

CARVER C37

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C37 OWNER'S MANUAL

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This manual 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 of their operation. Please read it carefully, and familiarize yourself with the craft before using it.

This owner's manual is not a course on boating safety or seamanship. If this is your first craft, or if 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 national sailing federation or yacht club will be pleased to advise you of local sea schools, or competent instructors.

Ensure that the anticipated wind and sea conditions will correspond to the design category of your craft, and that you and your crew are able to handle the craft in these conditions.

Even when your boat is categorized for them, the sea and wind conditions corresponding to the design categories A, B, and C range from severe storm conditions to category A, to strong conditions for the top of category C, open to the hazards of a freak wave or gust. These are therefore dangerous conditions, where only a competent, fit and trained crew using a well maintained craft can satisfactorily operate.

This owner's manual is not a detailed maintenance or trouble-shooting guide. In the case of difficulty, refer to the boat builder or his representative.

Always use trained and competent people for maintenance, fixing, or modifications. Modifications that may affect the safety characteristics of the craft shall be assessed, executed and documented by competent people. The boat builder cannot be held responsible for modifications that he has not approved.

In some countries, a driving licence or authorization are required, or specific relations are in force.

Always maintain your craft properly and make allowance for the deterioration that will occur in time and as a result of heavy use or misuse of the craft.

Any craft, no matter how strong it may, can be severely damaged if not used properly. This is not compatible with safe boating.. Always adjust the speed and direction of the craft to sea conditions.

All persons should wear a suitable buoyancy aid (life jacket/personal flotation device) when on deck. Note that, in some countries, it is a legal requirement to wear a buoyancy aid that complies with their national regulations at all times.

PLEASE KEEP THIS MANUAL IN A SECURE PLACE, AND HAND IT OVER TO THE NEW OWNER WHEN YOU SELL THE CRAFT.

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USING THE OWNER'S INFORMATION KIT

THE OWNER'S INFORMATION KIT CONTAINS:

QTY.	ITEM
1	Owner's Guide
(Varies)	OEM information

Please read the Owner's Guide and OEM (Original Equipment Manufacturer) information carefully. Become familiar with the yacht, its components, and systems before attempting to operate.

NOTE: The Owner's Information kit must be onboard when the yacht is in operation.

OWNER'S GUIDE

The Owner's Guide purpose is to designed to provide guidance on how to safely operate and maintain the yacht and it's various systems. The Owner's Information Kit also contains safety precautions and operation tips, as described below:

PRECAUTION

DANGER 

DESCRIPTION

Denotes that an extreme intrinsic hazard exists which would result in high probability of death or irreparable injury if proper precautions are not taken.

WARNING 

Denotes that a hazard exists which can result in injury or death if proper precautions are not taken.

CAUTION 

Denotes a reminder of safety practices or directs attention to unsafe practices which could result in personal injury or damage to the craft or components or to the environment.

NEVER 

Describes a user based hazard that should NEVER be performed.

NOTE:

Provides important information that can offer assistance.

A Tip From Carver! 

Provides various tips to keep the yacht in top condition

Please obtain handling and operation experience before operating your new yacht. Gaining training is important if this is your first yacht, or if changing to a type of yacht that is unfamiliar. Gaining training is for your own comfort and safety. Your dealer, national sailing federation, or yacht club can advise local sea schools or competent instructors.

NOTE: Drawings and illustrations contained within this guide are included as graphic aids to assist in the general operation and maintenance of the yacht. The drawings and illustrations are used for graphic purposes only. The drawings do not include all of the details of each system, and the drawings are not to scale. Do not reference the drawings to order parts or to service the yacht. Contact an authorized Carver Dealer for parts or service required.

A Tip From Carver! 

MANY PEOPLE WITHIN THE CARVER ORGANIZATION ARE AVID YACHTERS. SOME OF THE EXPERIENCE GAINED DURING OUR YEARS OF YACHTING ARE PRESENTED IN THIS OWNER'S GUIDE. THE INFORMATION IS PRESENTED UNDER THE HEADING, "A TIP FROM CARVER."

Carver Yachts reserves the right to change materials, part numbers, specifications, or system designs at any time without notice.

OEM INFORMATION

The OEM (Original Equipment Manufacturer) information is supplied by companies from whom Carver Yachts has purchased components to install in your yacht. These components include, but are not limited to, standard items:

- Engines
- Air Conditioning Systems
- Etc.

The OEM information explains how to operate and maintain the components.

If you install an aftermarket accessory on your yacht, add the OEM information that accompanies the accessory to the Owners's Information Kit

NOTE: If the OEM information conflicts with this Owner's Guide, follow the instruction in the OEM information.

PRE-DELIVERY SERVICE RECORD

The Pre-Delivery Service Record, on the following page, must be completed and signed by your Carver Dealer before the yacht can be delivered. Your Carver Dealer will prepare the yacht for delivery in accordance with the procedures detailed within this document.

Make sure the Pre-Delivery Service Record and all OEM warranty cards have been completed and mailed to the companies listed. Make sure to retain a copy of the Pre-Delivery Service Record for your own reference.

WARRANTY REGISTRATION

Carver Yachts warrants every yacht the company manufactures, as explained in the Carver Limited Warranty. The owner's copy of the warranty is located in Section 9. Please review the warranty carefully.

The Warranty Registration on the following page is the first step in activating your Carver Yachts limited warranty. This document must be completed and signed by you and your Carver Dealer before taking delivery of the yacht. Failure to complete and register the Warranty Registration could void the Carver Yachts limited warranty.

To ensure the warranty remains in effect, Carver Yachts, your Carver Dealer, and you (the owner) must each uphold specific responsibilities. The following responsibilities are described in Section 9.

At time of delivery, make a complete inspection of the yacht and its systems. Document any work that needs to be completed by the Dealer to meet the terms of your agreement.

Two cards are located at the end of the Preface. The cards are Second and Third Owner Registration Cards. Carver strongly recommends that the purchaser of a previously-owned Carver, register ownership with Carver Yachts.

BUILDER'S PLATE

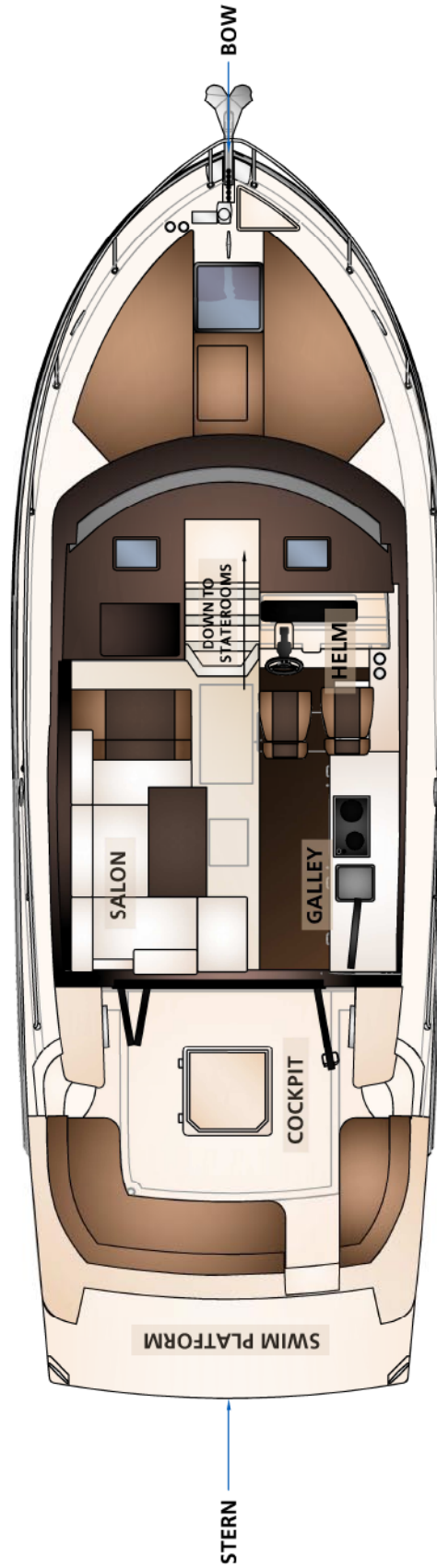
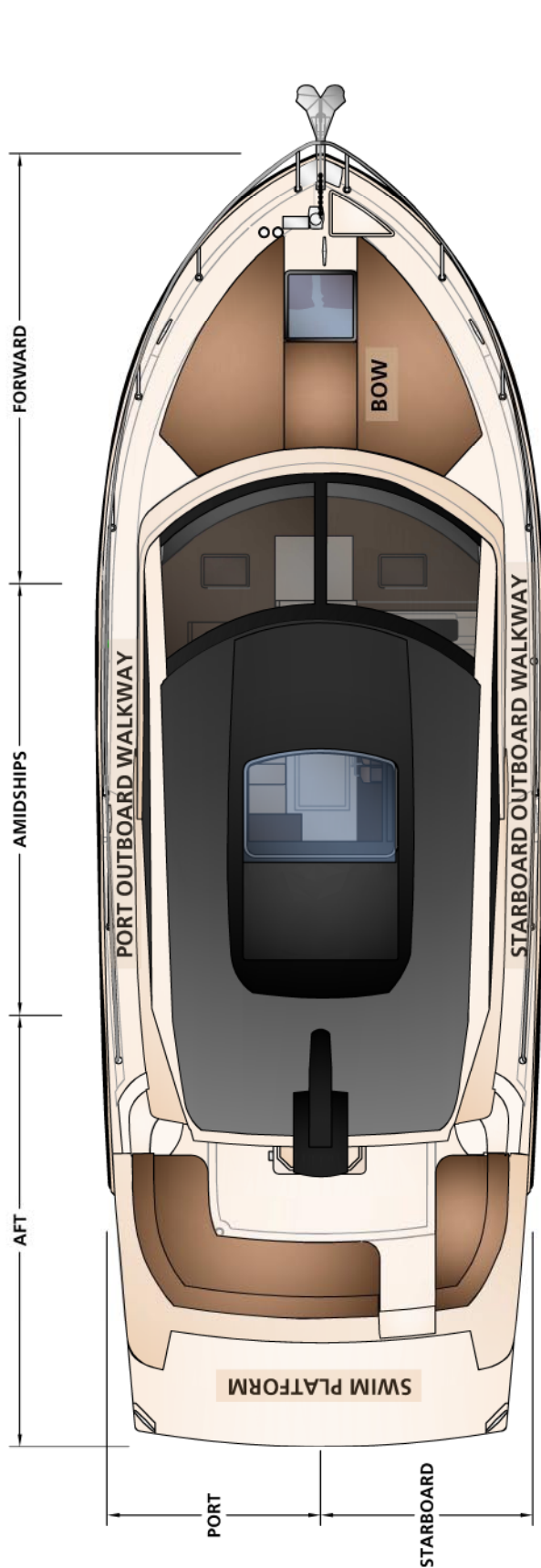
Builder's Plate: Part of the information is given on the builder's plate affixed on the craft. A full explanation of this information is given in the relevant sections of this manual.

EXPLANATION OF TERMS USED IN THIS MANUAL

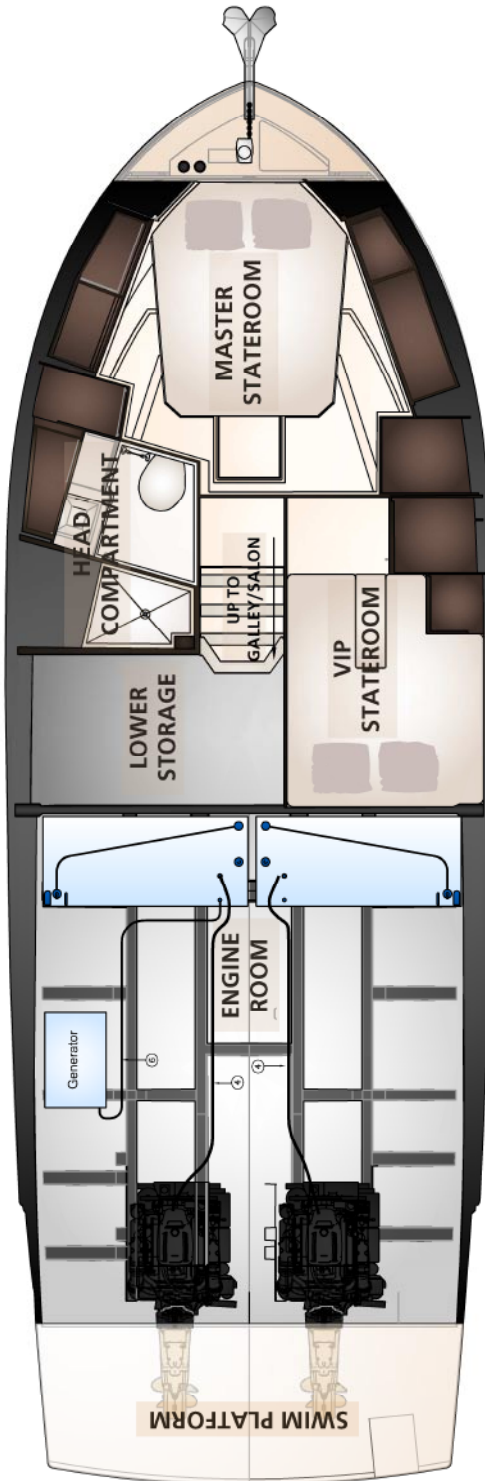
TERM	EXPLANATION
AC CONTROL PANEL	Alternating breaker panel that controls the alternating current for the onboard components
AFT	Area the describes the back portion of the boat
AMIDSHIPS	An area midway between the bow (front) and stern (back)
BERTH	Beds within the staterooms
BILGE	The interior of the hull that collects water
BILGE PUMP	A pump intended for removal of water that has collected in the hull
BOW	The forward most section of the yacht
BRIDGE	The upper most area of yacht that is open, including the upper helm and seating area
BULKHEADS	The interior walls of a boat
CABIN	The enclosed area of the yacht's
CABLEMASTER	Device that retrieves the electrical shore cord
CIRCUIT BREAKER	A device used to interrupt an electrical circuit when current flow exceeds a predetermined level
COCKPIT	The exposed aft deck area
COMPANIONWAY	A passageway within the vessel
COMPARTMENTS	Isolated space within the vessel, normally prefaced with its intended use
DC CONTROL PANEL	Direct current breaker panel that controls the alternating current for the onboard components
DINETTE	The dining area on the yacht
MAIN DECK	The main level of the yacht
ENGINE ROOM	Lower control room of the yacht; housing the engines, seacocks, etc
ENGINE ROOM HATCH	Hatch or cover of the engine room, located in the cockpit
FOREPEAK	The front portion of the yacht
FORWARD	Toward the bow or front of the boat
GALLEY	The kitchen area of a boat
HATCHES	Cover on hatchways or access holes
HATCHWAYS	Access ways through decks
HEAD	A toilet
HELM	Control area to operate and steer the boat
HULL	The main lower body of a boat
HULL BREACH	A hole or puncture in the hull of the boat that can allow water to leak in
LAZARETTE	Storage compartment at the stern
LOCKER	A storage place, or closet
MASTER DISCONNECT	Switches that turn ON or cut OFF the flow of electricity to various locations SWITCHES throughout the yacht

TERM	EXPLANATION
MOORING	An arrangement for securing a boat to a mooring buoy or pier
NAVIGATION LIGHTS	A set of red, green, and white lights which must be shown by all vessels between dusk and dawn
PORT	Standing in aft, facing forward, port is the left side of a boat
PORTHOLE	Window used on the hull to admit light and air
SALON	The main social cabin on a vessel, usually the largest area
SEACOCK	A shutoff valve on a plumbing or drain pipe between the vessel's interior and the sea
SHORE POWER	Alternating electrical current power that is generated from shore
SOLE	Floor within the living area of the vessel
STARBOARD (STBD)	Standing aft, facing forward, the right side of the vessel
STATEROOM	The sleeping quarters onboard
STERN	The back of a boat
TRANSOM	Vertical hull structure at the extreme aft of the vessel
TRIM	Fore and aft angle of the vessel, as it relates to being level with the world
UNDERWAY	Movement. Usually referring to a vessel proceeding forward
UPPER HELM	The upper control area to operate and steer the boat, located on the bridge
WATER LINE	The line of the water on the hull when the vessel is afloat
WINDLASS	A device used to raise and lower the anchor

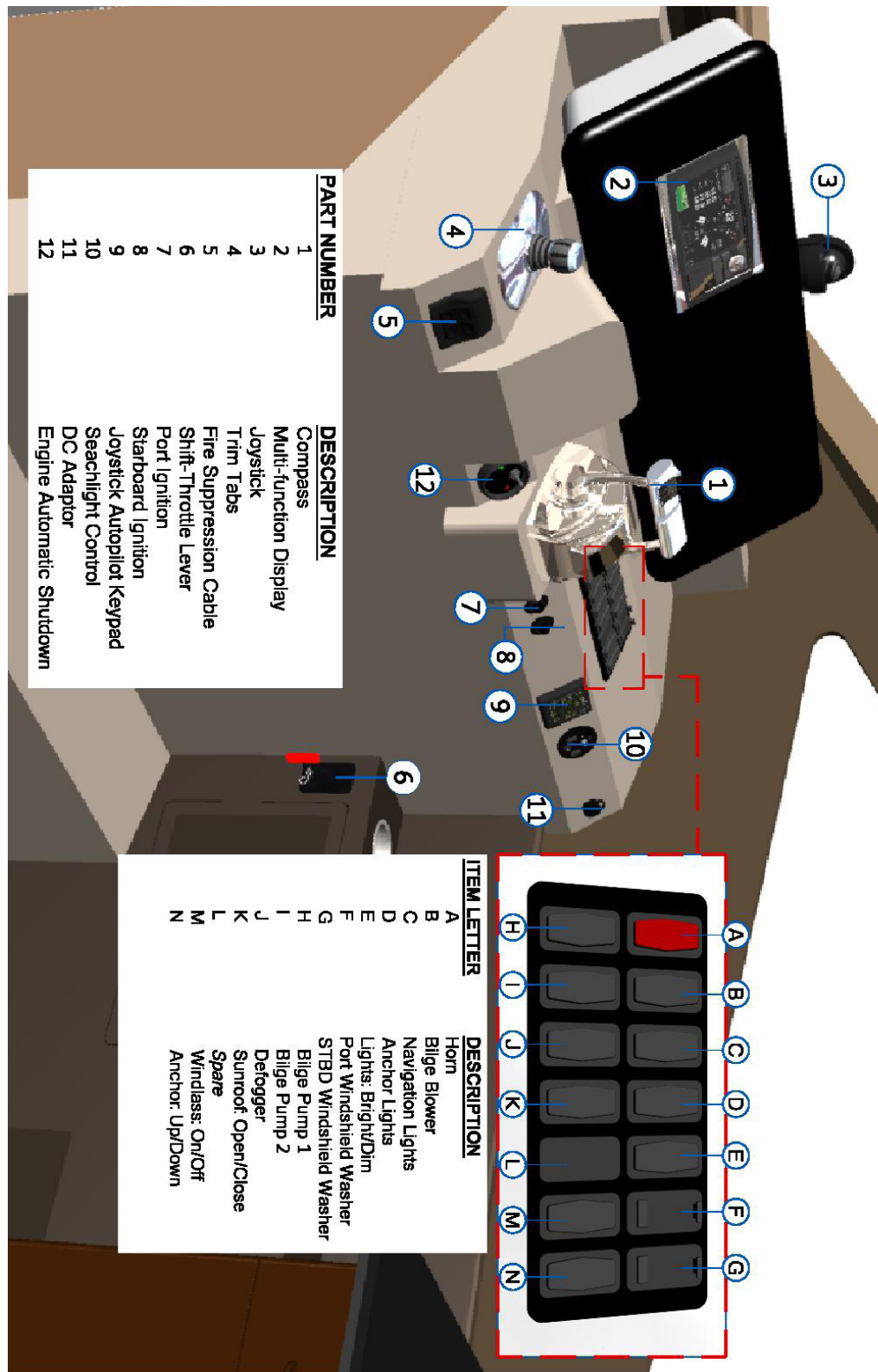
PLAN VIEWS: BASIC LOCATIONS



PLAN VIEWS: BASIC LOCATIONS



HELM COMPONENTS LABELED



PART NUMBER

1
2
3
4
5
6
7
8
9
10
11
12

DESCRIPTION

Compass
Multi-function Display
Joystick
Trim Tabs
Fire Suppression Cable
Shift-Throttle Lever
Port Ignition
Starboard Ignition
Joystick Autopilot Keypad
Seachlight Control
DC Adaptor
Engine Automatic Shutdown

ITEM LETTER

A
B
C
D
E
F
G
H
I
J
K
L
M
N

DESCRIPTION

Horn
Bilge Blower
Navigation Lights
Anchor Lights
Lights: Bright/Dim
Port Windshield Washer
STBD Windshield Washer
Bilge Pump 1
Bilge Pump 2
Defogger
Sunroof: Open/Close
Spare
Windlass: On/Off
Anchor: Up/Down



WARNING

VISION FROM THIS HELM STATION IS LIMITED. MAINTAIN A LOOKOUT AS REQUIRED.

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**CARVER YACHT CORPORATION
PO BOX 1010
PULASKI WI 54162-1010**

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PO BOX 1010
PULASKI WI 54162-1010**



SECOND OWNER REGISTRATION

Owner's Name: _____

Street Address: _____

City: _____ State: _____ Zip Code: _____

Telephone: (____) _____ Date of Purchase: _____

Purchased From: _____

Yacht Hull Identification Number: CDR _____

Second Owner Registration does not extend, alter, or transfer the Carver Limited Warranty. Refer to the Carver Limited Warranty for details.



THIRD OWNER REGISTRATION

Owner's Name: _____

Street Address: _____

City: _____ State: _____ Zip Code: _____

Telephone: (____) _____ Date of Purchase: _____

Purchased From: _____

Yacht Hull Identification Number: CDR _____

Third Owner Registration does not extend, alter, or transfer the Carver Limited Warranty. Refer to the Carver Limited Warranty for details.

YACHTING SAFETY

YACHTING SAFETY IS YOUR RESPONSIBILITY. Fully understand the operating procedures and safety precautions outlined in the Owner's Information Kit and this Owner's Guide before operating the yacht. **SAFE YACHTING IS NO ACCIDENT.**

SAFE OPERATION

SAFE OPERATION INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING:

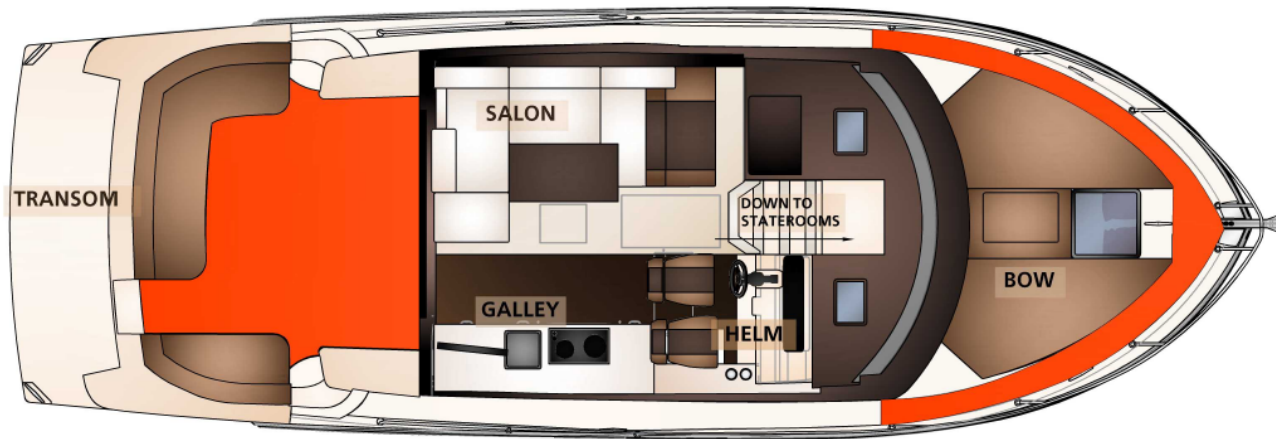
- Keep the yacht and equipment in safe operating condition. Inspect the hull, engines, safety equipment, and all yachting gear regularly.

NOTE: Federal law requires the owner to provide and maintain safety equipment onboard. Consult the U.S. Coast Guard, state, and local regulations to ensure all required safety equipment is onboard. Additional equipment may be recommended for your safety and the safety of the passengers. Become aware of the safety equipment's availability and use.

- Use caution when fueling the yacht. Understand the fuel tank's capacity, and fuel amount used when operating at frequently used engine speeds (RPMs).
- Make sure enough fuel is stored for cruising requirements. Know the tank's cruising radius and fuel tank range. Typical tank usage: 1/3 of the supply to reach the destination, 1/3 to return, and keep 1/3 in reserve for changes in plans due to weather or other circumstances.
- **ALWAYS** keep fire extinguishing and lifesaving equipment onboard. The safety equipment must meet regulatory standards, and should be noticeable, accessible, and in proper operating condition. Passengers onboard should know of the equipment's location, and how to use each piece of equipment.
- Keep seacocks, cockpit drains, hull drain, and other opening/closing devices in the hull closed or open, as appropriate, to minimize the risk of flooding.
- Keep an eye on the weather. Be aware of possible changing conditions by checking local weather reports before departure. Monitor strong winds and electrical storms.
- Always keep accurate, updated charts of the areas chosen to cruise. Keep back up charts if a chart plotter is used.
- File a Float Plan with a family member, relative, friend, or other responsible person ashore before departure from PORT or harbor.
- Always practice safe yachting, courtesy, and common sense.
- Instruct at least one passenger onboard with the yacht's basic operation. The designated person can take over if the operator is unexpectedly, unable to maintain control.
- **DO NOT** allow passengers to ride anywhere other than designated seating areas.
- Ask all passengers to remain seated while the yacht is in motion.
- **DO NOT** use the boarding platform or boarding ladder, while either of the engines are running. Both engines and generator must be shut off.
- **Understand and obey the "Rules of the Road."** Always maintain complete control of the yacht.
- **DO NOT** overload or improperly load the yacht. See Section 9: *Load Capacity*, for instructions on maximum capacity
- **DO NOT** travel faster than conditions warrant or beyond your abilities.
- Avoid sudden maneuvers at any speed.
- For comfort and safety, reduce speed in waves.
- **DO NOT** operate the yacht in weather or sea conditions beyond your skill and experience.
- **DO NOT** operate the yacht while under the influence of drugs and/or alcohol.
- **DO NOT** operate the yacht if visually impaired.
- **DO NOT** store equipment containing petrol in compartments not designed for this purpose.
- When starting the engines, make that no one is in the engine room and all persons are in the designated working deck.

MAN-OVERBOARD PREVENTION

Safety rails and non-skid deck surfaces have been provided in the design to help prevent falling overboard while underway.



MAIN LEVEL WORKING DECK



WORKING DECK/SAFE LOCATIONS SHOWN IN ORANGE

WARNING

SERIOUS INJURY OR FALLING OVERBOARD CAN OCCUR IF THE YACHTER IS LOCATED OUTSIDE OF THE DESIGNATED WORKING DECK WHILE UNDERWAY.

IF SOMEONE FALLS OVERBOARD

Use the boarding ladder, located on the transom swim platform to bring the passenger(s) safely back onboard without swamping or capsizing the yacht.

OPERATING THE BOARDING LADDER:

1. Remove the anchor pin from the bracket by pushing the rungs forward, then lift the rungs up, and finally pull the rungs and entire operable portion of boarding ladder toward you. See next page for illustration.
2. Pull the operable portion of the boarding ladder out, away from the boat, until the outer set cylinder relocates from back to the front of the stationary bracket attached to the swim platform. See next page for illustration.
3. Pull the rungs outward, away from the boat, to extend the ladder into the water.
4. Once the boarding ladder is fully extended and the set cylinder is placed fully forward, the ladder is safe to climb.

IF SOMEONE FALLS OVERBOARD

Operator vision from the helm may be obstructed by high trim angles of the craft and other factors caused by one or more of the following variable conditions:

1. Propulsion unit trim angles (on craft equipped with a power trim system on the propulsion unit)
2. Hull trim plane angles (on craft equipped with power operated trim planes or trim tabs on the transom)
3. Loading and load distribution
4. Speed
5. Rapid acceleration
6. Transition from displacement to planing mode
7. Sea conditions
8. Rain and spray

9. Darkness and fog
10. Interior lights
11. Position of tops and curtains
12. Persons or movable gear in the operators's field of vision

The International regulations for Preventing Collisions at Sea (COLREG) and the rules of the road require that a proper lookout be maintained at all times and observance of right of way be respected. Observance of these rules is essential.

ADVERSE CONDITIONS

WEATHER

All passengers should be aware of present weather conditions and the weather forecast at all times. Check the forecast before beginning a day of yachting. However, be aware that weather conditions can change rapidly.

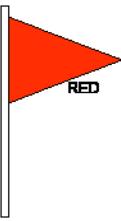
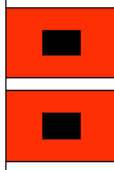
IF A MARINE RADIO IS ONBOARD:

- Listen to the weather reports issued by the U.S. Coast Guard and other sources.

IF A PORTABLE RADIO IS ONBOARD:

- Keep the radio tuned to a station broadcasting frequent weather reports. Many yachting clubs fly weather signals; learn to recognize the following weather signals.

WEATHER SIGNALS

	SMALL CRAFT ADV. WINDS TO 33 KNOTS	GALE WARNING WINDS: 34 - 47 KNOTS		STORM WARNING WINDS: 48 - 63 KNOTS	HURRICAN WINDS: 64+ KNOTS
DAY FLAGS	 RED	 RED RED	DAY FLAGS	 BLACK ON RED	 BLACK ON RED BLACK ON RED
NIGHT FLAGS	 RED  WHITE	 WHITE  RED	NIGHT FLAGS	 RED  RED	 RED  WHITE  RED

STORM PREPARATION

Storms rarely appear without advance notice. If a storm is a possibility, keep a watch on the horizon, especially to the West for the storm's approach. Watch for changes in wind direction or cloud formations. Understanding the weather conditions, and what to do when the weather takes a turn for the worse is important.

If a storm is approaching, the best course of action is to return to port. If unable to return, prepare to weather the storm. To do so:

- Keep portlights, window, washboards, doors, hatches, or ventilation openings closed when appropriate, e.g. in rough weather or at planing speeds. If necessary, provide operating instructions.
- Reduce speed as the seas build.

- Make sure all persons onboard are wearing the personal flotation devices.
- Drop a sea anchor over the stern to maintain the bow into the seas. If a sea anchor is unavailable, use a canvas bucket, tackle box, or other object that will replace the anchor.

WARNING

ALL OPENING/OPERATING WINDOWS AND PORTLIGHTS, HATCHES, AND DOORS SHOULD BE CLOSED DURING OPERATION IN ROUGH WEATHER OR PLANING SPEEDS.

FOG

Fog is a result of either warm-surface or cold-surface conditions. Periodically measure the air temperature and dew point temperature to determine the liability of fog formation. Fog is likely to develop if the difference between the air temperature and dew point temperature is small.

REMEMBER THE FOLLOWING GUIDELINES:

- Head for shore at the first sign of fog, unless the yacht is well equipped with charts and navigational equipment. Wait until conditions improve. If charts are available onboard: take bearings as fog sets in, mark the current position, and continue to log the course and speed.
- All persons onboard should put on their personal flotation devices.
- If sound equipment is installed, check soundings regularly and match the sounds with depths shown on the charts.
- Station a person forward in the yacht as a lookout.
- Reduce speed. Periodically, stop the engines and listen for surrounding fog signals.
- Sound the horn or fog bell intermittently to warn others.
- Set anchor if there is doubt in continuing the cruise. Listen for other fog signals while continuing to sound the fog horn or bell.

EMERGENCY PROCEDURES

It is important to obtain training to handle any emergency that may arise. The following is **NOT** an exhaustive list of situations that may be encountered while yachting; however, this section serves as a guide to aid in emergencies.

FIRE FIGHTING EQUIPMENT AND LOCATIONS

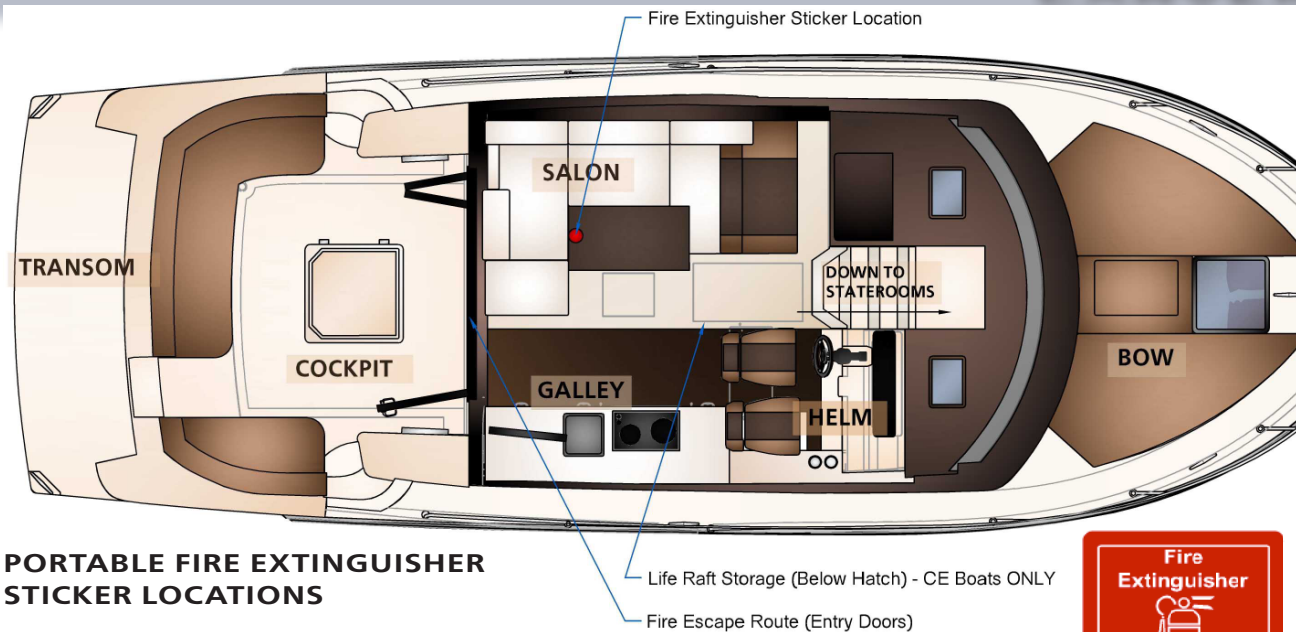
B.1 FIRE-FIGHTING EQUIPMENT

B.1.1 PORTABLE FIRE EXTINGUISHERS

This boat, when in service, shall be equipped with a properly rated portable fire extinguishers. Stickers have been placed throughout the yacht to designate the location for each fire extinguisher. It is the owner's/operators responsibility to supply the designated fire extinguishers. The fire extinguisher locations have been placed in the following locations:

- Salon: below the lounge seating, aft amidships
- Bridge: at the top of the steps, starboard side, amidships

(SEE NEXT PAGE FOR PORTABLE FIRE EXTINGUISHER LOCATION ILLUSTRATION.)



PORTABLE FIRE EXTINGUISHER STICKER LOCATIONS

B.1.3 SERVICING OF FIRE-FIGHTING EQUIPMENT

The boat owner/operator shall:

- have fire-fighting equipment checked at the intervals indicated on the equipment,
- replace portable fire extinguishers, if expired or discharged, by devices of identical fire-fighting capacity,
- have fixed systems refilled or replaced when expired or discharged.

B.2 RESPONSIBILITY OF BOAT OWNER/OPERATOR

It is the responsibility of the boat owner/operator to ensure that fire-fighting equipment is readily accessible when the boat is occupied, and to inform members of the crew about:

- the location and operation of fire-fighting equipment,
- the location of discharge openings into the engine space, and
- the location of routes and exits.

B.3 CAUTIONARY NOTICES TO THE BOAT OPERATOR

B.3.1 GENERAL

- Keep the bilges clean and check for fuel and gas vapors or fuel leaks frequently.
- When replacing parts of the fire-fighting installation, only matching components shall be used, bearing the same designation or having equivalent technical and fire-resistant capabilities.
- Do not fit free-hanging curtains or other fabrics in the vicinity of, or above, cookers or other open-flame devices.
- Do not stow combustible material in the engine space. If non-combustible materials are stowed in the engine space, they shall be secured against falling into machinery and shall cause no obstruction to access into or from the space.
- Exits other than the main companionway doors or hatches with permanently fixed ladders are identified by a symbol (see B.1).

B.3.2 SPECIFIC WARNINGS

- Never obstruct passageways to exits and hatches,
- obstruct safety controls, e.g. fuel valves, gas valves, switches of the electrical system,
- obstruct portable fire extinguishers stowed in lockers,
- leave the craft unattended when cooking and/or heating appliances are in use,
- modify any of the craft's systems (especially electrical, fuel and gas) or allow unqualified personnel to modify any of the craft's systems

- fill any fuel tank or replace gas bottles when machinery is running, or when cooking or heating appliances are in use,
- smoke while handling fuel or gas.

GENERAL FIRE PREVENTION RESPONSIBILITIES OF THE OWNER

- Provide at least one bucket, with a lanyard attached, stowed in a readily accessible position for the protection of the deck.
- Ensure that fire fighting equipment is readily accessible when the boat is occupied
- Inform members of the crew about the following emergency items and locations:
 - Location and operation of fire fighting equipment
 - Location of discharge openings into the engine space
 - Location of routes and exits

DANGER

ANY FIRE ONBOARD THE YACHT IS SERIOUS. EXPLOSION IS POSSIBLE. DEVELOP A FIRE RESPONSE PLAN. RESPOND IMMEDIATELY TO ANY EMERGENCY.

EVERY YACHTER SHOULD DEVELOP A FIRE RESPONSE PLAN. THE PLAN SHOULD DETERMINE:

- THE TYPE OF FIRE (FUEL, ELECTRICAL, ETC.)
- WHERE THE TYPE OF FIRE, LISTED ABOVE, MIGHT BREAK OUT
- THE BEST WAY TO REACT

HAVE A PLAN. ASSIGN RESPONSIBILITIES TO OTHERS TO ALLOW QUICK DECISIONS AND REACTIONS.

NEVER

- NEVER OBSTRUCT PASSAGE WAYS TO EXITS AND HATCHES.
- NEVER OBSTRUCT SAFETY CONTROLS, SUCH AS FUEL VALVES AND ELECTRICAL SYSTEM SWITCHES.
- NEVER OBSTRUCT PORTABLE FIRE EXTINGUISHERS IN LOCKERS.
- NEVER LEAVE THE YACHT UNATTENDED WHILE COOKING, OR WHILE HEATING APPLIANCES ARE IN USE.
- NEVER USE GAS LIGHTS IN THE YACHT.
- NEVER MODIFY ANY OF THE YACHT'S SYSTEMS, ESPECIALLY ELECTRICAL OR FUEL.
- NEVER FILL THE FUEL TANKS WHILE: MACHINERY IS RUNNING, WHILE COOKING, OR HEATING APPLIANCES ARE IN USE.
- NEVER SMOKE WHILE HANDLING FUEL.

NOTE: Everyone onboard should know of the fire extinguisher locations, and how to operate the extinguishers.

IN CASE OF FIRE

- Stop the engines immediately.
- Shut off the bilge blowers immediately if the fire is in the engine room.
- **DO NOT** open the hatch to the engine room. The fire will flare up if the fresh air supply increases suddenly.
- Keep the fire downwind if possible. Head into the wind if the fire is aft of the yacht.
- Have all persons onboard put on their personal flotation devices.
- If the fire is accessible. **USE THE FIRE EXTINGUISHER.**
 1. Aim the fire extinguisher at the base of the flames
 2. Use a sweeping motion to put out the fire.
- Make a distress signal and call for help on the radio if the fire gets out of control.

It is the owner and/or crew's decision to abandon the yacht. If the decision is to abandon ship, **ALL** persons onboard should jump overboard, and swim to a safe distance away from the burning yacht.

WARNING

ALL THRU SEACOCKS MUST BE CLOSED WHILE NOT IN USE TO REDUCE THE RISK OF FLOODING.

If water is leaking in the hull, and the yacht is taking on water:

1. Turn ON the bilge pumps.
2. Assign someone to bail out the bilge and investigate the cause of the flooding.
3. Attempt to repair the yacht when the source of the leak is found.

Almost anything can be stuffed into the opening to stop the leaking temporarily. Leak plugging material will work better if applied from the exterior where water pressure can aid in stopping the leak. Station a crew member to hold the plug in place if the plug is applied from the inside. In all cases, monitor the plugged area.

SWAMPED OR CAPSIZED YACHT

IMMEDIATELY PUT ON A PERSONAL FLOTATION DEVICE, AND SET OFF A DISTRESS SIGNAL IF THE YACHT BECOMES SWAMPED OR CAPSIZED. Chances are good that a capsized yacht will stay afloat. To ensure the safety of the crew and yacht, it is important to perform the following:

- Stay with the yacht, unless an emergency situation occurs.
- Do not leave the yacht or try to swim to shore except under extreme conditions.
- Remember, a capsized yacht is easier to see than a swimmer.
- Remember, the shore may be further away than it appears.

To reduce the occurrence of a swamped or capsized yacht:

1. Reduce headway and turn the yacht slightly if water is coming over the bow.
2. Turn the yacht so the bow is slightly off from meeting the waves head on.
3. Drop a sea anchor, and adjust the length of the line to hold the bow at the most favorable angle.

COLLISION

If a serious collision occurs, check everyone onboard for injuries, then inspect the entire yacht to determine the extent of the damage.

- Prepare to help the other craft unless your yacht or passengers are in danger.
- If the hull has been penetrated, prepare to plug the fracture once the colliding yachts have been separated.
- Shore up the hole inside of the yacht with a spare life jacket or bunk cushion.
- Trim weight, if possible, to get the hole above the water level during repairs.
- If the yacht is in danger of sinking, have everyone onboard put on the personal flotation devices.
- If a radio is installed, immediately, contact the Coast Guard or other rescue authorities.

RUNNING AGROUND

Excessive weight in the fore or aft sections of the yacht will cause a trim change, and may yield greater draft than expected. Equip the yacht with a quality depth-measuring instrument, and allow ample water below the hull while operating.

IF THE YACHT RUNS AGROUND:

- Check everyone onboard for injuries
- Inspect the yacht for damage.

IF LIGHTLY GROUNDED:

- Shift the weight of the passengers or gear to heel the yacht while reversing engines.

IF TOWING BECOMES NECESSARY:

- Use a commercial towing service.

NEVER

NEVER ATTACH A TOW LINE TO A SINGLE DECK CLEAT OR ANCHOR WINDLASS. THE CLEATS AND WINDLASS ARE NOT DESIGNED TO TAKE THE FULL LOAD OF THE YACHT AND MAY PULL FREE FROM THE DECK, CAUSING SERIOUS INJURY OR PROPERTY DAMAGE.

MAN OVERBOARD

In the event that someone falls overboard, understanding what to do is important. Emergency procedures are published in *Chapman Piloting* publications, and instruction is offered by the U.S. Coast Guard.

Hypothermia may be an immediate concern if a person falls overboard. Hypothermia occurs when a person's body loses heat faster than the body can replace it. The person will become exhausted or likely drown if not rescued in a timely manner. The colder the water, the faster body's heat is lost. Personal flotation devices increase survival time because they provide insulation. To understand the survival time to water temperature ratio.

WATER SURVIVAL CHART

Water Temp. (°F)	Exhaustion Unconsciousness	Expected Time of Survival
32.5	Under 15 min.	Under 45 min.
32.5-40	15-30 min.	30-90 min.
40-50	30-60 min.	1-3 hr.
50-60	1-2 hr.	1-6 hr.
60-70	2-7 hr.	2-40 hr.
70-80	3-12 hr.	3 hr.- Indefinite
Over 80	Indefinite	Indefinite

MEDICAL EMERGENCY

- No one should act as a doctor, if not properly trained.
- Someone onboard should know first aid. First aid training is available through your local Red Cross.
- Keep a fully stocked first aid kit onboard at all times.

EQUIPMENT FAILURE

- Steering, propulsion, and control failure can often be prevented by having the yacht maintained and checked periodically. See *Maintenance* Section.
- Radio for help or signal with flags and wait for help if the systems fail.

RADIO COMMUNICATION (U.S. ONLY)

It is the yachter's responsibility to follow and understand proper rules and procedures. Private yachts are not required to have a radio on board at all times. However, if a radio is available, it should be tuned to channel 16. Channel 16 is the frequency for emergency calls or initial calls between yachts. For more information, go to www.navcen.vscg.gov.

Additional information on radio communications can be found in *Chapman's Piloting* publications.

DISTRESS SIGNALS

The yacht operator is required, by law, to lend assistance to a craft in distress. Assistance must be given as long as your life or yacht is not put in harm's way in the process. In the United States, Good Samaritan laws protect the public from liability incurred while giving aid.

SAFETY EQUIPMENT

NOTE: Sections of this chapter titled: *Safety Equipment* and *Owner's Responsibilities* applies to US regulations ONLY - EXCLUDING the section titled: *Pre-departure Actions*.

FEDERAL LAW REQUIRES YACHT OWNERS TO PROVIDE AND MAINTAIN SAFETY EQUIPMENT ONBOARD. Consult the US Coast Guard, State, and local regulations to ensure that all the required safety equipment is onboard. It is the owner's responsibility to learn about additional recommended equipment before operating their yacht.

PERSONAL FLOTATION DEVICES (PFD'S)

- A minimum of one personal flotation device is required for each person onboard. The PFD must be U.S. Coast Guard-approved wearable.
- The PFD's must be readily accessible and in serviceable condition.
- The PFD's must be of a suitable size for each person onboard.
- A minimum of three PFD's (two wearable and one throwable) are required regardless of the number of persons onboard.

PFD TYPE I, WEARABLE:

- Type I is the most effective life preserver for all waters when rescue may be delayed.
- Type I is designed to turn most unconscious or drowning people from a facedown position to a vertical or face-up position.

PFD TYPE IV, THROWABLE:

- At least one throwable Type IV PFD device is required onboard at all times.
- Type IV PFD does not strap to the user.
- Type IV PFD must be thrown to a person in the water and held by the user until rescued.
- The most common Type IV PFD's are buoyant cushions or ring buoys.
- Type IV PFD must be in serviceable condition and immediately available for use.

VISUAL DISTRESS SIGN (VDS)

Visual distress signal equipment is required by the U.S. Coast Guard for all yachts operating on U.S. coastal waters. Yachts owned in the United States and operating on the high seas must also carry VDS equipment. The visual distress equipment signal must be readily accessible and in serviceable condition. Both pyrotechnic and non-pyrotechnic equipment must be U.S. Coast Guard approved. Both types of distress signal equipment can become ineffective with age. Replace the equipment before taking the yacht out if the equipment's usage date has expired.

APPROVED PYROTECHNIC EQUIPMENT INCLUDES:

- Hand held or aerial red flares
- Hand held or floating orange smoke
- Launchers for aerial red meteors or parachute flares

APPROVED NON-PYROTECHNIC EQUIPMENT INCLUDES:

- Orange distress flag
- Dye markers
- Electric distress light.

No single signaling device is ideal under all conditions. Carrying a variety of visual distress signal equipment onboard is important. Select devices with packaging that children ONLY will find difficult to open, especially if children are onboard.

SOUND SIGNALING DEVICE

The yacht must be equipped with an operable device that can produce a sound signal if conditions require.

REQUIRED SOUND DEVICES INCLUDE:

- One horn is standard on all models.
- Yachts longer than 39' 4", one bell and one whistle is required. The devices must meet the Inland Navigational Rules Act of 1980.

For details on the appropriate signals, refer to the *Navigational Rules* published the U.S. Coast Guard, International-Inland.

RUNNING AND NAVIGATION LIGHTS

- Running and navigation lights must be turned on for safe operation after dark.
- Observe all navigation rules for meeting and passing.
- Do not run at high speeds during night operation.
- Always use common sense and good judgment while cruising at night.

RADAR REFLECTORS

Radar reflectors, if installed, should measure at least 18" diagonally. The reflectors should be placed 12'-0" above the waterline to ensure that yachts with radar have sight of your yacht.

FIRE EXTINGUISHERS

Fire extinguishers must be approved by the U.S. Coast Guard. The U.S. Coast Guard classifies fire extinguishers by the type of fire the extinguisher can extinguish. The fire extinguisher classifications include: foam, carbon dioxide, chemical, and FE-2421. Below is the standard extinguishing equipment on the yacht:

Yachts longer than 40' and shorter than 65': The yacht has a fixed fire extinguishing system approved by the U.S. Coast Guard. In addition, it is the owners responsibility to also install either: Two Type B-I (or) one Type B-II extinguisher is on board.

All fire extinguishers should be mounted in a readily accessible location, away from the engine room. Everyone onboard should know of the fire extinguisher locations, and how to operate the extinguishers.

If a charge indicator gauge is equipped on the fire extinguisher, cold or hot weather may affect the gauge reading. Consult the manufacturer's manual supplied with the fire extinguisher to determine the gauge accuracy.

Check and maintain the fire extinguishing equipment in accordance with the manufacturer's recommendations. Replace fire fighting equipment if expired or discharged. Replace with devices of identical or greater fire fighting capacity.

OWNER'S RESPONSIBILITIES

SAFE YACHTING COURSES

Your local Coast Guard Auxiliary offers comprehensive safe yachting classes several times per year. Contact the Yacht US Foundation at: 1-800-336-Yacht (2628) (or) in Virginia, at 1-800-245-Yacht (2628), or e-mail at: www.yachtus.com.

For a course schedule in your area, contact your local U.S. Coast Guard Auxiliary or Power Squadron Flotilla for the time and place of their next scheduled class.

It is recommended to read, *Chapman's Piloting, Seamanship and Small Yacht Handling* for further information on handling the yacht in various situations.

RULES OF THE ROAD

Navigating responsibly requires the operator to comply with a set of rules intended to prevent accidents. Just as other people expect that all other drivers know how to drive a car, other yachters expect that all yachters know how to drive a yacht.

As a responsible yachter, the marine traffic rules enforced by the Coast Guard and COLREGS must be followed. Two sets of rules are enforced:

1. United States Inland Navigational Rules
2. International Rules - COLREGS

The United States Inland Rules applies to all vessels inside the demarcation lines separating inland and international waters. The U.S. Coast Guard lists the traffic regulations in the *Navigational Rules, International-Inland* publication. A copy can be obtained from a local U.S. Coast Guard Unit or the United States Coast Guard Headquarters at: 1300 E. Street NW, Washington, D.C. 20226.

Other helpful publications available from the U.S. Coast Guard include:

- Aids to Navigation (U.S. Coast Guard pamphlet #123), publication explains the significance of various lights and buoys

- Yachting Safety Training Manual
- Federal Requirements for Recreational Yachts

Check with your local Coast Guard station, your Dealer, or a local marina about navigational aids unique to your area.

DOCUMENTATION

A *Certificate of Number* is issued to a yacht owner registered with the U.S. Coast Guard. The certificate must be onboard when the yacht is in use. State registration is required. Check with the U.S. Coast Guard, or your state regulatory agency, to determine what other records are required onboard.

The following logs are strongly recommended to be maintained, in addition to the required documents. Log books are available from maritime supply stores. The recommended logs include:

- **Navigation Log**, containing: engine speeds, compass courses, and time records is essential for both cruising and maintenance purposes.
- **Maintenance Log**: used to track the type and frequency of maintenance procedures performed on the yacht and the yacht's systems. Refer to Section 7 for additional information on yacht maintenance.
- **An Engine/fuel Log**: essential for calculating range and fuel requirements.

DRUGS AND ALCOHOL

It is against the law to operate a yacht while under the influence of drugs or alcohol.

DISTRESS CALLS

If a ship-to-shore radio telephone is installed, heed storm warnings, and answer any distress calls from other yachters. The word **"MAYDAY"** spoken three times is the international signal of distress. Monitor marine radio channel 16 is reserved for emergency and safety messages. Channel 16 is also used to contact the U.S. Coast Guard or other yachters if there is trouble.



NEVER SEND A "MAYDAY" MESSAGE UNLESS THERE IS A SERIOUS EMERGENCY AND IMMEDIATE ASSISTANCE IS REQUIRED.

VOLUNTARY INSPECTIONS

Courtesy inspections are offered by the U.S. Coast Guard Auxiliaries or State Yachting Officials in many states to ensure that all yachts comply with safety standards, and the required safety equipment is onboard. After a voluntary inspection, time is given to make corrections without prosecution. Check with the appropriate state agency or the U.S. Coast Guard Auxiliary for details.

YACHTING ACCIDENTS

A vessel used for recreational purposes is required to file a report when:

- An accident resulting in loss of life or disappearance from a vessel
- An injury requiring medical treatment beyond first aid
- Property damage in excess of \$200
- Complete loss of the vessel.

In cases of death and injury, reports must be submitted within 48 hours. All other cases, reports must be submitted within 10 days. Reports must be submitted in the state where the accident occurred.

YACHTING REGULATIONS

It is the owner's responsibility to make sure that the yacht is in compliance with all federal, state, and local regulations. Check with your local U.S. Coast Guard office for relevant federal regulations. Your state's Department of Natural Resources may have some publications available that deal with relevant state laws. It is important to be aware of local environment laws, and to respect codes of

good practice.

GARBAGE

Dumping garbage into the sea is a worldwide problem. Coast Guard regulations prohibit dumping plastic refuse and garbage mixed with plastic into any waters, and restrict the dumping of other forms of garbage. IT IS ESSENTIAL THAT ALL YACHTERS HELP TO CLEAN OUR WATERWAYS BY PROPERLY DISPOSING OF ALL GARBAGE.

Be aware of international regulations against marine pollution (Marpol) and to respect it as much as possible.

OIL

The Federal Water Pollution Control Act prohibits the discharge of oil or oily waste into or upon the navigable waters. Violators could be subject to a significant fine if such discharge causes a film or sheen upon or discoloration of the surface of the water, or causes a sludge or emulsion beneath the surface of the water.

SEPTIC WASTE

It is illegal to discharge septic waste directly overboard on U.S. inland and coastal waters and many other countries. Do not discharge toilets or holding tanks close to shore or in any prohibited zone, and to use harbour or marina pump-out facilities to empty the holding tank before leaving the harbour. If an overboard discharge is installed, check with a local U.S. Coast Guard and/or other authorities to ensure that compliance is met with local regulations.

STATE AND LOCAL ORDINANCES

State or locality may have laws limiting: speed, noise, or the yacht's wake. Check with the local harbor master if certain yachting operations are restricted by local ordinances or state laws. Check with state and local authorities to confirm compliance with local regulations regarding: marine sanitation, noise, speed, and wake.

CARBON MONOXIDE (CO) WARNINGS

CO detectors are standard on all Carver yachts. Have the detectors professionally calibrated at regular intervals.



CO2 ILLUSTRATION 1

DANGER

CARBON MONOXIDE (CO) IS A COLORLESS, ODORLESS, AND TASTELESS GAS EMITTED THROUGH ENGINE AND GENERATOR EXHAUST. PROLONGED EXPOSURE TO CO CAN RESULT IN UNCONSCIOUSNESS, BRAIN DAMAGE, AND DEATH.

CARBON MONOXIDE (CO) WILL CAUSE SERIOUS INJURY OR DEATH. STAY CLEAR FROM THE EXHAUST PORT WHEN THE ENGINE IS RUNNING.

PEOPLE SLEEPING ONBOARD CAN EASILY BE OVERCOME BY CARBON MONOXIDE. DO NOT SLEEP WHILE THE ENGINES OR GENERATOR ARE RUNNING.



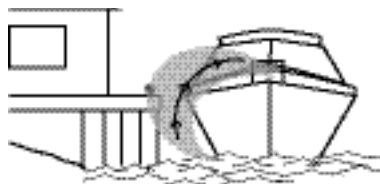
CO2 ILLUSTRATION 2

SAFETY



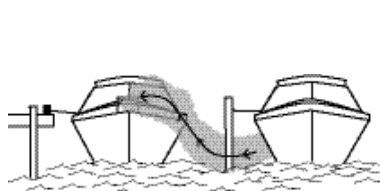
PREVENTING CO EXPOSURE

Open a forward hatch, porthole, or window to help prevent the accumulation of CO in the cabin and enclosed exterior areas. Creating air circulation allows air to travel through the yacht's interior. Have a trained marine technician inspect the exhaust systems when the yacht is in for service, or if a change in the sound of an engine or the generator is noticed. See CO Illustration below



Blockage of exhaust outlets can cause carbon monoxide to accumulate in the cabin and cockpit area; even when the hatches, windows, portholes, and doors are closed.

WARNING:
NEVER OPERATE THE GENERATOR WHILE THE YACHT IS MOORED AGAINST ANOTHER YACHT, DOCK, OR WALL STRUCTURE THAT COULD BLOCK THE EXHAUST OUTLET.



Exhaust from another vessel alongside your yacht, while docked or anchored, can emit poisonous CO gas inside the cabin and cockpit areas of your yacht.

WARNING:
BE ALERT FOR GENERATOR AND ENGINE EXHAUST FROM OTHER VESSELS ALONGSIDE YOUR YACHT. PROVIDE ADEQUATE VENTILATION.



The station wagon effect or back drafting can cause CO gas to accumulate inside the cabin, cockpit, and bridge areas when operating the yacht at a high bow angle or with improper or heavy loading.

WARNING:
PROVIDE ADEQUATE VENTILATION, REDISTRIBUTE THE LOAD OR BRING YOUR YACHT OUT OF HIGH BOW ANGLE. OPEN FORWARD HATCH OR WINDOW.



CO gas can accumulate in the cabin, cockpit and bridge areas when operating your yacht at slow speeds or when the yacht is stopped in the water. A tail wind can also increase accumulation (force of wind entering from aft section of yacht).

WARNING:
PROVIDE ADEQUATE VENTILATION OR SLIGHTLY INCREASE SPEED IF POSSIBLE. OPEN FORWARD HATCH OR WINDOW.



The station wagon effect or back drafting can cause CO gas to accumulate: inside the cabin, under protective weather coverings, cockpit, or bridge areas when the yacht is underway.

WARNING:
PROVIDE ADEQUATE VENTILATION WHEN THE CANVAS TOP, SIDE OR BACK CURTAINS ARE IN THE CLOSED, PROTECTIVE POSITIONS. OPEN FORWARD HATCH OR WINDOW.

TO PREVENT SERIOUS INJURY OR DEATH BY ASPHYXIATION:

- Keep the engine room hatch closed when operating the engines and generator.
- Do not occupy aft lounging areas, including: the boarding platform, or swim near the engine or generator exhaust outlets while the engines or generator are running.
- Minimize the time spent getting underway; CO production is greater when the engines are cold.
- Maintain the propulsion and generator engines to optimize efficiency, which reduces CO emissions.

For additional information on carbon monoxide and yachting, please contact marine organizations that produce safety publications.

For information on receiving a free VESSEL SAFETY CHECK, visit www.vesselsafetycheck.org or contact your local U.S. Coast Guard Auxiliary or United States Power Squadrons®.

- U.S. Coast Guard Auxiliary: 1-800-368-5647 or on the Internet at: www.cgaux.org
- U.S. Power Squadrons: 1-888-FOR-USPS (1-888-367-8777) or on the Internet at: www.usps.org

The following chart displays possible situations where CO can accumulate. Become familiar with the following examples and the suggested precautions to help prevent CO2 poisoning.

IDENTIFYING CO EXPOSURE

IN HIGH CONCENTRATIONS, CO CAN BE FATAL IN MINUTES. However, the effects of lower concentrations can also be lethal.

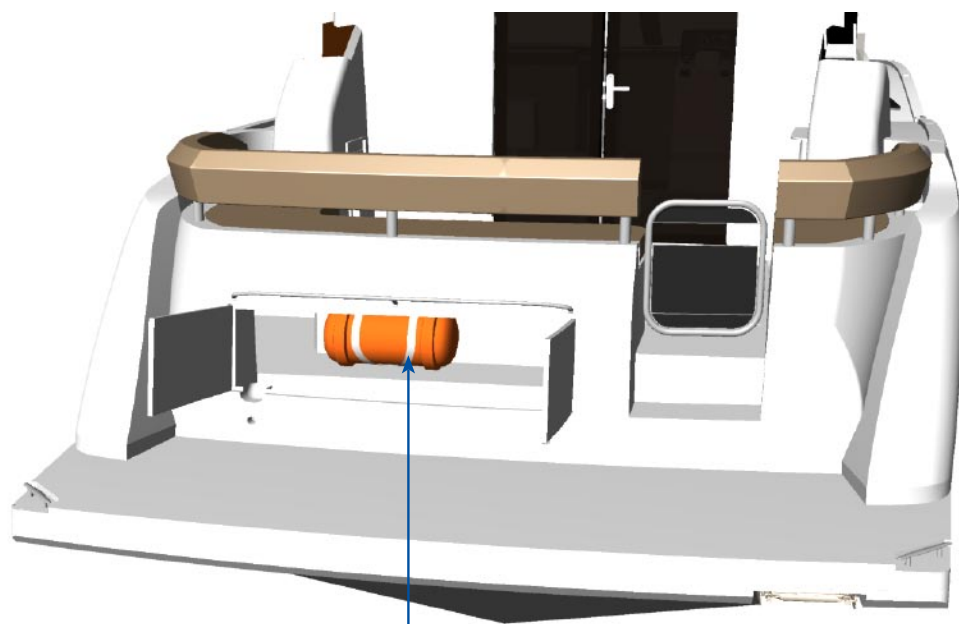
Symptoms of exposure to CO are:

- Watery and itchy eyes
- Throbbing temples
- Inability to think coherently
- Ringing in the ears
- Headache
- Incoherence / slurred speech
- Flushed appearance
- Inattentiveness
- Loss of physical coordination
- Tightness across the chest
- Drowsiness
- Nausea
- Dizziness
- Vomiting
- Fatigue
- Collapse
- Convulsions

TREATING CO EXPOSURE

If suspected that someone is suffering from CO exposure, take the following actions immediately:

- Thoroughly ventilate the area if possible
- Evacuate the area and move the affected person(s) to a fresh air environment
- Administer oxygen, if available
- Get medical assistance
- Determine the probable source of the CO and correct the condition.

LIFE RAFT LOCATION: CE CERTIFIED YACHTS

LIFE RAFT LOCATION: CE CERTIFIED YACHTS

OTHER HEALTH AND SAFETY INFORMATION**WARNING**

CANCER, BIRTH DEFECTS, AND OTHER REPRODUCTIVE HARM ARE KNOWN BY THE STATE OF CALIFORNIA TO BE CAUSED BY CHEMICALS EMITTED FROM ENGINE EXHAUST, ENGINE EXHAUST CONSTITUENTS, AND A VARIETY OF COMPONENTS.

CAUTION

ALWAYS WASH YOUR HANDS, THOROUGHLY, WITH SOAP AND WATER TO PROTECT YOUR SKIN. BATTERY POSTS, TERMINALS, AND RELATED ACCESSORIES CONTAIN LEAD AND LEAD COMPOUNDS. WASH HANDS AFTER HANDLING USED ENGINE OIL. ENGINE OIL CONTAINS CHEMICALS THAT HAVE CAUSED CANCER IN LABORATORY ANIMALS.

STABILITY AND BUOYANCY

To ensure your yacht maintains its stability and buoyancy, perform or obey the following items:

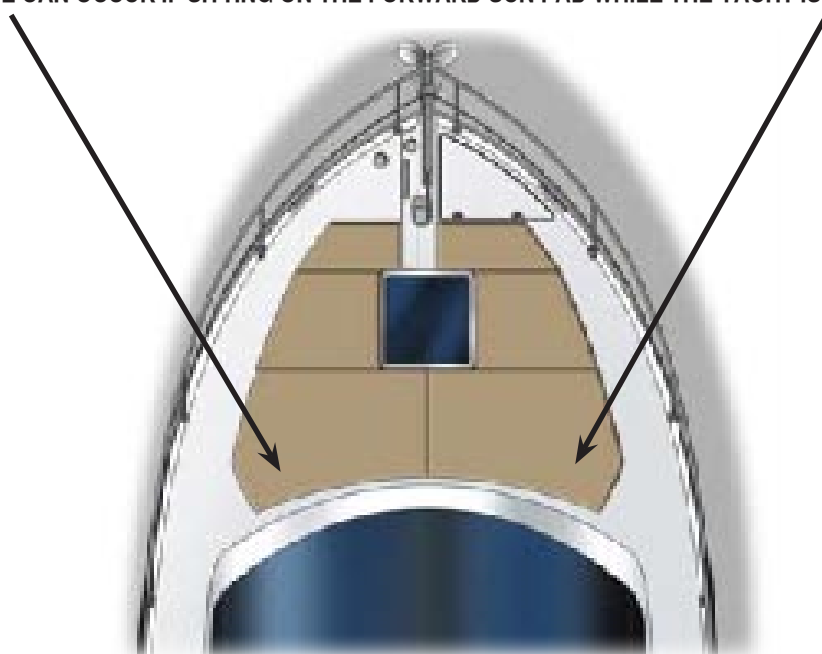
- Any change in disposition of the masses aboard may significantly affect the stability, trim, and performance of the craft.
- Bilge water should be kept to a minimum.
- Stability is reduced by any weight added up high.
- In rough weather, hatches, locker, and doorways should be closed to minimize the risk of flooding.
- Stability may be reduced when towing or lifting heavy weights using a davit or boom.
- Air tanks shall not be punctured.
- Breaking waves are a serious stability hazard.

WARNING LABELS

Warning labels are posted throughout the yacht to protect everyone onboard, the yacht, the yacht's equipment, and any personal property onboard. It is important to read, understand, and obey all warning labels. Failure to obey a warning label may result in serious injury or damage to the yacht, the yacht's equipment, or any personal property on the yacht.

WARNING

DO NOT SIT ON THE FORWARD SUN PAD WHILE THE YACHT IS IN MOTION. INJURY, FALLING OVERBOARD, OR LOSS OF BALANCE CAN OCCUR IF SITTING ON THE FORWARD SUN PAD WHILE THE YACHT IS IN MOTION.



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DC ELECTRICAL SYSTEM



DC ELECTRICAL SYSTEM

A 12-volt DC (Direct Current) electrical system is equipped onboard. The DC electrical system is a comprehensive system designed to meet the present and future 12-volt electrical needs. Wire-runs and connections are positioned to prevent abrasion and exposure to moisture, as well as to remain accessible for inspection, repairs, and the addition of aftermarket electrical accessories.

Wires used throughout the DC electrical system are plastic coated and color-coded.

CAUTION

EXERCISE CAUTION WHEN RECHARGING AND/OR DISCONNECTING/RECONNECTING THE BATTERIES.

DANGER

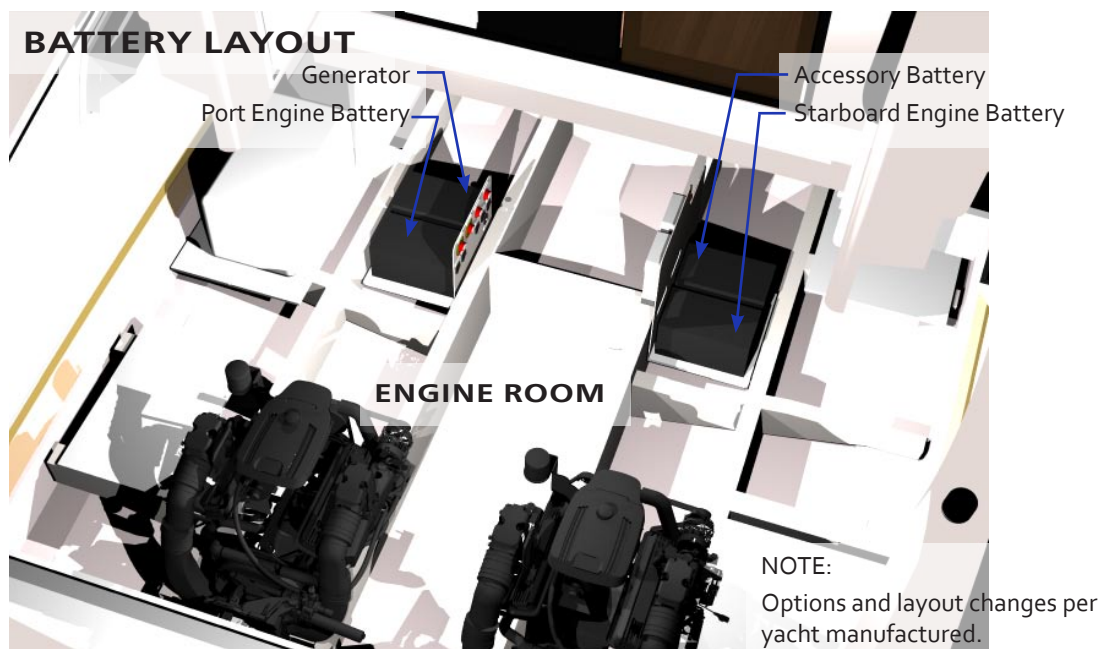
FIRE OR EXPLOSION MAY RESULT FROM IMPROPER USE OF ELECTRICAL DC AND AC SYSTEMS.

BATTERIES

BATTERIES

The batteries located in the engine room power the DC electrical system. The batteries are allocated to four sets of DC Components:

- Engine Batteries - A single 12-volt starting battery is designated for each engine for Mercury and Volvo Engines. Cummins engines require (2) 12-volt starting batteries connected to create 24-volts per engine.
- Accessory Batteries - A single 12-volt deep cycle battery is designated for the accessory items onboard
- Generator Battery - A single 12-volt starting battery is designated for the generator
- Stern Thruster - Two 12-volt batteries designated for each stern thruster (If installed)
- Bow Thruster - Two 12-volt batteries designated for each bow thruster (If installed)

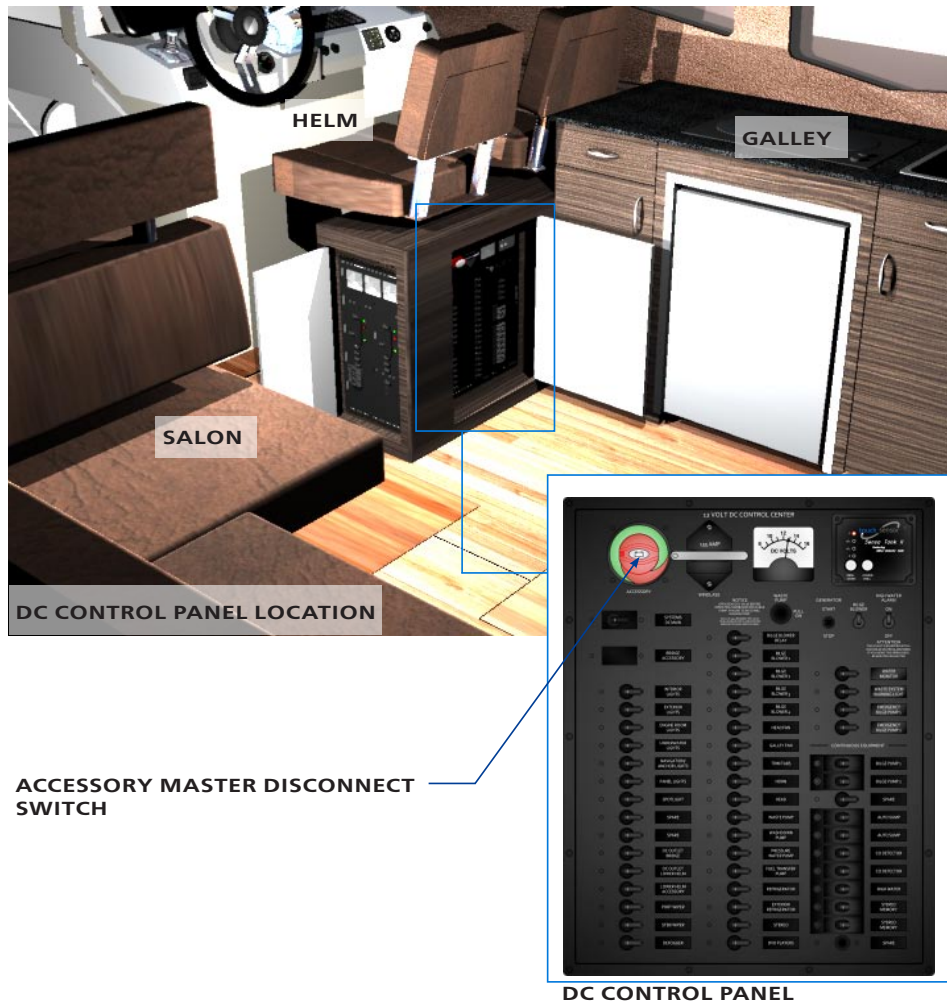


MASTER DISCONNECT SWITCHES

MASTER DISCONNECT SWITCHES

Master disconnect switches control electricity from the batteries to the DC Control Panel, engines, and accessory items. Multiple master disconnect switches control the flow of electricity to the DC components. The switches are allocated to the following DC electrical component: accessory equipment, bow thruster, generator, engine port, and engine starboard. Turn the master disconnect switch to

the ON position to provide electricity to the DC Control Panel (below the helm seating) and the breakers control the flow of electricity the DC panel's allocated items.



ACCESSORY BATTERY AND MASTER DISCONNECT SWITCH

The accessory equipment is controlled by the DC Control Panel. The DC Control Panel is located below the helm seating. The DC Control Panel is powered by a single 12-volt accessory battery located in the engine room. See previous page for battery location.

Electricity from the accessory battery is controlled by a master disconnect switch. The switch is located on the DC Control Panel, (below the helm seating). Circuit breakers on the DC Control Panel control the flow of electricity to the other DC circuit breaker panels.

ENGINE BATTERIES AND MASTER DISCONNECT SWITCHES

Each propulsion engine has one or two designated engine batteries depending on the installed engine. See beginning of this section for engine and battery options. Each engine battery set is located outboard of the designated engine. See previous page for engine battery location.

A master disconnect switch controls the electricity from each battery bank to the battery's designated engine. The engine master disconnect switches are located in the engine room, aft, forward the generator. See next page for illustration. Turn ON the master disconnect switches to provide electricity to the engines. See the following pages for engine battery master disconnect switch location.

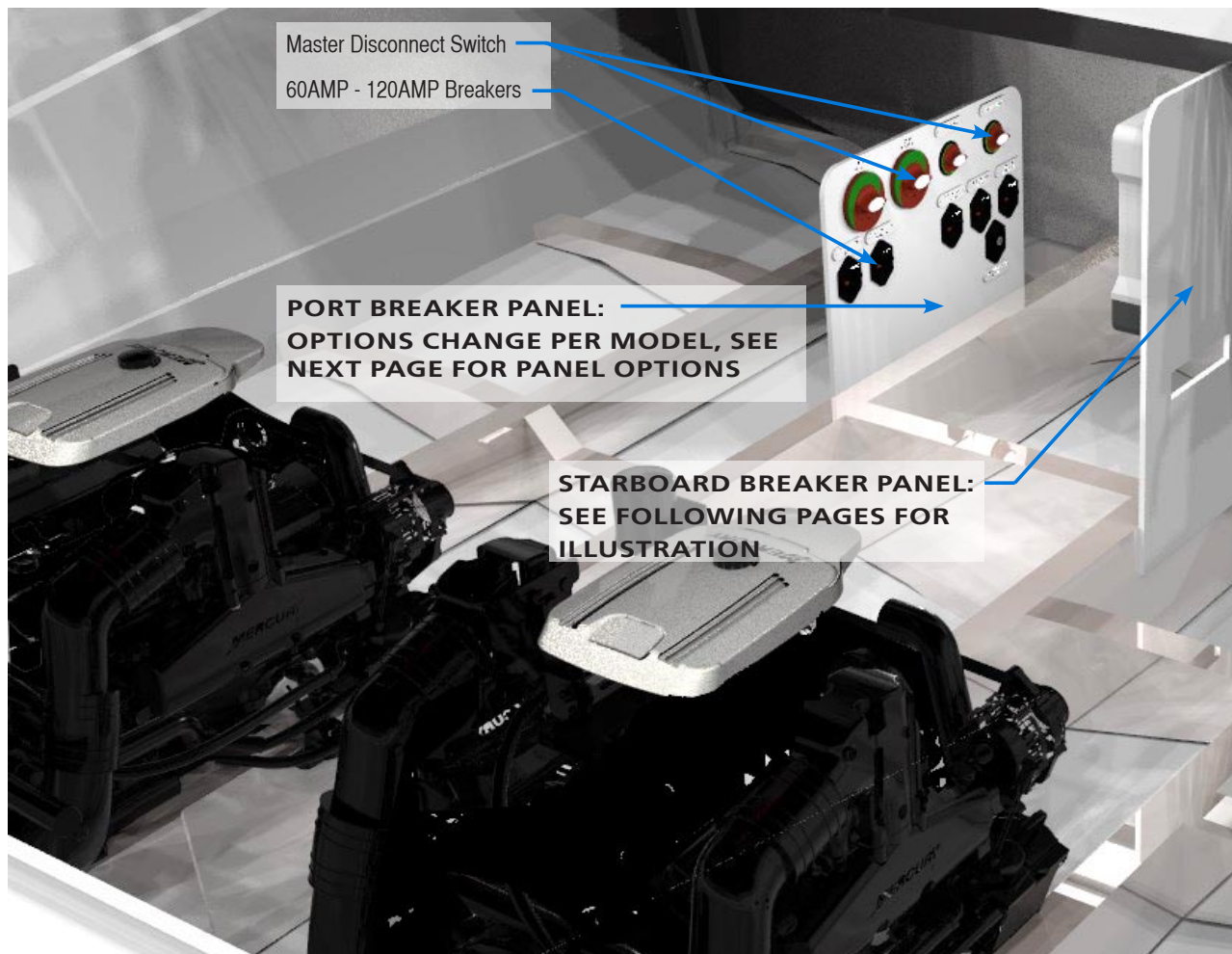
GENERATOR BATTERIES AND MASTER DISCONNECT SWITCH

The generator has a single, dedicated battery. Electricity from the battery to the generator starter is controlled by a master disconnect switch. The switch is located in the engine room, aft directly behind the port engine. Turn ON the master disconnect switch to provide electricity to the generator starter. See previous page for generator battery location. See next page for generator master disconnect switch location.

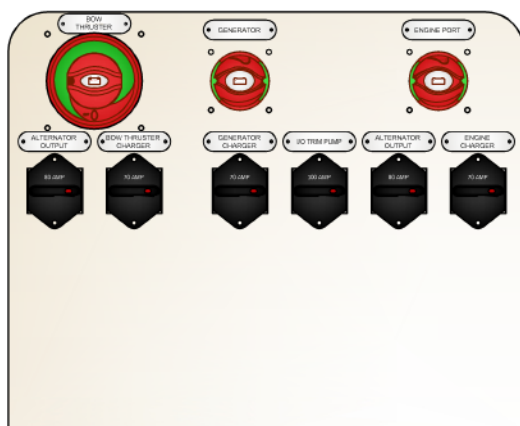
DC ELECTRICAL SYSTEM



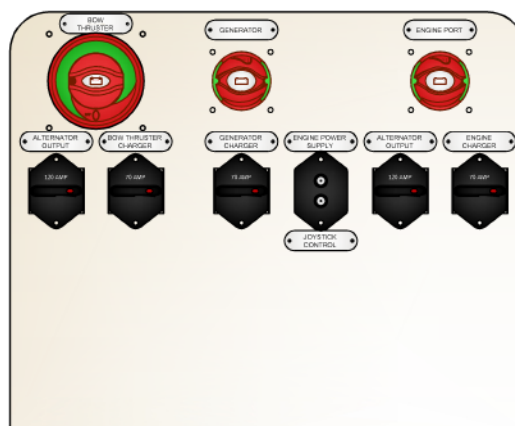
PORT ENGINE ROOM BREAKER PANEL



PORT ENGINE ROOM BREAKER PANEL OPTIONS



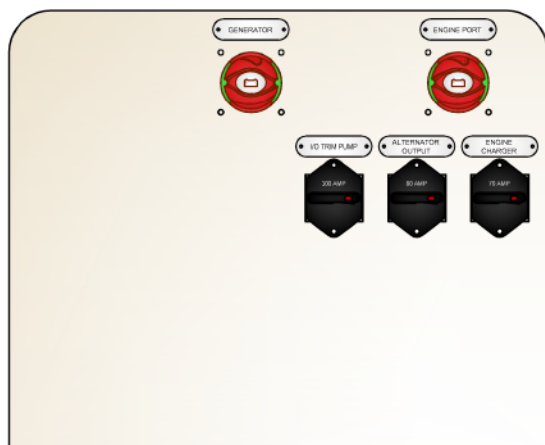
OPTION 1



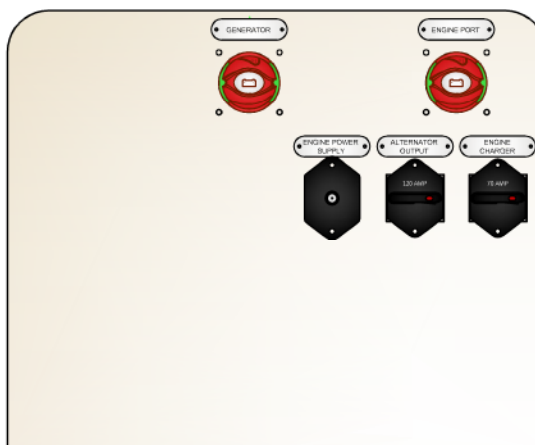
OPTION 2

PANEL OPTIONS CONTINUED ON NEXT PAGE

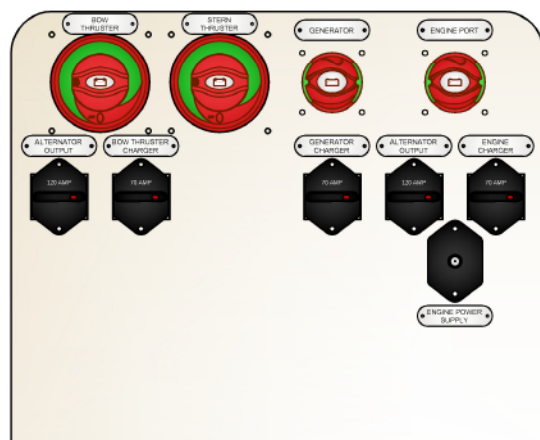
PORT ENGINE ROOM BREAKER PANEL OPTIONS CONT'D



OPTION 3



OPTION 4



OPTION 5

SEE NEXT PAGE FOR STARBOARD ENGINE ROOM BREAKER PANEL

DC ELECTRICAL SYSTEM

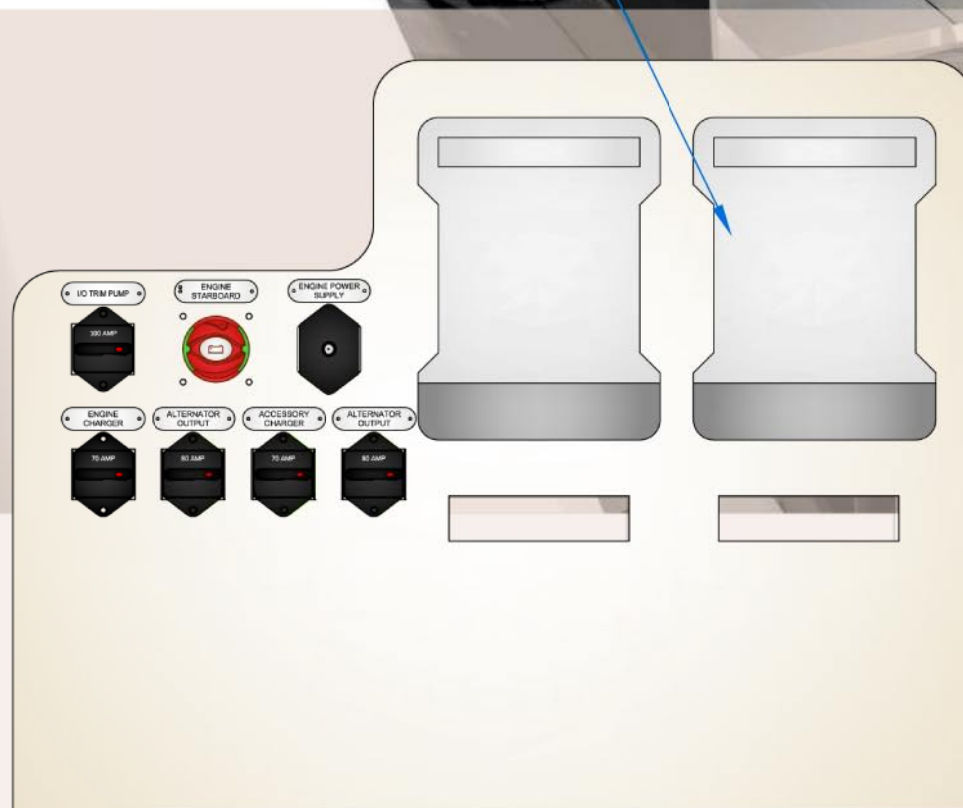


STARBOARD ENGINE ROOM BREAKER PANEL

Engine Room Breaker Panel: Starboard Side
Master Disconnect Switches: See drawing below
for labels.

Breaker Switches: See drawing below for labels
and amperage

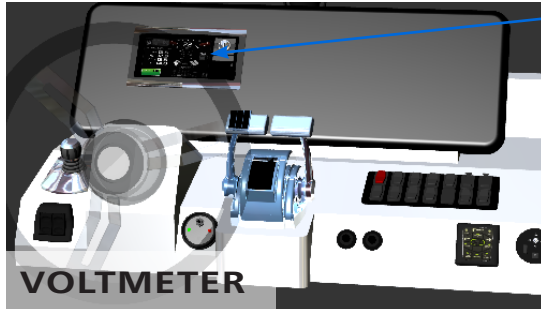
60 Amp Battery Charger (2)



Engine Room Breaker Panel: Starboard Side

MONITORING BATTERY VOLTAGE LEVELS

A fully charged battery that has not been charged or discharged for at least two hours should indicate a reading between 12.3 and 12.7 volts. A reading below this level indicates a partially charged battery. The battery is dead if the voltmeter reads zero.



ENGINE BATTERY VOLTAGE LEVEL

The voltage level of each engine battery pair is determined by activating the battery's dedicated voltmeter. The voltmeters are located at each helm. For both engines, a single LCD display provides information on the engine temperature, oil pressure, and battery voltage level.

ACCESSORY BATTERY

The voltage level of the accessory battery is determined by using the voltmeter, labeled "DC VOLTS", located on the DC Control Panel (below the helm seating, within the cabinetry forward the galley).

ACTIVATING THE VOLTMETER:

1. Turn ON the Accessory battery master disconnect switch. The Accessory master disconnect switch is located on the DC Control Panel (below the helm seating within the cabinetry, forward the galley).
2. Switch ON the SYSTEMS DC MAIN circuit breaker on the DC Control Panel (below the helm seating within the cabinetry, forward the galley).

CHARGING THE BATTERIES

While the engines are running, the designated alternators generally supply enough power to replace the power used by the yacht's DC equipment.

The PORT and STBD engines are each equipped with alternators that charge each 12-volt battery installed, except for the generator battery. The DC equipment will eventually drain the batteries being used without the engines running.

IF THE BATTERIES GET DRAINED, EITHER:

- Start the PORT or STBD engine or use the onboard battery chargers to recharge the batteries.
- If not connected to shore power, run the generator to activate the battery chargers.

NEVER

NEVER ALLOW THE YACHT'S BATTERY'S CHARGE LEVEL TO REACH <10 VOLTS. DISCHARGING A BATTERY < 10 VOLTS CAN DAMAGE THE BATTERY SO THAT IT CAN NO LONGER RECHARGE.

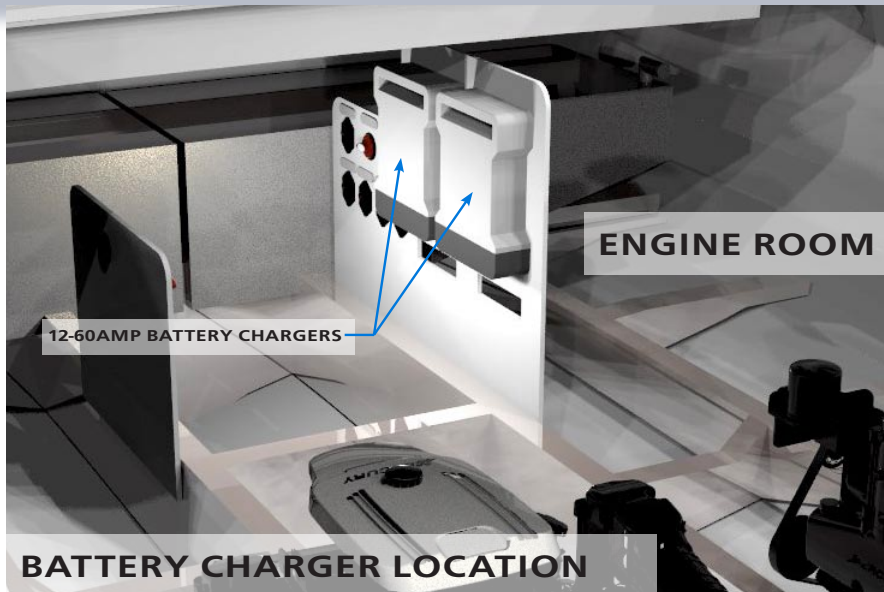
THE BATTERY CHARGER SHOULD ALWAYS BE OPERATING WHEN THE YACHT IS CONNECTED TO SHORE POWER. TURN ALL BATTERY MASTER DISCONNECT SWITCHES TO THE OFF POSITION IF THE YACHT IS UNOCCUPIED FOR AN EXTENDED PERIOD OF TIME AND IF THE YACHT IS NOT CONNECTED TO SHORE POWER.

BATTERY CHARGERS

Two battery chargers are equipped onboard. If a bow thruster or stern thruster is installed, one battery is designated per charger. See below for illustration.

- (1) 60 amp battery charger: monitors the voltage levels of the engine and accessory batteries
- (1) 60 amp battery charger: monitors the bow thruster and generator battery

DC ELECTRICAL SYSTEM



Each battery charger monitors and maintains the voltage levels of one or more factory installed battery. When the chargers are ON, they automatically charge the attributing batteries when the voltage drops below the manufacturers level. Each charger is mounted in the engine room, forward the starboard engine. See above for illustration.

If neither a bow or stern thruster is installed, the voltage levels of the generator battery are monitored and maintained by a single battery charger. See above for illustration.

BATTERY MAINTENANCE

DANGER

THE BATTERIES CONTAIN AN ACID CALLED ELECTROLYTE. WEAR GLOVES AND PROTECTIVE EYE WEAR WHEN WORKING ON AND AROUND THE BATTERIES. AVOID CAUSING DAMAGE THAT COULD SPILL ELECTROLYTE INTO THE ENGINE ROOM OR BILGE WHEN SERVICING THE BATTERIES. AVOID GETTING SALTWATER IN OR ON THE BATTERY. EITHER CONDITION CAN CREATE A POISONOUS GAS THAT IS HARMFUL IF INHALED. WHEN A BATTERY IS BEING CHARGED, IT CREATES HYDROGEN GAS.

IF THE BATTERY IS DAMAGED AND ELECTROLYTE GETS SPILLED:

1. Ventilate the area of the spill.
2. Neutralize the spilled acid by pouring baking soda on the spill.
3. Remove the neutralized electrolyte, using a disposable rag or paper towel.
4. Replace damaged/leaking battery.

Batteries are relatively maintenance free; however, to increase the batteries effectiveness and life perform the following:

- Keep the batteries fully charged at all times. Batteries should never be stored partially charged. The charge level of the batteries can be monitored using the voltmeters on the helm instrument panel (engine batteries) or control panel (accessory batteries).
- Inspect the batteries at least once every 30 days for corrosion, loose wiring, dirt, etc.

WARNING

DISCONNECT THE BATTERIES BEFORE CLEANING.

- Periodically clean the battery terminals and cable connections. Remove any accumulation of dirt on the top of the battery case. Use a wire brush to clean the terminals. Coating the terminals with a terminal protecting product will help reduce corrosion that can form in these areas.
- Make sure the battery cables are securely attached to the terminal posts. Tighten the terminal nuts snugly using a torque wrench, to 20ft/lbs.
- Remove the batteries from the yacht during periods of extended storage in freezing climate areas. Store the batteries in a cool (above freezing temperature), dry area. All batteries lose some charge during storage, but the lower the temperature the less charge is lost. Avoid storing the batteries in a humid area.
- Check the battery charge level monthly, using a hydrometer or installed voltmeter. Charge the battery if the specific gravity of the battery is less than 1.225 or the voltage is less than 12 Volts.

NOTE: Batteries are maintenance free. Electrolyte CANNOT be checked.

SAFETY SYSTEM

The safety systems include:

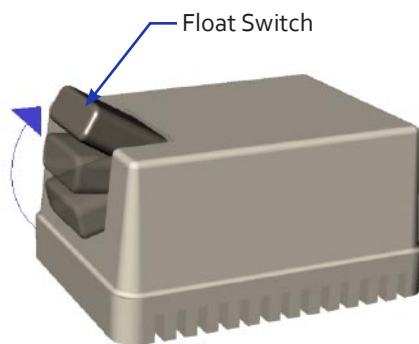
- High water alarm
- CO detectors in salon and staterooms
- Two - four (depending on region the yacht is shipped to) automatic/manual bilge pumps, 2000 gpm each pump

The safety system circuit breakers should remain ON at all times due to the high level of importance the system holds.

IF A SAFETY SYSTEM CIRCUIT BREAKER TRIPS:

1. Immediately identify and correct the cause of the problem.
2. Reset the breaker.

NOTE: Periodically test each bilge pump by operating the manual switch, or by raising the switch on the bilge pump float switch. The switch is located next to the pump. See below for bilge pump float switch illustration.



BILGE PUMP FLOAT SWITCH

CO DETECTORS

CO Detectors should be calibrated periodically. See OEM Manual for manufacturer's explanation.

NOTE:

CO Detectors will chirp when battery voltage is low.

OPERATING THE DC EQUIPMENT

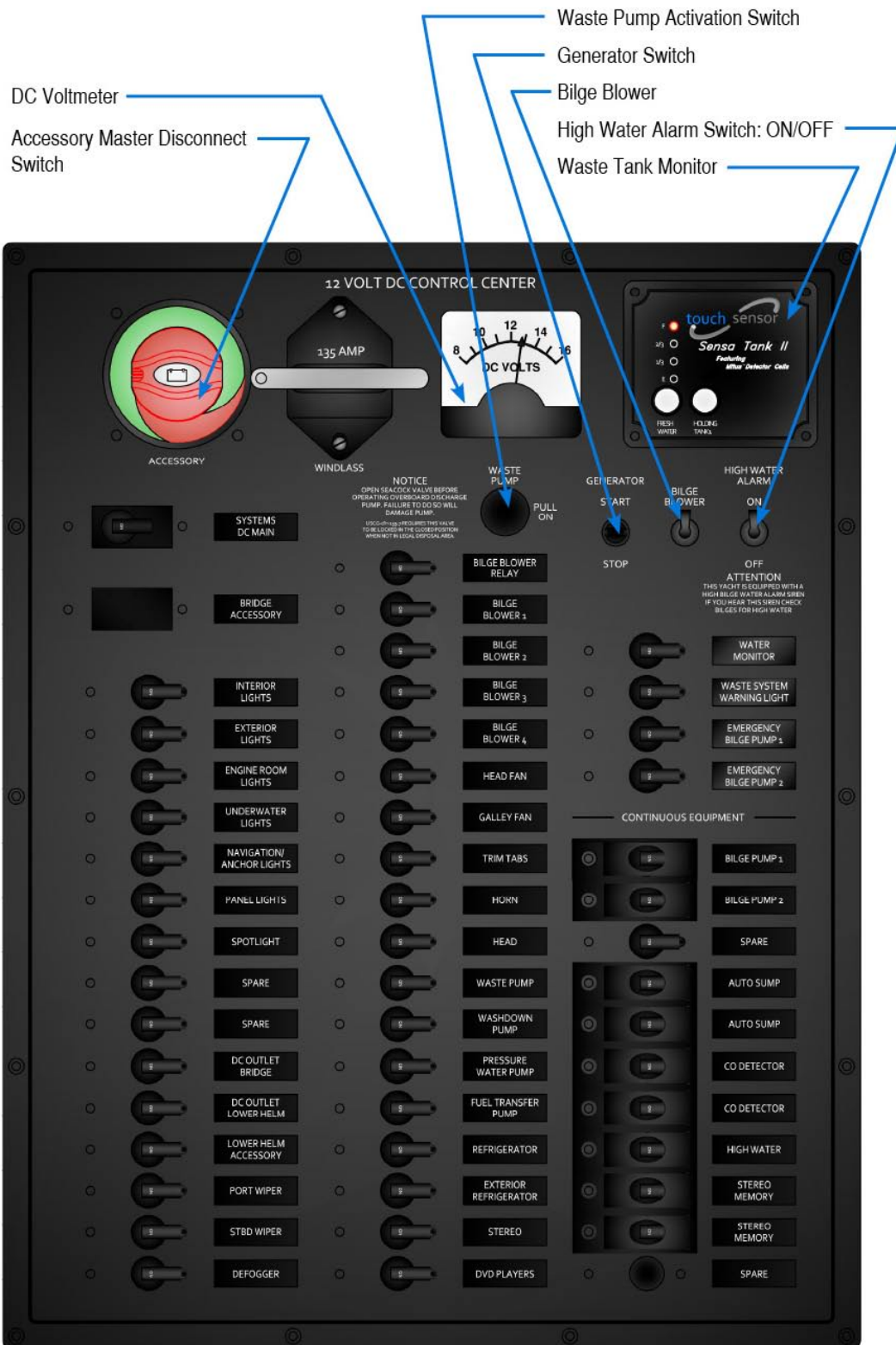
Power to the boat's DC components is controlled by circuit breakers and individual controls for each component. The C40 contains a single DC Control Panel located in the Dinette aft, STBD cabinet.

DC ELECTRICAL SYSTEM



DC CONTROL PANEL

The DC Control Panel manages the power supply to the DC components listed on the panel. The DC panel is located below the helm seating and contains the circuit breakers described in this section. The panel also contains additional controls and meters, described in the vendor literature. See beginning of this section for DC Control Panel location.



NEVER

NEVER RESET A BREAKER OR REPLACE A FUSE THAT HAS AUTOMATICALLY TRIPPED WITHOUT FIRST CORRECTING THE PROBLEM. FAILURE TO MAKE NECESSARY CORRECTIONS MAY CREATE A DANGEROUS SITUATION.

The circuit breakers on the DC Control Panel enables the user to control the DC components by switching the breakers ON or OFF. All of the circuit breakers protect the electrical system by automatically disconnecting the circuit from the power source in the event of a short or overload. Power is supplied to the circuit breaker panels by the accessory batteries.

NOTE: If a circuit breaker location is labeled, but no circuit breaker is present, the component named on the label is an option that is not installed.

DC CONTROL CENTER CIRCUIT BREAKERS

(Breakers are listed alphabetically below)

AUTO SUMP (2 BREAKERS)

Switch the AUTO SUMP breakers ON before using any items on the yacht that drain into the sump. The sump pump is activated automatically by a float switch when water within the sump rises above a point where the water needs to be relocated.

BILGE BLOWER 1 - BILGE BLOWER 4

The Bilge Blower breaker controls the electricity to the bilge blower. Switch the Bilge Blower circuit breaker ON to supply power to the Bilge Blower. Refer to the OEM information for details on operating the Bilge Blower.

BILGE PUMP 1, BILGE PUMP 2

Each bilge pump is activated automatically by a float switch when water within the bilge rises to the pump manufacturer's design level. THE AUTO BILGE PUMP BREAKERS MUST BE ON WHEN THE BOAT IS IN THE WATER.

BILGE BLOWER RELAY

The Bilge Blower Relay breaker controls the relays for the automatic bilge pumps. Each bilge pump relay at the helm is connected to a relay that operates the switch's designated bilge pump.

CO DETECTOR (2 BREAKERS)

Carver has installed several carbon monoxide (CO) detectors for personal safety. The CO detectors continuously check the air in the cabin for the presence of carbon monoxide. The breakers must be ON for the CO detectors to operate.

WARNING

ALWAYS ACTIVATE THE CO DETECTORS WHEN THE ENGINES OR GENERATOR ARE RUNNING. CARBON MONOXIDE IS DANGEROUS.

FOR INFORMATION ON MINIMIZING, DETECTING, AND CONTROLLING CARBON MONOXIDE ACCUMULATION REFER TO SECTION 1: *CARBON MONOXIDE (CO) WARNINGS*.

The CO Detectors alert passengers to the presence of carbon monoxide in the cabin. The detectors emit a loud, high-pitched sound when activated. If the alarm sounds, determine the cause of the CO accumulation, and correct the problem immediately.

Test each unit on a weekly basis. Locate the test button on each CO detector. If suspected that the CO detector is faulty, have your dealer repair the detector or replace the detector immediately.

Refer to Section 1: *Carbon Monoxide (CO) Warnings* for more information on CO.

DC ELECTRICAL SYSTEM



DC OUTLET BRIDGE

The DC Outlet Bridge breaker controls the flow of electricity to the 12V DC Outlet located at the bridge helm. Switch the breaker ON to allow use of the DC Outlet.

DC OUTLET LOWER HELM

The DC Outlet Lower Helm breaker controls the flow of electricity to the 12V DC Outlet located at the lower helm. Switch the breaker ON to allow use of the DC Outlet.

DEFOGGER

The Defogger breaker controls the switch for the optional lower helm windshield defoggers.

DVD PLAYERS

The DVD Player breaker controls the flow of electricity to the DVD player located in the Salon. Switch the breaker ON to allow use of the DVD player.

EMERGENCY BILGE PUMP 1, EMERGENCY BILGE PUMP 2 (EUROPEAN CE OPTION ONLY)

The Emergency Bilge Pump breakers control the emergency bilge pumps in the hull. The emergency bilge pumps operate continuously when the breakers are switched ON.

EXTERIOR REFRIGERATOR

The Exterior Refrigerator breaker controls the onboard refrigerator located on the cockpit.

FUEL TRANSFER PUMP (DIESEL ENGINE OPTION ONLY)

The Fuel Transfer Pump breaker controls the pump that transfers the fuel to the fuel tank.

GALLEY FAN

The Galley Fan breaker controls the exhaust fan switch in the galley.

GUEST HEAD

The electric head breaker controls the electric pump that flushes the toilet in the Guest Head. Switch the head breaker ON to enable the pump. Pressing the wall mounted switch on the vanity, labeled, "HEAD" flushes the toilet. Refer to Section 4: *Toilets* and the OEM information for details on operating the toilet.

HEAD FAN

The head fan breakers controls the fans in the head.

HIGH WATER

The high water alarm breaker controls the flow of electricity to the high bilge water alarm. For a description of the high bilge water alarm, refer to Section 4: *Bilge System*. The high water alarm breaker must be ON when the boat is in the water.

HORN

The Horn breaker controls the flow of electricity to the switch that operates the horn.

LIGHTS (All): ENGINE ROOM LIGHTS, EXTERIOR LIGHTS, INTERIOR LIGHTS, PANEL LIGHTS, NAVIGATION LIGHTS, SPOTLIGHT, UNDER WATER LIGHTS

The Lights breakers control the various light switches throughout the yacht.

LOWER HELM ACCESSORY

The Lower Helm Accessory breaker controls the accessory items at the lower helm. Switch the breaker ON to enable the lower helm accessories.

MASTER HEAD

The electric head breaker controls the electric pump that flushes the toilet in the Master Head. Switch the head breaker ON to enable

the pump. Pressing the wall mounted switch on the vanity, labeled, "HEAD" flushes the toilet. Refer to Section 4: *Toilets* and the OEM information for details on operating the toilet.

PORT WIPER

The PORT Wiper breaker controls the switches that operate the windshield wiper on the PORT side.

PRESSURE WATER PUMP

The pressure water pump breaker controls the fresh water system's pressure pump. Switch the water pump breaker ON to activate the pump after the fresh water tank is filled. Refer to Section 4: *Pressurizing and Priming the Water System* for information on using the water pump to fill and prime the water system.

REFRIGERATOR

The refrigerator breaker controls the onboard refrigerator in the galley.

STARBOARD WIPER

The Starboard Wiper breaker controls the switches that operate the windshield wiper on the starboard side.

STEREO

The Stereo breaker controls the power to the stereo in the Salon. Switch the breaker ON to supply power to the system.

STEREO MEMORY (2 BREAKERS)

The stereo memory breakers control the stereo systems. The stereo memory breakers should always be ON to maintain the information programmed into the stereo's memory. The stereos will need to be reprogrammed if the stereo memory breaker is switched OFF.

Refer to the OEM information for details on programming the stereos.

SYSTEMS DC MAIN

The Systems DC Main breaker controls the other circuit breakers on the DC Control panel.

TRIM TABS

The Trim Tabs breaker controls the DC power to the trim tab controls at the helm. Trim tabs are used to improve the running angle of the yacht while underway. Refer to Section 6: *Trim Tabs* for more information on using the trim tabs.

VIP HEAD FAN

The VIP head fan breakers controls the fan in the VIP Head.

WASHDOWN PUMP

The washdown pump breaker controls the optional transom raw water washdown pump. Switch the washdown pump breaker ON to activate the washdown pump. Turn the washdown pump off by switching the washdown pump breaker OFF when finished using the washdown. For information on using the washdown pump, refer to Section 4: *Raw Water Washdown*.

WASTE PUMP

The waste pump breaker controls the waste pump switch for the optional overboard discharge system. Use the waste pump to empty the waste tank directly overboard.

WASTE SYSTEM WARNING LIGHT

The Waste System Warning Light breaker controls the waste level gauge located in the head. Switch the breaker ON to supply power to the system.

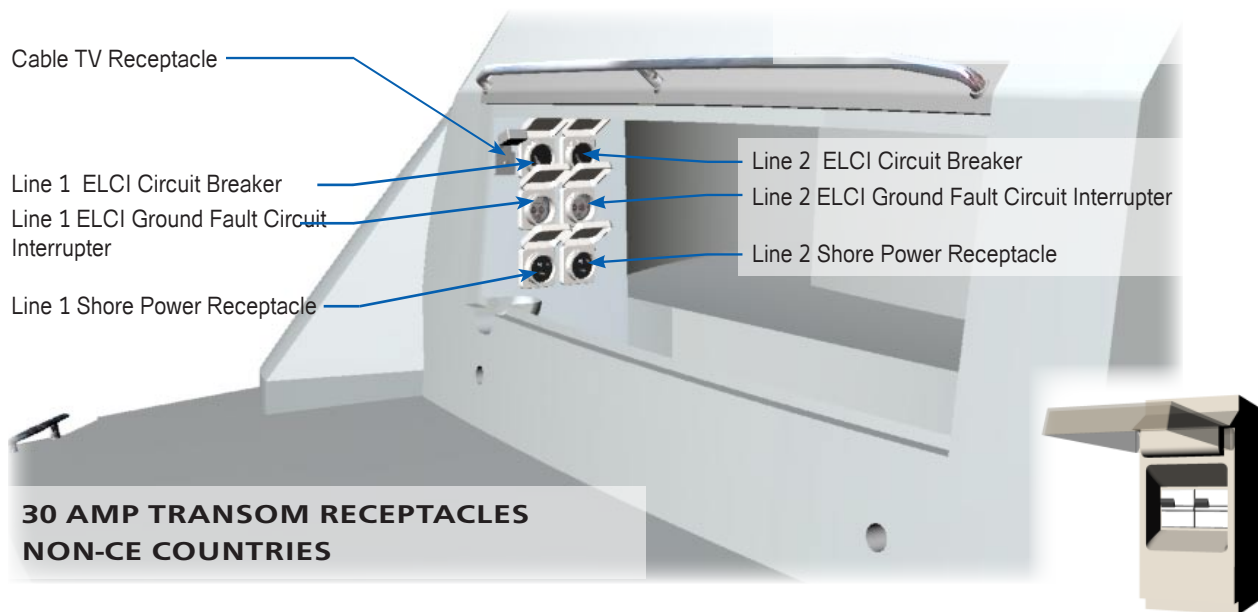
WATER MONITOR

The Water Monitor breaker controls the fresh water monitoring system, including the water level display.

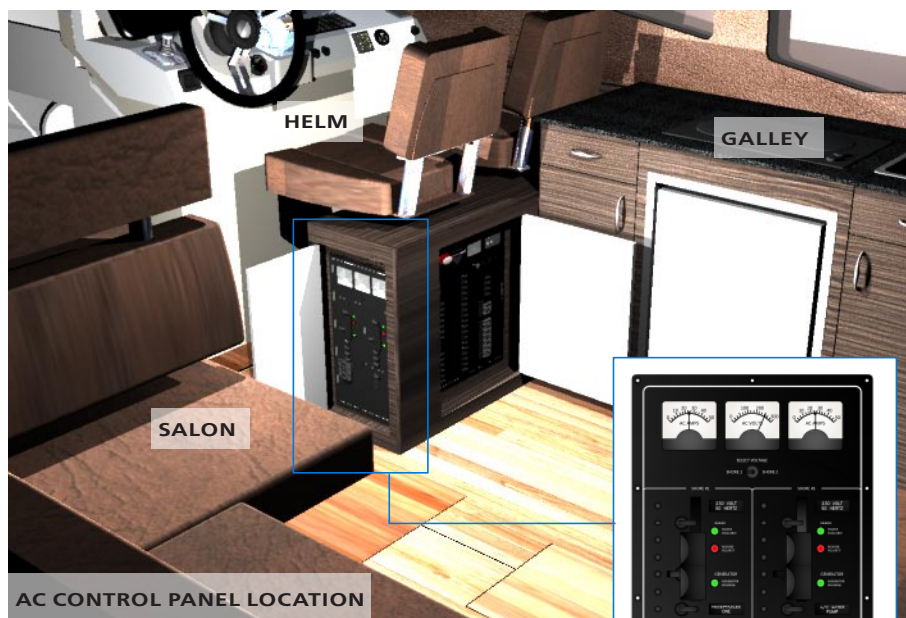
AC ELECTRICAL SYSTEM

The power for the AC electrical system is supplied by either a shore power source or the onboard generator. *The Shore Power Connection Procedure* and the *Onboard Generator Procedure* are explained later in this section.

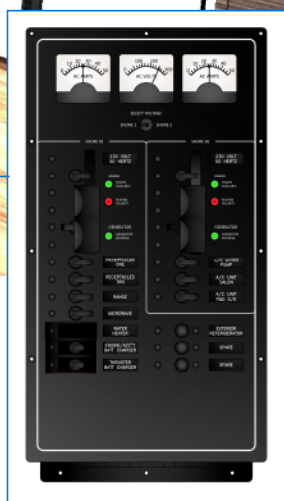
- Line 1/Line 2 (120V/60Hz, 30amp) AC electrical system is designed for use in US and Canada.
- Shore 1/Shore 2 (230V/50Hz, 30 amp) AC electrical system is designed for use in CE Countries.
- AC Control Panel, located below the helm seating at the center walkway.



ELCI CE COUNTRIES



AC CONTROL PANEL LOCATION



AC CONTROL PANEL

DANGER

FIRE OR EXPLOSION MAY RESULT FROM IMPROPER USE OF ELECTRICAL DC AND AC SYSTEMS.

DANGER

ELECTRICAL SHOCK MAY RESULT FROM IMPROPER USE OF THE AC ELECTRICAL SYSTEM.

IMPORTANT

- DO NOT MODIFY THE YACHT'S ELECTRICAL SYSTEM OR RELEVANT DRAWINGS. INSTALLATION, ALTERATIONS, AND MAINTENANCE SHOULD BE PERFORMED BY A COMPETENT MARINE ELECTRICAL TECHNICIAN. INSPECT THE SYSTEM AT LEAST TWICE PER YEAR.
- DISCONNECT FROM SHORE POWER WHEN SYSTEM IS NOT IN USE
- CONNECT METALLIC HOUSINGS OR ENCLOSURES OF INSTALLED ELECTRICAL APPLIANCES TO THE PROTECTIVE CONDUCTOR SYSTEM IN THE CRAFT (GREEN OR GREEN WITH A YELLOW STRIPE CONDUCTOR).
- USE A DOUBLE-INSULATED OR GROUNDED (EARTHED) ELECTRICAL APPLIANCES.
- IF REVERSE POLARITY INDICATOR IS ACTIVATED, DO NOT USE ELECTRICAL SYSTEM. CORRECT POLARITY FAULT BEFORE ACTIVATING THE ELECTRICAL SYSTEM ON THE CRAFT.
- TEST THE ELCI ON A MONTHLY BASIS BY PRESSING THE "T" ON THE BREAKER (CE ONLY).
 - IF TRIPPING OCCURS:
 1. UNPLUG ALL APPLIANCES.
 2. RESET THE SWITCH.
 3. INDIVIDUALLY PLUG IN EACH APPLIANCE UNTIL THE SAFETY SWITCH TRIPS TO DETERMINE THE FAULTY APPLIANCE.
 - IF THE SAFETY SWITCH DOES NOT TRIP WITH INDIVIDUAL APPLIANCES, THEN THE CIRCUIT MAY BE OVER-LOADED
 - IF THE SAFETY SWITCH TRIPS WITH NO APPLIANCES CONNECTED, THE INSTALLATION CABLING MAY BE DAMAGED. CONSULT AN ELECTRICIAN.

SYSTEM ORGANIZATION

NORTH AMERICA/PACIFIC RIM

STANDARD (NORTH AMERICAN/PACIFIC RIM ONLY)

LINE 1

Line 1 (30 amp) circuit on the AC electrical panel provides power to all of the AC equipment except, the air conditioning system. Line 1 is configured as 120 volts 60 Hertz. See breakers on AC Panel for list of installed items controlled by the LINE 1 circuit.

LINE 2

Line 2 (30 amp) circuit, located on the AC electrical panel provides power to all of the AC components listed on the Shore 2 column of circuit breakers on the AC Control Panel. Line 2 is configured as 120 volts 60 Hz. See breakers on AC Panel for list of installed items controlled by the LINE 2 circuit.

EUROPEAN ELECTRICAL SYSTEM

SHORE 1

Shore 1 (30 amp) circuit on the AC electrical power provides power to all of the AC equipment except, the air conditioning system. Shore 1 is configured as 230 volts 50 Hertz. See breakers on AC Panel for list of installed items controlled by the Shore 1 circuit.

SHORE 2

Shore 2 (30 amp) circuit, located on the AC electrical panel provides power to all of the AC components listed on the Shore 2 column of circuit breakers on the AC Control Center. Shore 2 is configured as 230 volts 50 Hz. See breakers on AC Panel for list of installed items controlled by the SHORE 2 circuit.

DANGER

DO NOT SERVICE THE AC ELECTRICAL SYSTEM. DEATH OR INJURY MAY OCCUR.

AC Power Sources

SHORE POWER

The transom shore power connectors and the ELCI circuit breaker groups are located in the transom storage locker on the PORT side. See beginning of this section for shore power receptacles location and ELCI breaker locations.

DO NOT alter the shore power cable connectors, use only compatible cable connectors and shore power receptacles.

NOTE: Remove all contents from the refrigerator if the yacht is unoccupied. The shore power supply to the vessel may be interrupted and food may spoil.

CAUTION

EXERCISE CAUTION WHEN CONNECTING/DISCONNECTING TO SHORE POWER.

CAUTION

DO NOT SUPPLY POWER TO THE WATER HEATER WHEN IT IS EMPTY. FIRE DAMAGE MAY RESULT IF THE HEATING ELEMENT IS DAMAGED.

DANGER

ELECTRICAL SHOCK RESULTING IN DEATH OR SERIOUS INJURY CAN OCCUR BY USING A DAMAGED SHORE POWER CORD OR A CORD THAT IS NOT DESIGNED FOR THE INTENDED PURPOSE. THE SHORE POWER CORD MUST BE IN EXCELLENT CONDITION WITH NO CUTS, NICKS, OR ABRASIONS IN THE EXTERIOR PLASTIC COVER. THE CORD MUST BE SPECIFICALLY DESIGNED TO CONNECT THE YACHT TO A SHORE POWER SOURCE.

DANGER

DO NOT ALLOW SHORE POWER CABLE END TO HANG IN THE WATER. AN ELECTRICAL FIELD CAN RESULT WHICH CAN CAUSE INJURY OR DEATH TO NEARBY SWIMMERS.

DANGER

DEATH OR SERIOUS INJURY MAY OCCUR BY INCORRECTLY SERVICING THE AC ELECTRICAL SYSTEM. ONLY TRAINED ELECTRICIANS SHOULD SERVICE THE YACHT'S AC ELECTRICAL SYSTEM.

BEFORE ATTEMPTING TO SERVICE THE AC ELECTRICAL SYSTEM, ALWAYS:

- DISCONNECT THE YACHT FROM THE SHORE POWER SOURCE
- SHUT OFF THE GENERATOR

AC ELECTRICAL SYSTEM



SHORE POWER CONNECTION

DANGER

DO NOT APPLY POWER TO AN EMPTY WATER HEATER.

WARNING

TURN OFF THE MAIN CIRCUIT BREAKERS BEFORE PLUGGING INTO DOCKSIDE POWER. MAKE SURE THE PLUG CONNECTION IS SECURE. SERIOUS DAMAGE TO ELECTRONIC EQUIPMENT WILL RESULT IF DIRECTIONS ARE NOT FOLLOWED. SEE BEGINNING OF THIS SECTION FOR ELCI BREAKER LOCATION.

WARNING

TO MINIMIZE SHOCK AND FIRE HAZARD:

- BEFORE USING THE SHORE POWER CORD, EXAMINE THE CABLE FOR DAMAGE. DO NOT USE THE SHORE POWER CORD IF IT APPEARS CUT OR DAMAGED. DO NOT USE A CORD WITH DAMAGED OR CORRODED TERMINALS.
- TURN OFF THE BOAT'S SHORE CONNECTION SWITCH BEFORE CONNECTING OR DISCONNECTING THE CORD.
- CONNECT THE SHORE POWER CORD TO CRAFT'S INLET BEFORE CONNECTING TO SHORE POWER SOURCE.
- IF THE BOAT IS EQUIPPED WITH A POLARITY INDICATOR WHICH ACTIVATES, DISCONNECT THE SHORE POWER CORD AND CORRECT THE POLARITY.
- DISCONNECT THE SHORE POWER CORD AT THE SHORE OUTLET FIRST.
- DO NOT LEAVE THE SHORE POWER CORD CONNECTED TO THE SHORE-OUTLET WHEN THE CORD IS NOT IN USE.
- CLOSE THE SHORE POWER INLET COVER TIGHTLY.
- IF THE REVERSE POLARITY INDICATOR LIGHT IS ACTIVATED, DO NOT USE THE ELECTRICAL SYSTEM. CORRECT THE POLARITY FAULT BEFORE ACTIVATING THE ELECTRICAL SYSTEM ON THE CRAFT.

DO NOT ALTER THE PLUG AND CONNECTOR ON THE SHORE POWER CORD.

WARNING

DO NOT WORK ON AN ENERGIZED AC SYSTEM.

WARNING

WHEN CONNECTED TO SHORE POWER, DO NOT SWIM ANYWHERE NEAR THE YACHT. STRAY VOLTAGE MAY LEAK FROM THE SHORE POWER CORD AND/OR YACHT OR NEIGHBORING YACHT'S SHORE POWER SYSTEM. SERIOUS INJURY OR DEATH MAY OCCUR.

SHORE POWER CONNECTION PROCESS:



STEP 1: Switch OFF the WATER HEATER circuit breaker on the AC Control Panel. The AC Panel is located in the cabinet below the helm seating at the center catwalk. Do not switch the breaker on again until the fresh water system has been filled, pressurized, and primed. (See first page of this section for AC Control Panel location.)

STEP 2: Switch OFF the ELCI circuit breaker group(s), located in the port transom storage locker. See first page of the section for illustration. Depending on region that the yacht is shipped to, the ELCI are labeled either:

- LINE 1/LINE 2
- SHORE 1/SHORE 2

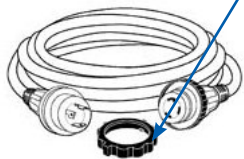
DANGER

ELECTRICAL SHOCK RESULTING IN DEATH OR SERIOUS INJURY CAN OCCUR BY USING A DAMAGED SHORE POWER CORD OR A CORD THAT IS NOT DESIGNED FOR ITS PURPOSE. THE SHORE POWER CORD MUST BE IN EXCELLENT CONDITION WITH NO CUTS, NICKS, OR ABRASIONS IN THE EXTERIOR PLASTIC COVER. THE CORD MUST BE SPECIFICALLY DESIGNED TO CONNECT THE BOAT TO A SHORE POWER SOURCE.

IMPORTANT

Switching OFF the ELCI circuit breaker groups before connecting to the shore power prevents arcing and burning of the shore power cord receptacles. Disconnecting will protect the electrical equipment on board from rapid ON/OFF current connections, which may occur during the connection process.

Threaded Locking Ring



SHORE POWER CORD

- STEP 3:** Locate the 50' shore power cord. Connect the female end of the cord to the boat's shore power receptacle. See previous page for illustration.
- STEP 4:** Connect the female end of the cord(s) to the yacht's shore power receptacles. The receptacles are located on the port transom. See beginning of this section for illustration.
- STEP 5:** Secure the nonmetallic threaded locking ring to the boat's shore power receptacle. Securing, prevents the cord from being accidentally disconnected and prevents arcing due to a gap between the cord plug and the receptacle.

DANGER

DO NOT HANG THE END OF THE SHORE POWER CORD INTO THE WATER. NEARBY SWIMMERS OR PASSENGERS CAN BE KILLED OR SERIOUSLY INJURED FROM THE SURROUNDING ELECTRICAL FIELD.

- STEP 6:** Turn OFF the breaker on the Shore Power Source Outlet.
- STEP 7:** Secure the nonmetallic threaded locking ring to the shore power source outlet. Securing the locking ring prevents the cord from being accidentally disconnected and from arcing due to a gap between the cord plug and the outlet.
- STEP 8:** Turn ON the breaker at the shore power source outlet.
- STEP 9:** Switch ON the LINE 1 and LINE 2 or SHORE 1 and SHORE 2 ELCI Circuit Breaker Groups located in the PORT transom storage locker. See first page of this section for illustration. The breakers are labeled either LINE or SHORE depending on the region the yacht is shipped to.



AC CONTROL PANEL

- STEP 10:** Make sure the GREEN Indicator lights are lit on the AC Control Panel, located below the helm seating at the center catwalk. The Green Indicator Lights indicate that power is available. See first page of this section for AC Control Panel illustration and location.

IF THE GREEN INDICATOR LIGHT IS NOT LIT:

- Recheck all connections and check circuit breakers on AC Control Panel.

AC ELECTRICAL SYSTEM



- Monitor voltmeter and ammeter while connected to shore power.



AC CONTROL PANEL

STEP 11: Check to make sure that the **Reverse Polarity Indicator** is not lit. **IF THE INDICATOR LIGHT ILLUMINATES, SWITCH THE MAIN CIRCUIT BREAKER GROUPS OFF.**

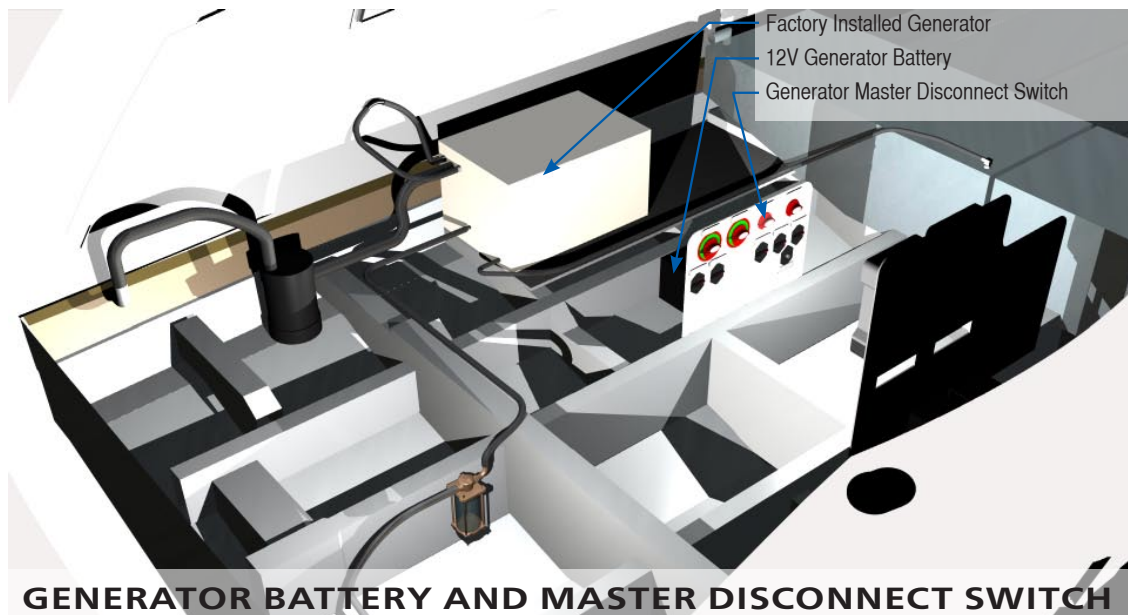
GENERATOR POWER

The onboard generator can be used to power the AC electrical system when a shore power source is not available. The generator is installed in the engine room on the port side, forward. See below for illustration.

The generator starter is powered by a designated 12-volt battery. The generator battery is located in the engine room, inboard of the generator. Power to the generator from the battery is controlled by a master disconnect switch. The generator master disconnect switch is located in the engine room inboard of the generator.

CAUTION

NEVER TURN OFF THE GENERATOR MASTER DISCONNECT SWITCH WHILE THE GENERATOR IS IN OPERATION. DOING SO, COULD DAMAGE THE THE GENERATOR AND/OR ALTERNATOR WIRING.



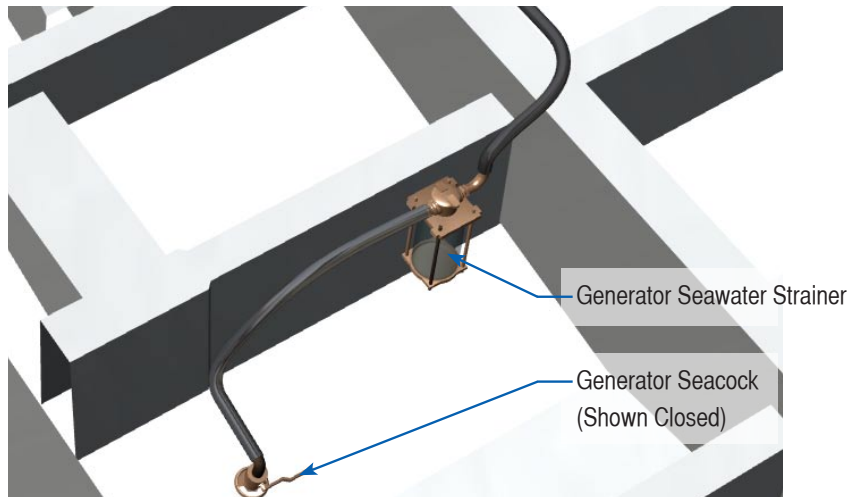
GENERATOR BATTERY AND MASTER DISCONNECT SWITCH

PRIOR TO STARTING/CLEANING THE GENERATOR

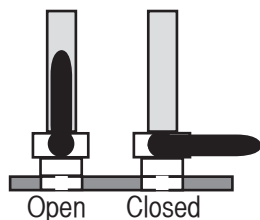
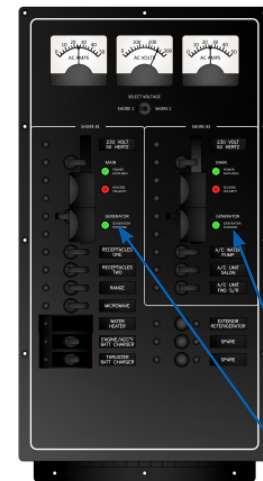
READ, UNDERSTAND, AND FOLLOW THE OEM (ORIGINAL EQUIPMENT MANUFACTURER) INFORMATION THAT DESCRIBES THE GENERATOR.

- STEP 1:** Turn OFF the generator by following the OEM instructions.
- STEP 2:** Ensure the seawater strainer is not clogged with debris.

- STEP 3:** Close the generator cooling system seacock. The seacock is located below the engine room access hatch in the cockpit. See previous page for illustration.
- STEP 4:** Remove and clean the Seawater Strainer. The Seawater Strainer is located directly forward the Generator Seacock.
The generator engine uses a seawater cooling system. The cooling system includes a strainer that prevents debris in the seawater from entering the cooling system's water pump.
- STEP 5:** Reinstall the strainer. If the strainer leaks when the seacock is opened; close the seacock, then check the strainer for correct installation.



STEP 3: GENERATOR SEACOCK SHOWN CLOSED
STEP 4: GENERATOR SEAWATER STRAINER LOCATION



- STEP 6:** Before attempting to start the generator, make sure the Generator Seacock is OPEN.

A Tip From Carver! 💡

Dedicating a 12-volt battery to the generator provides an important safety feature. A dedicated battery enables you to start the generator regardless of the condition of the propulsion engine batteries. If the batteries become discharged to the point where they are unable to start an engine: start the generator, then turn on the engine battery chargers. When the engine batteries are recharged to an adequate level, you can start the propulsion engines.

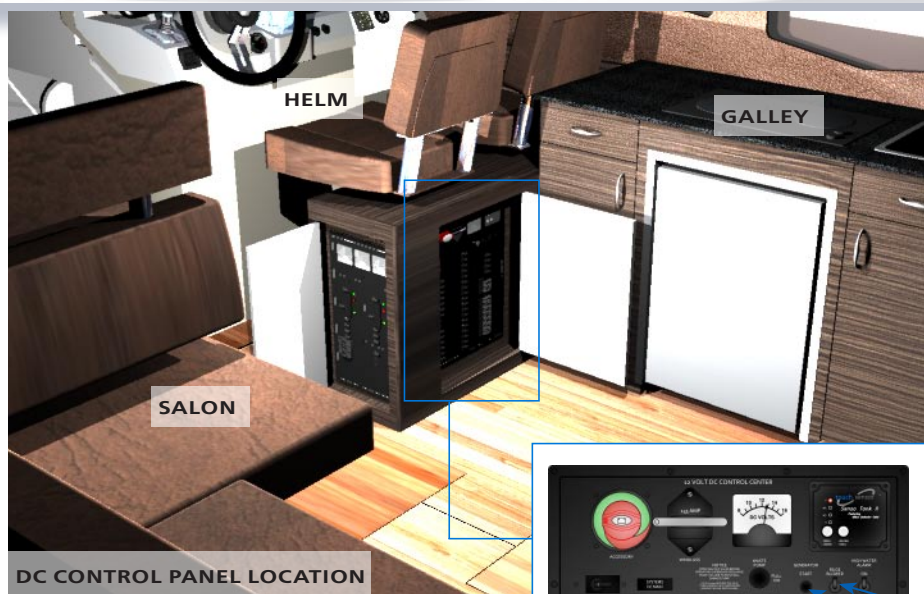
CAUTION ⚠️

DO NOT OPERATE THE GENERATOR WHILE THE GENERATOR'S COOLING SYSTEM SEACOCK IS CLOSED. OPERATING THE GENERATOR WITH THE SEACOCKS CLOSED CAN DAMAGE THE SYSTEM.

STARTING THE GENERATOR

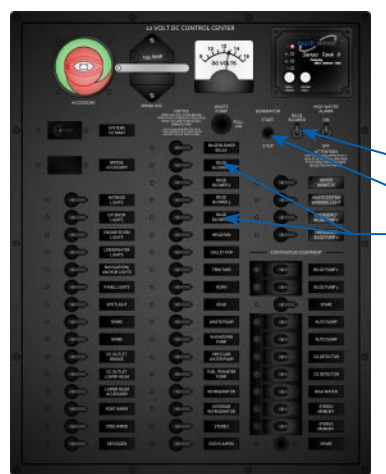
- STEP 1:** Open the GENERATOR cooling system's seacock. See above illustration for seacock location.
- STEP 2:** Switch BILGE BLOWER 1, BILGE BLOWER 2, BILGE BLOWER 3, and BILGE BLOWER 4 circuit breakers ON, located on the DC Control Panel (below Helm seating). See next page for DC Control Panel Illustration.
- STEP 3:** Turn the BILGE BLOWER switch ON. The bilge blower switch is located on the upper right corner the DC Control Panel. The DC Control Panel is located below the helm seating. See next page for illustration.

AC ELECTRICAL SYSTEM



**STEP 2 AND STEP 3
(FROM PREVIOUS PAGE)**

STEP 4 (BELOW)



DC CONTROL PANEL

BILGE BLOWER Switch
GENERATOR START/STOP Switch
BILGE BLOWER 1 - BILGE BLOWER 4
Circuit Breakers

WARNING

GASOLINE VAPORS CAN EXPLODE, RESULTING IN INJURY OR DEATH. BEFORE STARTING THE ENGINES OR GENERATOR, PERFORM THE FOLLOWING:

- CHECK THE ENGINE ROOM FOR GASOLINE VAPORS
- OPERATE BILGE BLOWER FOR 4 MINUTES
- VERIFY THAT BLOWERS ARE OPERATING PROPERLY, RUN THE BLOWER WHEN THE VESSEL IS OPERATING BELOW CRUISING SPEED.

CAUTION

THE STARTER CAN BE DAMAGED BY HOLDING DOWN THE GENERATOR SWITCH IN THE START POSITION AFTER THE GENERATOR IS STARTED. THE GENERATOR START/STOP SWITCH IS SPRING ACTIVATED. RELEASE THE SWITCH FROM THE START POSITION ONCE THE GENERATOR STARTS.

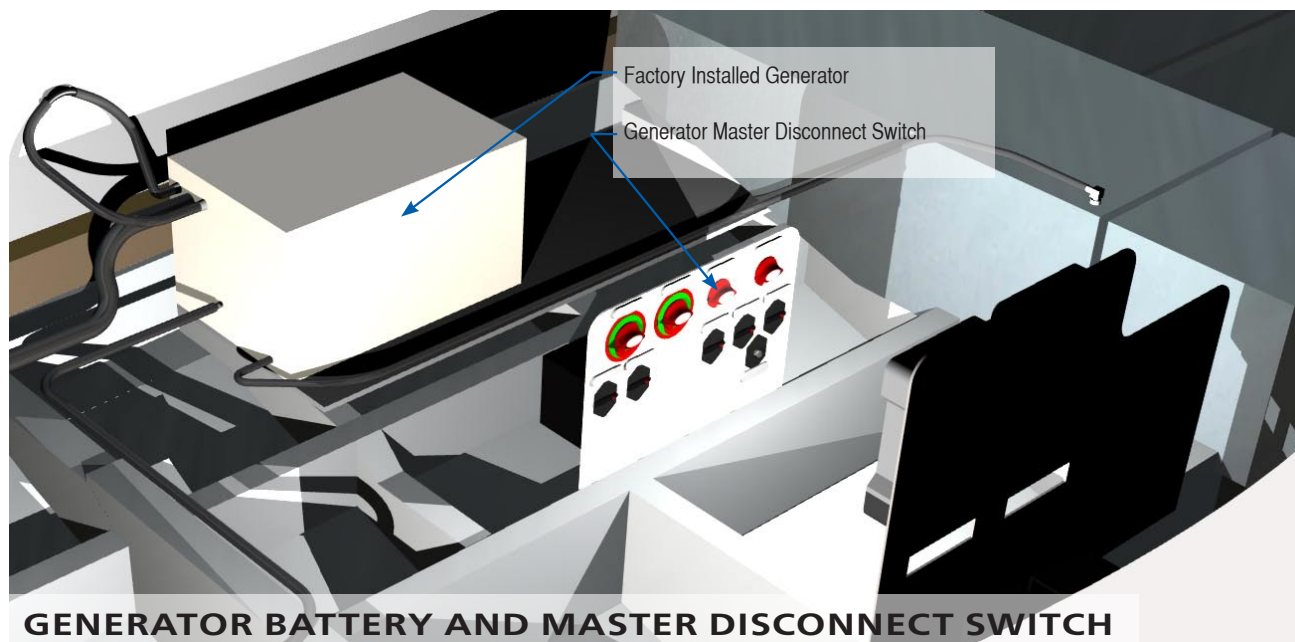
NEVER HOLD THE STOP/START SWITCH IN THE START POSITION FOR MORE THAN 10 SECONDS.

STEP 4: On the DC Control Panel, press and hold the GENERATOR START/STOP switch until the generator starts. Release the switch once the generator starts. See above for the Generator Start/Stop Switch location.

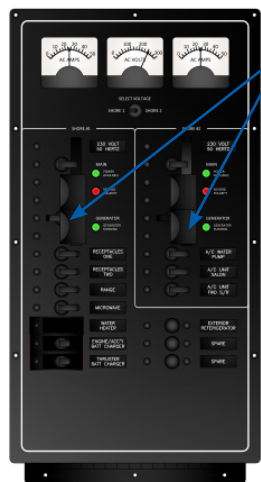
STEP 5: Once the generator is running smoothly, switch the GENERATOR circuit breaker group ON, located on the AC Control Panel. The AC Control Panel is located in the cabinetry below the helm seating at the center catwalk. The breaker group connects the AC electrical system to the generator output. Once the *Generator Running* indicator light illuminates, power is available to the other circuit breakers on the AC Control Panel. See previous page for AC Control Panel illustration.

STEP 6: To turn the generator OFF, push the START/STOP, switch to the STOP position, located on the DC Control Panel. See previous page for illustration.

STEP 7: Turn the generator battery master disconnect switch to the **OFF** position if the generator is not going to be used for a few days. The generator battery master disconnect switch is located on the port engine room electrical panel, beside the generator.



GENERATOR BATTERY AND MASTER DISCONNECT SWITCH



AC CONTROL PANEL

STEP 8: To change the AC power source from the generator to shore power, switch the GENERATOR circuit breaker group **OFF**, located on the AC Control Panel.

STEP 9: Once the GENERATOR circuit breaker group has been turned OFF, connect to a shore power source as described earlier in this section.



DANGER
DO NOT INHALE GENERATOR EXHAUST. GENERATOR EXHAUST CONTAINS CARBON MONOXIDE, A POISONOUS GAS. REFER TO SECTION 1: *CARBON MONOXIDE WARNINGS* FOR MORE INFORMATION ON ENGINE EXHAUST AND CARBON MONOXIDE.

OPERATING THE AC EQUIPMENT

Power to the AC components is controlled by circuit breakers and individual controls for each component. The AC Control Panel is located below the helm seating at the center walkway.

Two ELCI Circuit Breaker locations are installed onboard:

- ELCI Circuit Breaker Groups, located at the transom port locker. See beginning of this section for ELCI illustration and location. AC breakers are labeled depending on region that the yacht is shipped to:
 - LINE 1/LINE 2 (US, Canada and NON-EC Countries)
 - SHORE 1/SHORE 2 (EC Countries)
 - AC Control Panel

AC ELECTRICAL SYSTEM

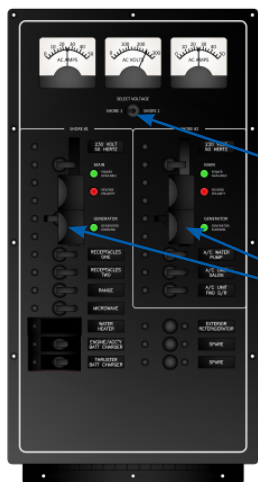


Electricity to the AC components are controlled by switching the breakers on the AC Control Panel ON or OFF. The breakers also protect the electrical system by automatically disconnecting the circuit from the power source in the event of a short or circuit overload.

NEVER

NEVER RESET A BREAKER THAT HAS AUTOMATICALLY TRIPPED WITHOUT FIRST CORRECTING THE PROBLEM. FAILURE TO CORRECT THE PROBLEM MAY CREATE A DANGEROUS SITUATION.

AC CONTROL PANEL



AC CONTROL PANEL

The AC Control Panel manages the power supply to all of AC equipment installed on-board. The AC Panel is located in the Dinette aft, starboard cabinet. See previous page for panel location illustration.

Power to the panel is supplied by either, a shore power connection or the generator.

AC POWER SELECTOR

The AC Power Selector circuit breaker groups provides power to the other circuit breakers on the AC Control Panel. Each breaker group consists of three breakers that operate together.

A sliding lockout plate prevents the Shore breaker group and Generator breaker group from switching ON at the same time. Slide the lockout plate to the position necessary to expose the chosen breaker group.

- **MAIN:** Switch the MAIN breaker group ON if a shore power source is used to provide electricity to the AC electrical system.
- **GENERATOR:** Switch the GENERATOR breaker group ON if the generator is used to provide electricity to the AC electrical system.



AC CONTROL PANEL

INDICATOR LIGHTS

POWER AVAILABLE GREEN INDICATOR LIGHT

The Power Available Indicator light illuminates when the yacht is connected to a working shore power source. Switch the Shore circuit breaker group ON to provide power to the AC electrical system.

REVERSE POLARITY RED INDICATOR LIGHT

The Reverse Polarity Indicator Light is illuminated when the shore power source electrical system is wired incorrectly, and the hot and neutral wires have been reversed.

VOLTMETER - LINE VOLTAGE

The voltmeter indicates the amount of voltage that is entering the AC electrical system.

The voltmeter should read between 110 and 120 volts when the yacht's AC electrical system is connected to either a shore power source or to the generator (while the generator is running) with the MAIN breakers ON.

If the voltmeter reads 95 volts or less, DO NOT USE THE AC SYSTEM. If the voltmeter is 95 or less, do one of the following:

- Contact the marina's management to identify and correct a shore power problem
- Have a qualified technician service your generator.

CAUTION

IF THE REVERSE POLARITY LIGHT IS ILLUMINATED, TURN OFF CRAFT'S SHORE POWER CONNECTION SWITCH IMMEDIATELY, THEN CONTACT THE DOCK MASTER TO HAVE IT CORRECTED.

NOTE: For boats that operate on 110 volts, the limits are 110-120 volts AC and no less than 100 volts.

IF THE VOLTMETER READS ZERO VOLTAGE AND INDICATOR LIGHTS ARE NOT ILLUMINATED, NO ELECTRICITY IS REACHING THE AC CONTROL CENTER.

IF A GENERATOR IS BEING USED, MAKE SURE

- The generator is operating properly.
- The safety circuit breaker is ON, located on the generator control panel.

IF SHORE POWER IS USED, MAKE SURE

- The shore power cord is properly attached to both the boat and the shore power source.
- The circuit breaker at the shore power source box is ON.
- The ELCI circuit breaker group is ON.

IF THE VOLTMETER CONTINUES TO READ ZERO VOLTAGE, DO ONE OF THE FOLLOWING

- Have qualified technician service your generator.
- Contact the marina's management to identify and correct a shore power problem.
- If the problem appears to be with your boat's AC electrical system, have the system inspected by a qualified electrician.

AMPMETER - LOAD CURRENT

The ammeter indicates the amount of current being drawn by the AC electrical equipment.

THE AMMETER SHOULD READ ZERO AMPS WHEN THE FOLLOWING ITEMS OCCUR:

- Either the MAIN or GENERATOR circuit breaker group is ON and all other breakers on the AC Control Panel are OFF.
- There is no power being consumed on board the vessel.

THE AMMETER READINGS INCREASE ABOVE ZERO AMPS:

- As the circuit breakers, located on the AC Control Center, are switched ON and the associated equipment is turned ON.
- The equipment plugged into the AC receptacles is turned ON. Refer to *Electrical Loads* later in this section for information on the AC electrical system load limits.

AC CONTROL PANEL CIRCUIT BREAKERS

NOTE: The AC and DC panels have extra breakers labeled SPARE. The breaker panel is set-up for additional electrical components to be installed for future upgrades and changes.

LINE 1/SHORE 1 CIRCUIT BREAKERS

ENGINE/ACC'Y BATTERY CHARGER

The Engine/Acc'y Battery Charger breaker controls the flow of electricity to the battery charger that maintains the voltage levels in the engine batteries and the accessory batteries. Switch the breaker "ON" to supply power to the battery charger. The engine battery chargers are located on the engine room breaker/master disconnect panels forward the engines. Refer to the OEM information for details on operating the battery charger.

ICEMAKER (OPTION)

The Icemaker breaker controls the flow of electricity to the optional icemaker if equipped. Switch the breaker ON to supply power to

AC ELECTRICAL SYSTEM



the icemaker. Refer to the OEM information for details on operating the icemaker or refrigerator.

MICROWAVE

The Microwave breaker controls the flow of electricity to the microwave located in the galley. Switch the breaker ON to supply power to the microwave. Refer to the OEM information for details on operating the microwave.

RANGE

The Range breaker controls the flow of electricity to the range located in the galley. Switch ON the breaker to supply power to the range. Refer to the OEM information for details on operating the range.

RECEPTACLES ONE

The Receptacles One breaker controls the flow of electricity to the receptacles in the Master Stateroom, VIP Stateroom and Head. Switch the breaker ON to supply power to the Master Stateroom receptacles. The receptacles are used the same as in-home outlets.

NOTE: If the RECEPTACLES ONE circuit breaker is ON, but power is not available to the receptacles in this group, the circuit's GFCI breaker may have tripped. Refer to *Ground Fault Circuit Interrupters* later in this section for more information.

RECEPTACLES TWO

The Receptacles Two breaker controls the flow of electricity to the receptacles in the salon and dinette. Switch the breaker ON to supply power to the Salon receptacles. The receptacles are used the same as in-home outlets.

NOTE: If the RECEPTACLES TWO circuit breaker is ON, but power is not available to the receptacles in this group, the circuit's GFCI breaker may have tripped. Refer to *Ground Fault Circuit Interrupters* later in this section for more information.

THRUSTER BATTERY CHARGER (OPTION)

The Thruster Battery Charger breaker controls the flow of electricity to the bow/stern thruster and generator battery charger that maintains the voltage levels in the battery supplying power to the bow and/or stern thruster. Switch the breaker ON to supply power to the battery charger. The generator battery charger is located in the engine room aft, starboard side. Refer to the OEM information for details on operating the battery charger.

WATER HEATER

The Water Heater breaker controls the power to the water heater located in the engine room. Switch the breaker ON to supply power to the water heater. Refer to the OEM information for details on operating the water heater.

CAUTION

DO NOT SUPPLY POWER TO THE WATER HEATER WHEN THE WATER HEATER IS EMPTY.

LINE 2/SHORE 2 CIRCUIT BREAKERS

A/C WATER PUMP

The Air Conditioning System Water Pump breaker controls the flow of electricity to the water pump that supplies the air conditioning system with seawater. Switch the breaker ON to supply power to the water pump.

CAUTION

DO NOT SWITCH THE AIR CONDITIONING SYSTEM WATER PUMP BREAKER ON UNTIL AFTER THE SEACOCK SUPPLYING THE AIR CONDITIONING SYSTEM WITH SEAWATER HAS BEEN OPENED. REFER TO SECTION 4 - AIR CONDITIONING SYSTEM FOR MORE INFORMATION.

A/C UNIT FWD S/R (ONLY WITH HIGH CAPACITY AIR CONDITIONING OPTION)

The Air Conditioning Unit Forward Stateroom breaker controls the flow of electricity to the air conditioning unit that cools the Master Stateroom, and, VIP Stateroom, and Head. To supply power to the unit, switch the A/C System Water Pump breaker ON, before switching the Air Conditioning Unit Master Stateroom breaker ON.

CAUTION

DO NOT SWITCH THE AIR CONDITIONING UNIT MASTER STATEROOM BREAKER ON UNTIL AFTER THE SEACOCK SUPPLYING THE AIR CONDITIONING SYSTEM WITH SEAWATER HAS BEEN OPENED. REFER TO SECTION 4 - AIR CONDITIONING SYSTEM FOR MORE INFORMATION.

AC UNIT SALON (2 BREAKERS)

The Salon AC Unit breaker controls the flow of electricity to the air conditioning unit that cools the Salon and Galley. To supply power to the unit, switch the A/C SYSTEM WATER PUMP breaker ON, before switching the AIR CONDITIONING UNIT SALON breaker ON.

CAUTION

DO NOT SWITCH THE AIR CONDITIONING UNIT SALON BREAKER ON UNTIL AFTER THE SEACOCK SUPPLYING THE AIR CONDITIONING SYSTEM WITH SEAWATER HAS BEEN OPENED. REFER TO SECTION 4 - AIR CONDITIONING SYSTEM FOR MORE INFORMATION.

EXTERIOR REFRIGERATOR

The Exterior Refrigerator breaker controls the flow of electricity to the two exterior refrigerators located on cockpit. To supply power to the unit, switch the EXTERIOR REFRIGERATOR breaker ON.

GROUND FAULT CIRCUIT INTERRUPTERS



GROUND FAULT CIRCUIT INTERRUPTER (GFCI)

Each AC receptacle contains a Ground Fault Circuit Interrupter (GFCI). The GFCI measures both the amount of current flowing to the circuit's receptacles and the amount of current returning from the receptacles. The GFCI compares the two values once measured. If the values are not the same, the GFCI instantly trips and power is shut-off to the receptacles.

An electrical shock received through a standard receptacle will continue through a person's body and flow into any grounded object that the person is touching or standing on. The GFCI, however, will immediately shut off power to the receptacle. Shutting off the power limits the time the person being shocked to a brief moment, significantly reducing injury to the person.

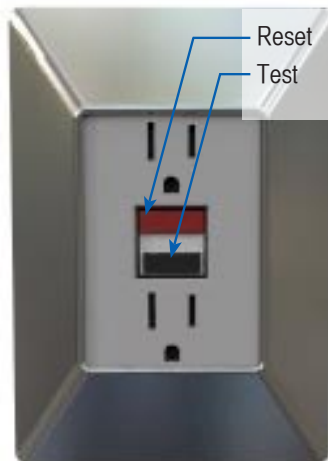
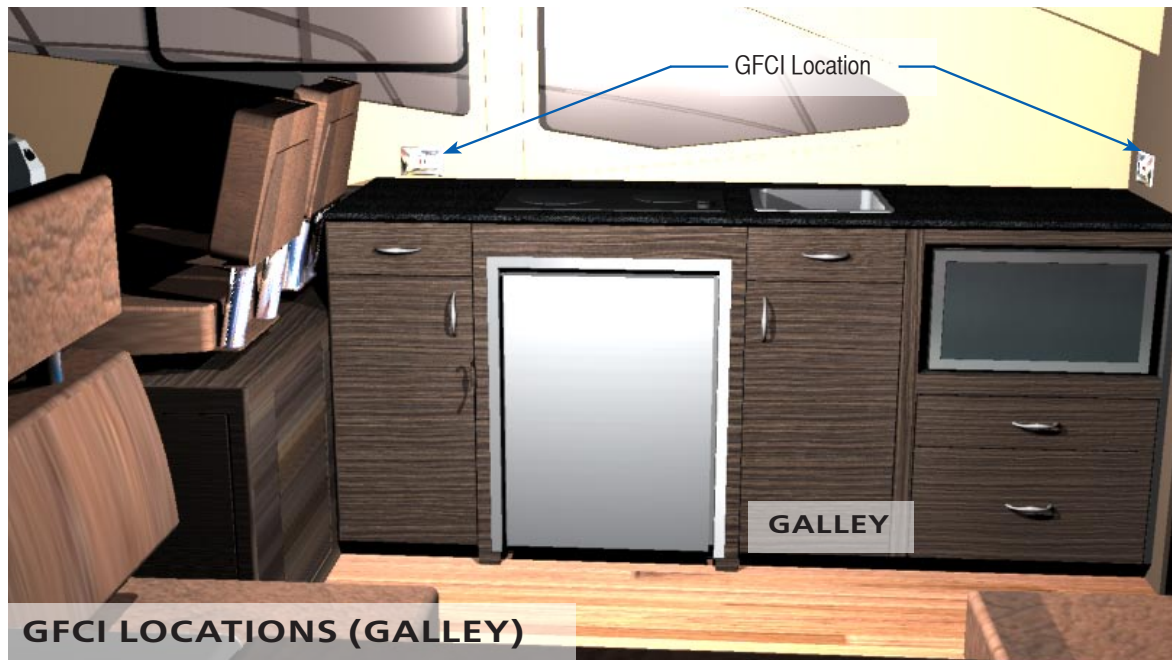
(See next page for GFCI Locations illustration)

AC ELECTRICAL SYSTEM



GFCI RECEPTACLE LOCATIONS

Two GFCI receptacles are installed in galley. Both receptacles protect a group of receptacles that can include both open outlets and outlets already in use for built-in equipment. All outlets onboard are connected to the master.



GROUND FAULT CIRCUIT INTERRUPTER

RESETTING AND TESTING GFCI'S

GFCI's have Test and Reset buttons located on the receptacles.

Switch the TEST button ON/OFF switch to ON, to reset a GFCI that has tripped.

Press the RESET button to reset the GFCI after it has tripped. Resetting a GFCI allows electricity to flow again to the receptacle.

Test each GFCI circuit once per week.

TESTING THE GFCI UNIT:

1. Press the TEST button. If operating normally, it cuts the electricity to the receptacle on the GFCI.
2. Plug a lamp or other AC powered device into the receptacle, and turn ON the device. The device should NOT operate.
3. Press the TEST button. **DO NOT** use the receptacle if the receptacle still has power. Contact a qualified electrician to make the appropriate repairs.
4. Reset the GFCI to restore power to the receptacle.

DANGER

DEATH OR SERIOUS INJURY CAN OCCUR BY RECEIVING AN ELECTRICAL SHOCK FROM THE AC ELECTRICAL SYSTEM INCLUDING THE GFCI RECEPTACLE. SEEK IMMEDIATE MEDICAL ATTENTION AFTER RECEIVING AN ELECTRICAL SHOCK.

DANGER

DO NOT USE A GFCI OR ANY RECEPTACLE ON A GFCI CIRCUIT IF POWER IS STILL AVAILABLE ON THAT CIRCUIT AFTER THE TEST BUTTON HAS BEEN PRESSED. CONTACT A QUALIFIED ELECTRICIAN TO MAKE APPROPRIATE REPAIRS.

ELECTRICAL LOADS

Be aware that each device exerts a “load” on the system when operating AC powered devices through the AC electrical system. The electrical load is equal to the amount of current (amps) that the device draws from the AC electrical system. The AC electrical system is designed with a maximum total load that the device can handle. Each LINE and SHORE circuit has an electrical load capacity of 30 amps.

The MAIN Circuit Breaker on the AC Control Panel will trip if the total load on the circuit exceeds the circuit's capacity; it will trip if the devices operating from the circuit are drawing too much current. The AC Control Panel is located below the helm seating at the center catwalk. See beginning of this section for panel location.

A list of common AC powered devices and the approximate maximum current that the devices draw while operating is shown in the chart below. If an AC-powered device is used that has an electric motor, such as a vacuum cleaner or electric drill, the device should have a “motor load plate” mounted on it. The motor load plate lists the current that the device draws while operating.

ELECTRICAL LOAD PER DEVICE

<u>AC DEVICE</u>	<u>APPROXIMATE MAXIMUM CURRENT USED (AMPS)</u>
Fan	0.7
Electric blanket	2.0
Television	2.7
Coffee maker	6.3
Battery charger	7.3
Toaster	10.5
Frying pan	12.3
Space heater	13.7
Refrigerator	1.5

As detailed above, appliances using a motor or a heating element will draw a relatively large amounts of current. Exercise caution when using appliances such as: curling irons, toasters, coffee makers, hair dryers, food mixers or similar types of AC powered devices.

DO NOT USE TOO MANY MOTOR OPERATED APPLIANCES AT THE SAME TIME.

BONDING SYSTEM

A comprehensive metallic bonding system that interconnects all underwater equipment and thru-hull fittings is equipped on each model. The bonding system ensures that all metallic equipment onboard, including the fittings, have at the same electrical potential. The bonding system minimizes corrosion of the underwater fittings caused by stray electrical currents.

Sacrificial zinc anodes are components located at the transom on the propeller shafts and on the trim tabs. The anodes corrode and deteriorate before the yacht's underwater fittings. The sacrificial zinc anodes protect the underwater metal components from galvanic corrosion, as well as stray current corrosion.

The yacht's 12 Volt DC ground electrical system is connected to the bonding system through bus bars.

WARNING

DO NOT MODIFY THE YACHT'S BONDING SYSTEM. THE SYSTEM'S INTEGRITY IS WEAKENED BY MAKING MODIFICATIONS.

WARNING

MONITOR THE CONDITION OF THE YACHT'S ZINC ANODES. REPLACE THE ZINC ANODES WHEN THEY HAVE DETERIORATED TO 30% OF THE ORIGINAL SIZE. DO NOT ALLOW THE ZINC ANODES TO COMPLETELY DETERIORATE. REFER TO SECTION 7: *MAINTENANCE SCHEDULE* FOR RECOMMENDED INSPECTION INTERVALS.

NOTE: Damage resulting from stray current or galvanic corrosion is NOT covered under the Carver limited warranty.

TROUBLESHOOTING THE AC ELECTRICAL SYSTEM

Problem	Problem Cause	Possible Solution
VOLTMETER ON AC CONTROL PANEL READS ZERO	Shore power cord is not connected	Connect the shore power cord
	No power is at the shore power source box	Contact marina management
	The breaker installed in the shore power source box is OFF	Switch ON the circuit breaker
	The AC MAIN circuit breaker group is OFF	Switch ON the circuit breaker group
	The appropriate Shore or Generator circuit breaker group on the AC Control Panel is OFF	Switch ON the circuit breaker group
	The shore power cord failed	Replace the cord
	The generator ran out of fuel	Check the fuel level in the PORT fuel tank; refuel if necessary
	The SAFETY circuit breaker on the generator control panel is OFF	Switch ON the circuit breaker
	The generator failed	Contact a qualified electrician to make the appropriate repairs
	The voltmeter failed	Contact a qualified electrician to make the appropriate repairs
NO POWER AT THE RECEPTACLES, BUT THE VOLTMETER ON THE AC CONTROL PANEL INDICATES AN ADEQUATE VOLTAGE LEVEL	The wire within the AC electrical system is loose or disconnected	Contact a qualified electrician to make the appropriate repairs
	The receptacles breakers on the AC Control Panel are OFF	Switch ON the circuit breaker
THE SHORE #1 OR SHORE #2 CIRCUIT BREAKER ON THE AC CONTROL PANEL TRIPS IMMEDIATELY AFTER BEING RESET	A GFCI has tripped	Locate the tripped GFCI and press the RESET button
	The circuit breaker has failed	Contact your Carver Dealer to have the circuit breaker replaced

SEE SECTION 9 FOR ELECTRICAL SCHEMATICS

AC ELECTRICAL SYSTEM



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AIR CONDITIONING SYSTEM

POWERING THE AIR CONDITIONER

The air conditioning system needs an AC power source to operate, supplied either by:

- Shore Power
- On-board Generator

AIR CONDITIONING SYSTEM LAYOUT

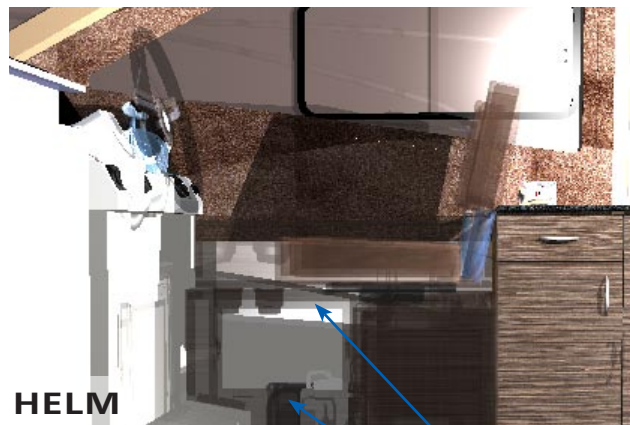
The onboard air conditioning system has two design layouts. The installed system varies depending on the purchased configuration. Configuration 1 is labeled as STANDARD OUTPUT and has a total of 16,000 BTU's. Configuration 2 is labeled as HIGH OUTPUT and has a total output of 25,000 BTU's. Each configuration is detailed below.

STANDARD OUTPUT (16,000 BTU'S)

The Standard Output air conditioning system consists of a single, factory-installed 16,000 BTU air conditioning unit with ventilation supplied to each room. The air conditioning unit is located at the helm station behind the hatch access door. See below for illustration.

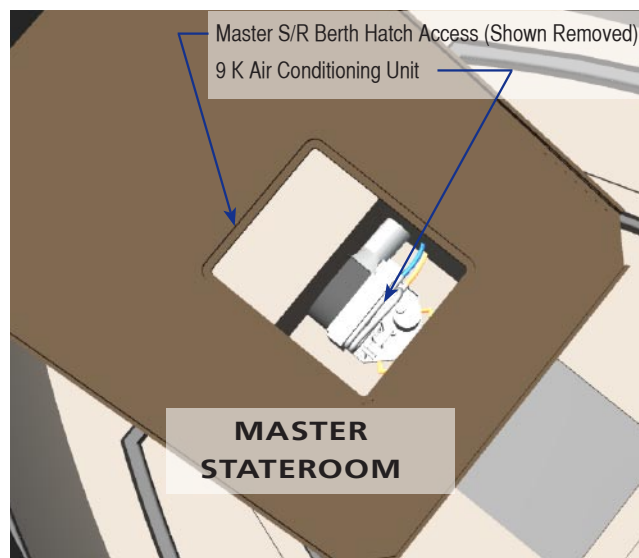
ACCESSING THE 16,000 BTU A/C UNIT

Locate and remove the hatch access panel at the helm outboard wall. The panel is held in place with plastic clips and can easily be removed.



HELM

16 K BTU Air Conditioning Unit
Helm Hatch Access Panel (Shown Removed)



9K BTU AIR CONDITIONING UNIT LOCATION: FORWARD UNIT

HIGH OUTPUT (25,000 BTU'S)

The High-Output air conditioning system consists of two air conditioning units placed in different locations on the yacht with ventilation supplied to each room. The A/C units and locations are as follows:

HELM

A single 16,000 BTU air conditioning unit is installed at the helm station. The panel is held in place with plastic clips and can easily be removed.

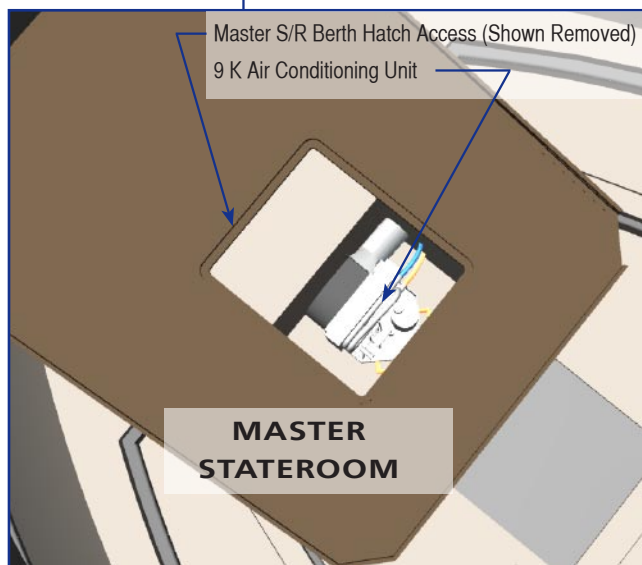
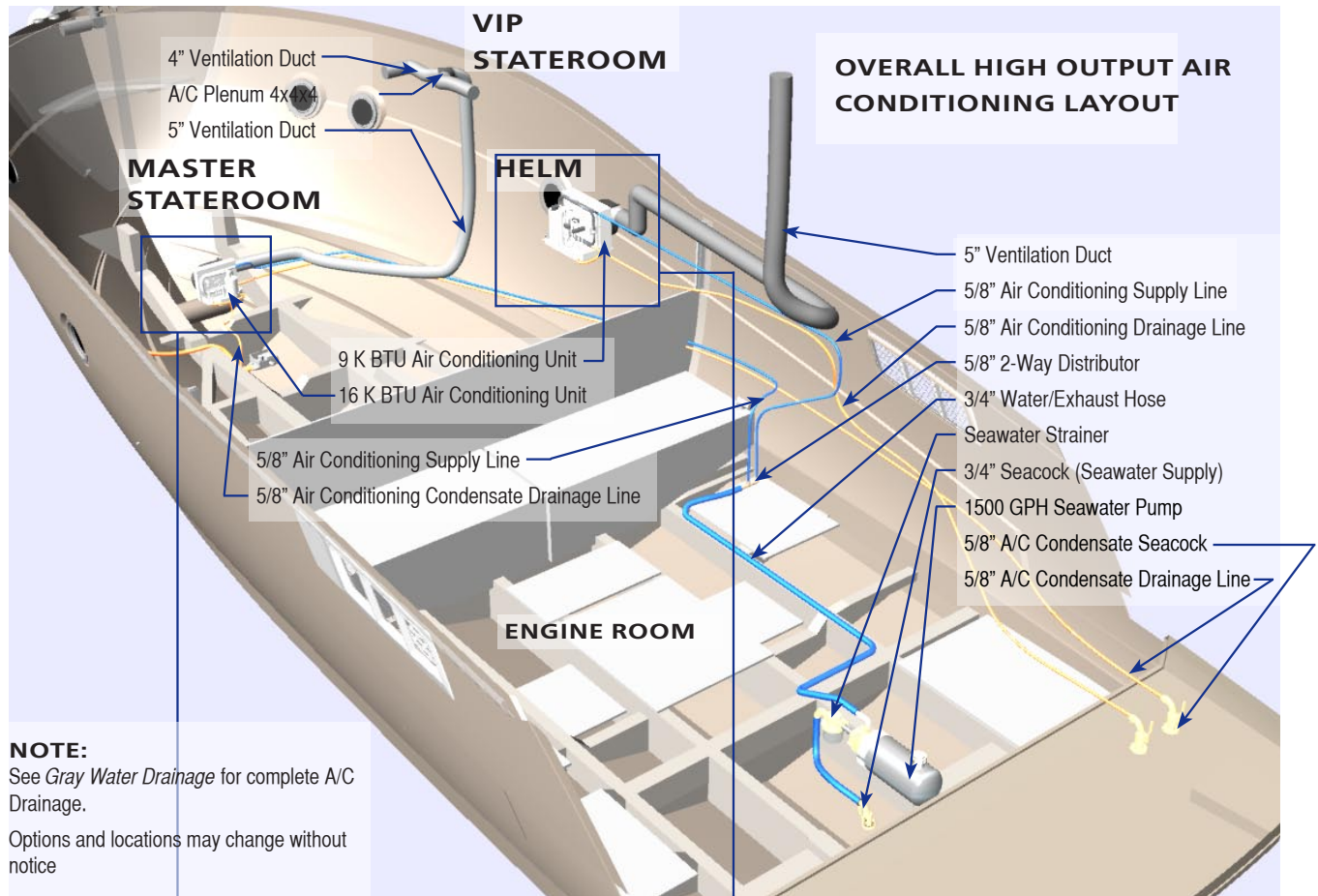
MASTER STATEROOM

A single 9,000 BTU unit is installed in the master stateroom within the frame of the bed. A single access panel is located on the top of the bed framing, below the mattress. The panel simply lifts off to reveal the air conditioner. See above for location.

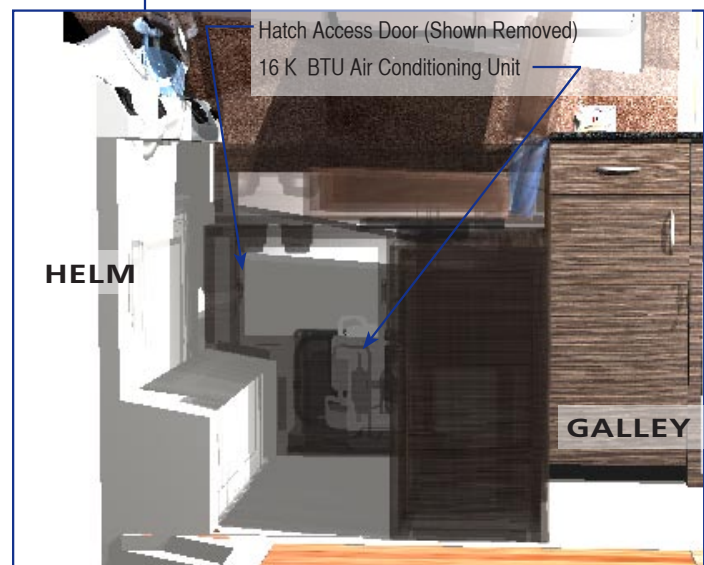
PRODUCING HEAT

The air conditioning system produces heat when operated in reverse cycle mode. Reverse cycle operation is affected by the tempera-

HIGH OUTPUT AIR CONDITIONING SYSTEM LAYOUT



9K BTU AIR CONDITIONING UNIT LOCATION: FORWARD UNIT

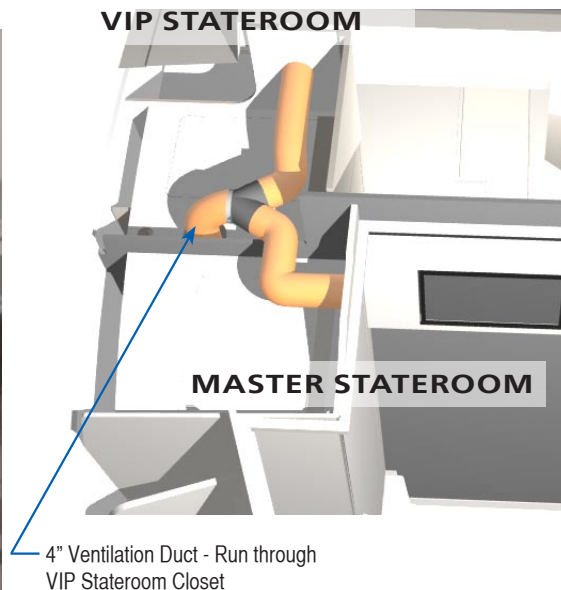
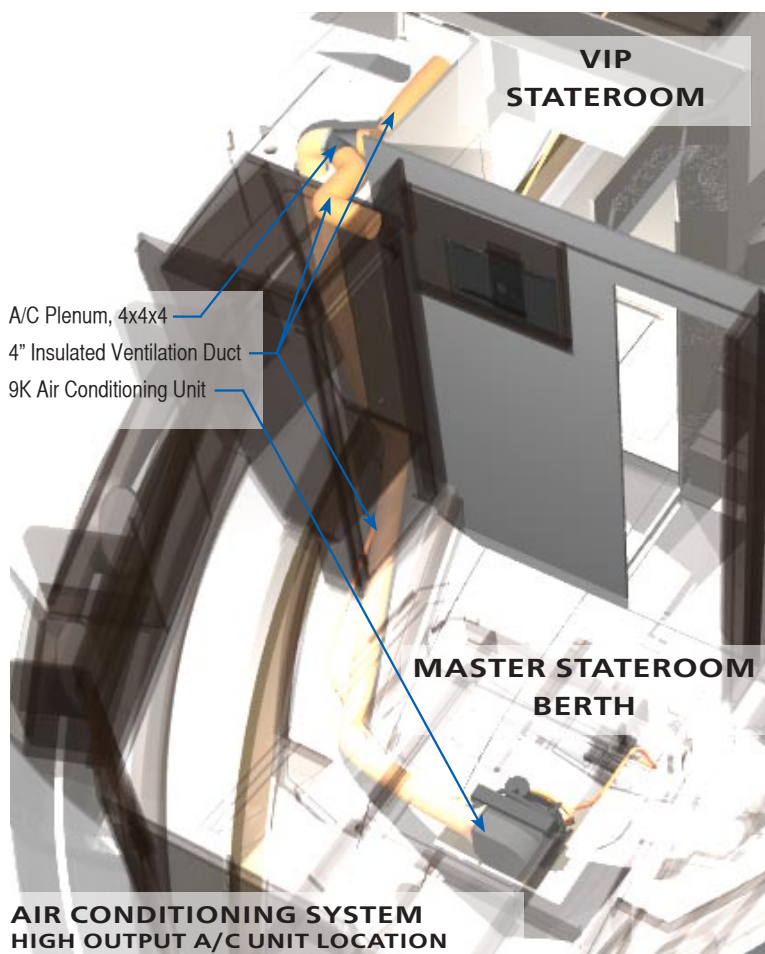


16K BTU AIR CONDITIONING UNIT LOCATION: AFT UNIT

INTERNAL SYSTEMS



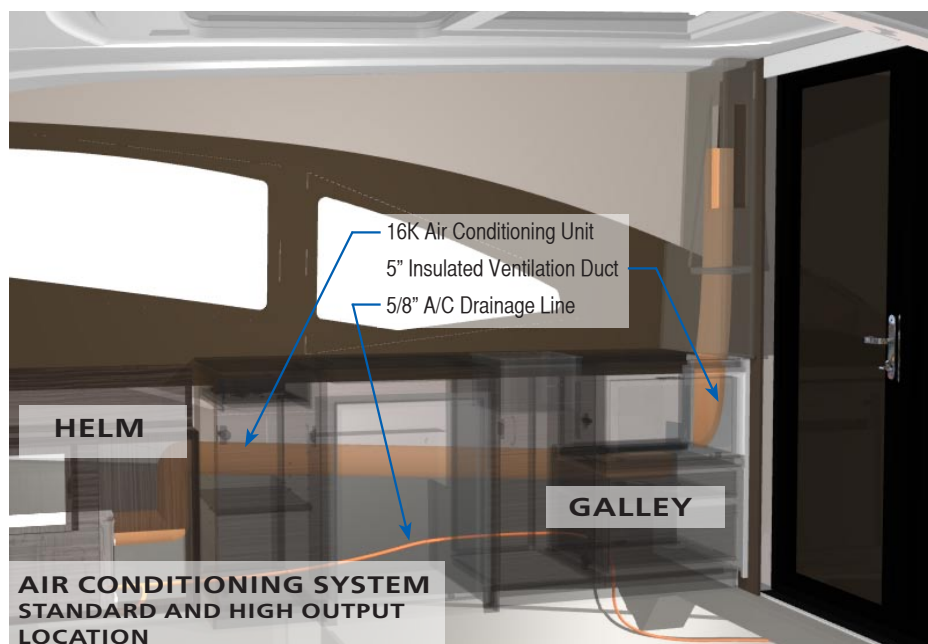
HIGH OUTPUT AIR CONDITIONING VENTILATION LAYOUT



NOTE:

See *Gray Water Drainage* for complete A/C Drainage.

Options and locations may change without notice



AIR CONDITIONING RETURN VENTILATION



AIR CONDITIONER RETURN VENT

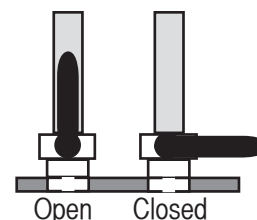
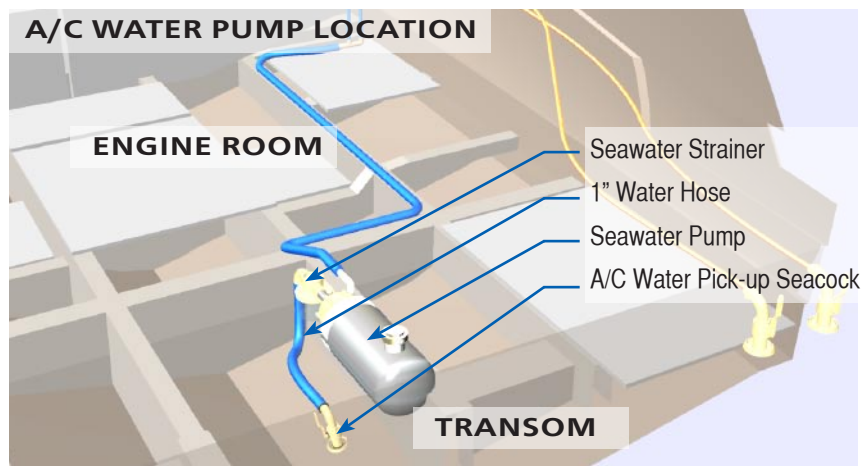
INTERNAL SYSTEMS



ture of the seawater. The air conditioning system's ability to produce warm air decreases as seawater temperature decreases. Carver recommends not to operate the air conditioning system in reverse cycle mode when the seawater temperature is below 40°F.

POWERING THE AIR CONDITIONING

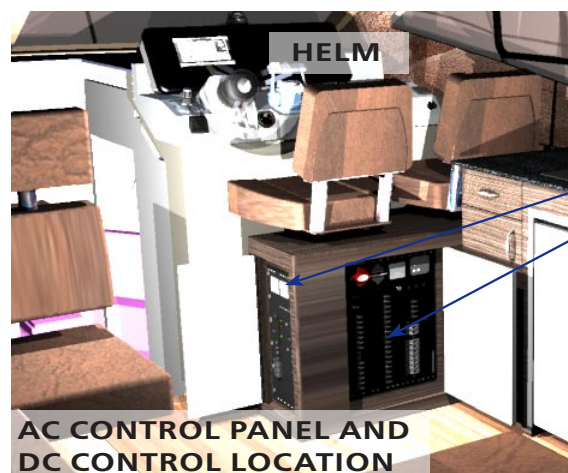
1. Close the air conditioning water pick-up seacock.
2. Remove and clean the air conditioning system's seawater strainer. The strainer prevents debris in the seawater from entering the air conditioning system.



CAUTION

DO NOT SWITCH THE A/C SYSTEM WATER PUMP BREAKER ON UNTIL AFTER THE SEACOCKS SUPPLYING THE AIR CONDITIONING SYSTEM WITH SEAWATER HAVE BEEN OPENED. THE PUMP AND SEACOCKS ARE LOCATED IN THE ENGINE ROOM, SEE ABOVE FOR LOCATION.

3. Reinstall the seawater strainer. If the strainer leaks when the air conditioning seacock is opened, close the seacock, then check the strainer for correct installation.
4. Open the air conditioning water pick-up seacock. A single pump supplies the air conditioning units with seawater. See above for illustration.
5. Supply AC power to the yacht. Refer to Section 3: *Shore Power* and/or *Generator Power* for instruction.
6. Switch the correct circuit breakers group to ON (SHORE POWER or GENERATOR) located on the AC Control Panel. The AC Control Panel is located below the helm seating. See below for illustration.

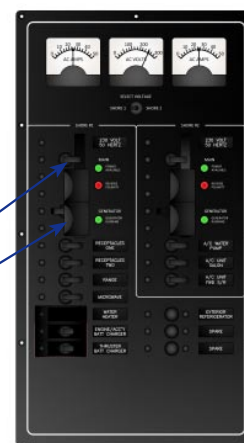


AC Control Panel

DC Control Panel

Shore Power

Generator

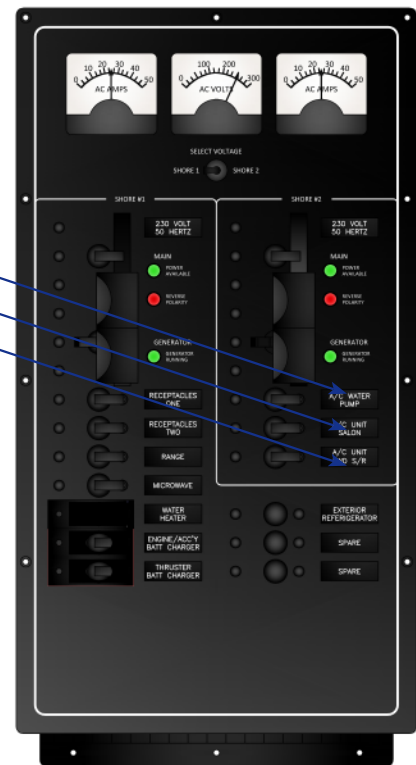


AC CONTROL PANEL

7. Switch the (2) AUTO SUMP circuit breakers to ON, located on the DC Control Panel. The DC Panel is located below the Helm Seating. See previous page for DC Control Panel location. Condensation from the air conditioning system drains into the sump, the circuit breaker must be ON while the air conditioning system is operating.
8. Switch the A/C WATER PUMP circuit breaker to ON, located on the AC Control Panel. The AC Control Panel is located below the helm seating at center walkway. See previous page for AC Panel Location.
9. Switch ON the desired Air Conditioning Unit circuit breakers, located on AC Control Panel. See below for illustration.
10. Verify that seawater is pumping through the air conditioning unit(s). The seawater exits through the discharge thru-hull fittings on the side of the yacht. See *Gray Water System* for Air Conditioning Discharge.
11. Use the controls for each air conditioning unit to set the desired temperature. Refer to the OEM information for details on operating the air conditioning controls.



DC CONTROL PANEL

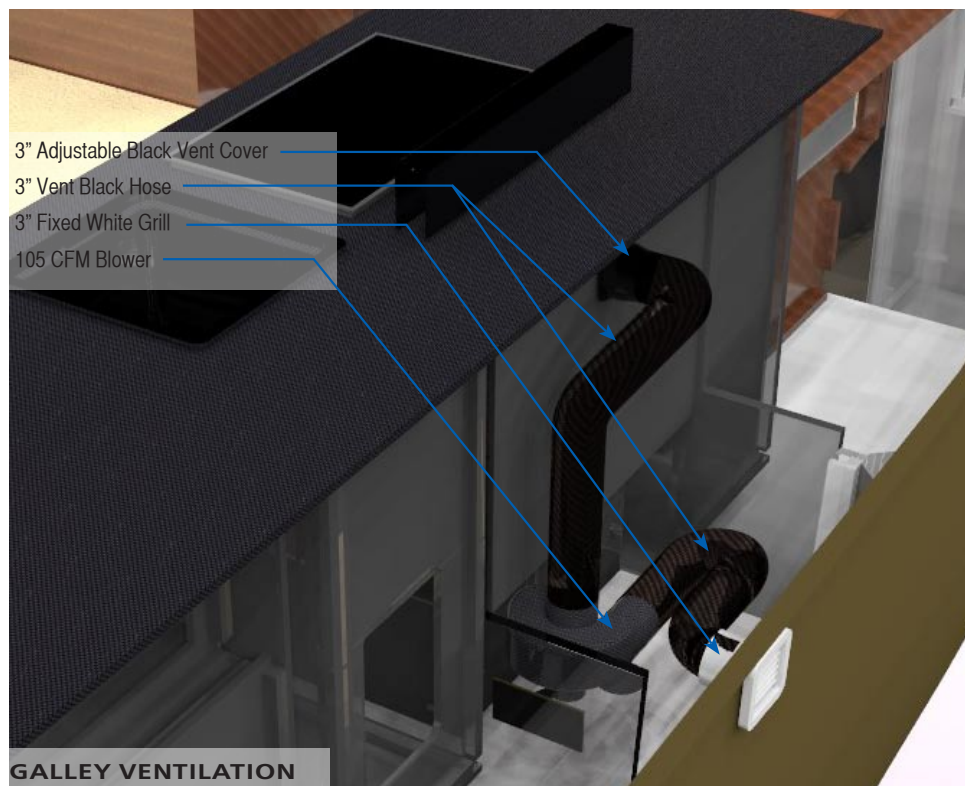
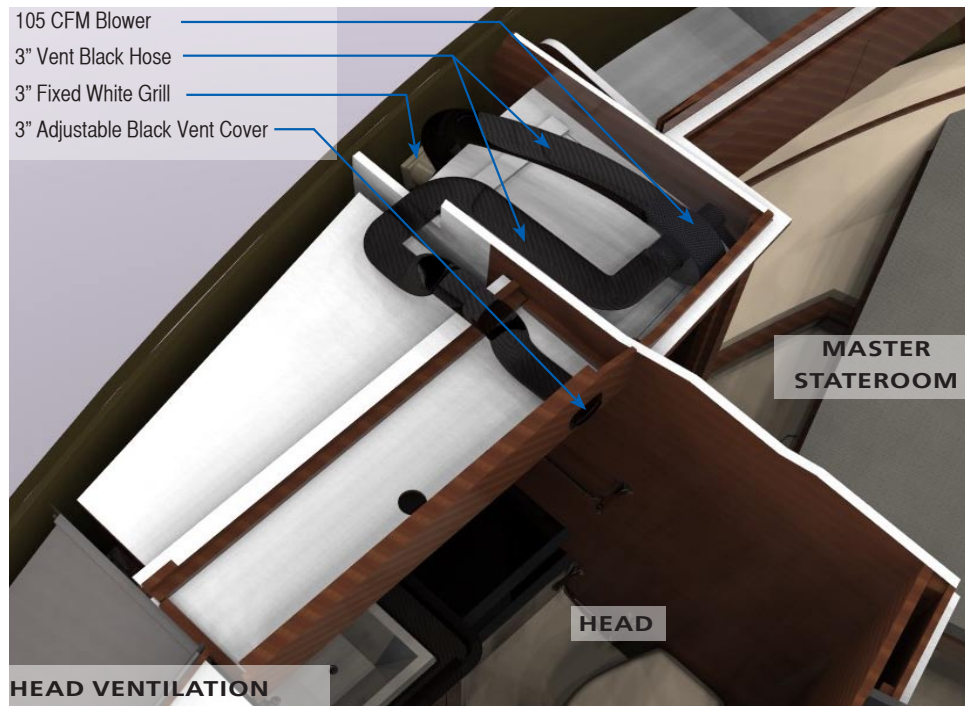


AC CONTROL PANEL

Auto Sump
A/C Water Pump
A/C Unit Salon
A/C Unit FWD S/R

VENTILATION SYSTEM

The ventilation system uses a 3" flexible vacuum hose with a 105 CFM blower to ventilate the designated area. The blower is wired to a switch, when turned ON, ventilates the designated room. Each switch is located in the room that it ventilates. A ventilation system is located the head and the galley. See below for illustrations.



FRESH WATER SYSTEM

The freshwater system contains a single 90 gallon (341L) freshwater tank that supplies water to the sinks, showers, and heads. The freshwater tank is located in the after section of the engine room. See later in this section for illustration. The water heater for the freshwater system is located below the Salon in the storage room below the steps. See illustrations on the following pages for locations.

It is important to flush the freshwater tanks periodically. Thoroughly flush the water system at the following intervals:

- Before initial use
- Flush and sanitize at least once each season

FILLING THE WATER TANK

The fresh water tank is filled through a deck fitting labeled, WATER. The deck fitting is located on the transom, starboard side, next to the transom gate. Supply only clean, fresh water into the water tank. The tank is full when water is discharged from the water tank vent. The vent is located in the hull, outboard of the WATER fill deck plate fitting. See the following pages for illustration.

CAUTION

DO NOT OVERFILL THE WATER TANK, NOR LEAVE THE FILL HOSE UNATTENDED WHILE THE TANK IS BEING FILLED. OVERFILLING COULD RUPTURE THE TANK.

PRESSURIZING AND PRIMING THE WATER SYSTEM

IMPORTANT

PRESSURIZE AND PRIME THE WATER SYSTEM ONLY AFTER THE FRESH WATER TANKS ARE FULL.

PRESSURIZING AND PRIMING THE WATER SYSTEM:

1. Verify that the DC Control Panel has power. The DC Control Panel is located in below the helm seating within the cabinetry forward the Galley. See Section 2, *DC Electrical System* for illustration.
2. Switch ON the AUTO SUMP circuit breaker, located on the DC Control Panel.
3. Locate the hot water heater. The hot water tank is located below the forward steps leading to the staterooms. The hot water heater can be access through the galley hatch access panel. See the following pages for illustration.
 - 3a. Open the hot and cold water shut-off valves on the hot water tank. See the following pages for illustration.
 - 3b. Close the water relief valve. See the following pages for illustration.
4. Partially open ALL cold water faucets including: sinks, showers, and transom hand shower.
5. Switch ON the PRESSURE WATER PUMP circuit breaker, located on the DC Control Panel (below the helm seating within the cabinetry forward the Galley). Turning the Pressure Water Pump breaker ON activates the pressure water pump and pressurizes the water system. The fresh water system is fully primed when all of the air is purged from the system's pipes and hoses.
6. Monitor each sink tap and shower head.
7. Once a steady stream of water flows from the tap or shower head close the cold water faucet for the tap or shower head.
8. Open all hot water faucets.
9. Again, close the hot water faucet for the tap or shower head, once a steady stream of water flows from the tap or shower head.
10. The water system is fully primed when all hot and cold water faucets have a steady flow of water.
11. Add water to the freshwater tank to replace the water used in previous steps.
12. The pressure water pump automatically shuts off when water pressure within the system increases to the manufacturer's design level.

INTERNAL SYSTEMS



USING THE WATER SYSTEM

The freshwater system is designed to operate the same as an in-home water system. Open any faucet to receive fresh water after filling, pressurizing, and priming the fresh water system. The pressure in the system decreases as water draws from the system. The pressure water pump automatically turns on and increases the pressure when pressure within the system decreases. The automated system ensures a steady flow of water any time a faucet is opened.

Occasionally, re-priming may be necessary for a recently filled system or a system that has not been used for a while. Re-priming is normal, and is caused by an accumulation of air bubbles at the pressure water pump. To re-prime the fresh water system, repeat the steps under: *Pressurizing and Priming the Water System* from the previous page.

A Tip From Carver

To obtain a consistent shower temperature, turn on the cold water faucet fully, then slowly turn on the hot water faucet until the water flowing from the shower head is at the desired temperature. This method keeps the pressure water pump running and eliminates widely fluctuating temperatures.

WATER HEATER

OPERATING THE WATER HEATER:

1. Fill, pressurize, and prime the fresh water system as explained under: *Pressurizing and Priming the Water System* from the previous page. This process automatically fills the water heater.
2. Supply AC power to the yacht. Refer to **Section 3: AC Power Sources** for instruction.
3. Locate the AC Control Panel (below the helm seating at the center walkway. See Section 3 for illustration and location.
 - 3a. Switch ON the SHORE 1 and SHORE 2 AC Main circuit breakers.
 - 3b. Switch ON the WATER HEATER circuit breaker.
4. For additional information, refer to the OEM information for details on operating the water heater.

CAUTION

DO NOT SUPPLY POWER TO THE WATER HEATER WHILE EMPTY; DAMAGE MAY OCCUR TO THE HEATING ELEMENT. FILL, PRESSURIZE, AND PRIME THE FRESH WATER SYSTEM BEFORE TURNING ON THE WATER HEATER, AS DESCRIBED IN: FILLING THE WATER TANK AND PRESSURIZING AND PRIMING THE WATER SYSTEM WITHIN SECTION 4.

SHOWERS AND SINKS

SHOWER

A shower is installed in the Head.

SINK

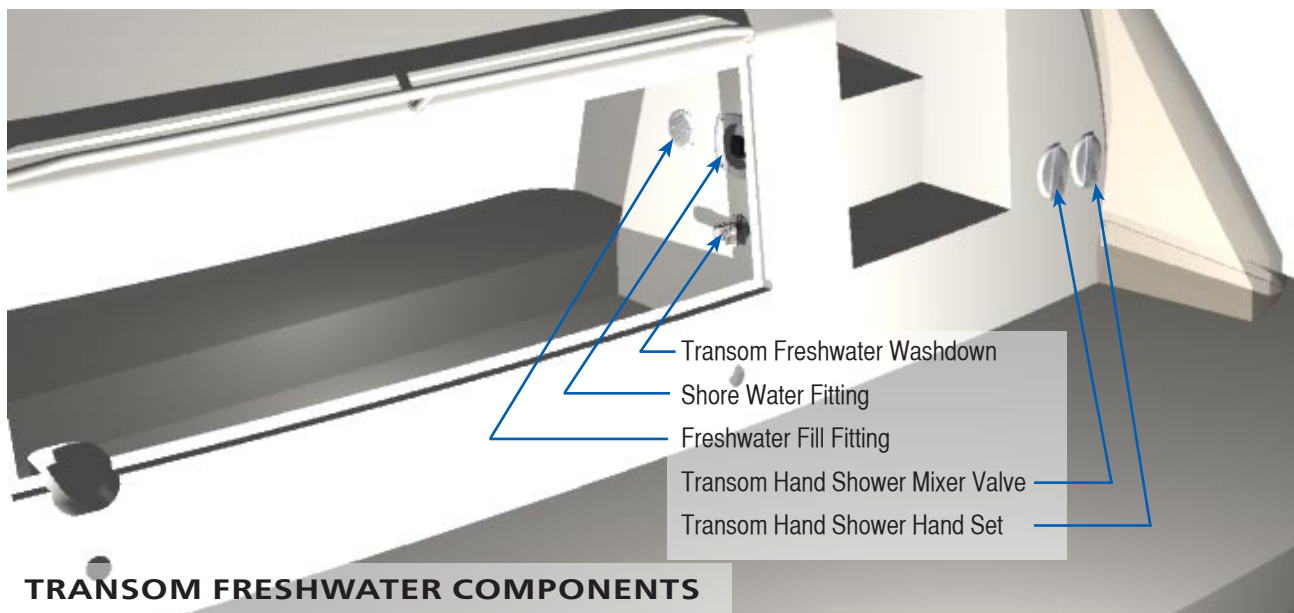
Two sinks are installed onboard. One sink is installed in the Galley and one sink is installed in the Head.

Used gray water from the sinks and showers drain into the auto-sump. The sump is located below the yacht's waterline. A pump is needed to drain the sump and discharge its water overboard. See *Gray Water System* for addition information on drainage.

The sump pump operates automatically when water in the sump rises above the pump's manufactured level. The automatic operation occurs only when the AUTO SUMP circuit breaker is ON. The breaker is located on the DC Control Center (below the helm seating within the cabinetry for the galley).

TRANSOM HAND SHOWER

The transom hand shower supplies warm, fresh water after swimming. The hand shower is especially useful when the yacht is run in salt water. The hand shower is an integral part of the yacht's fresh water system. Simply, turn on the faucet and adjust for the desired water temperature. The hand shower and mixing valve are located on the transom Starboard side.

**FRESH WATER WASHDOWNS**

The optional transom fresh water washdowns supply water from the fresh water tank to washdown and clean the yacht. The fresh water washdown is especially useful if the yacht is operated in salt water. The transom fresh water washdown is located within the transom storage compartment.

A Tip From Carver!

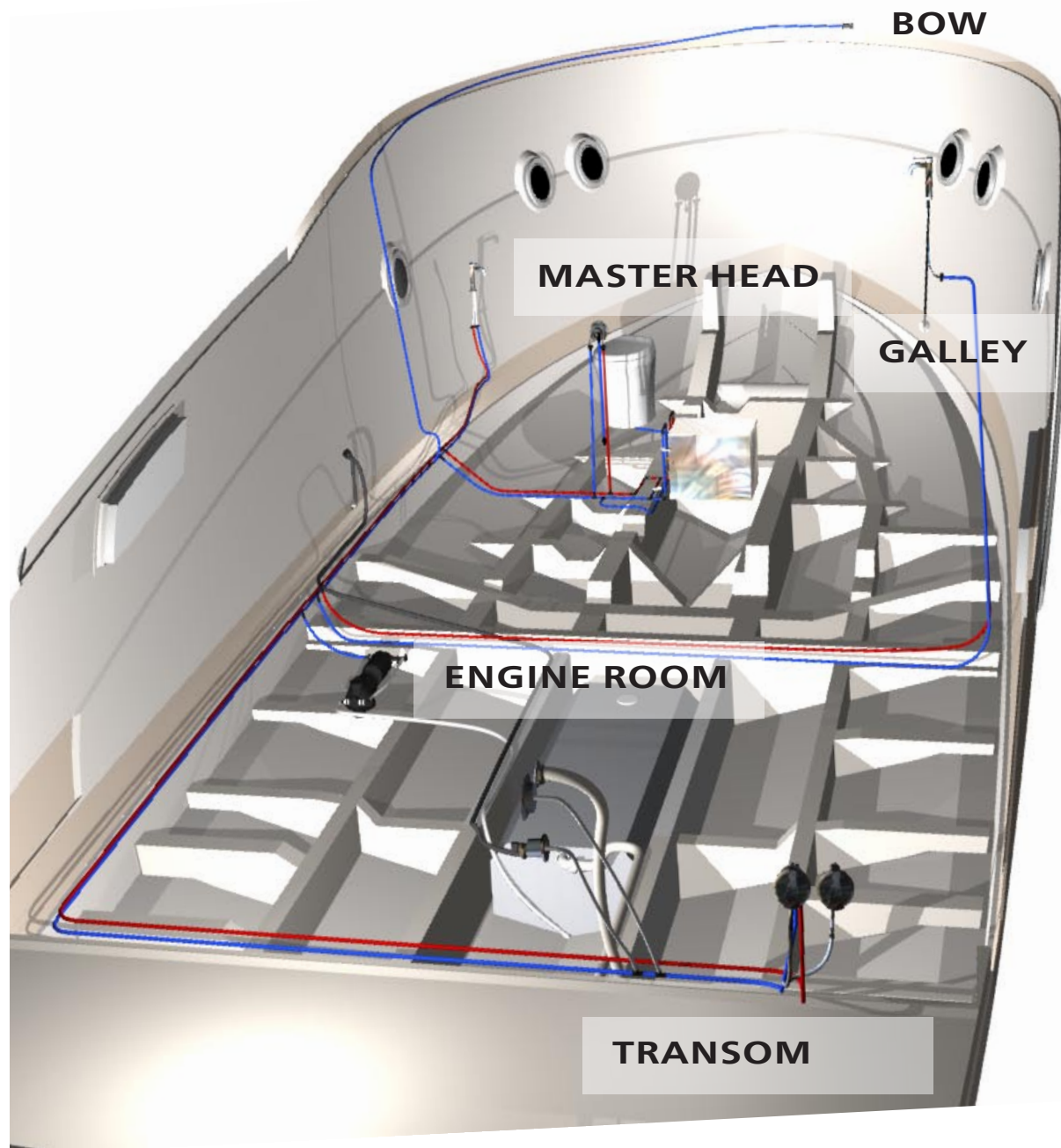
The fresh water washdown system draws water from the yacht's fresh water tanks. The amount of fresh water in the water tanks is quickly reduced by prolonged use of the washdown system.

USING THE FRESH WATER WASHDOWNS:

1. Locate the transom mounted hose fittings. The transom mounted fitting is located within the transom storage compartment.
2. Attach one end of an appropriately sized nylon water hose to the fitting of choice.
3. Attach a nozzle to the other end of the hose.
4. Open the faucet at the base of the hose fitting to supply water to the hose.

When connecting to shore water, switch OFF the PRESSURE WATER PUMP circuit breaker, located on the DC Control Panel (below the helm seating at the center walkway).

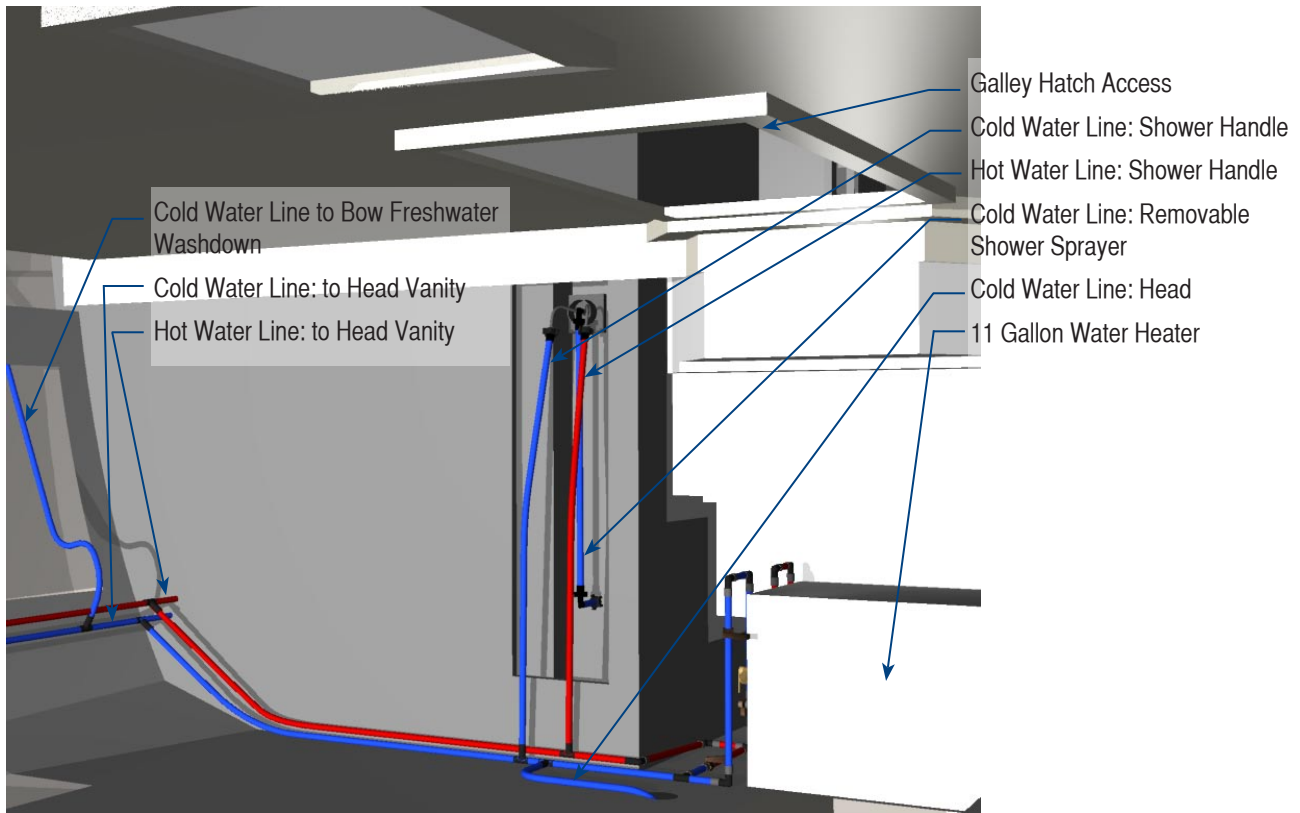
FRESHWATER SYSTEM OVERALL LAYOUT



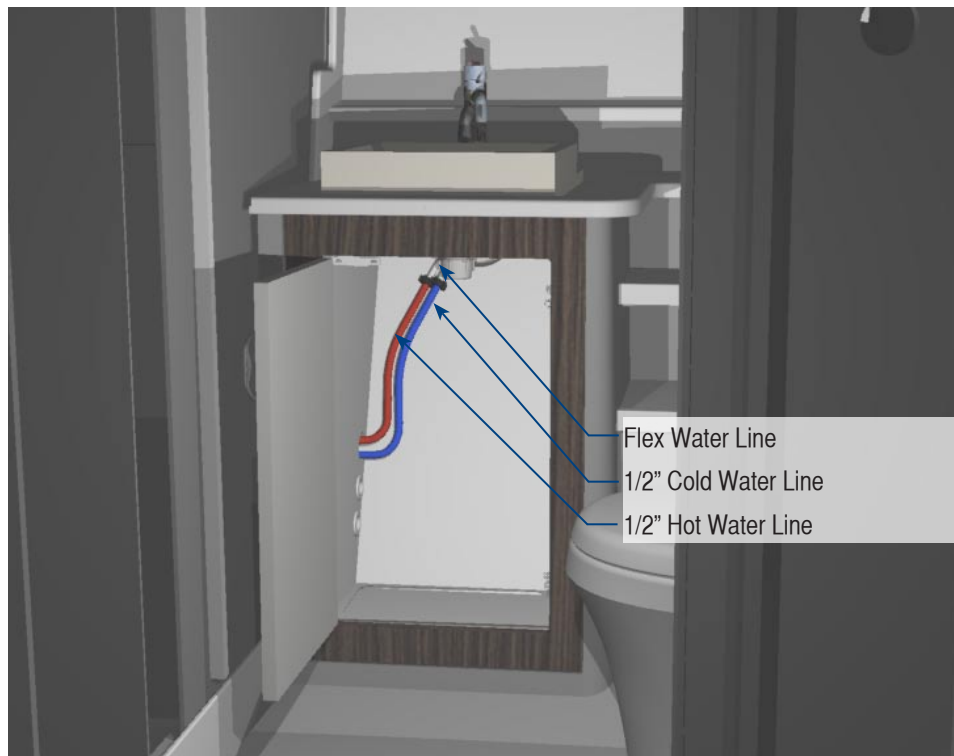
NOTE:

SEE NEXT PAGES FOR INDIVIDUAL ROOM
FRESHWATER PLUMBING LAYOUTS.
LOCATIONS AND LAYOUTS MAY CHANGE
WITHOUT NOTIFICATION

HEAD FRESHWATER SYSTEM



HEAD PLUMBING/BELOW GALLEY PLUMBING

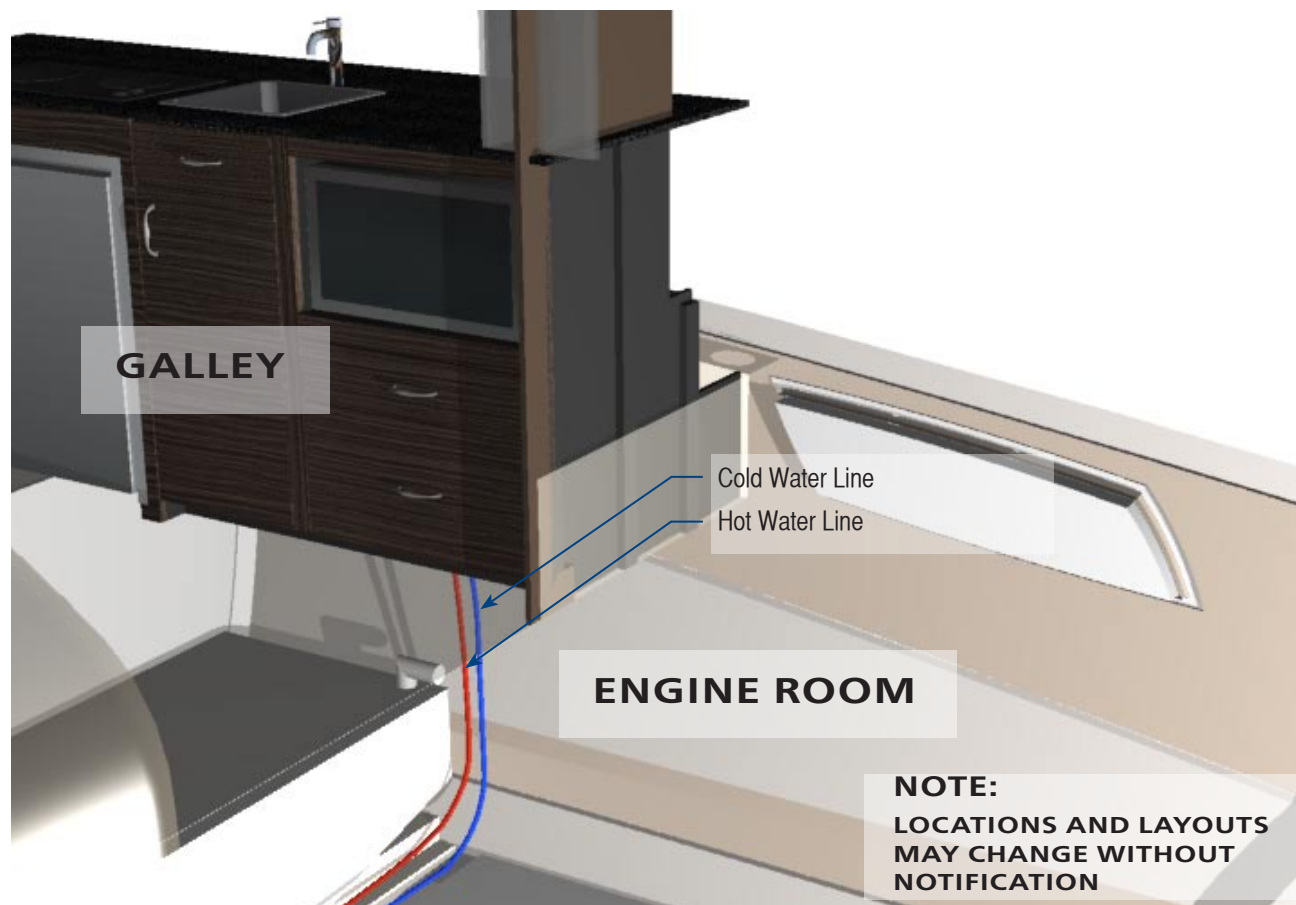


HEAD: SHOWER FIXTURE PLUMBING

INTERNAL SYSTEMS

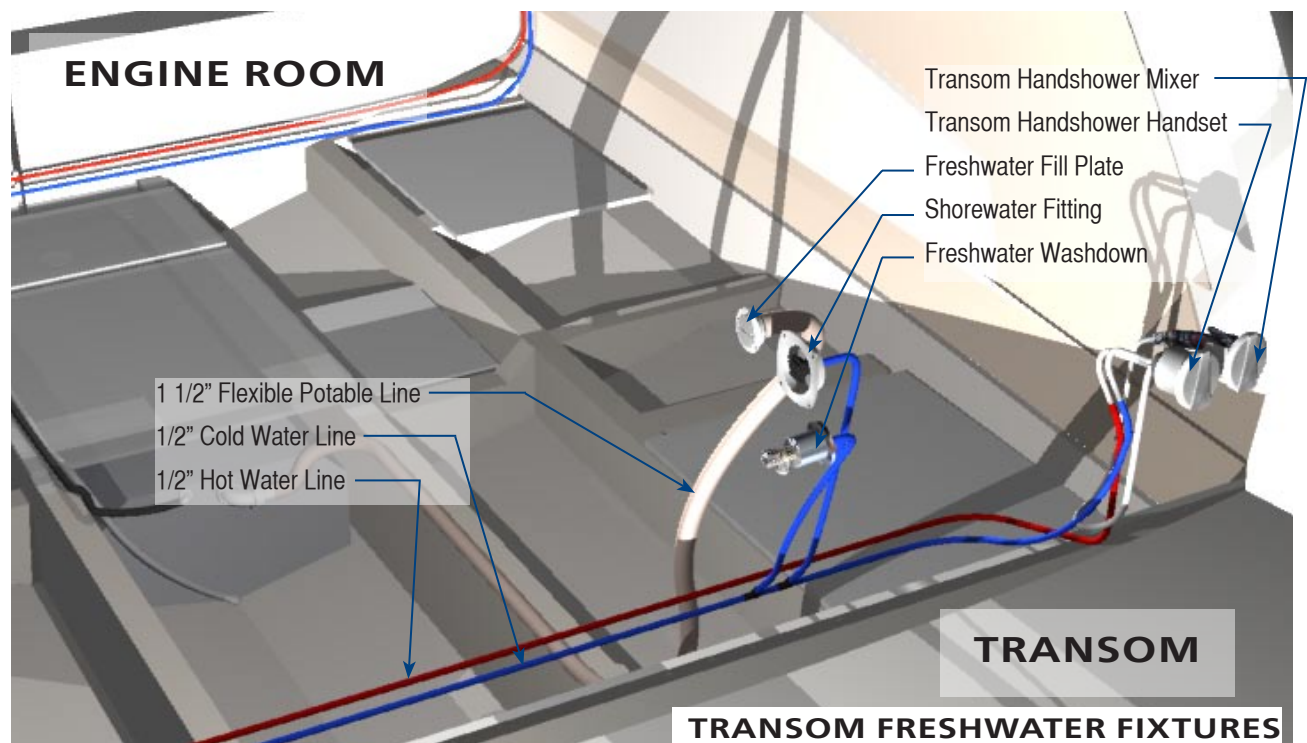
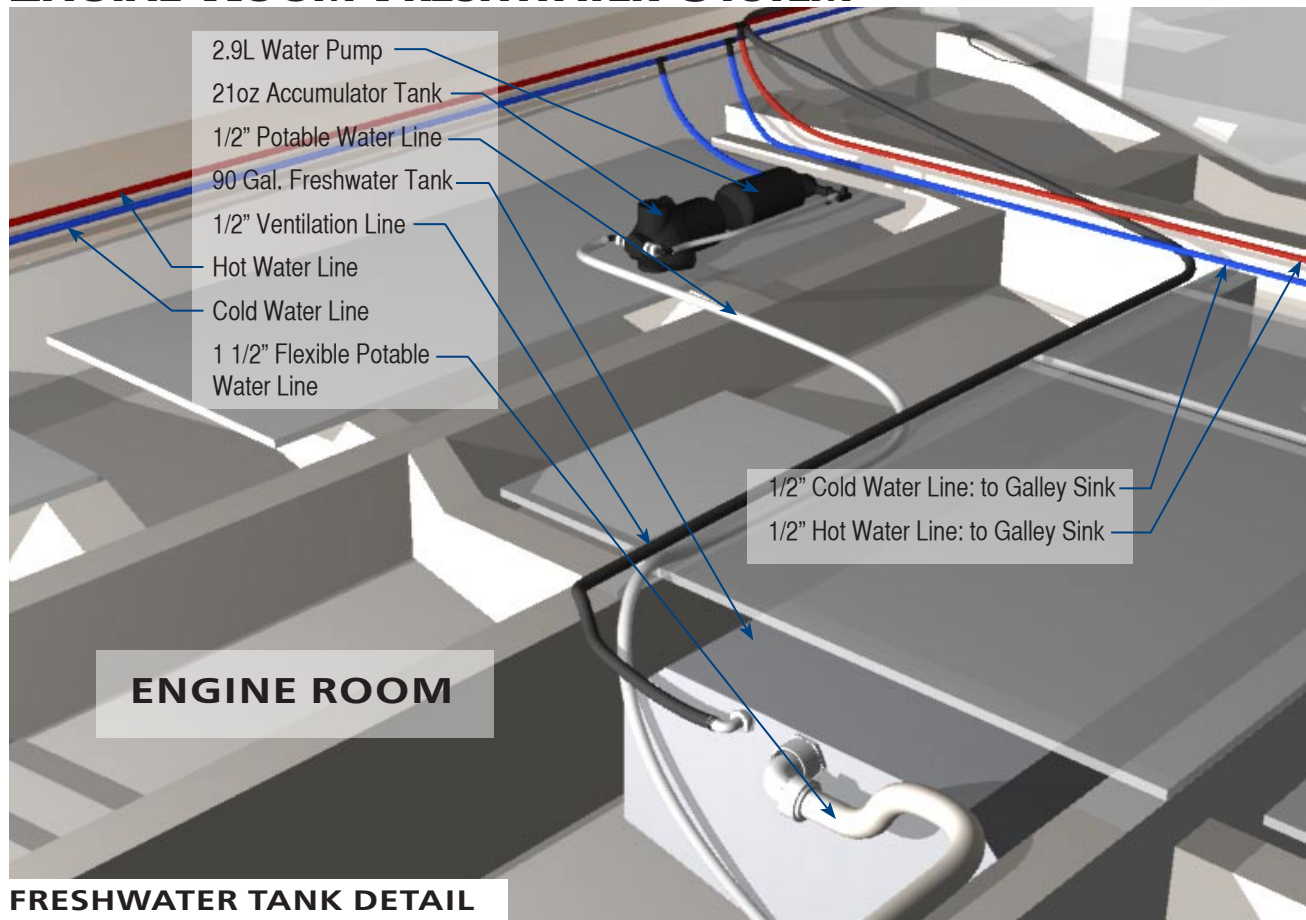


GALLEY FRESHWATER SYSTEM



(See next page for *Engine Room Freshwater System*)

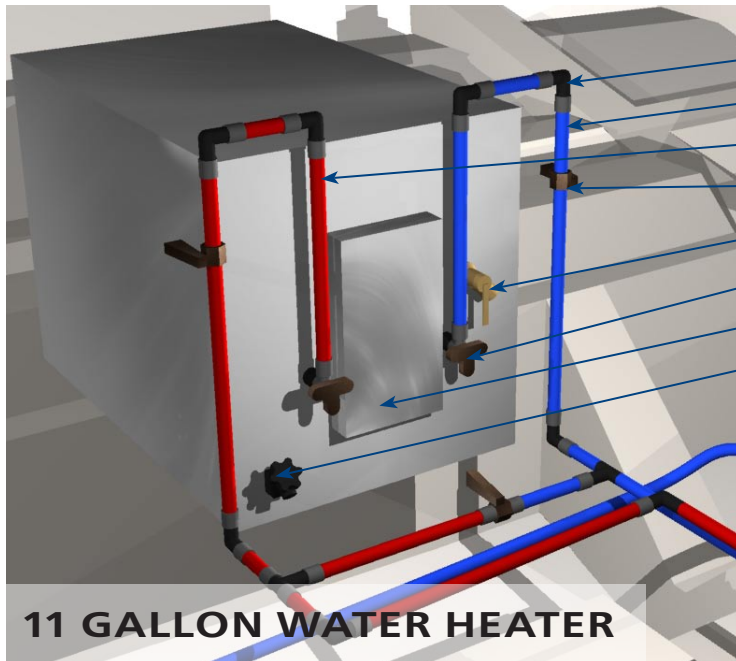
ENGINE ROOM FRESHWATER SYSTEM



INTERNAL SYSTEMS



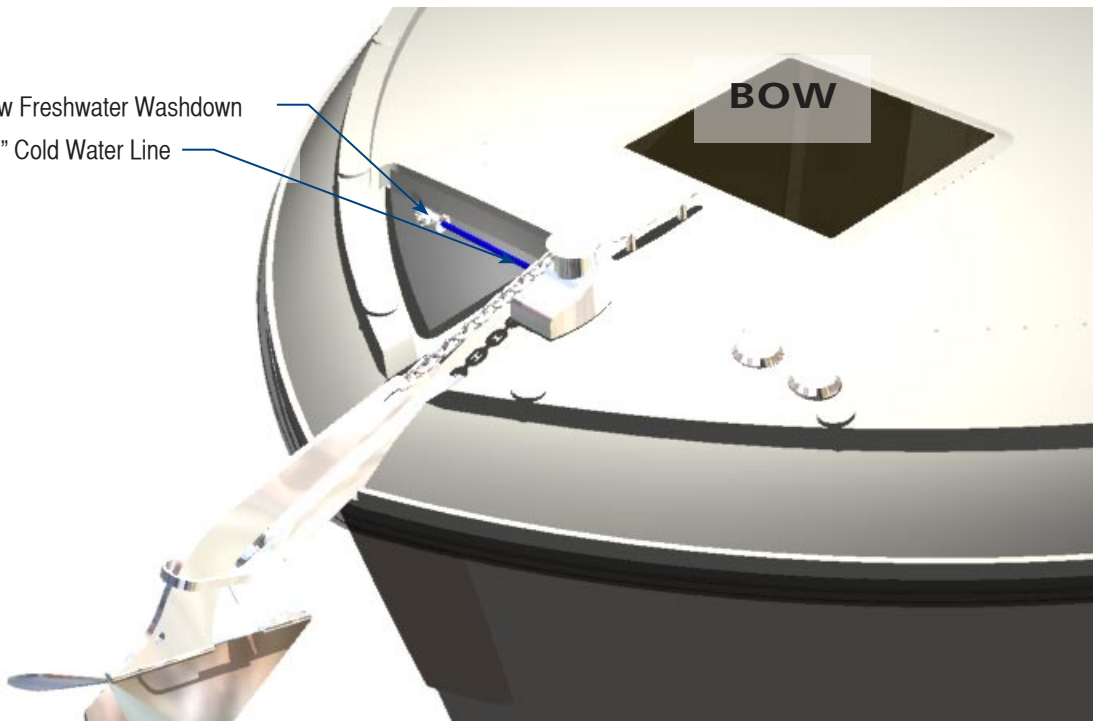
FRESHWATER SYSTEM



- 1/2" WL Elbow
- Cold Water Line
- Hot Water Line
- 1/2" WL Shut-off Valve
- Temperate and Pressure Relief Valve
- 1/2" WL x 1/2" FPT Drop Ear Elbow
- Water Heater Element
- Water Heater Drain

11 GALLON WATER HEATER

- Bow Freshwater Washdown
- 1/2" Cold Water Line



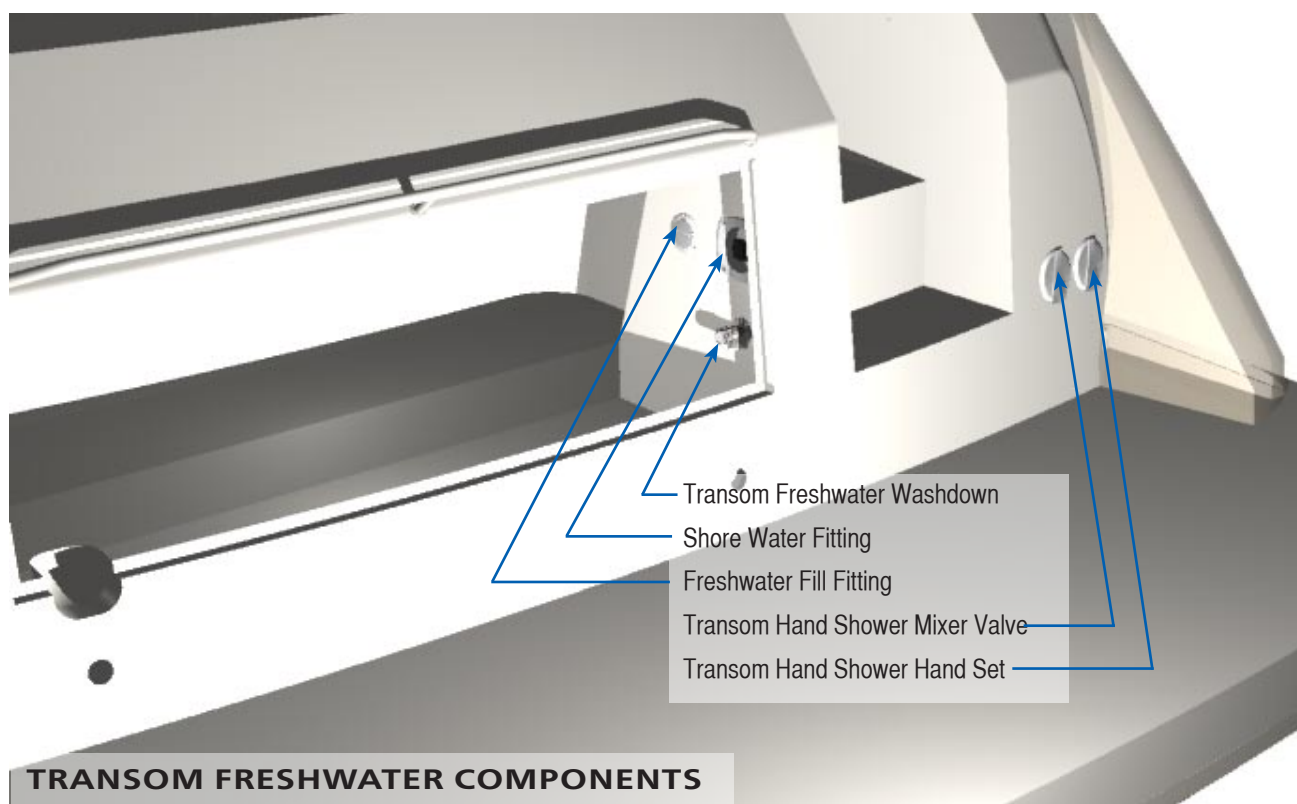
SHORE WATER

The shore water fitting enables the fresh water system to draw water from a land water source while the yacht is docked. Shore water is not drawn from the onboard tank.

The deck plate labeled WATER is the only way to fill the fresh water tank. Connecting to shore water bypasses the onboard fresh water tank and pressure water pump; water does not fill into the tank. See next page for illustration.

CONNECTING TO SHORE WATER:

1. Locate the shore water fitting labeled, SHORE WATER. The shore water fitting is located in the transom port locker. See illustration below.
2. Attach one end of a water hose to the shore water fitting.
3. Attach opposite end of the hose to the dock side water tap.
4. Close all sink and shower faucets.
5. Turn on the AUTO SUMP circuit breaker, located on the DC Control Panel (below the helm seating within the cabinetry forward the galley).
6. Turn the dock side water tap ON.



CAUTION

DO NOT LEAVE THE YACHT UNATTENDED WHILE CONNECTED TO SHORE WATER. WATER MAY DEVELOP ONBOARD IF A WATER LINE LEAKS.

BILGE SYSTEM

The bilge system on the C37 contains the following bilge pumps quantities based upon region:

NORTH AMERICAN

- 2 Automatic Electric Submersible Bilge Pumps

CE/INTERNATIONAL

- 2 Standard Electric Submersible Bilge Pumps
- 2 Automatic Electric Submersible Bilge Pumps

The bilge is the lowest interior point of the hull. Any accumulation of water in the hull will flow to the bilge. Each bilge pump can remove up to 1100 to 2000 gallons of water per hour. The bilge locations include:

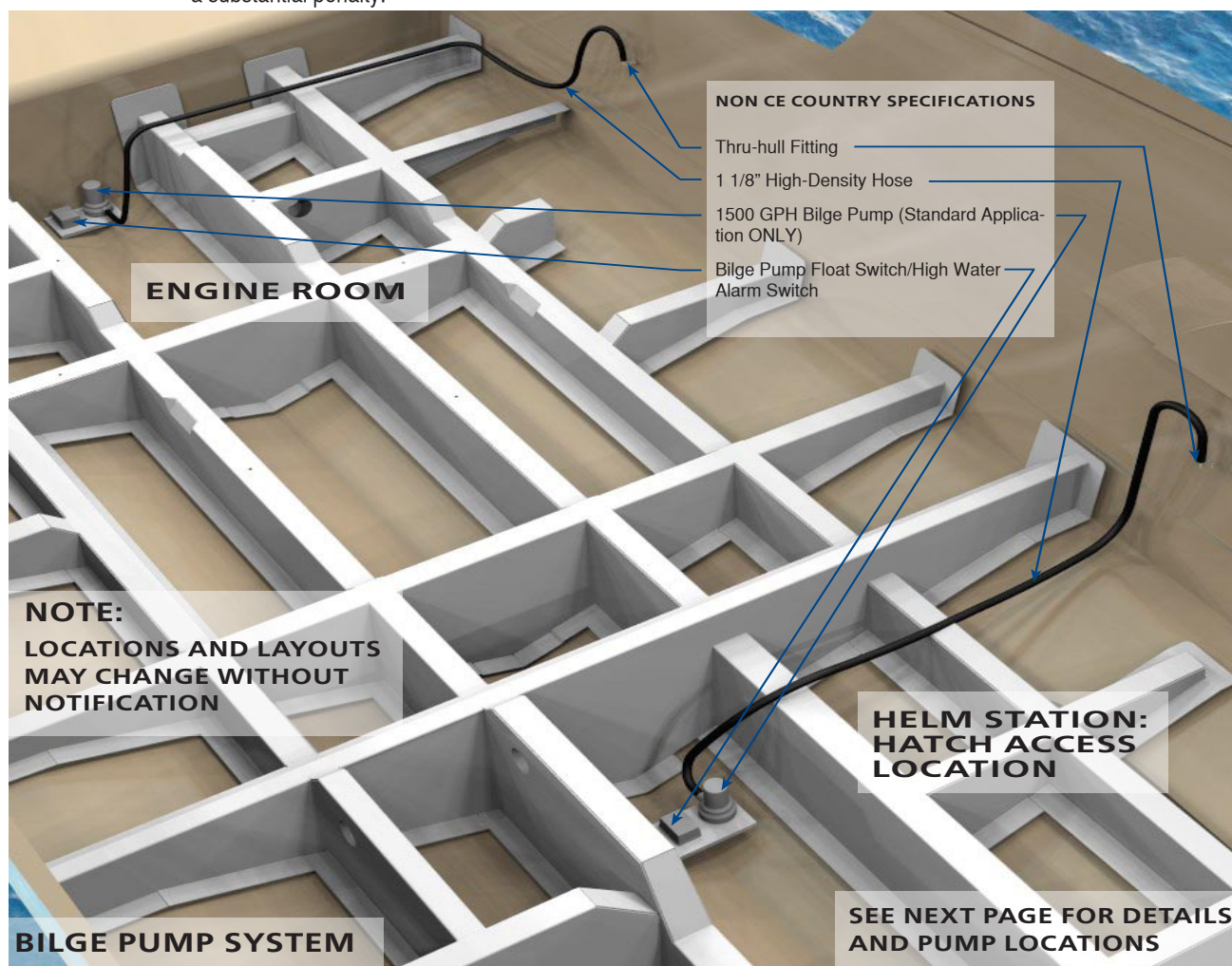
FORWARD BILGE

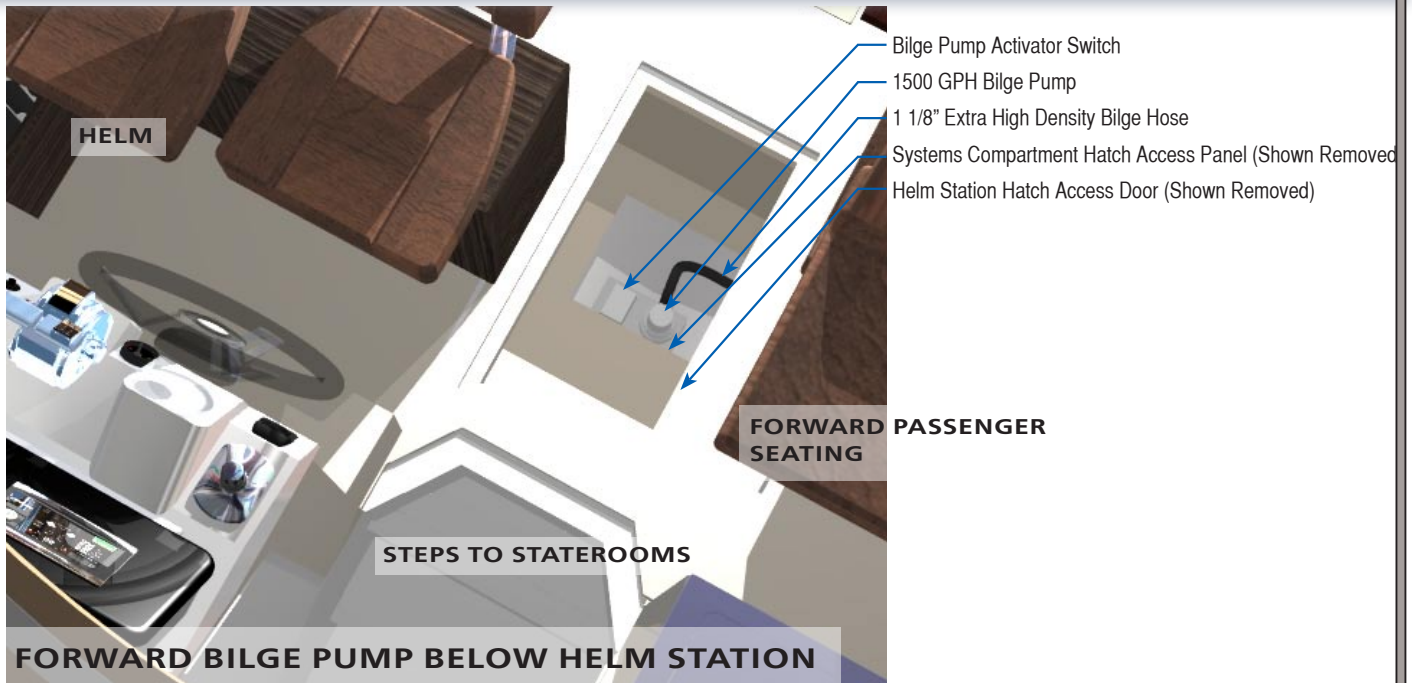
The forward bilge pump is located below the hatch access door, beside the helm. A 2nd lower hatch access door must be removed to access the pumps. See next page for illustration on accessing pumps.

TRANSOM BILGE

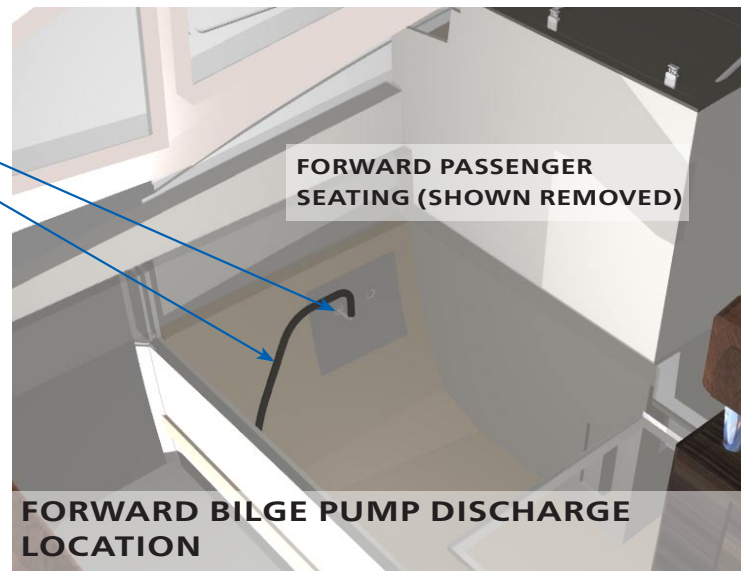
The transom bilge pump is located in the aft bilge area in the engine room.

NOTE: Wipe up any oil that may have accumulated in the bilges before operating the bilge pumps. Pumping oil overboard contributes to water pollution, and is in violation of the Federal Water Pollution Control Act. Violators are subject to a substantial penalty.





1 1/8" Bilge Pump Thru-hull
1 1/8" Extra High Density Bilge Hose



WARNING

THE COMBINED CAPACITY OF THE SYSTEM IS NOT INTENDED TO DRAIN THE CRAFT IN THE CASE OF DAMAGE.

WARNING

THE BILGE PUMPING SYSTEM IS NOT DESIGNED FOR DAMAGE CONTROL.

SAFETY PRECAUTION

CHECK THE FUNCTION OF ALL BILGE PUMPS AT REGULAR INTERVALS. CLEAR PUMP INLETS FROM DEBRIS. IF SEA-COCKS ARE FITTED IN THE FORE AND AFT PEAK BULKHEADS, THEY SHALL BE KEPT CLOSED AND SHALL ONLY BE OPENED TO LET WATER DRAIN INTO THE MAIN BILGES.

CAUTION

NEVER STORE ITEMS IN THE BILGES. DAMAGE MAY OCCUR TO THE PUMPS, PIPES, OR OTHER COMPONENTS ESSENTIAL FOR PROPER OPERATION BY STORING LOOSE ITEMS IN THE BILGES.

THE WATER IN THE BILGES MUST BE DRAINED BEFORE STORING FOR THE WINTER IF THE YACHT IS KEPT IN A CLIMATE WITH BELOW FREEZING TEMPERATURES.

FROZEN WATER IN THE BILGES MAY CAUSE SEVERE DAMAGE TO THE YACHT AND ITS COMPONENTS. REFER TO SECTION 8: *BILGES* FOR MORE INFORMATION ON WINTERIZING THE BILGES.

BILGE PUMP OPERATION

Each automatic bilge pump can be operated either automatically or manually. The bilge pumps remove nearly all of the water that collects in the bilges.

Two high water sensors are equipped onboard. The sensors detect high bilge water, and an alarm will sound if detected. The most likely causes of high bilge water are:

- A hull breach
- Faulty bilge pump
- Faulty seacock/hose.

NOTE: The HIGH WATER ALARM switch and HIGH WATER ALARM circuit breaker, located on the DC Control Panel (below the helm seating within the cabinetry forward the galley) must be ON at all times; the alarm will sound if high water is detected in the bilge.

AUTOMATIC OPERATION

An electronic water sensor float switch is built-in to each automatic bilge pump. The sensor switch automatically turns the pump on when bilge water rises to the product's design level.

OPERATING THE BILGE PUMPS IN AUTOMATIC MODE:

The Automatic Bilge Pump is activated by a float switch, located on the bilge pump. Test each sensor switch by pressing the two indents on the side of the switch for 4 seconds. Doing so, should turn ON the bilge pump.

NOTE: Periodically test each sensor to ensure that the sensor and pump are in proper working condition.

MANUAL OPERATION

MANUALLY OPERATING THE AUTOMATIC BILGE PUMPS:

1. Provide power to the circuit breakers on the DC Control Panel (Dinette aft, Starboard side).
 - 1a. Switch ON the SYSTEMS DC MAIN circuit breaker.
 - 1b. Switch ON the BILGE PUMP 1 and BILGE PUMP 2 circuit breakers.
 - 1c. Switch ON the EMERGENCY BILGE PUMP 1 and EMERGENCY BILGE PUMP 2 circuit breakers
2. Press the BILGE PUMP 1 and BILGE PUMP 2 switches located at the helm to activate the bilge pumps.
3. Turn the bilge pumps OFF when the bilge water level is too low for the pump to drain. Allowing the pump to operate when water is too low can damage the unit.

NOTE: A light will illuminate on the manual switch at the helm when the bilge pumps are operating in either manual or automatic mode. The light indicates that the pumps are operating.

CAUTION

TURN OFF THE BILGE PUMP WHEN THE WATER DECREASES TO A LEVEL THAT PUMP CAN NO LONGER OPERATE. CAU-

TION IS ONLY NECESSARY IN MANUAL MODE. ALLOWING THE PUMP TO OPERATE WITHOUT WATER CAN DAMAGE THE PUMP.

CAUTION

CHECK THE FUNCTION OF ALL BILGE PUMPS AT REGULAR INTERVALS. CLEAR DEBRIS FROM THE PUMP INLETS.

SERVICING THE BILGE PUMP

See Original Equipment Manufacturer for servicing the bilge pump.

OWNER/OPERATOR RESPONSIBILITIES

It is the owner/operator's responsibility to supply at least one bailer/draw bucket on board, secured against accidental loss.

A Tip From Carver!

A small amount of water collects in the yacht's bilge. The water is usually not enough to activate the automatic switch on the bilge pump. While underway, use the helm switches to manually turn the bilge pumps on, and let the pumps run for 30 seconds to one minute. When your yacht is on plane, water in the bilge flows to the stern, where the aft bilge pump is located. The amidships bilge pumps are near the lowest point in the hull.

HULL DRAIN

One hull drain is equipped on the yacht. The drain allows water to drain from the bilges while the yacht is in dry storage. The yacht and cradle should be positioned to allow water to flow toward the hull drain. The drain is located in the transom in the deepest portion of the hull's "V."

The hull drain will drain water only from the bilge area aft of the forward engine bulkhead. If water collects forward of the engine room bulkhead; the water must be pumped out.

CAUTION

SECURELY TIGHTEN THE DRAIN PLUG INTO THE HULL DRAIN BEFORE LAUNCHING.

A Tip From Carver!

Coat the threads of the hull drain plug with waterproof grease before you install the plug into the hull drain fitting. This makes it easier to remove the plug at a later date.

GRAY WATER SYSTEM

The Gray Water System is designed to have the sinks and shower drain into the gray water pan that discharges the water either overboard or into an onboard gray water tank.

GRAY WATER TANK (OPTION)

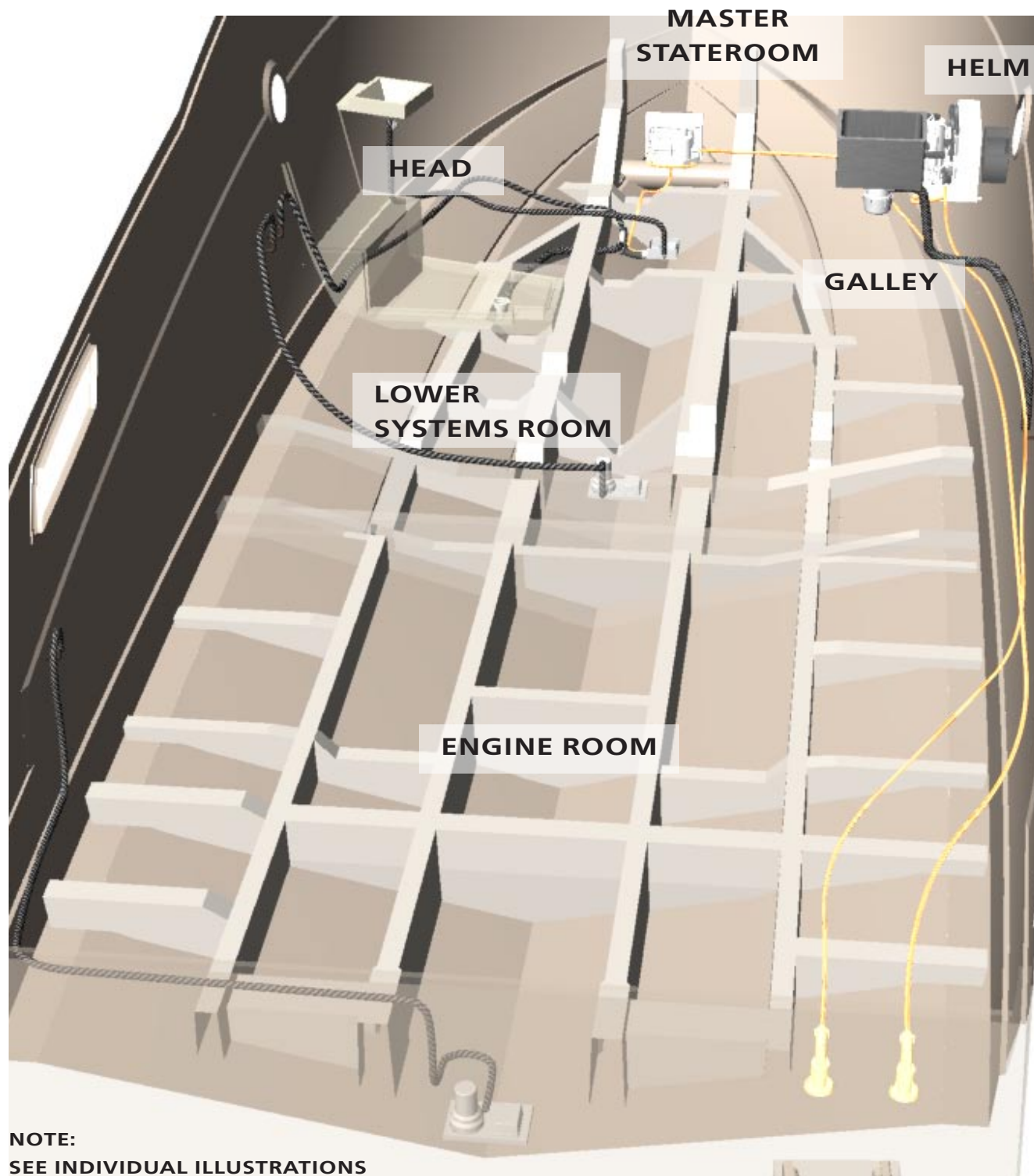
Once the gray water tank is full, the tank can be emptied at dock side with the procedure described on the next page, titled: *Emptying The Waste/Gray Water Tank*.

The gray water tank is single tank, labeled as *shower sump tank* connected to the gray water drains by a series of hoses. See *Dock-side Discharge* or *Overboard Discharge* in this section for emptying the tanks.

INTERNAL SYSTEMS

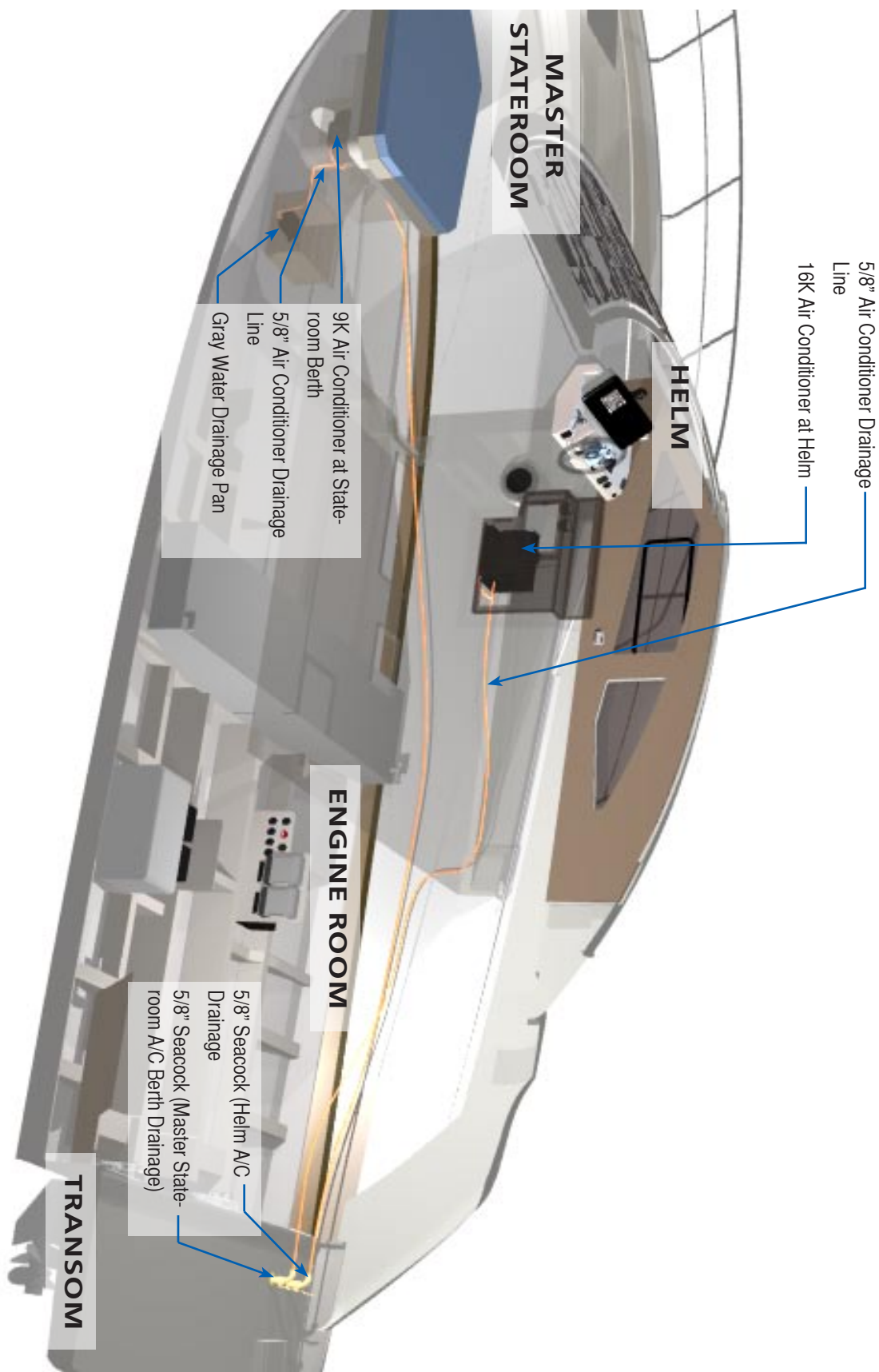


GRAY WATER SYSTEM



NOTE:
SEE INDIVIDUAL ILLUSTRATIONS
ON THE FOLLOWING PAGES FOR
LABELS AND DETAILS.

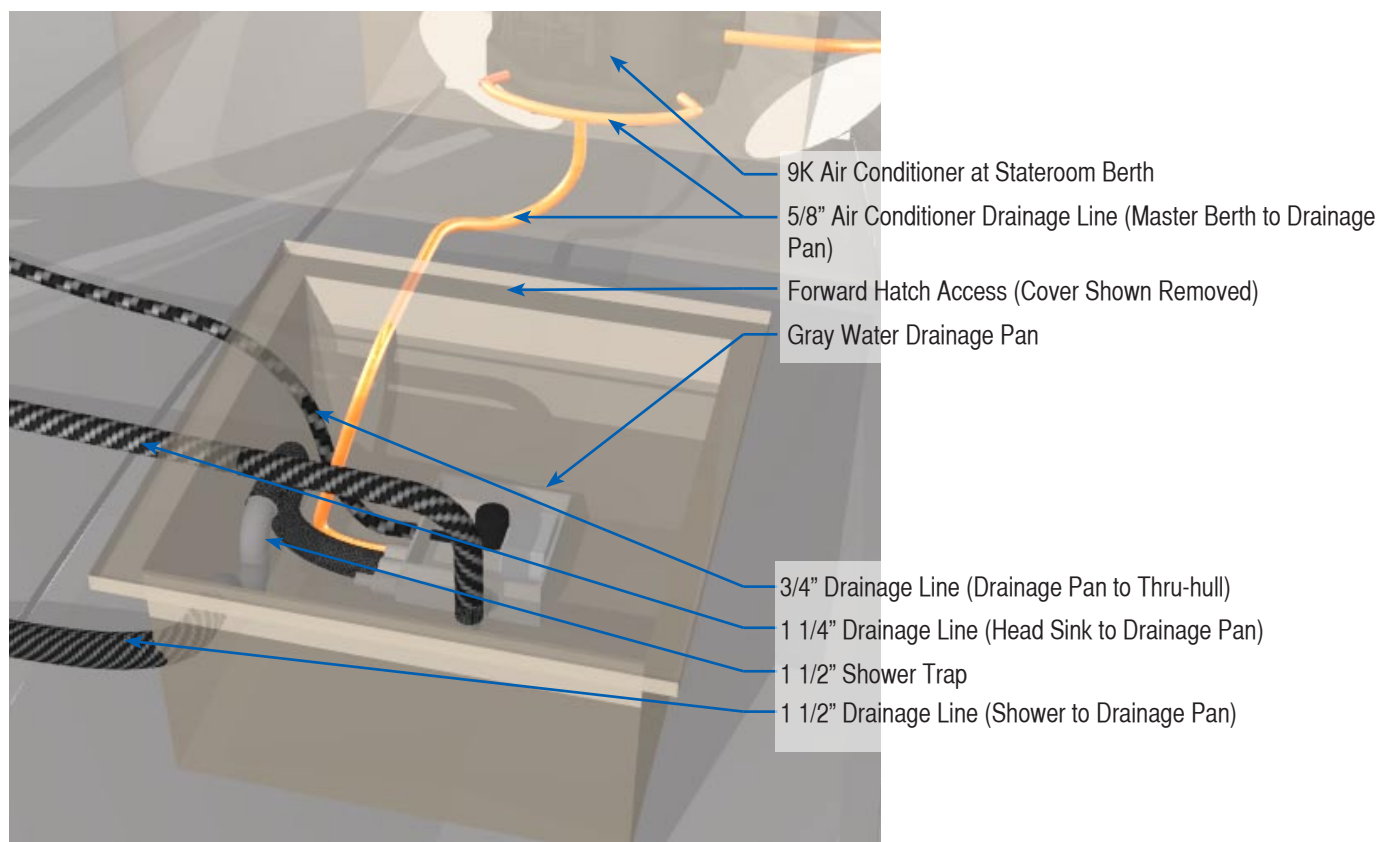
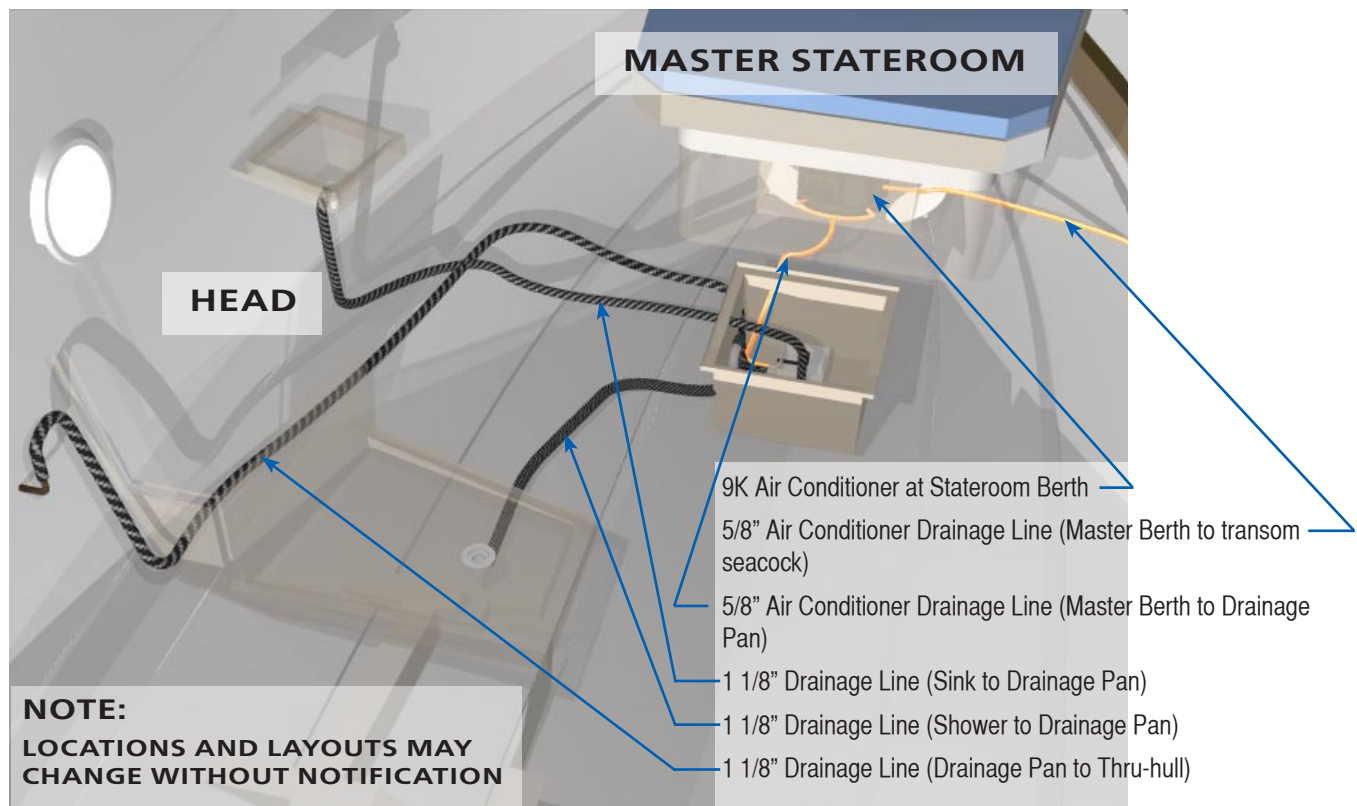
GRAY WATER SYSTEM

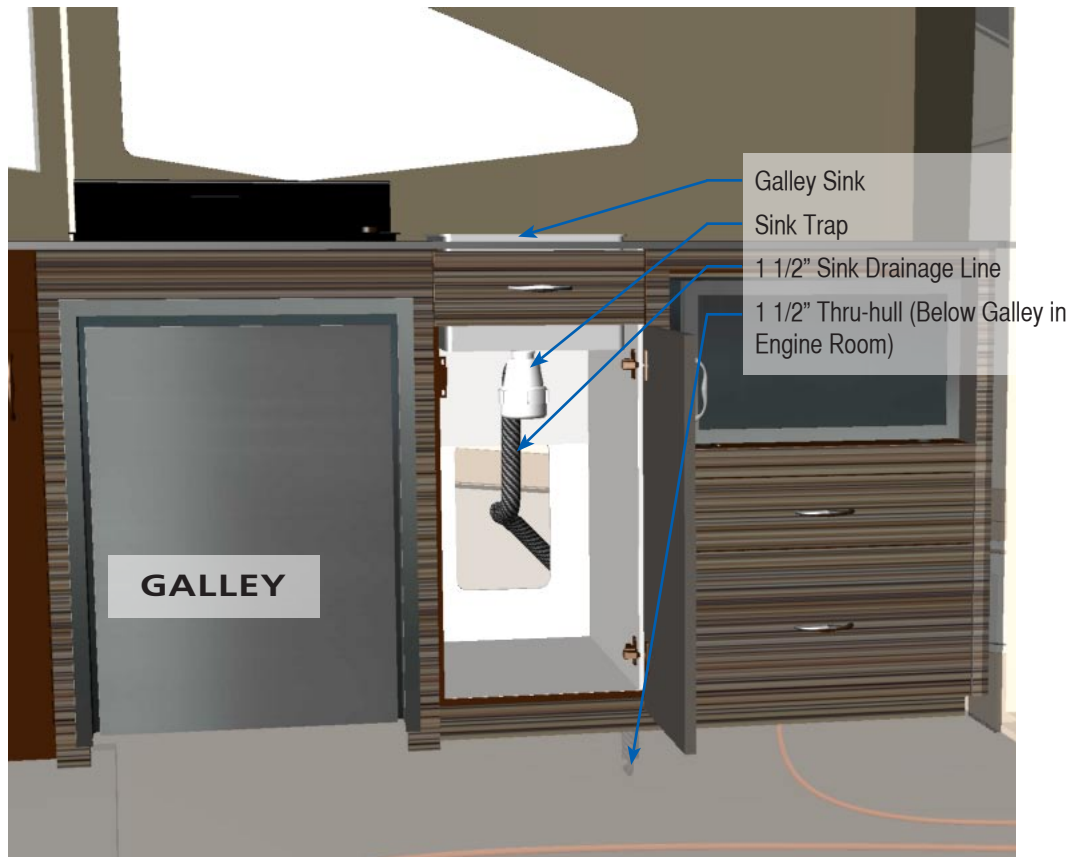


INTERNAL SYSTEMS



GRAY WATER SYSTEM



GRAY WATER SYSTEM**NOTE:**

LOCATIONS AND LAYOUTS MAY
CHANGE WITHOUT NOTIFICATION

SANITATION SYSTEM

EASY FIT TOILETS

The toilet system uses a motor to flush the head. Instruct guests on how to properly use the vacuum flush system. Refer to the OEM Information for proper toilet usage. A single 40 GAL, 151 L tank is supplied onboard. See next page for location.



OPERATING THE VACUUM FLUSH SYSTEM:

1. Confirm DC power is available at DC Control Panel (Below the helm seating within the cabinetry forward the salon.)
2. Make sure the HEAD circuit breaker is ON, located on the DC Control Panel.
3. Check the level indicated on the tank monitor located on the DC Panel.
4. Check the waste system warning light. Empty the waste tank if the indicator shows a reading of at least 3/4 full. (See Emptying The Waste/Gray Water Tank procedure on the next page)

NOTE: A **WARNING** light in the Master Head will illuminate when the waste tank is 3/4 full. If the red indicator is not lit, proceed to next step.

5. Press the FLUSH button located on the wall mounted FLUSH/ADD WATER control mechanism
6. If the toilet bowl is dry, press the ADD WATER switch, located on the FLUSH/ADD WATER control mechanism.

The vacuum system may gradually lose vacuum pressure over time. When pressure in the system drops below the manufacturer's level, the vacuum pump engages automatically to bring vacuum pressure back to the optimum level.

NOTE: To eliminate the toilet vacuum pump noise, temporarily shut the pump off by using the TOILET switch. The switch is located in the Master Head. Placing the switch in the OFF position shuts off the toilet's vacuum pump.

The vacuum system may gradually lose vacuum pressure over time. When pressure in the system drops below the manufacturer's design level, the vacuum pump engages automatically to bring vacuum pressure back to the optimum level.

CAUTION

IF THE WASTE SYSTEM IS NOT GOING TO BE USED FOR TWO OR MORE WEEKS, FLUSH TWO TO THREE GALLONS OF FRESH WATER THROUGH EACH HEAD. FLUSHING WATER WILL FLUSH THE WASTE IN THE HOSES TO THE TANKS. REMOVING THE WASTE FROM THE HOSES WILL DECREASE ODORS ONBOARD.

EMPTYING THE WASTE TANK AND/OR OPTIONAL GRAY WATER TANK

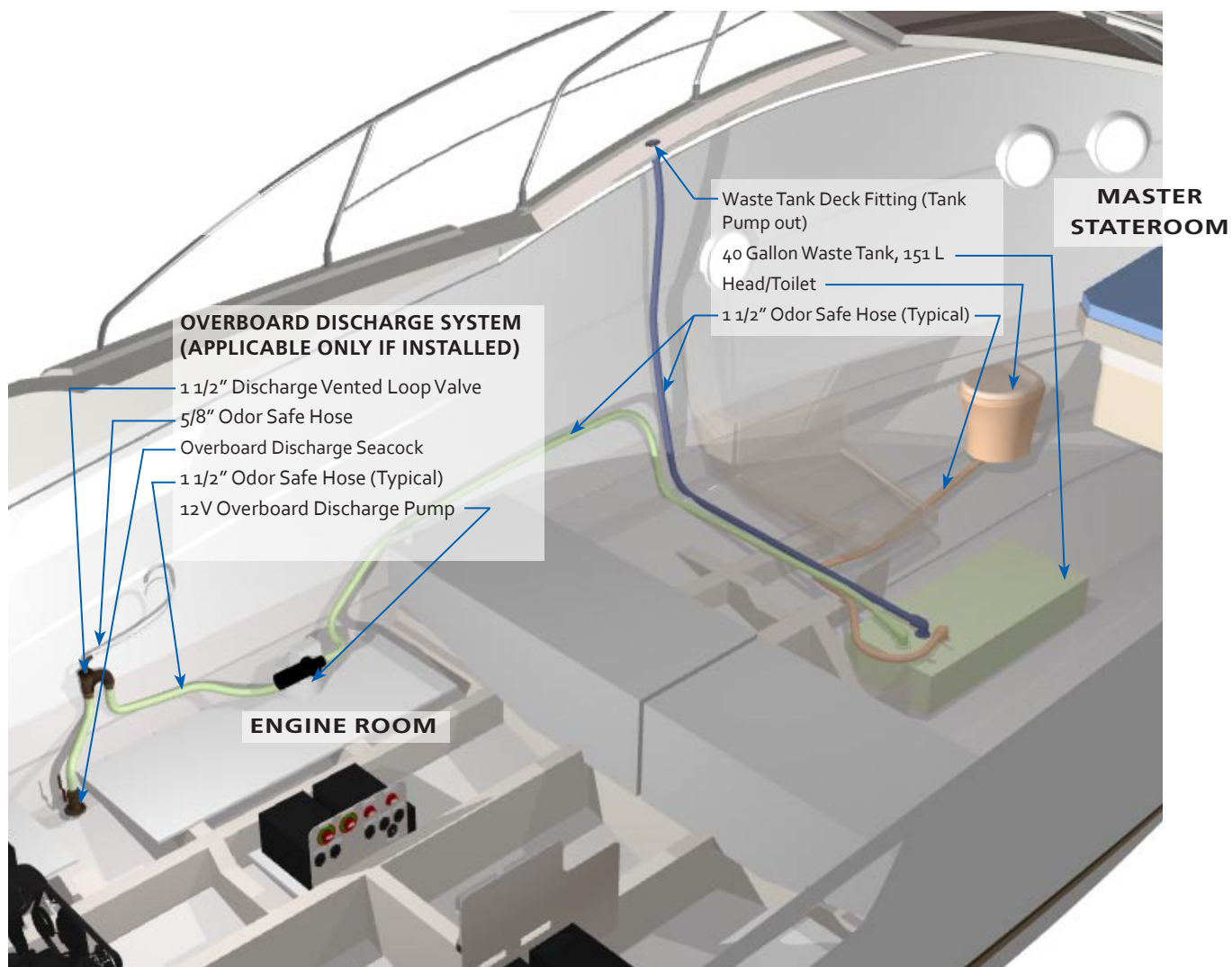
The sanitation system contains a single centrally located polyethylene waste tank. The waste tank can be accessed through the galley hatch access floor panel, located amidships, in the companionway leading to the staterooms. See *Sanitation System Details* on the following pages for illustration. It is important to observe local regulation on discharge.

DOCKSIDE DISCHARGE

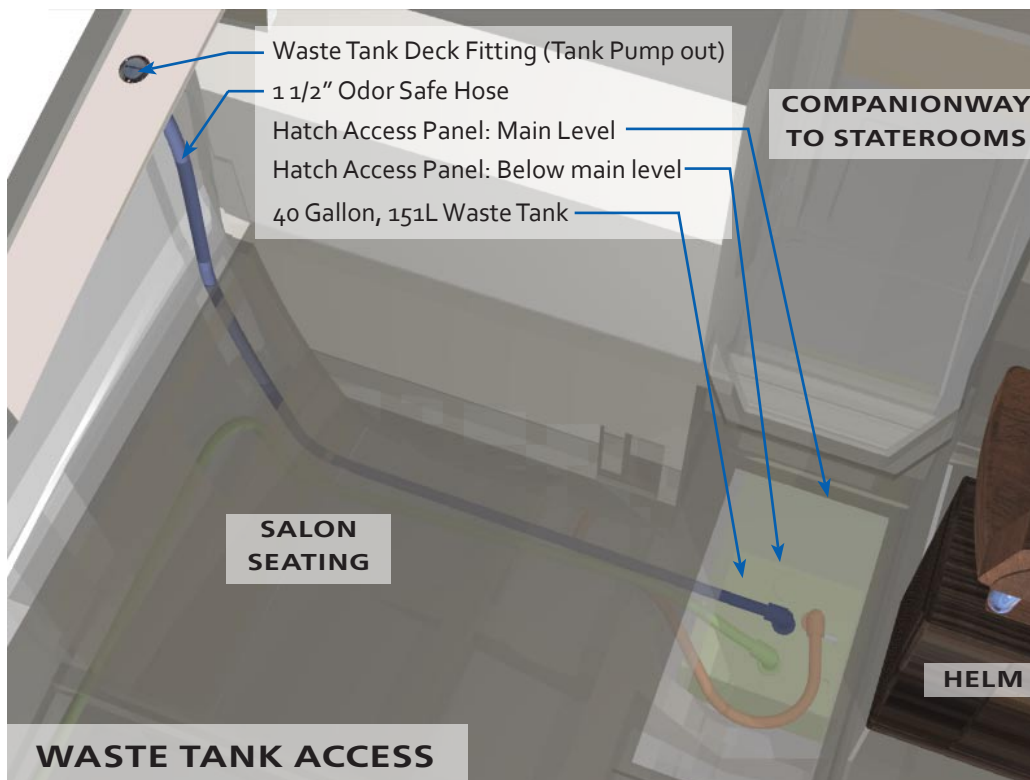
Using the dockside discharge method, waste is flushed from the heads to the waste tanks and stored until the waste is transferred to a dockside pumpout station.

EMPTYING THE WASTE TANK AND/OR GRAY WATER TANK:

1. Locate a dockside pumpout station.
2. If a gray water tank is installed, make sure the Y-valve, located in the engine room is set to the correct position. The Y-valve allocates the WASTE tank or GRAY WATER tank to be emptied.
3. Remove the deck plate, labeled WASTE using the Waste Tank Deck Key supplied. The waste deck plate is located at on transom, port side. See illustration below.
4. Attach the pumpout vacuum hose to the WASTE deck fitting. The WASTE deck fitting is located on the port outboard catwalk, forward amidships. See below for location. Make sure to have a secure connection between the transfer hose and the deck fitting.
5. Activate the pumpout vacuum. The pumpout vacuum transfers onboard waste to the dockside holding station.
6. Flush the waste tank, after all waste is removed:
 - 5a. Pour several gallons of fresh water through the WASTE deck fitting.
 - 5b. Reattach the vacuum hose to the deck fitting, and activate the pumpout vacuum to remove the fresh water and any remaining waste.
6. Replace the deck plate.

**WASTE SYSTEM OVERALL LAYOUT**

SANITATION SYSTEM DETAILS



A Tip From Carver!

THE WASTE DECK PLATE IS NOT CONNECTED TO THE FITTING AND DOES NOT FLOAT. BE CAREFUL NOT TO DROP THE DECK PLATE WHEN REMOVING. YOU CAN ORDER A REPLACEMENT FROM YOUR CARVER DEALER IF YOU LOSE THE PLATE. WASTE DECK PLATES ARE DROPPED OVERBOARD FREQUENTLY ENOUGH THAT WE SUGGEST YOU CARRY AN EXTRA PLATE IN YOUR ONBOARD SPARE PARTS KIT.

WARNING

DISCHARGING WASTE OVER BOARD IS ILLEGAL IN MANY AREAS OF THE UNITED STATES.

IT IS EVERYONE'S RESPONSIBILITY TO COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS WHEN USING THE OVERBOARD DISCHARGE SYSTEM. DISCHARGING WASTE OVERBOARD IN RESTRICTED AREAS WILL RESULT IN SIGNIFICANT PENALTIES. IT IS IMPORTANT TO FOLLOW INTERNATIONAL REGULATIONS AGAINST MARINE POLLUTION (MARPOL) AND RESPECT IT AS MUCH AS POSSIBLE.

USE A HARBOR OR MARINA PUMP-OUT FACILITY TO EMPTY THE HOLDING TANK BEFORE LEAVING HARBOR.

IMPORTANT

SYSTEM SHALL BE EMPTY DURING STORAGE AT FREEZING TEMPERATURES.

WASTE TANK/GRAY WATER TANK DEODORIZERS AND ACCEPTABLE CLEANING CHEMICALS

Any RV tank cleaner, RV anti-freeze, or RV deodorizer is acceptable for use with the waste tank or gray water tank.

OVERBOARD DISCHARGE SYSTEM

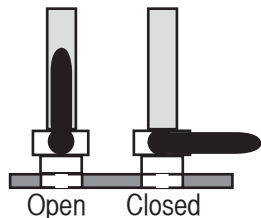
Discharging black water/sewage overboard is against the law in some areas of the United States. It is the yachter's responsibility to maintain compliance with all applicable federal, state, and local laws when using the overboard discharge system. Significant penalties result for discharging waste overboard.

With the overboard discharge system, waste is flushed from the toilets to the waste storage tank. In locations that overboard discharge is legal, the tanks can be discharged directly overboard.

If overboard discharge is not legal at your location, either wait until an area is reached where it is legal, or use a dock side pumpout station to empty the waste tanks.

See previous page for Overboard Discharge System Illustration.

EMPTYING THE WASTE AND/OR GRAY WATER TANK:



1. Open the overboard discharge seacock. The seacock is located in the engine room, port side aft. See next page for illustration.
2. If an optional gray water holding system is installed, turn the waste tank-gray water tank Y-valve to select the waste tank. Otherwise, proceed to step 4. This Y-valve is located near the waste tank Y-valve.
3. Turn the ACCESSORY battery master disconnect switch to the ON position. The accessory master disconnect switch is located on the DC Control Panel. The DC Control Panel is located below the helm seating within the cabinetry forward the galley. See Section 2 for illustration.
4. On the DC Control Panel, switch the DC MAIN circuit breaker ON, then switch the WASTE PUMP circuit breaker ON.
5. Turn the overboard discharge pump switch ON. The switch is located near the overboard discharge seacock. This activates the overboard discharge pump, which pumps the waste overboard.

NOTE:

When the waste tank is empty, turn the overboard discharge pump switch OFF. Operating the pump when the waste tank is empty can damage the pump.

6. After all waste is pumped overboard, turn the overboard discharge pump switch OFF.
7. Turn the waste tank Y-valve to select the dockside discharge hose.
8. Remove the waste tank deck plate labeled "WASTE" using the removal tool supplied with your boat. This plate is located in the forward starboard corner of the boarding platform. Refer to Section 9 - Deck Plates for the exact location of this plate.
9. Flush the waste tank by pouring a few gallons of fresh water through the "WASTE" deck fitting.
10. Turn the waste tank Y-valve to select the overboard discharge hose.
11. Reactivate the overboard discharge pump and remove the fresh water and any remaining waste, then turn the pump switch "OFF."
12. Close the overboard discharge seacock.
13. Replace the "WASTE" deck plate.
14. On the DC Control Center, switch the Forward Waste Pump circuit breaker "OFF."

RAW WATER WASHDOWN (OPTION)

The optional bow and transom raw water washdowns uses seawater to washdown and clean the yacht.

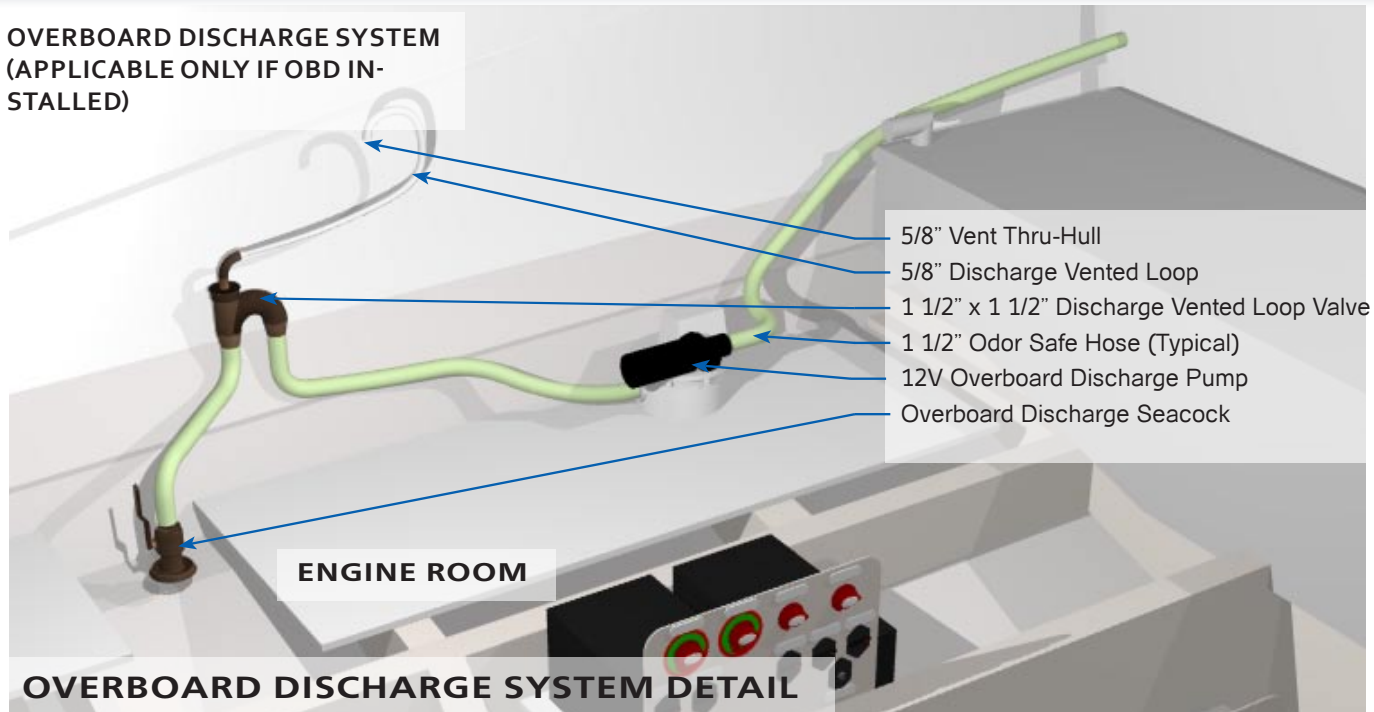
USING THE RAW WATER WASHDOWNS:

1. Locate the bow and transom mounted hose fittings. Each location is as follows:

INTERNAL SYSTEMS



OVERBOARD DISCHARGE SYSTEM (APPLICABLE ONLY IF OBD IN- STALLED)



- The bow-mounted fitting: located on the forepeak deck under the hatch.
 - Transom-mounted fitting: located in the starboard aft stairs.
2. Attach one end of an appropriately sized nylon water hose (with nozzle) to the hose fitting of choice.
 3. Make sure the raw water seacock is closed, remove and clean the raw water filter. See above for location.
 4. Reinstall the seawater filter and open the seacock. If the filter leaks when the seacock is opened, close the seacock and check the filter for the correct installation.
 5. Open the seacock to supply the seawater to the washdown pump.
 6. Switch ON the WASHDOWN PUMP circuit breaker located on the DC Control Panel, located below the helm seating within the cabinetry, forward the galley.

CAUTION

DO NOT OPERATE THE WASHDOWN PUMP WHEN THE SEACOCK SUPPLYING SEAWATER TO THE WASHDOWN SYSTEM IS CLOSED. THE PUMP CAN BE DAMAGED BY CONTINUING OPERATION WITHOUT SEAWATER.

The raw water washdown pump, when activated, creates pressure in the raw water washdown system. When the hose nozzle is closed, water pressure within the system increases to the design specifications, once reached, the pump automatically shuts off. When the hose nozzle is open, releasing water from the system, the pressure in the system decreases. When the pressure decreases to the manufacturer's design level, the pump automatically turns ON and increases the pressure. The system settings ensure a steady flow of water every time the raw water washdown is used.

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OVERVIEW

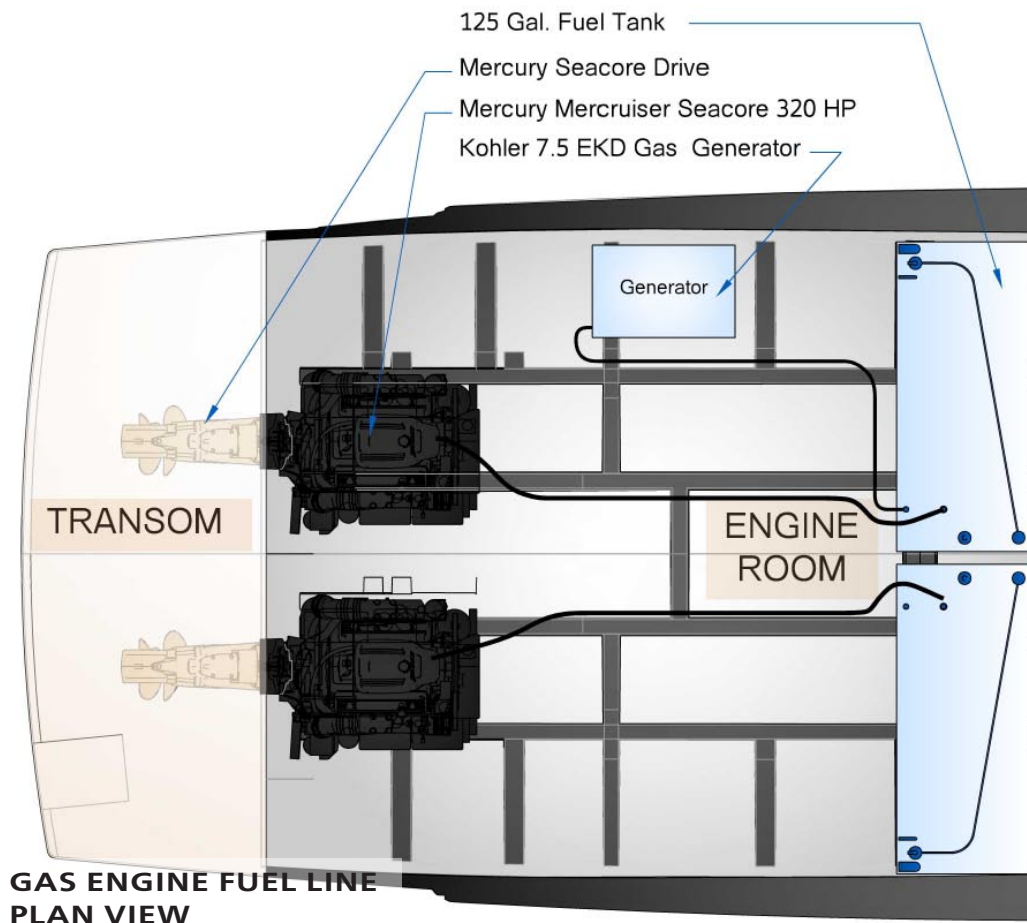
Section 5: *Propulsion* covers the standard Carver factory installed gas engines and any options within the propulsion system. Section 5 covers the engines and the engine components within the engine room and items at the helm.

CAUTION

DO NOT OPERATE THE CRAFT WITH AN ENGINE OF RATED POWER GREATER THAN THE MAXIMUM RECOMMENDED POWER.

PROPULSION: GAS ENGINES

The Mercury Mercruiser 377 MAG Seacore 320 HP Gas Engines are equipped on the C37 (X4). Section 5 provides a general overview of the propulsion system and operation. For a detailed explanation of the engines, engine operation, and engine maintenance; refer to the OEM information provided with the boat. **The maximum recommended engine power is 560kw.**



NOTE:

Options and locations are subject to change without notice.

CAUTION

AVOID CONTACT OF FLAMMABLE MATERIALS WITH HOT ENGINE PARTS.

EXHAUST SYSTEM: GAS ENGINES

The exhaust system for each engine consists of an exhaust manifold, exhaust piping, and the exhaust hoses used to vent the exhaust to the atmosphere. Carbon monoxide may escape and endanger everyone on board if the exhaust system contains leaks or obstructions, or has any other problem that prevents it from venting exhaust properly. Check the exhaust system regularly for proper operation. Change in engine noise could indicate an exhaust system problem, and should immediately be investigated.

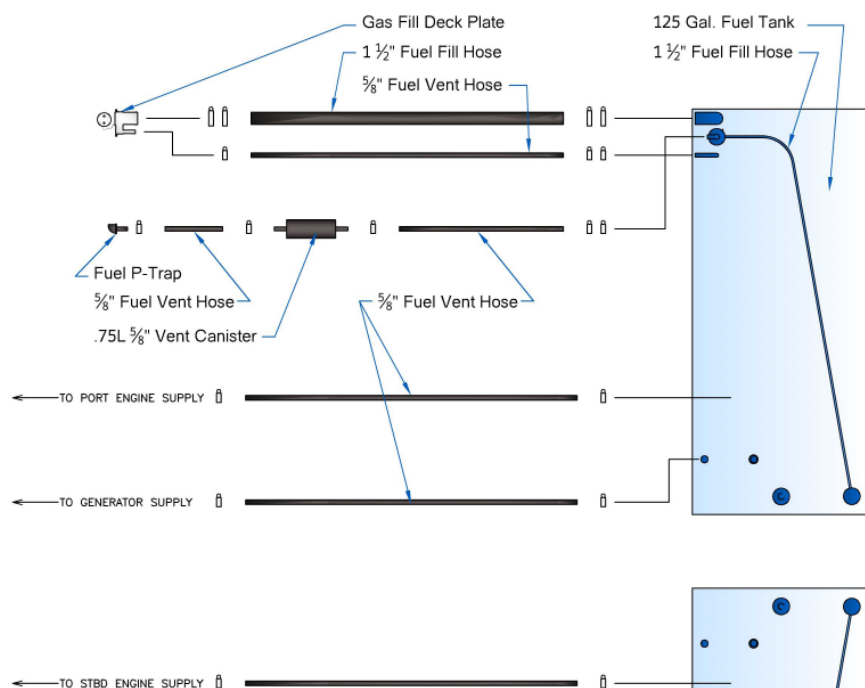
FUEL SYSTEM: GAS ENGINES

FUEL LINES

To avoid damage to the fuel lines, make sure that the fuel lines are sealed, clamped, and intact. See illustration below for fuel line locations.

FUEL TANKS

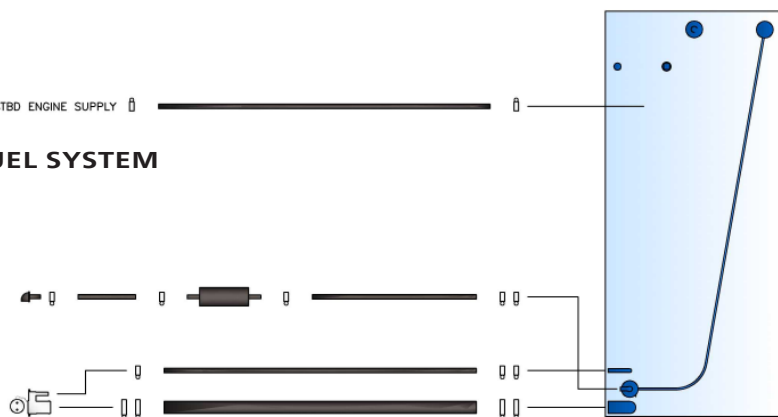
Two tanks are installed onboard to create a combined fuel amount of 250 GAL, 946 L. A maximum of 125 GAL, 473 L of fuel can be stored in each fuel tank. The installed fuel system meets or exceeds the standards set by the U.S. Coast Guard, National Marine Manufacturers Association (NMMA), and the American Boat and Yacht Council at the time when the yacht was built. Each fuel tank has passed rigorous tests performed by the tank manufacturer. The entire fuel system has passed Carver's pressure testing and inspection. Your Carver Dealer also makes a full inspection of the fuel system before the yacht is delivered to the owner. An entry on the Carver Pre-Delivery Service Record verifies the dealer's completion of the inspection. The Carver Pre-Delivery Service Record has been shipped with your boat within the inside flap of this manual.



NOTE:

- See previous page for Gas Engine Fuel Line Plan View.
- See next page for Gas Engine Fuel System 3D Illustrations.

GAS FUEL SYSTEM



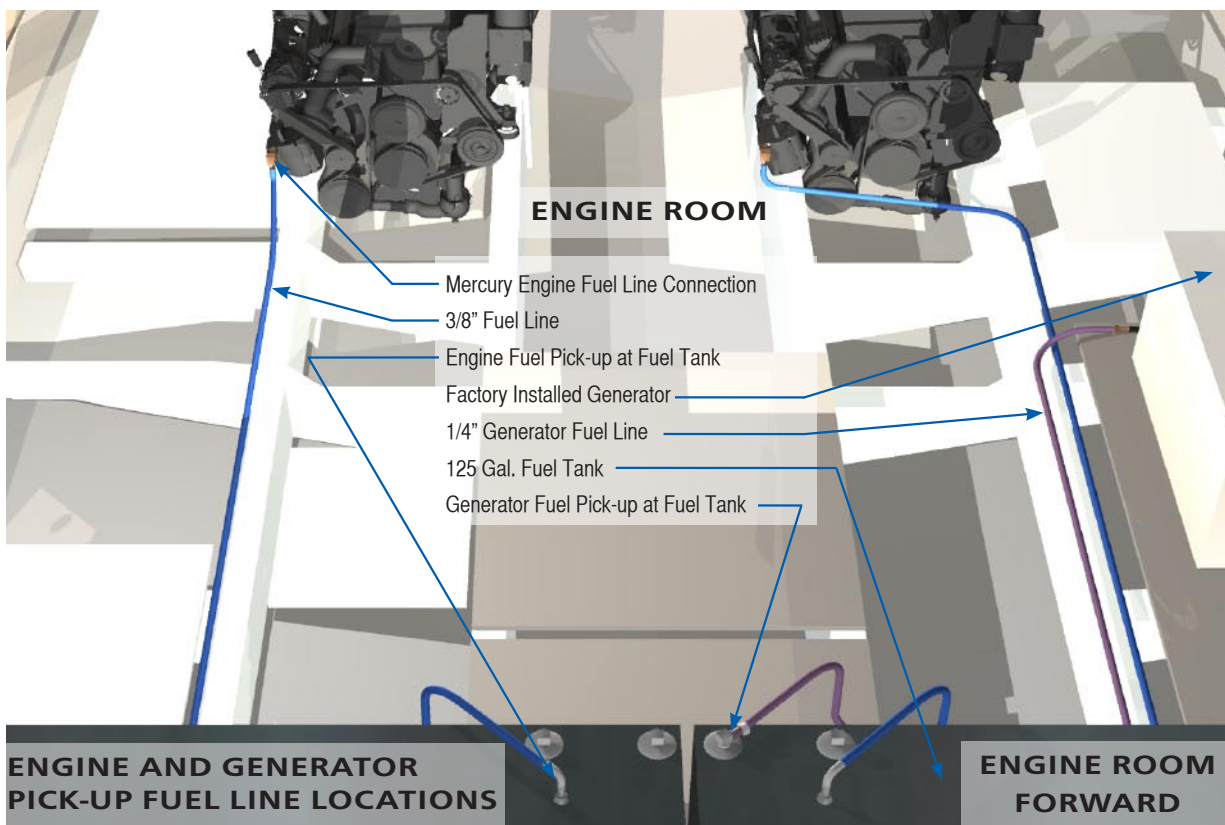
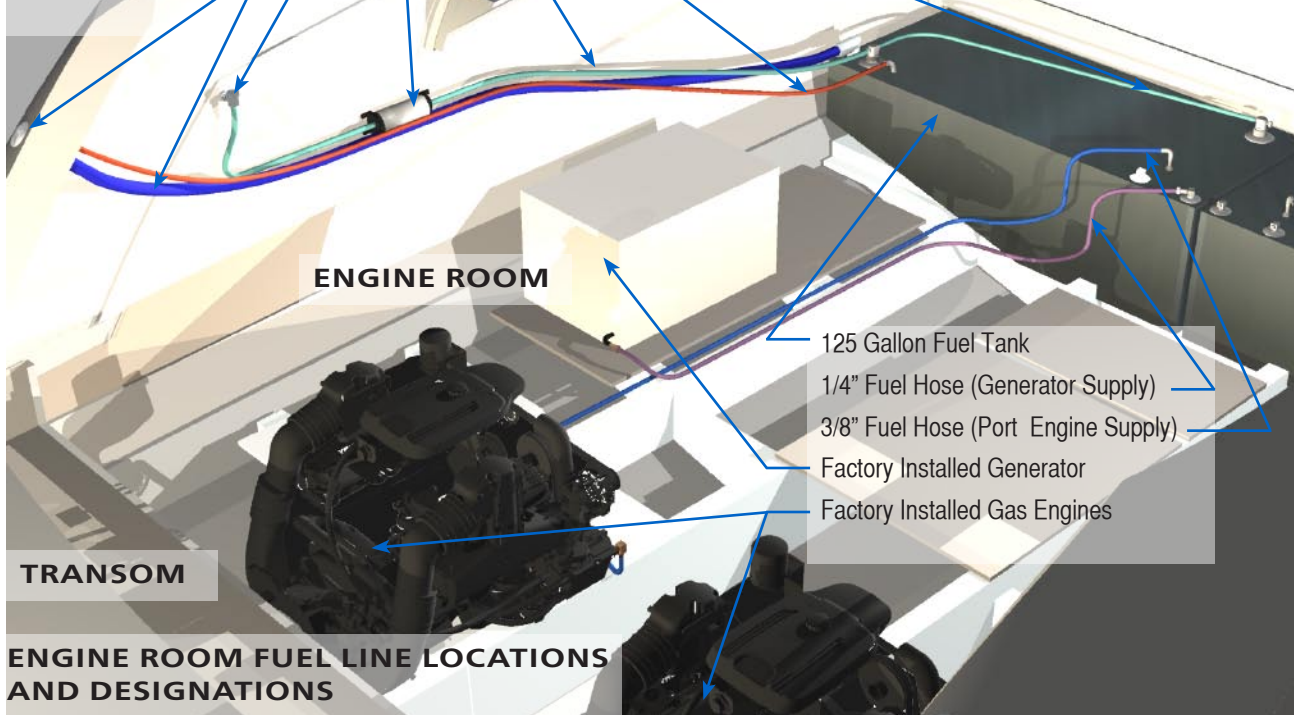
PROPULSION

GY
CARVER

- 5/8" Fuel Vent Hose
- .75L 5/8" Vent Carbon Canister
- Fuel Vent P-trap
- 1 1/2" Fuel Fill Hose
- Fuel Fill Deck Plate

NOTE:

Options and locations are subject to change without notice.



IMPORTANT

TANK CAPACITY MAY NOT BE USABLE ACCORDING TO TRIM AND LOADING AND THAT A 20% RESERVE SHOULD BE KEPT IN TANK AT ALL TIMES

Both propulsion engines are plumbed to the allocated fuel tank located on the same side as the engine. The gas propulsion system uses fuel supply lines and fuel return lines to fuel the engines. The supply lines feed fuel to the engine. The return lines transfer fuel not burned by the engine back to the fuel tank. The generator draws fuel from the port fuel tank only. See illustration on the previous page for fuel line locations.

CAUTION

CORROSION CAN OCCUR IN THE FUEL TANKS OVER TIME. WATER CONDENSES INSIDE THE FUEL TANKS, ESPECIALLY IN HUMID REGIONS. THE WATER CAN REACT WITH THE FUEL IN THE TANKS TO CREATE A MIXTURE THAT CAN CORRODE THE TANKS ON THE INSIDE.

TO AVOID TANK CORROSION:

- **USE THE FUEL IN THE FUEL TANKS AS OFTEN AND AS COMPLETELY AS POSSIBLE.**
- **KEEP THE TANKS FULL OF FUEL WHEN STORED OR USED INFREQUENTLY.**
- **DO NOT PUT ALCOHOL-BASED FUELS IN THE TANKS.**
- **CHECK THE RACOR FUEL FILTER BOWLS FOR WATER ACCUMULATION ON A REGULAR BASIS.**

FUEL SHUT-OFF VALVE (DIESEL ONLY)

Fuel supply shut-off valves are located in the engine room on top of each fuel tank. Each valve opens or closes to supply fuel to the allocated system component. Diesel Application ONLY.

FUEL TANK VENTS

Each fuel tank is vented overboard. As the fuel tanks get filled, air is displaced from inside the tanks, and escapes through the vents. However, when the engines are running, air enters the fuel tanks through the vents to displace the fuel being used. See previous pages for illustration for fuel vent hoses.

COOLING SYSTEM: GAS ENGINES

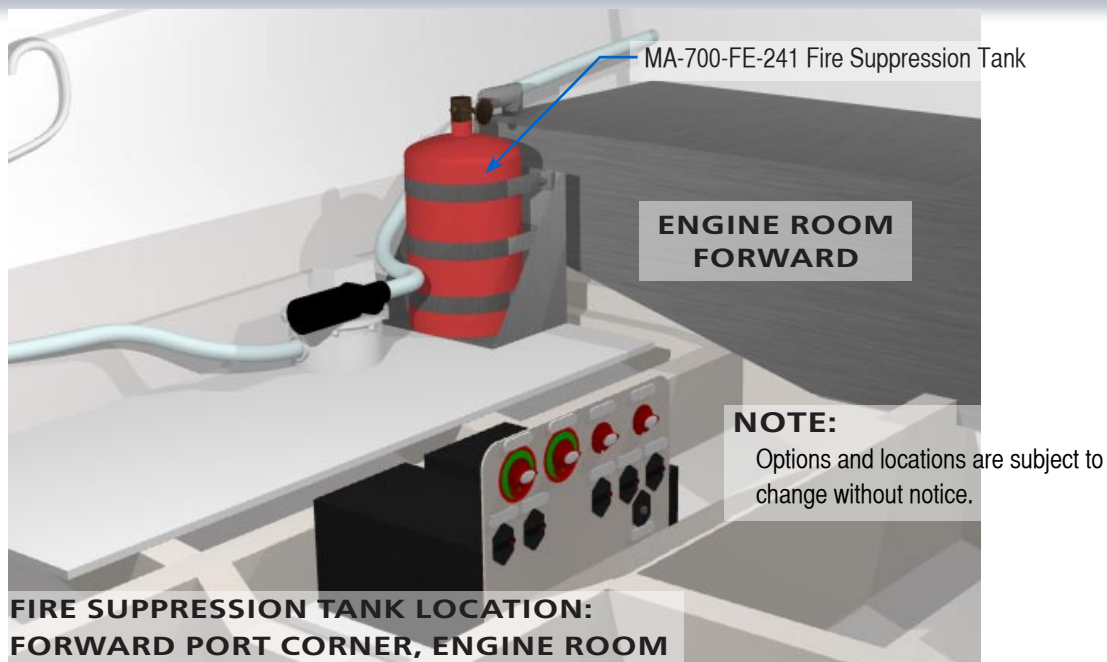
Each propulsion engine has a closed cooling system that removes heat from the engine and the exhaust system. Make sure that a sufficient level of coolant mixture is kept in each system. **REFER TO MERCURY'S OWNER'S MANUAL FOR MAINTAINING THE COOLING SYSTEM.**

CAUTION

SERIOUS DAMAGE TO THE ENGINE AND RELATED SYSTEMS CAN OCCUR BY RUNNING AN ENGINE WITH AN INADEQUATE SUPPLY OF ANTIFREEZE OR OBSTRUCTED SEAWATER PICKUPS OR STRAINERS.

FIRE SUPPRESSION SYSTEM

An automatic fire suppression system is installed in the engine room. The suppression tank is located in the forward port side of the engine room. See below for fire suppression tank illustration. The fire suppression system provides extra security in the event of an engine room fire. Refer to the OEM information for details on operating the fire suppression system. The system can also be activated manually by a handle mounted at the helm. See next page for fire suppression system illustrations.



WARNING

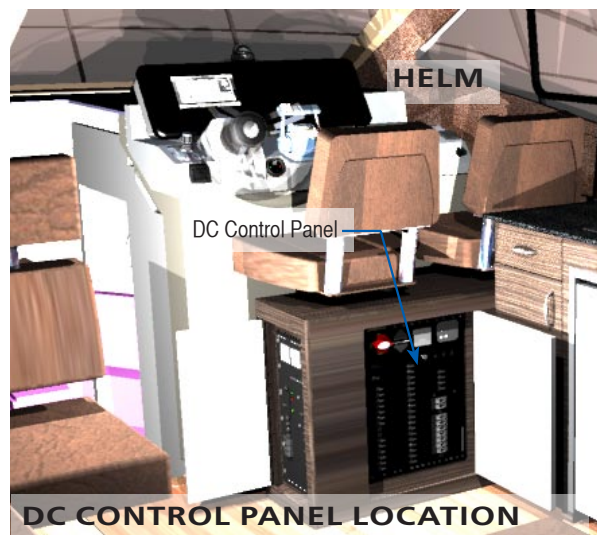
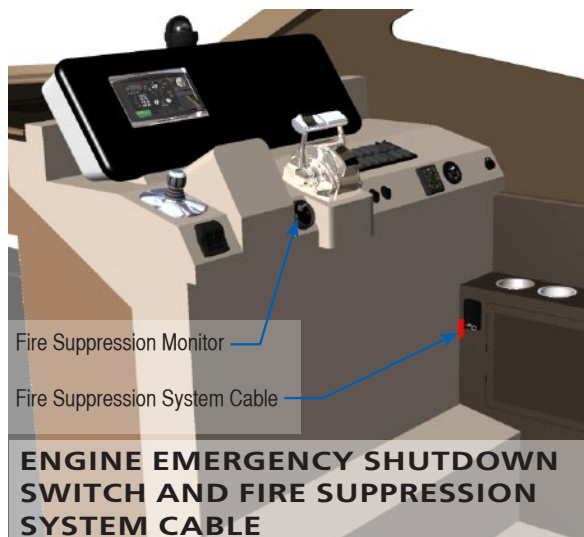
IMMEDIATELY EVACUATE THE ENGINE ROOM AND THE AFT BILGE AREA IF THE FIRE SUPPRESSION SYSTEM IS ACTIVATED. ASPHYXIATION CAN RESULT IF THE FIRE SUPPRESSION SYSTEM CHEMICALS ARE INHALED.

IMMEDIATELY VENTILATE THE ENGINE ROOM WITH FRESH AIR ONCE THE FIRE IS EXTINGUISHED AND THE SYSTEM IS DEACTIVATED.

The fire suppression system monitor is wired to an ignition switch. The monitor light should be ON when the ignition switch is turned ON. The monitor is installed at the helm. The suppression system contains an engine shut-off circuit. The engines automatically shut off when the system is activated for safety reasons.

DO NOT ATTEMPT TO RESTART THE ENGINES UNTIL THE FIRE IS OUT AND ANY DAMAGE TO THE ENGINES AND FUEL SYSTEM HAS BEEN REPAIRED. The override switch, located on the system monitor, resets the engine shut-off circuit after the system has been activated, allowing the engines to be restarted.

New components that have the same designation or equivalent technical and fire-resistance capabilities must be used when performing maintenance on the fire suppression system.



ENGINE ROOM VENTILATION: GAS ENGINES

The engine room is equipped with a ventilation system that consists of intake ducts, exhaust ducts, and bilge blowers. The ventilation system is designed to remove fuel vapor and excess heat from the engine room. The bilge blowers operate when the engines are running, as long as BILGE BLOWER 1 - BILGE BLOWER 4 circuit breakers are ON, located on the DC Control Panel (Below Helm Seating). See above for DC Control Panel illustration.

The engine room ventilation system must be kept in proper operating condition. Perform the following items to ensure proper condition:

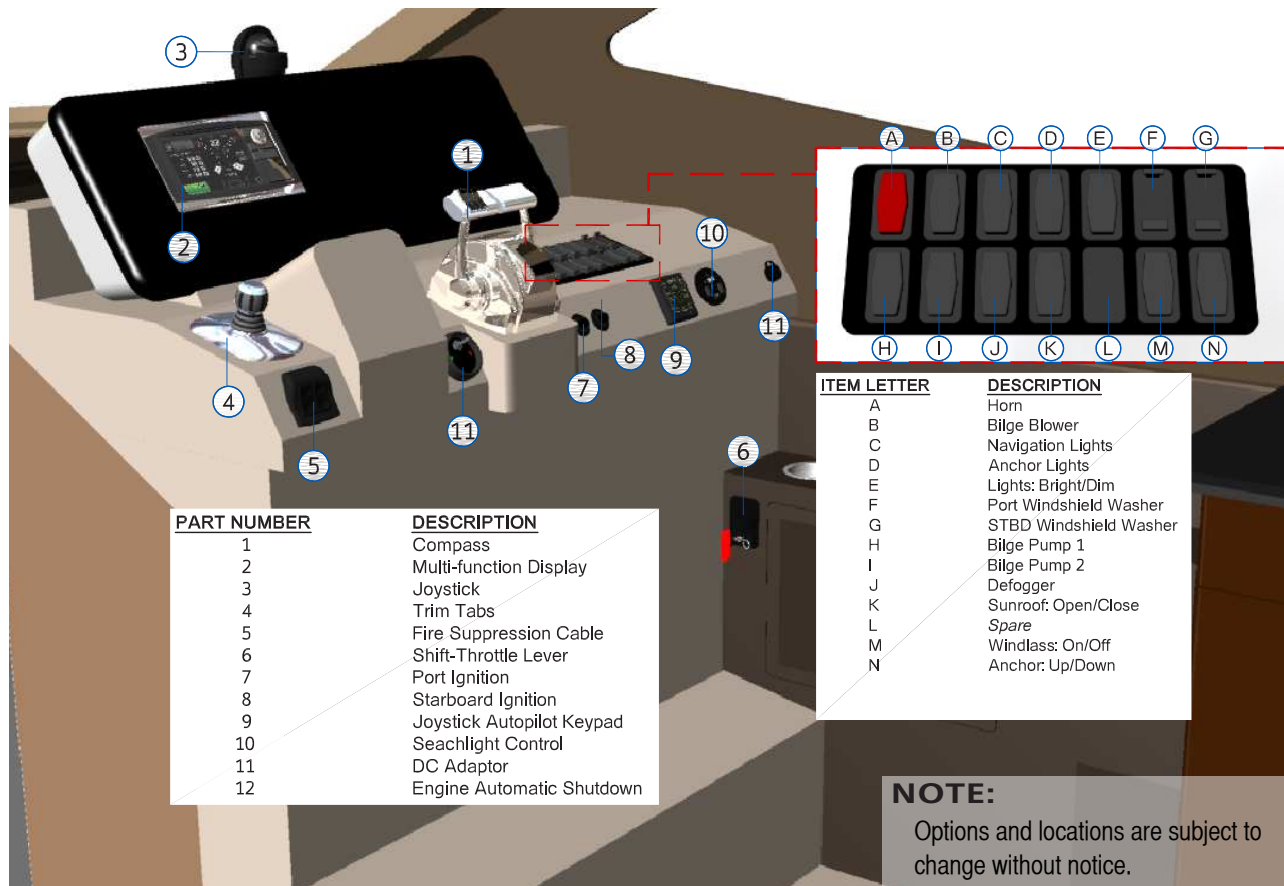
- Inspect the intake and exhaust ducts regularly to keep free of obstructions, make sure the ducts have not collapsed or torn.
- Inspect the blowers to ensure they are operating properly.
- Replace worn components with new components of the same type.

STARBOARD ENGINE VENTILATION



HELM CONTROLS

The helm controls allow the operative to be engaged with the engine activity, control the boat's speed, engine RPMs, and control the boats direction.



ENGINE/MULTI-FUNCTION DISPLAY MONITOR (2)

The engine/multi-function display monitor displays various engine functions and other necessary functions to keep the yacht running efficiently. Items controlled by the display include:

- RPM
- Engine Hours
- Coolant Temperature
- Voltage
- Turbo Pressure
- Oil Pressure
- Warnings and Alarms
- Trim Position
- Surface Water Temperature
- Speed through Water
- Water Tank Level
- Fuel Tank Level

SEARCHLIGHT CONTROL (10)

The searchlight control function controls the direction of the searchlight movement. The searchlight can be moved either side-to-side or up and down.

THRUSTER (OPTION)

The thruster allows the operator to gain control of the yacht while the engines propel the yacht forward and backward. The joystick panel and docking panel provide control of the thruster at the stern.

ENGINE IGNITION (7 + 8)

Each engine ignition key switch starts and stops its designated engine.

ENGINE SHUTDOWN SWITCH (11)

The engine shutdown switch, when activated will automatically shutdown the engines. Used in the event of a fire in the engine room.

SHIFT-THROTTLE LEVER (1)

The shift-throttle levers are connected to the engines by an electronic control system (Engine Interface). The function of the Shift-throttle levers is to control the engine speed.

The levers allow the drive to shift the engines from neutral to forward or neutral to reverse to control the engines' RPM's. See below for lever position guide:

1. **FORWARD: Above Neutral Position:** Shifts the engines to forward and increases the RPM levels
2. **NEUTRAL: Center Position:** The engines remain in neutral at their lowest RPM levels.
3. **REVERSE: Below Neutral Position:** Shifts the engines to reverse and increases the RPM level

NOTE: Carver recommends operating the engines at the same speed while cruising. Doing so, reduces engine noise, engine vibration, and improves engine efficiency.

RAYMARINE E127 (OPTION)

The Raymarine E127 is a wireless integrated multifunction touchscreen display unit that provides Navionics charts for navigation. Refer to the Raymarine E127 OEM manual for complete information about the unit.

FIRE SUPPRESSION SYSTEM CABLE RELEASE (6)

The fire suppression system cable release, when pulled will activate the fire suppression tank in the engine room. The fire suppression cable release is used in the event of a fire in the engine room.

PREPARING FOR CRUISING

Follow the steps below to safely fuel the boat and operate the engines.

FUELING

1. Securely moor the yacht. See Section 6, *Mooring* for illustration on mooring the yacht.
2. Close all portholes, windows, hatches and doors.
3. Turn OFF all devices that use electricity to operate or create electricity.
4. Extinguish all open flames and smoking material on the yacht. Also extinguish the flames around the fuel dock.
5. Turn OFF all battery master disconnect switches. See Section 2 for master disconnect switches and locations.
6. Have all passengers evacuate the yacht.
7. Estimate the necessary amount of stored fuel.
8. Select the fuel tank to be fueled first.
9. Remove the appropriate fuel fill deck plate using the deck plate key supplied with the yacht. The deck plates are located on either side of the transom.

WARNING

AVOID SPILLING FUEL ON THE GELCOAT AND PAINTED SURFACES OF THE YACHT. FUEL CAN STAIN THE GELCOAT,

PAINT, AND HULL ACCENT STRIPES (IF APPLIED).

NOTE: The fuel tanks are designed to accept fuel at a maximum rate of 9 gallons per minute (GPM) when the tank is between 25% and 75% full. The pressure inside the tank must not exceed 4 psi during fueling. Many marine fuel pumps can deliver fuel at rates up to 35 GPM. A high fueling rate should never be used, a high rate could damage the fuel system.

10. Decrease the fueling rate when fueling a tank that is either nearly empty or nearly full. Decreasing the rate helps prevent a fuel surge when the tank is empty, back up and spillage when the tank is full.
11. Begin pumping fuel at a rate of no more than 9 GPM into the fuel tank. When the tank is close to full, slow the fuel rate to less than 9 GPM.
12. Monitor the fuel tank air vents. Stop filling when the sound of the air exiting the fuel tank vents changes during the filling process. The sound will change significantly once the tank is full.
13. Replace the fuel fill deck plate.
14. To fuel the next fuel tank, repeat steps 9 - 12.
15. Wipe up any spilled fuel after each tank is filled.

PRE-START CHECKLIST

1. Read and understand the Owner's Manual and all OEM information.
2. Check both fuel gauges to verify that the yacht is sufficiently fueled for the trip.
3. Inspect the engine room:
 - 3a. Check fuel system for any signs of leakage.
 - 3b. Check the bilge water level.
 - 3c. Check for oil in the bilge.
 - 3d. Check the crank case oil level in each engine.
 - 3e. Make an overall inspection of the engine room for signs of potential problems.
 - 3f. Follow all maintenance instructions as detailed in Section 7: *Maintenance*.
4. Turn ON the master disconnect switches for both engine battery pairs and the accessory batteries. See Section 2 for master disconnect switch locations and illustrations.
5. Locate the DC Control Panel (below the helm seating) See Section 2 for illustration and location:
 - 5a. Switch on the SYSTEMS DC MAIN circuit breakers
 - 5b. Verify that all of the Safety circuit breakers are ON
 - 5c. Switch ON the BILGE BLOWER 1 - BILGE BLOWER 4 circuit breakers.
 - 5d. Switch ON the ELECTRONICS MAIN circuit breaker if navigation equipment is installed at the helm.
 - 5e. If needed, switch ON the AUTO SUMP (2 breakers) circuit breakers.
 - 5f. Switch ON any other circuit breakers for equipment that may be needed.
7. Verify that all safety gear is onboard, and in proper operating condition. Make sure all safety equipment is carried onboard, required by Federal, State, and local regulations.
8. Verify that an adequate supply of fresh water is onboard.
9. Check the level of waste in the waste tanks, empty the waste if necessary. Refer to Section 4: *Emptying the Waste Tanks*.
10. Disconnect and store the shore power cord and shore water hose.

WARNING

GAS VAPORS CAN EXPLODE, RESULTING IN INJURY OR DEATH. BEFORE STARTING THE ENGINES OR GENERATOR, PERFORM THE FOLLOWING:

- **CHECK ENGINE ROOM FOR FUEL VAPORS**

- OPERATE BILGE BLOWER FOR 4 MINUTES
- VERIFY THAT BLOWERS ARE OPERATING PROPERLY, RUN THE BLOWER WHEN THE VESSEL IS OPERATING BELOW CRUISING SPEED.

STARTING THE ENGINES

Refer to the OEM information for details on using the engine controls.

1. Open the cooling system seacocks for both engines. See *Cooling System* earlier in this section for seacock locations.
2. Move the shift/throttle lever to the neutral. (See *Helm Controls* Illustration earlier in this section)
3. Select the desired engine to start first by pressing the ignition switch button. **NEVER START BOTH ENGINES SIMULTANEOUSLY.**

CAUTION

DO NOT HOLD THE IGNITION KEY IN THE START POSITION FOR MORE THAN 10 SECONDS. THE IGNITION SWITCH IS SPRING ACTIVATED. RELEASE THE IGNITION KEY AS SOON AS THE ENGINE STARTS. FAILURE TO RELEASE THE KEY MAY DAMAGE THE STARTER. IF THE ENGINE DOES NOT START WITHIN 10 SECONDS, RELEASE THE IGNITION KEY, AND START THE ENGINE AGAIN.

ONCE THE ENGINES HAVE STARTED

1. Check the engine gauges. Verify that all readings on the helm are within the normal range.
2. Look into the engine room, and visually inspect the fuel system hoses and exhaust hoses. Shut off the engines, and investigate if a leak is suspected or if anything else is out of order. Identify and correct the cause of the problem before restarting the engines.

DANGER

KEEP OUT OF THE ENGINE ROOM WHILE ONE OR BOTH ENGINES ARE OPERATING. THE ENGINE ROOM CONTAINS MOVING, HOT MACHINERY.

3. Allow the engines to warm up until the temperature gauges begin moving up before engaging drives.
4. Make sure all navigation systems are operating properly.
5. Periodically perform a visual inspection of the engine room while underway.

IMPORTANT: FUEL MONITORING

CARVER RECOMMENDS TO MONITOR AND LOG THE AMOUNT OF FUEL ADDED TO EACH TANK AT FILL UP DURING THE INITIAL USAGE OF THE YACHT. COMPARE THE FUEL USAGE TO THE FUEL GAUGE INDICATION AT THE TIME OF FILL UP. THE COMPARISON SHOULD BE MADE AT LEAST THREE (3) TIMES:

- 1/4 TO FULL
- 1/2 TO FULL
- 3/4 TO FULL

A FOURTH CHECK SHOULD BE PERFORMED IF A SAFE CONDITION IS AVAILABLE THAT WILL ALLOW THE ENGINES TO RUN TO NEAR EMPTY.

THE READINGS WILL PROVIDE A BETTER INDICATION OF THE AMOUNT OF FUEL IN THE TANKS IN COMPARISON TO THE FUEL GAUGES. THE READINGS PROVIDE SECURITY, AND KEEPS THE FUEL TANKS FROM BEING DEPLETED. CARVER RECOMMENDS STARTING ALL CRUISES WITH FULL TANKS, ESPECIALLY CRUISES THAT TAKE UP AT LEAST 1/2 OF THE TOTAL TANK CAPACITY BEFORE COMING TO THE NEXT FUEL STATION.

LAUNCHING THE YACHT

Have a professional launch the yacht. Your dealer can either provide experienced people or recommend someone to launch.

WARNING



THE PORT HOLE WINDOWS LOCATED ON THE HULL SIDES MUST BE SECURED CLOSED WHENEVER THE VESSEL IS UNDERWAY.

WARNING



ALL OPENING/OPERATING WINDOWS AND PORTLIGHTS, HATCHES, AND DOORS SHOULD BE CLOSED DURING OPERATION IN ROUGH WEATHER OR PLANING SPEEDS.

NAVIGATION

Understanding navigation is very important when out on the open seas. Instructions on navigation are beyond the scope of this guide. Reading *Chapman's Piloting and Seamanship*, to obtain instruction regarding navigation, is encouraged by Carver.

CHARTS (RAYMARINE E127 DISPLAY AT HELM) (OPTION)

Water charts are available from the National Ocean Survey (NOS), a branch of the National Oceanic and Atmospheric Administration, Washington D.C. The NOS offers publications, listing the charts needed for local areas; however, inland rivers may not be included on the listing. Inland river charts are available from the U.S. Army Corps of Engineers district office. Your dealer may also have local water charts.

Keeping charts up-to-date is an important part of navigation. *The Weekly Notice to Mariners*, available from the Defense Mapping Agency or the U.S. Coast Guard, is an excellent resource for updating charts.

HORN

Use the horn to alert other yachters of your presence, especially when operating at night or in fog. The horn meets U.S. Coast Guard standards.

SHALLOW WATER OPERATION

Always pay attention to water depth while cruising. Shallow water navigation can be very hazardous. Avoid waters that are too shallow for the yacht's draft.

NAVIGATING OUT OF SHALLOW WATERS:

1. Reduce speed immediately if crossing into shallow waters.
2. Consult nautical charts to determine the yacht's position.
3. Try to plot a course out of the shallows through waters deep enough for the yacht's draft.
4. Radio for help and wait until help arrives if the yacht runs aground. Do not attempt to relaunch the yacht. Serious damage may occur to the hull or underwater gear.

CONTROLLING THE YACHT

Every yacht owner should know how to perform the following procedures competently. Do not attempt the following procedures without first receiving appropriate training.

CAUTION



AVOID SUDDEN MANEUVERS AT SPEED. FOR COMFORT AND SAFETY, REDUCE SPEED IN WAVES. DO NOT SIT IN THE

BOW COCKPIT WHEN THE BOAT IS MOVING FAST.**LOADING**

When loading items onto the yacht, have someone on the pier hand the items on deck once boarded. Stow all items securely to prevent them from shifting once in motion. Distribute the weight evenly and keep the load low if the yacht is loaded near capacity or if seas get rough. DO NOT make abrupt changes in load distribution. Shift the load or move about only after stopping or slowing the yacht.

CASTING OFF AND DOCKING

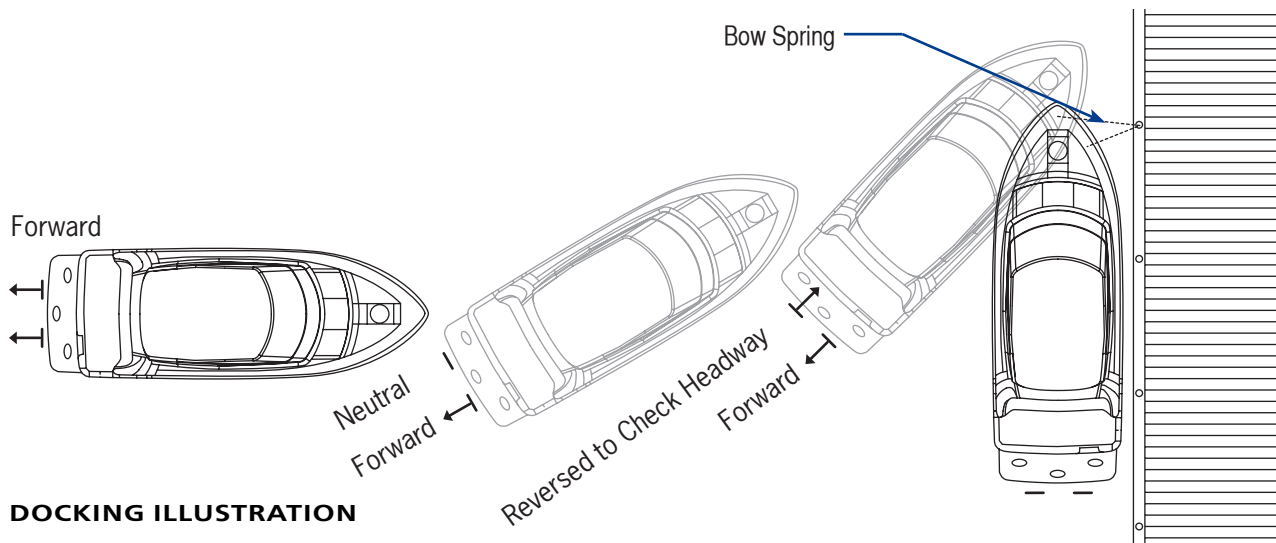
Docking and casting off can be hampered by wind and current. It is important to use the current by approaching or leaving with the current instead of fighting against it. Also, the operator should adequately fender the yacht against collisions with docks or other yachts.

If a dinghy is used to reach the yacht:

1. Make sure the dinghy line does not foul the propeller.
2. Start the engines after getting onboard
3. Send someone forward to slacken the line.
4. Finally, release the line.

In a river with current, the yacht will gain headway with the current. Power the yacht forward after clearing the buoy.

In a calm bay with neither wind nor current, back the yacht away a few yacht lengths. Powering forward, keep the buoy in sight, and give it ample room until clear. Run the yacht slowly until the anchorage has been cleared to avoid creating a nuisance with the yacht's wake.

**DOCKING ILLUSTRATION****LEAVING A PIER OR MOORING**

Getting underway from a pier is accomplished by performing the following:

1. Take in all lines EXCEPT the bow spring. See illustration above.
2. Power the yacht forward, with a neutral rudder, using ONLY the engine farthest from the pier. The yacht will pivot around the bow spring line, moving the stern out and away from the pier.
3. Place a fender between the bow and the pier to prevent scraping as the yacht pivots about the bow spring.
4. Once the stern is clear of yachts and other obstructions, take the bow spring in and back the yacht away.

Yachts are often secured to a mooring buoy at marina anchorages. Fouling the propeller with a mooring line is the principal hazard when leaving a mooring.

OPERATING AND MANEUVERING



IF A DINGHY IS USED TO REACH THE YACHT, FOLLOW THIS PROCEDURE TO GET UNDERWAY:

1. Make sure the dinghy line does not foul the propeller.
2. Start the engines after getting onboard.
3. Send someone forward to slacken the line.
4. Release the line.

CONTINUE WITH THIS PROCEDURE IF IN A RIVER WITH CURRENT:

- 5a. Power the yacht forward after the buoy has been cleared.

CONTINUE WITH THIS PROCEDURE IF IN A CALM BAY (IF THERE IS NEITHER WIND NOR CURRENT):

- 5b. Back the yacht away a few yacht lengths.
6. Keep the buoy in sight, as the yacht is powered forward, and give the buoy ample room until clear.
7. Run slowly until the anchorage has been cleared to avoid creating a nuisance with your wake.

LANDING AT A PIER

Approach the pier at a right angle to land at a pier.

STDB LANDING

1. Place the rudders to PORT and reverse the PORT engine to check headway.
2. Leave the STDB engine in forward gear to swing the yacht parallel to the pier.

PORT LANDING

Turn the rudders to STDB, and put the STDB engine into reverse as the yacht comes in. If necessary, shift in and out of gear to control the yacht's speed.

PICKING UP, OR MOORING

1. Approach the mooring at slow speed.
2. Take note of how other yachts are moored. The approaching course should be roughly parallel to the others heading if they are heading into the wind or water current.
3. Stay clear of other moorings to avoid fouling them.
4. If a dinghy is being towed, station a crew member at the helm to keep the dinghy line from fouling the propeller.
5. Shifting the engines into neutral when estimating that the yacht's forward momentum will carry the yacht to the buoy.
6. Station someone at the bow with a yacht hook to pick up the pennant float.

IF YOUR MARK IS ABOUT TO BE OVERSHOT, CONTINUE WITH STEP 7A BELOW:

- 7a. Check headway as the bow comes up to the buoy.

IF YOU FALL SHORT OF YOUR MARK, CONTINUE WITH STEP 7B BELOW:

- 7b. A few turns of the propeller should get the yacht to the buoy. Keep the engine running until the pennant eye has been secured on the bitt or bow cleat.
8. Get clear and calmly try again if passengers can not reach the pennant or if you overshoot.

MANEUVERING

The yacht's propellers rotate in opposite directions. Depending on which propeller is rotating, the yacht will track in different directions.

PORT PROPELLER ROTATING ONLY:

The yacht tracks forward and to STDB in forward gear and to PORT in reverse gear.

STDB PROPELLER ROTATING ONLY:

The yacht tracks forward and to PORT in forward gear and to STDB in reverse gear.

BOTH PROPELLERS ROTATING AT THE SAME SPEED:

The rudders amidships and the engines in forward gear, the yacht will track straight forward.

MOVING BACKWARD:

The yacht's rudders are not as effective; the side force from the propellers is used to steer the yacht.

MANEUVERING ASTERN

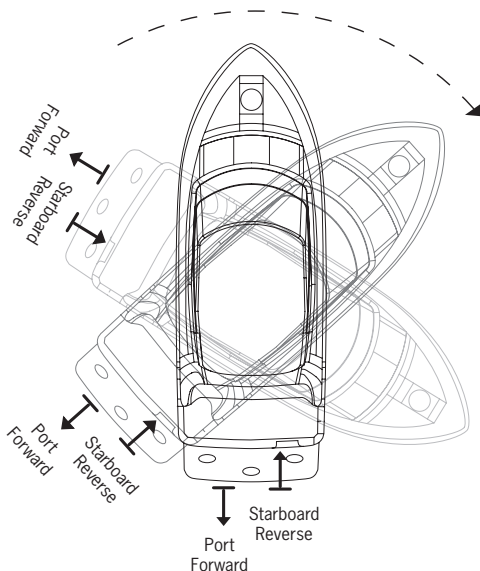
Backing a yacht may be necessary in a crowded marina. The yacht's twin engines allow the yacht to track straight astern or to either side. When backing, keep the trim tabs up. To make a turn to PORT, shift the PORT engine to neutral. A STDB turn astern is made by shifting the STDB engine to neutral.

Check sternway (stop reverse motion) by shifting the engines to forward gear and throttling forward. Full stern turns can be executed, but watch the bow. The bow cuts a much wider arc than the stern and collisions could occur in crowded areas.

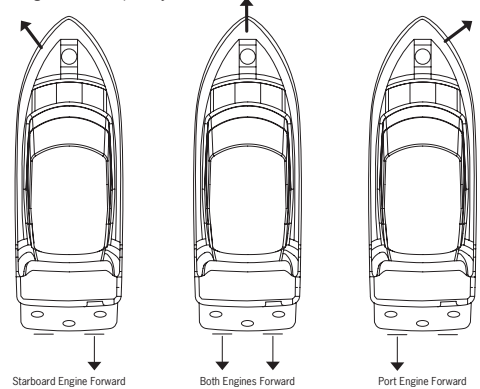
CLOSE QUARTERS TURNS

Executing a close quarters turn:

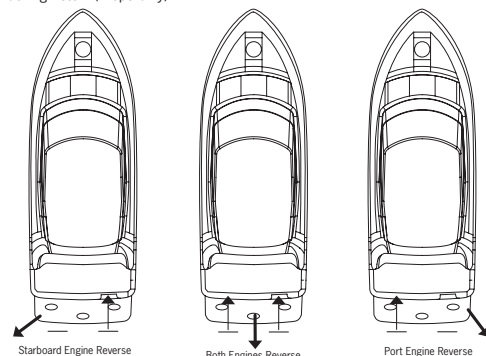
1. Check your headway
2. Shift one engine into reverse while shifting the other into forward gear. As you advance the throttles, the opposing forces cause the yacht to pivot about a point centered between the propellers.
3. Turn the rudders in the direction of the turn to assist the rate of turn.

**CLOSE QUARTERS TURN ILLUSTRATION**

Tracking Forward (Props Only)



Tracking Astern (Props Only)

**TRACKING ILLUSTRATION****CHECKING HEADWAY**

Stopping the yacht's forward motion is referred to as "checking headway". It is important learn how to confidently stop the yacht within any required distance.

Check headway by shifting the engines to neutral and coming to a complete stop over a long distance, or by reversing the engines

and stopping within a shorter distance.

TOWING

ALWAYS offer assistance to a vessel in distress. However, towing a capsized yacht or a yacht with a damaged hull is not recommended. Lend aid to the occupants, and call the proper authorities when towing is required. Remember, **ALL YACHTERS ARE OBLIGATED TO LEND AID TO ANY PERSON IN DISTRESS, BUT NOT TO THE VESSEL. DO NOT ATTEMPT TO TOW A DISABLED YACHT.** One disabled yacht is better than two.

ANCHORING

The anchor's holding power depends on the anchor's weight and the anchor line length. The most effective anchor line length is six to seven times the depth of the water. For example, if the water is 10 feet deep, the anchor line length should be 60-70 feet.

DROPPING THE ANCHOR

1. Approach the selected anchor site from downwind.
2. Come to a complete stop over the desired anchor drop spot. The anchor can be lowered from either the helm or from the bow with foot switches. To activate the foot switch at the bow, simply lift the cover.
3. Reverse the engines and slowly move the yacht backward to pay out more anchor line when the anchor hits bottom. The anchor flukes will dig in when the anchor is appropriately set.
4. Check for anchor drag, immediately after anchoring. Observe the shoreline landmarks.
5. Observe the landmarks again after thirty minutes.
6. Reset the anchor if the points of reference have changed.

DANGER

DO NOT DEPEND ON THE WINDLASS AS A FINAL ANCHORING RODE SECURING METHOD. THE WINDLASS IS NOT DESIGNED TO HOLD THE WEIGHT OF THE YACHT. DAMAGE TO THE WINDLASS IS LIKELY IF USING AS A SECURING METHOD.

WEIGHING IN

When weighing in (pulling in) the anchor:

1. Weigh in the rope until vertical.
2. When the rope is taut, give a hard tug to pull the anchor's shank up.
 - 2a. If the anchor is stuck, wrap some of the rope around a bow cleat and keep tension on the rode. The yacht's momentum may free the anchor.
 - 2b. If there is a swell, wind the rope around a bow cleat when the bow drops into a wave trough. As the bow lifts, it may free the anchor.
 - 2c. If neither method 2a nor 2b works:
 - 2c01. Pay out a few feet of rode
 - 2c02. Secure the rope around the bow cleat, and maneuver around the anchor.
 - 2c03. Keep the rope tight until the proper angle is found to pull the anchor loose.

ELECTRIC WINDLASS

An electric windlass simplifies the above procedures. Follow the above procedures, and use the windlass control at the helm to drop anchor. To relieve strain on the windlass, a hook called the devil's claw engages the chain when the anchor is down.

A Tip From Carver!

ALWAYS tie off the anchor rope to the anchoring cleat to avoid potentially damaging stress on the windlass.

ADDITIONAL ANCHORAGE AND ANCHORAGE PROBLEMS

If intending to stay at anchor overnight, or if anchored close to another structure, consider dropping another anchor from the stern. Additional anchorage prevents the yacht from swinging around if the wind or current shifts.

Paying out a few feet of line, and maneuvering around the anchor may be necessary if the anchor is stuck when weighing in. Keep the line tight until the correct angle is found that pulls the anchor loose.

If a swell occurs, hold the anchor chain in a vertical position and let a wave trough lift the bow.

Consider dropping another anchor from the stern if planning to stay at anchor overnight or if anchored close to another structure. Dropping a second anchor prevents the yacht from swinging around if the wind or current shifts.

Anchoring may be required in strong wind. If the spare anchor is dropped, make sure the two anchors are laid out at an angle. A trough may set for the second anchor if both anchors are set in-line and one of them drags.

WARNING

BE AWARE OF CARBON MONOXIDE (CO) POISONING WHILE ANCHORING. REFER TO SECTION 1: YACHTING SAFETY FOR DETAILED SAFETY PRECAUTIONS.

STERN ANCHORS

It may be necessary to use both, bow and stern anchors at the same time during anchorages. To drop both anchors:

1. Drop the bow anchor.
2. Pay out extra anchor line (15-18 times the depth).
3. Drop the stern anchor and adjust the length of line payed out on both anchors as necessary.

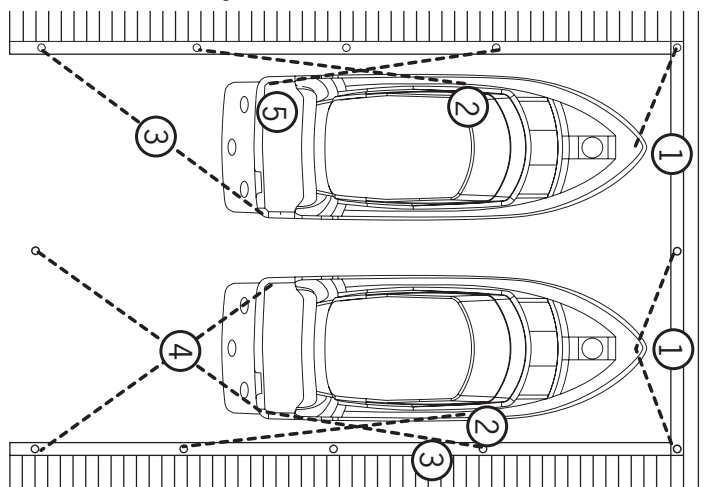
MOORING LINES

Become familiarized with mooring line terminology and mooring line use. Obtain training on mooring if necessary. Learn how and when to tie the various knots used in seamanship. Yachts that are not moored correctly can suffer and cause serious damage. The following information serves only as a guide to mooring the yacht.

The mooring illustration below demonstrates possible mooring lines for a small vessel. The lines include:

- **TOP** (Example 1) docking illustration shows how to tie up when docking in an alongside berth.
- **BOTTOM** (Example 2) docking illustration is used when tying up at four corners of the yacht.

The two spring lines are crossed and running to separate deck cleats. If possible, the stern line should be run to the offshore quarter cleat. Spring lines are useful in preventing undesired movement ahead or astern in a berth; they also keep a moored vessel in position when there is a significant rise or fall in tide.



EXAMPLE 1

EXAMPLE 2

MOORING ILLUSTRATION

OPERATING AND MANEUVERING



The mooring illustration on the previous page demonstrates possible mooring lines for a small vessel. The lines illustrated are as follows:

NUMBER	DESCRIPTION
1	Bow Line
2	Aft Bow Spring Line
3	Aft Quarter Spring Line
4	Stern Lines
5	Forward Quarter Spring Line

GETTING UNDERWAY

Becoming an “expert yachtsman” requires training and experience. Reading and understanding the provided information in this Owner’s Manual provides only part of the knowledge needed to operate a yacht safely and skillfully.

Carver owners have a wide range of abilities, from seasoned yachtsmen with years of experience to absolute beginners with a newfound love for the water. Be honest with appraising your level of skill.

SHAKEDOWN CRUISE

Make sure that the following tasks have been completed before taking your first cruise:

1. Your Carver Dealer has completed the Pre-Delivery commissioning. The inspection is documented on the Pre-Delivery Service Document and is signed by the dealer.
2. All warranty registration cards have been completed and mailed.
3. The Owner’s Manual and all OEM information has been read and understood.
4. The safety equipment onboard is in compliance with federal, state, and local regulations.
5. The yacht has been documented or registered, and displays the appropriate identification on the hull.
6. A representative from your Carver Dealer has reviewed the operation of the yacht and its systems, and answered all of your questions to your satisfaction.

Pick a calm day for the first outing if possible. The shakedown cruise with a new yacht is not the best time to bring friends or guests along. Entertaining guests can be a distraction from the real purpose of the cruise, which is to become familiar with the yacht. ONLY bring people (spouse and children) who will be part of the regular crew. However, it isn’t discouraged to invite the sales person who sold the yacht, or a member of your Carver Dealer’s service staff along for the ride.

Document any questions that come to mind during the cruise. Discuss the issues with your dealer. Follow the procedures outlined at the beginning of this section for fueling and starting the yacht’s engines.

ITEMS TO PERFORM ON THE FIRST OUTING:

- Proceed slowly.
- Have fun, but remember the objective of the cruise. The objective is to learn how the yacht operates and handles.
- Operate the engines at different RPMs.
- Try different trim angles.
- Monitor the gauges.
- Practice backing down and turning slow speed tight corners.
- Above all become familiar with the drive system.

PRE-DEPARTURE ACTIONS:

- Check the weather. Make sure conditions and seas will not be hazardous during your outing.
- Make sure all safety equipment is onboard, accessible, and in good working condition.
- Check the bilge for fuel vapor or water. Ventilate or pump out the bilge as necessary.
- Make sure the horn, navigation equipment, and lights are working properly.
- Instruct guests and crew in safety and operational matters.

- Check engine oil, transmission oil, and coolant levels.
- After starting the engines, check:
 - The overboard flow of cooling water
 - Engine temperatures
 - Oil pressures
- Fill the fuel tanks as needed. Know the tank capacity and fuel consumption at various RPM's. Know the tank's cruising radius and fuel tank range. Typical tank usage: 1/3 of the supply to reach the destination, 1/3 to return, and keep 1/3 in reserve for changes in plans due to weather or other circumstances.
- Have a second person onboard capable of taking over operating the yacht in case the operator is disabled.
- Before departing, inform a friend or relative of the intended cruising area, and the intended return time; so if delayed, the US Coast Guard can be contacted. Remember, to tell the contact person of your return to prevent false alarms. Do not file a float plan with the U.S. Coast Guard. The Coast Guard does not have the manpower to monitor all yachts.
- Stow all loose gear securely. Fenders and docklines should be stowed immediately after getting underway.

OPERATING AT PLANING SPEED

The yacht is equipped a "planing" hull. A planing hull skims over the water rather than through it. Planing is performed by first reaching a certain speed, called planing speed.

The trim angle of the yacht increases, when accelerating from a dead stop, causing the bow to rise and the stern to drop. The yacht eventually achieves plane, if acceleration continues, which means the bow slowly drops to a more level attitude.



GET ON PLANE AS SOON AS POSSIBLE. AVOID SPEEDS THAT CAUSE THE YACHT TO PLOW THROUGH THE WATER WHILE IN A BOW-HIGH ATTITUDE. A BOW-HIGH ALTITUDE OBSTRUCTS VISION AND LIMITS THE YACHT'S HANDLING AND PERFORMANCE CAPABILITIES.

Once on plane, back the throttles off to a point where the hull is still planing but the engines are operating at a fuel-efficient speed.

TRIM TABS

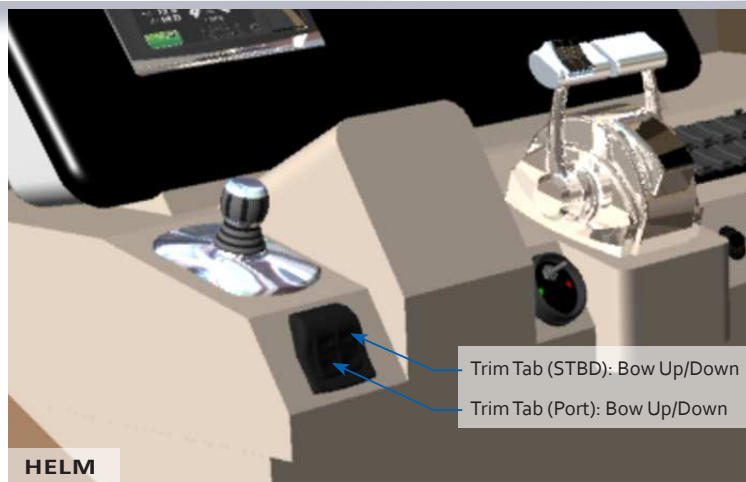
A trim system is designed into the operational controls. Trim tabs help the yacht get on plane by allowing the operator to adjust the attitude of the yacht for variables such as: load, passengers, seas or wind. Use the tabs at planing speeds to make minor adjustments in the fore-to-aft and beam-to-beam angle of the yacht. See below for trim tab illustration.

USING THE TRIM TABS:

1. Provide power to the DC Control Panel circuit breakers.
2. Switch ON the SYSTEMS DC MAIN circuit breaker on the DC Control Panel, located below the Helm seating.
3. Switch ON the TRIM TABS circuit breaker, located on the DC Control Panel, located below the Helm seating. The trim tabs are located the bridge helm. The controls consist of two switches located at the helm to the left of the steering wheel. The PORT switch controls the STDB tab; the STDB switch controls the PORT tab. Each switch is labeled BOW UP and BOW DOWN. See below for illustration.
4. Press both switches on the BOW UP side for 5 seconds before advancing the throttles. Pressing both switches lifts the trim tabs to the full UP position.
5. Advance the throttles to bring the yacht on plane.
6. Adjust the engine RPMs for cruising speed.

(See next page for *Trim Tab* Illustration.)

OPERATING AND MANEUVERING



CAUTION

DO NOT OVERTRIM THE YACHT. OVER-TRIMMING CAN CAUSE THE BOW TO VEER AND MAY LEAD TO LOSS OF CONTROL. PRESS THE CONTROL SWITCHES FOR ONE-HALF SECOND AT A TIME, THEN ALLOW THE YACHT TO RESPOND WHEN ADJUSTING THE TRIM TABS. CONTINUE TO ADJUST THE TRIM TABS UNTIL THE YACHT IS AT THE DESIRED TRIM ANGLE.

CAUTION

PUT THE TRIM TABS IN THE FULL “BOW UP” POSITION WHEN THE SEAS ARE AT ANY ANGLE TO THE YACHT’S STERN. DO NOT CHANGE THE TRIM TABS’ POSITION UNTIL THE SEAS ARE NO LONGER AT THE STERN.

The trim tab switches can be used together to bring the bow of the yacht to a lower attitude. This adjustment is often used when running into choppy seas. Bringing the bow down uses the sharper part of the yacht’s “V” hull to break through waves. Use the “BOW DOWN” side of both trim tab switches simultaneously to adjust the trim. Be careful when making bow down adjustments. Excessive bow down trim can cause considerable bow spray which hampers visibility and reduces control of your yacht.

LEVELING THE YACHT WITH THE TRIM TABS

Use the trim tabs individually to make beam-to-beam adjustments. If the majority of the onboard passengers are sitting on the PORT side, the STDB side of the yacht should be riding higher than the PORT side. Use the “BOW DOWN” side of the STDB trim tab switch to adjust the trim.

If the passengers decide to shift to the other side of the yacht, level the yacht by pressing the “BOW UP” side of the STDB trim tab switch for a few seconds. This undoes your previous adjustment. Then, use the “BOW DOWN” side of the PORT trim tab switch to adjust the trim.

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MAINTENANCE SCHEDULE

The maintenance activities and the intervals listed on the following pages are provided as guidelines only. The ideal maintenance activities and maintenance schedule depend on the components installed on the yacht, and the manner and environment in which the yacht is used. The more frequently the yacht is used, the more maintenance that needs to be performed. If the yacht is used in salt water, more maintenance is required, especially on the exterior.

For maintenance instructions on many of the yacht's components, refer to the OEM information. Maintenance activities are divided into four types:

TYPE A MAINTENANCE

Perform Type A maintenance:

- 48 hours after first launching the yacht
- 48 hours after launching, following a period of onshore storage.

TYPE B MAINTENANCE

Perform Type B maintenance after the engines have operated for 25 hours following launching, whether the yacht is new or coming out of onshore storage.

TYPE C MAINTENANCE

Perform Type C maintenance semiannually, or after the engines have operated for 100 hours, whichever comes first.

TYPE D MAINTENANCE

Perform Type D maintenance annually, or after the engines have operated for 200 hours, whichever comes first.

MAINTENANCE LOG

Use a maintenance log to keep a record of the maintenance activities performed on the yacht. The log should list both the activities described in the following charts, and the maintenance activities for the OEM equipment as recommended in the OEM information. MAKE COPIES OF THE LOG AND KEEP THE COPY IN A SAFE PLACE.

ENGINES AND DRIVE SYSTEM	TYPE A	TYPE B	TYPE C	TYPE D
Perform Maintenance As Outlined In The Engine Oem Information.	REFER TO OEM INFORMATION	REFER TO OEM INFORMATION	REFER TO OEM INFORMATION	REFER TO OEM INFORMATION
Inspect water intake hoses and connections.		X	X	X
Inspect exhaust system hoses and connections.	X	X	X	X
Check prop for balance and nicks.				X
Check strut bearings.			X	X
Check rudder alignment.			X	X
Check all thru-hull fittings.			X	X
Inspect engine seals.	X	X	X	X
Check engine alignment.	X	X	X	X
Spray ignition switch with contact cleaner.			X	X
Tighten engine mounts.		X		X
Check fire suppression chemical tank.			X	X
CONTROL SYSTEM				
Make any necessary throttle and shift adjustments.		X	X	X
Inspect linkage and connections.		X		X
Inspect hydraulic fluid levels.	X	X	X	X
Inspect rudder seals.	X	X	X	X
Inspect tiller tie bar linkage		X	X	X
Inspect trim tab reservoir		X	X	X

CONTROL SYSTEM	TYPE A	TYPE B	TYPE C	TYPE D
Inspect linkage and connections.		X		X
Inspect hydraulic fluid levels.	X	X	X	X
Inspect rudder seals.	X	X	X	X
Inspect tiller tie bar linkage		X	X	X
Inspect trim tab reservoir		X	X	X
ELECTRICAL SYSTEM				
Inspect and clean batteries.		X	X	X
Check battery fluid levels.		X	X	X
Check operation of all 12-volt equipment.	X	X	X	X
Check operation of all AC equipment.		X	X	X
Inspect shore power cords.		X	X	X
Inspect generator water intake and discharge.		X	X	X
Inspect zincs anodes.	*	*	*	*
Perform generator maintenance.	Refer to OEM Information	Refer to OEM Information	Refer to OEM Information	Refer to OEM Information
FUEL SYSTEM				
Replace engine fuel filters.	Refer to OEM Information	Refer to OEM Information	Refer to OEM Information	Refer to OEM Information
Inspect for fuel leaks.	X	X	X	X
Inspect fuel lines for signs of chafe.		X	X	X
FRESH WATER SYSTEM				
Flush water tank and system.			X	X
Clean in-line water filter.			X	X
FIBERGLASS / WOODWORK				
Clean fiberglass.		**	X	X
Wax hull and all non-tread areas.		**	X	X
Repair chipped fiberglass.				X
Clean interior woodwork.				X
INTERIOR				
Perform maintenance on the head.	Refer to OEM Information	Refer to OEM Information	Refer to OEM Information	Refer to OEM Information
Inspect thru-hull fittings.	X	X	X	X
Clean refrigerator/freezer.			X	X
Clean range and microwave oven.			X	X
Lubricate door hinges and locks.			X	X
Clean vinyl fabrics and wall coverings.			X	X
Spot clean woven fabrics.				X
Spot clean carpet.				X
EXTERIOR				
Check compass for magnetic deviation.			X	X
Check Trim Tab system for leaks.		X	X	X
Check tightness and caulking of deck hardware.				X
Clean upholstery.			X	X
Inspect tiller tie bar linkage		X	X	X
Inspect trim tab reservoir		X	X	X

*Inspect the zinc anodes at least once every two weeks. Check with local marina or consult other local yacht owners to determine the average life expectancy of the yacht's zinc anodes. If a rapid deterioration of the zinc anodes is noticed, have a professional yacht corrosion specialist check: the yacht, local seawater, and dock.

** Owner is recommended to clean and wax fiberglass on a regular basis (monthly) but not as part of a 25 hour check by dealer

EXTERIOR (CONTINUED)	TYPE A	TYPE B	TYPE C	TYPE D
Clean Plexiglas surfaces				X
Lubricate hinges, latches, and locks			X	X
Wash weather covers				X
BILGE SYSTEM				
Check hull drain plug	X	X		
Check and test bilge pumps	X	X	X	X
Inspect sump pump(s)			X	X
Check and test bilge blowers	Each time before starting engine	Each time before starting engine	Each time before starting engine	Each time before starting engine

**Inspect the zinc anodes at least once every two weeks. Check with local marina or consult other local yacht owners to determine the average life expectancy of the yacht's zinc anodes. If a rapid deterioration of the zinc anodes is noticed, have a professional yacht corrosion specialist check: the yacht, local seawater, and dock.

** Owner is recommended to clean and wax fiberglass on a regular basis (monthly) but not as part of a 25 hour check by dealer

EXTERIOR MAINTENANCE

The *Exterior Maintenance* section explains how to maintain various materials located on the cabin exterior, and how to help keep the yacht looking new.

FIBERGLASS SURFACES

The exterior fiberglass surfaces are coated with a protective layer of gelcoat. Gelcoat forms a hard, smooth and durable surface. Gelcoat contains microscopic pores that can, over time, collect dirt and discolor if the gelcoat is not kept clean.

CAUTION

DO NOT USE ABRASIVE CLEANERS WHEN WASHING THE YACHT. ABRASIVE CLEANERS SCRATCH AND DULL THE GELCOAT.

WASH THE YACHT WITH FRESH WATER AFTER EACH OUTING TO HELP KEEP THE GELCOAT CLEAN. IF THE YACHT IS OPERATED IN SALT WATER:

- WASH AT LEAST ONCE EVERY WEEK, EVEN IF THE YACHT HASN'T BEEN USED SINCE THE LAST WASHING.
- PERIODICALLY WASH WITH A SOLUTION OF FRESH WATER AND MILD SOAP.
- USE A SPONGE TO WASH SMOOTH SURFACES AND A STIFF NYLON OR NATURAL BRISTLE BRUSH TO WASH NONSKID SURFACES.

WARNING

DO NOT WAX THE NONSKID SURFACES. WAXING MAKES THE NONSKID SURFACES SLIPPERY AND DANGEROUS TO WALK ON.

WAX ALL NON-TREAD AREAS AT LEAST ONCE PER SEASON. USE A HIGH QUALITY, NON-YELLOWING, MARINE WAX. WAXING PROVIDES A SHINY SURFACE AND SEALS THE PORES IN THE GELCOAT, MAKING IT EASIER TO KEEP CLEAN.

CAUTION

FREQUENT AND CONTINUED USE OF ABRASIVE POLISHING COMPOUNDS, EVENTUALLY ERODES THE GELCOAT.

FIBERGLASS SURFACES (Continued)

Gelcoat eventually dulls with age, much like the paint on a car. Restore the gelcoat's luster using an electric buffer and a very fine grade polishing compound. Ask your Carver Dealer what brand and grade of polish to use.

Gelcoat stress cracks are common on all fiberglass yachts. The majority of stress cracks are cosmetic and limited to the gelcoat surface only. Gelcoat stress cracks are rarely an indication of structural problems. Contact your Carver dealer if stress cracks are found.

NOTE: The repair of cosmetic (non-structural) gelcoat stress cracks is not included under the terms of the Carver Limited Warranty.

GELCOAT REPAIR

Minor gelcoat nicks and cosmetic scratches are not difficult to repair, nor do either require the use of special or unique tools. Visually satisfying repairs takes little effort. Repairs to fiberglass laminates or structural fiberglass components are best left to the experienced technicians at your Carver Dealer.

A gelcoat repair kit is available from your Carver Dealer (Carver part number **82036-03**). The kit includes: color matched gel, gel hardener, and detailed instructions on making gelcoat repairs.

GELCOAT BLISTERS

Fiberglass is a durable and economical material, however; it is not indestructible. Blistering is the most problem associated with fiberglass. The blisters generally form in the gelcoat or in the outer most layer of laminate. The blisters can range in size from microscopic to two inches or larger in diameter.

The fiberglass blister's appearance does not indicate structural problems or faulty hull lamination. Gelcoat blisters form resulting from a natural process, and are quite common. Contact your Carver Dealer if blisters are discovered on the underwater portion of the hull.

HULL BOTTOM

The underwater portion of the hull is coated with a high-quality, factory-applied coat of anti-fouling bottom paint. The paint is applied after the hull has been carefully prepared. The paint has a high copper content and anti-fouling elements that retard the growth of marine life on the bottom of the hull. The anti-fouling elements in the paint have a limited life span, usually from one to three years, depending on how and where the yacht is used.

Inspect the hull bottom once a year. Repaint the hull if gelcoat is showing through the bottom paint. Use a paint that is compatible with the factory-applied paint. Failure to do so can void the bottom paint warranty. Also make sure the paint is formulated for the type of water the yacht is operated in. See your Carver Dealer for assistance in selecting an appropriate bottom paint.

To prepare the hull bottom for painting:

1. Lightly sand the existing paint with 80 grit to 100 grit sandpaper.
2. Remove all dirt and sanding residue from the hull.
3. Apply the new paint using a sprayer. Using a sprayer applies the smoothest coating and the best hull efficiency.
4. Allow the first coat to dry before proceeding if a second coat will be applied.

UNDERWATER METAL COMPONENTS

The hull's underwater portion has been carefully prepared, primed, and coated with a high-quality, anti-fouling bottom paint at the factory. However, the underwater metal components, including the shafts, struts, propellers, trim tabs and thru-hull fittings, were NOT primed or painted at the factory.

The owner is responsible for priming and painting ALL underwater metal components. Use a high-quality primer and anti-fouling paint. Reprime and repaint the components when bare metal is visible.

NOTE: Painting the propellers requires special care to attain a smooth surface. A rough surface on the propellers will seriously affect the yacht's performance.

Contact your Carver Dealer's Service Department if additional information is needed on priming and painting the underwater metal components.

CAULKING AND SEALANTS

Deck fittings, rail bases, windows, and all underwater fittings have been sealed with the finest quality sealants. The sealants, however, do not last indefinitely. The working action of the yacht, and the expansion and contraction caused by variations in outside temperature, eventually break down the sealant.

Fittings that have begun to leak must be resealed. Remove the fitting and clean the old sealant from both mating surfaces. Reseal the fitting using the sealant recommended by your Carver Dealer.

STAINLESS STEEL RAILS AND HARDWARE

STAINLESS STEEL IS NOT RUST-RESISTANT NOR IS IT STAIN-RESISTANT. When left in contact with the marine environment STAINLESS STEEL DOES RUST AND CORRODE. Proper care helps keep the stainless fittings on the yacht looking bright and shiny.

Clean the stainless steel rails and fittings after each outing with either soap and water or glass cleaner.

IF THE YACHT IS USED IN SALT WATER:

- Clean the rails and fittings at least once every week, even if the yacht hasn't been used since the last cleaning.

IF RUST APPEARS ON THE METAL:

- Remove the rust immediately with 3M Metal Restorer (Carver part number 051131). Failure to remove rust leads to irreversible pitting.
- Use brass, silver, or chrome polish to remove rust on stainless steel.
- Wax the stainless fittings and rails to help protect both surfaces from the elements and keep them looking their best.

Use the same wax on the fiberglass surfaces of the yacht.

NEVER

- **NEVER USE SANDPAPER, STEEL WOOL, OR OTHER ABRASIVES TO CLEAN STAINLESS STEEL FITTINGS OR RAILS.**
- **NEVER USE MINERAL ACIDS OR BLEACH TO CLEAN STAINLESS STEEL.**
- **NEVER LET STAINLESS STEEL COME INTO PROLONGED CONTACT WITH IRON, STEEL, OR OTHER METALS, PROLONGED CONTACT COULD CAUSE CONTAMINATION LEADING TO RUST OR CORROSION.**

DECORATIVE STRIPING TAPE

A variety of decorative stripes are applied to exterior of the yacht. Striping tapes are custom-made to Carver's color and size specifications. Replacement striping tape is only available through Carver Dealers. To remove a damaged section of tape, heat the area with a hair dryer. Heating with a hair dryer softens the adhesive, and makes the tape easier to remove. Use acetone to remove the adhesive residue.

CAUTION

AVOID SPILLING FUEL ON THE STRIPING TAPE WHILE FUELING. FUEL DAMAGES THE STRIPING TAPE.

HATCHES AND WINDOWS

The hatch frames are fabricated from aluminum or stainless steel. Some frames are painted with enamel. To clean both the painted and unpainted frames, use a sponge dipped in a solution of fresh water and mild soap. Do not use a brush or abrasive cleaner. Doing so can scratch the painted frame surfaces, damaging the appearance.

The cabin windows are made from tempered glass. Clean the windows with a soft cloth and glass cleaner. The bridge wind screen is made from formed Plexiglas. Clean the windscreen with a solution of fresh water and mild soap.

EXTERIOR VINYL UPHOLSTERY

Refer to the OEM information for details on cleaning the exterior vinyl upholstery.

Avoid saturating the exterior cushions with water. To enhance the appearance of the exterior cushions and upholstery, occasionally treat each item with an approved vinyl protectant.

CAUTION

IF DR. VINYL HAS BEEN USED TO REPAIR DAMAGED UPHOLSTERY, DO NOT USE THE FOLLOWING CLEANERS ON THE REPAIRED AREA. FURTHER DAMAGE WILL OCCUR:

- DENATURED ALCOHOL
- 3M CITRUS CLEANER
- AMMONIA AND HYDROGEN PEROXIDE

EXTERIOR CARPET

Rinse the bridge and deck carpet with fresh water when cleaning the other portions of the yacht's exterior. If the exterior carpet becomes soiled, remove the carpet from the yacht, and wash the carpet with hot water and any brand of carpet detergent suitable for hot water extraction.

To remove stains from the carpet, refer to the carpet OEM information.

EXTERIOR ENCLOSURES

Exterior enclosures are made from a high-quality, marine-grade, vinyl-coated fabric. Clean this fabric at regular intervals (at least twice per year).

WHITE VINYL

White exterior enclosures are made from vinyl coated materials. Clean the enclosures with a sponge dipped in a solution of fresh water and mild soap. To remove heavy dirt, use a vinyl cleaner. Treat the vinyl with a vinyl protectant twice each season.

SUNBRELLA

Colored canvas enclosures are made from Sunbrella fabric. The fabric should be cleaned regularly before dirt accumulates and becomes embedded. The fabric can be cleaned without removing from the stainless steel bow supports. Refer to the OEM information for details on cleaning the Sunbrella fabric.

WARNING

DO NOT CLEAN THE EXTERIOR ENCLOSURE FABRIC USING ABRASIVE DETERGENTS OR SUBSTRATES CONTAINING SOLVENTS OR GASOLINE. THESE PRODUCTS WILL DAMAGE THE VINYL COATING AND OR THE FABRIC. BE CAREFUL IF USING HIGH-PRESSURE OR STEAM-CLEANING DEVICES AS IMPROPER USE COULD DAMAGE THE VINYL COATING AND/OR FABRIC.

CLEANING THE EXTERIOR ENCLOSURES:

1. Apply a mild, lukewarm soap solution, such as liquid dishwashing soap, to the fabric using a soft brush or sponge.
2. Let the soap stand for a short period but do not allow the soap to dry.
3. Carefully rinse the fabric with fresh, clear water until all of the soap is removed.

CAUTION



DO NOT FOLD THE FABRIC WHILE WET OR DAMP TO PREVENT MILDEW BUILD-UP .

THE EXTERIOR ENCLOSURE FABRIC WAS TREATED BY THE MANUFACTURER WITH ANTI-MILDEW AGENTS; HOWEVER, THIS PROTECTION DOES NOT OFFER ABSOLUTE SAFETY AGAINST FUNGAL ATTACK.

4. Allow the fabric to dry thoroughly, then reuse or fold and store it.

CAUTION



THE EXTERIOR ENCLOSURE FABRIC IS SENSITIVE TO EXCESSIVE MECHANICAL STRAIN. AVOID PULLING THE FABRIC OVER SHARP EDGES OR ROUGH SURFACES. DO NOT WALK ON THE FABRIC. FOLDED CORNERS ARE OVER-STRETCHED AND THEREFORE PARTICULARLY SENSITIVE TO FRICTION AND ABRASION.

CAUTION



FABRIC MUST BE COMPLETELY DRY BEFORE STORAGE. MOISTURE ON STORED FABRIC CAN CAUSE THE GLASS TO CLOUD, AND THE FABRIC AND THREAD TO BREAK DOWN.

STORAGE

PREPARING THE FABRIC FOR STORAGE:

1. Thoroughly air dry the fabric.
2. If possible, store the fabric in a flat position (avoid rolling the fabric).
3. Avoid storing the fabric with the zipper(s) exposed to eliminate imprints into the next curtain.
4. Place the fabric in a dry, ventilated area.

When removing the fabric from storage, check for cloudy glass and zipper imprints. In most cases, both can be removed by hanging the fabric in the sun.

EXTERIOR WOOD TABLE

Exterior wood tables need regular care and maintenance. There is no warranty coverage provided by Carver Yachts or the vender of Carver once the table is exposed to daily temperature changes. Daily temperature changes affects wood when it naturally expands and contracts.

HIGH GLOSS FINISH TABLE

The exterior high gloss table is a custom ordered table that is requested by the dealer when the yacht is ordered. The exterior high gloss table comes without a warranty because it is used on the exterior of the yacht.

HIGH GLOSS CARE

The high gloss table should be cleaned weekly with non abrasive soap and water. Carver recommends using 3M Perfect It Polish. The polish should be applied with a soft polishing pad to remove minor scratches and to protect the surface. When the table is not in use, it should be kept covered with a water resistant breathable cover.

TEAK TABLE

A teak table should be oiled monthly to keep the wood from drying out. When the table is not in use, it should be kept covered with a water resistant breathable cover to protect it from the elements.

The exterior teak table is an optional item; the warranty period for the table is the same as the yacht's limited warranty period. The warranty period for both items start from the date of delivery to the original owner.

FINISH REPAIR PROCEDURES

THE FOLLOWING PROCESS IS ONLY A REPAIR PROCEDURE. ITEMS REPAIRED MAY NOT BE RESTORED TO THEIR ORIGINAL PRISTINE CONDITION. THE PROCESSES BELOW WILL ALLOW DAMAGED AREAS TO BE REPAIRED WITH AMAZING RESULTS.

WOOD FINISH BUFFING PROCEDURE

1. Clean surface with 3M cloths (3M #23589).
2. Identify the problem area and the sand affected area with 1200, 1500, and 2000 grit sandpaper.
3. Clean area with alcohol, and confirm that area is ready to be buffed, if not, repeat steps 1 - 3
4. Buff with a small amount of 3M Extra Cut Compound using the 3M 'Perfect It' Buffing Pad #05737 (White Color).
5. Apply a small amount of 3M 'Finesse It' Final Finish Compound using the 3M 'Perfect It' Buffing Pad #05725 (Black/Gray Color).
6. Repeat if necessary, if swirl marks appear.
7. Clean up area with 3M cloths (3M #23589) and 3M 'Clean and Shine'.

REMOVING DENTS IN WOOD FINISH

1. Apply water to the wood using a wet rag.
2. Apply heat to the wood, using either an iron or a hand steamer.
3. Sand area with 400 grit sandpaper.
4. Replace color with Triclad Water Base Stain 13-9810. Be careful not to get the material outside of the sanded area (doing so will result in a dark ring around the patch).
5. Apply Poly Sealer TH-20: 3 to 4 coats with a paintbrush
 - Allow 15 minutes between coats.
 - Allow 2 hours to dry.
6. Apply Poly Topcoat SC-4185: 3 to 4 coats with a paintbrush.
 - Allow 15 minutes between coats
 - Allow at least 8 hours to dry.
7. Level patch with a razor blade and sand with 1200, 1500 and 2000 grit sandpaper, following buffing procedure on the previous page.

FILLING DENTS IN WOOD FINISH

1. Locate the correct Burn Sticks color to match finished wood.
2. Apply Burn in Balm around area of patch to protect wood from heat.
3. Melt material into dented or chipped area.
4. Level the patched area with an iron and remove any excess Burn Stick material.
5. Scuff area with 600 grit sandpaper.
6. Apply Poly Sealer TH-20 over affected area: 3 to 4 coats with a paintbrush.
 - Allow 15 minutes between coats.
 - Allow at least 8 hours to dry.
7. Level patch with a razor blade, and sand with 1200, 1500, and 2000 grit sandpaper, following buffing procedure on the previous page.

REPAIRS FOR SURFACE DAMAGE OF TOPCOAT/SEALER

1. Apply Butyl Acetone to soften the material.
2. Remove white scratch mark with razor blade.
3. Scuff affected area, and sand with 600 grit sandpaper.

4. Apply Poly Sealer TH-20 to fill patch: 3 to 4 coats with a paintbrush
 - Allow 15 minutes between coats to dry, then sand with 600 grit sandpaper.
5. Apply Poly Topcoat SC-4185 to patch: 3 to 4 coats with a paintbrush
 - Allow 15 minutes between coats.
6. Let patch dry for at least 8 hours.
7. Level patch with a razor blade, then sand with 1200, 1500, and 2000 grit sandpaper, following buffing procedure on previous page.

REPAIRS FOR MAJOR DAMAGE THAT AFFECT WOOD COLOR

1. Remove all damaged areas, sand with 400 grit sandpaper until damage is gone.
2. Replace color to patched area:
 - 2a. Brush on color Triclad Water Base Stain 13-9810
 - 2b. Dab to blend out, be careful not to go outside the patching area (going outside may cause dark rings around the patch area).
3. Replace Poly Sealer TH-20: 3 to 4 coats with a paintbrush
 - Allow 15 minutes between coats
 - Allow 2 hours to dry.
 - Sand with 600 grit sandpaper.
4. Replace Poly Topcoat SC-4185: 3 to 4 coats with a paintbrush:
 - Allow 15 minutes between coats
 - Allow at least 8 hours to dry
5. Level patch with a razor blade, then sand with 1200, 1500, and 200 grit sandpaper, following buffing procedure.

MATERIAL LIST

PART NUMBER MATERIAL

8103261	Triclad Water Base Stain 13-9810
8103203	Poly Topcoat SC-4185
8103210	Poly Sealer TH-20
8103213	Butyl Acetone
8103214	Polyurethane Sealer Spray Catalyst
8103211	Toner Catalyst TH-720
8103212	Topcoat Catalyst TH-2537
8697610	400 Grit Sanding Disk
8697229	600 Grit Sanding Disk
8697188	800 Grit Sanding Disk
8697618	1200 Grit Sanding Disk
8601218	1500 Grit Sanding Disk
8697496	15 Micron Polishing Disk
----	Burn in Balm from Mohawk
----	Burn Sticks from Mohawk
8601207	3M Extra Cut Compound (1st Buff)
8619411	3M Finesse It Final Finish Compound (Final Buff)
----	3M Perfect It Buffing Pad #05737 (White Color)
----	3M Perfect It Buffing Pad #05725 (Black/Gray Color)

INTERIOR MAINTENANCE

Ventilating the cabin as often as possible is one of the best ways to maintain the yacht's interior. DO NOT allow moisture to accumulate in the yacht's interior. Moisture leads to a damp, musty environment, which encourages mildew growth.

WOODWORK

Solid hardwood and hardwood veneer is used throughout the interior of the yacht. Treat the woodwork with special care. Dust on a regular basis using 3M Clean and Shine and a soft rag.

NEVER

- **NEVER USE WAX-BASED FURNITURE POLISH OR CLEANER CONTAINING ABRASIVES.**
- **NEVER LAY WET OR DAMP TOWELS OR CLOTHING ON OR AGAINST THE FINISHED HARDWOOD SURFACES.**

The interior woodwork has been finished at the factory with a special industrial/commercial grade finish. If any of the woodwork needs to be refinished, contact your Carver Dealer to order the appropriate product. Follow the manufacturer's instructions on the product package when applying the finish.

HIGH PRESSURE LAMINATE

High Pressure Laminate (HPL) is used on many of the cabinet faces and counter tops. HPL is very durable and easy to clean. Clean the laminated surfaces with a cleaner made for use on household counter tops. Avoid using the counter tops as cutting surfaces. The HPL surfaces can permanently be scratched.

GRANITE AND MARBLE

Granite is used for the counter tops and floors in the galley. Marble is used for the counter tops and floors in the heads and foyer, and as highlights in the master stateroom. Refer to the OEM information to properly care for the granite and marble.

FABRICS

The yacht interior fabrics include: drapes, pillow shams, bed spreads, woven headliners, and sofa and chair coverings. Some fabrics have been treated with a stain protector. All fabrics require periodic cleaning. For best results, dry clean the fabrics.

For furniture upholstered in Ultraleather, refer to the OEM information for details on cleaning the material.

LEATHER

For furniture upholstered in Ultraleather, refer to the OEM information for details on cleaning this material.

CARPET

The interior carpet has been treated with a stain protector; however, the carpet still needs periodic cleaning. Care for the carpet in the yacht the same as carpeting is cared for at home. Vacuum often, and shampoo as needed using carpet shampoo.

New carpet sheds, and needs to be vacuumed frequently. Shedding is normal, and will stop after a few weeks.

INTERIOR FIBERGLASS

Some interior components are made of gelcoated fiberglass, such as the shower stalls and stateroom berth platforms. Interior fiberglass can be cleaned with standard household cleaners intended for cleaning fiberglass. Many types of cleaners are marketed as "tub and tile" cleaners. DO NOT use abrasive cleaners on the interior fiberglass surfaces. Abrasive cleaners scratch and dull the shiny gelcoat surface.

PLEXIGLASS

The shower door, mirrored face of the head medicine cabinets, and other areas of the yacht are made of Plexiglas. Clean Plexiglas

MAINTENANCE



surfaces with a solution of fresh water and mild liquid detergent. Remove fine scratches with a fine automotive acrylic rubbing and polishing compound.

CAUTION



DO NOT USE GLASS CLEANERS, ABRASIVE CLEANERS, OR AROMATIC SOLVENTS ON PLEXIGLAS. ABRASIVE CLEANERS ETCHES THE PLEXIGLAS.

MECHANICAL SYSTEMS

Mechanical Systems explains how to maintain the yacht's propulsion, electrical, fresh water, bilge and sanitation systems.

ENGINES/GENERATOR

Refer to the engine and generator OEM information for instructions on maintaining the yacht's engines and generator.

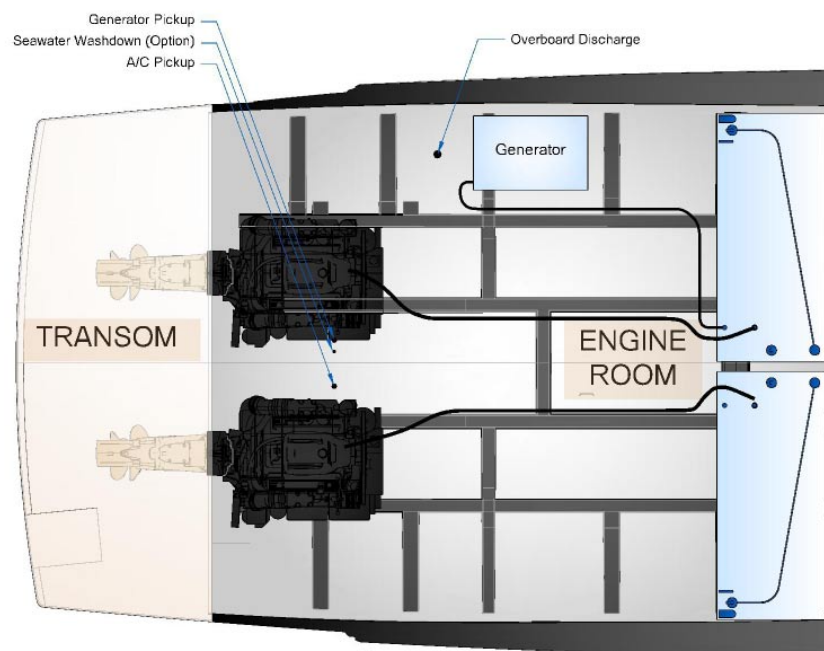
As an option, a seawater strainer may be installed in the water intake lines for each engine and the generator. At least once every 30 days, close the seawater seacocks, then open and clean the strainers. Refer to Section 4 or Section 5 for the exact location of the strainers.

Inspect the strainers more frequently if the yacht is operated in dirty waters or areas with a high degree of aquatic vegetation. A clogged strainer restricts the intake of seawater which can cause the affected engine or the generator to overheat.

THRU-HULL VALVES

Inspect the thru-hull valves on a monthly basis. Items to inspect are as follows:

- Make sure the connections between the hose and the valve are tight.
- Look for water leaks around the area where the valve and hull meet.
- Every 30 days, open and close each valve two or three times. Turning, guards against the valve seizing in the open or closed position.
- Make sure the valve handle is securely fastened. Tighten any loose handles.



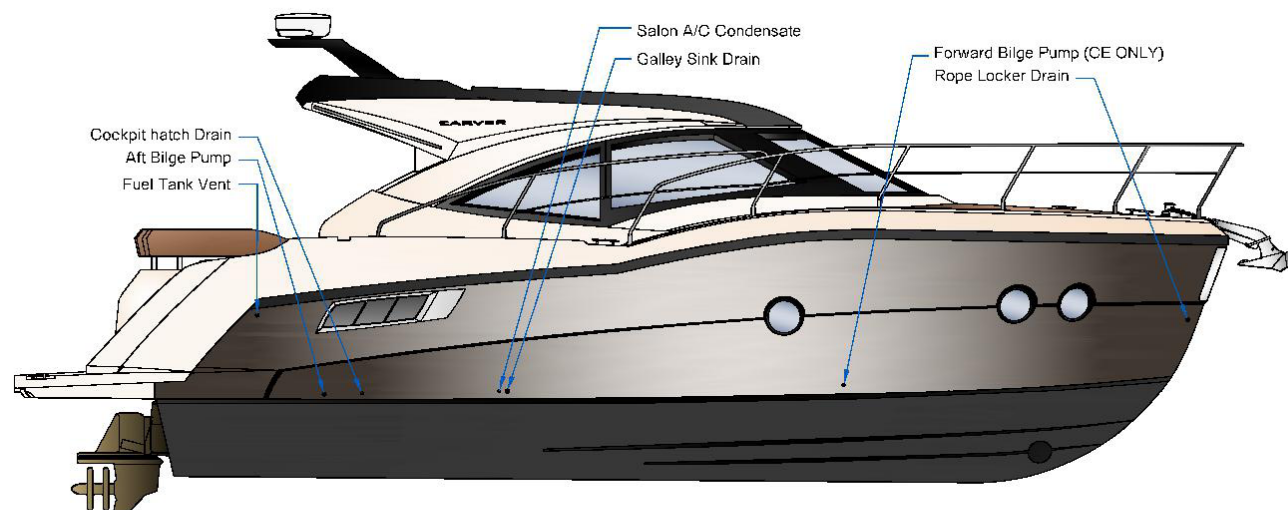
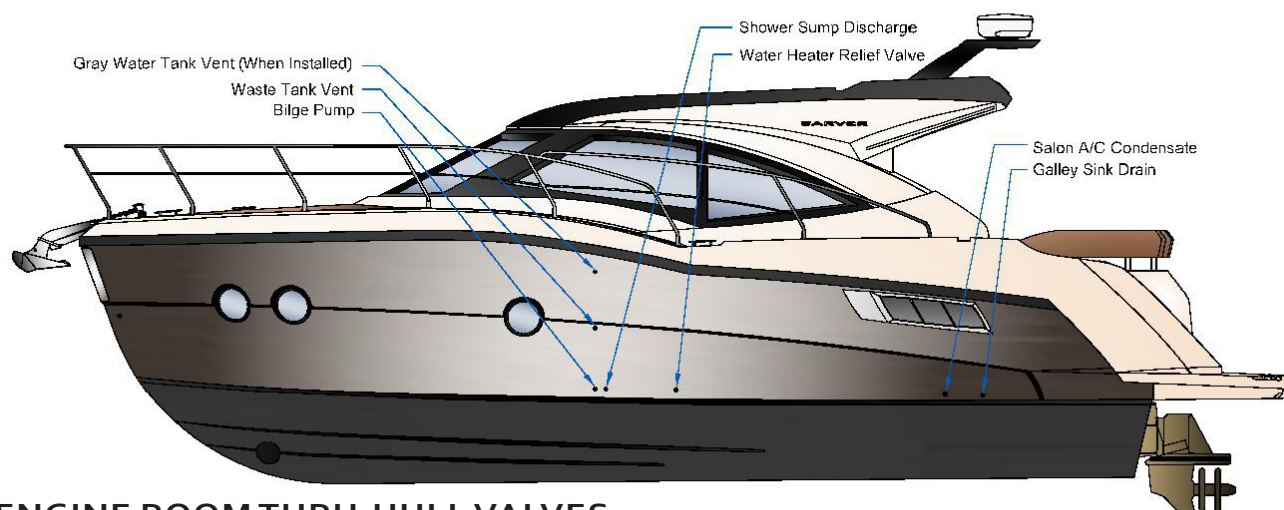
NOTE:

See next page for Side Views.

THRU-HULL VALVES

WARNING

ALL THRU SEACOCKS MUST BE CLOSED WHILE NOT IN USE TO REDUCE THE RISK OF FLOODING.

**STARBOARD THRU-HULL VALVES****ENGINE ROOM THRU-HULL VALVES**

MAINTENANCE



PROPELLER SHAFT SEALS

The propeller shaft extends through a shaft seal which is a watertight fitting. Check the shaft seal every month for leakage; contact your Carver Dealer if signs of leakage are found.

DANGER

KEEP OUT OF THE ENGINE ROOM WHILE ONE OR BOTH ENGINES ARE OPERATING. THE ENGINE ROOM CONTAINS MOVING, HOT MACHINERY. CHECK THAT THE ENGINES ARE OFF BEFORE INSPECTING THE PROPELLER SHAFT SEALS.

PROPS

Inspect the props often. Keep a swim mask in the yacht to inspect the props while swimming. Out-of-balance or damaged props can diminish the yacht's performance by reducing speed, causing steering problems, and creating vibrations. Vibrations can lead to drive train damage.

Have the propellers balanced by an established propeller repair shop at least once a year. Repair or replace damaged props.

DANGER

THE PROPELLER BLADES ARE SHARP. WEAR GLOVES WHEN HANDLING THE PROPELLER.

A Tip From Carver!

Consider purchasing and carrying a spare set of props onboard. Many marine dealers do not carry a full inventory of replacement propellers. A spare set allows your vacation or cruise to continue in the event that the primary set of props are damaged.

STRUTS

Propeller shaft struts require very little maintenance. Within each strut is a cutlass bearing that provides a smooth surface for the shaft to rotate. The cutlass bearings occasionally need to be replaced. However, bearing replacement is required more often if the yacht is used in sand or within other abrasive materials. Have a marine technician inspect the strut bearings when the yacht is pulled. Replace the bearings as recommended.

DC ELECTRICAL SYSTEM

Poor battery maintenance causes the majority of difficulties with the 12-volt DC electrical system. The factory-installed batteries should function normally for several years if properly maintained. The heavy-duty batteries can be discharged and recharged repeatedly without damaging them; however, completely discharging or overcharging a battery can shorten its life span. See Section 2 for battery locations.

TO MAXIMIZE THE USEFUL LIFE OF THE BATTERIES:

- Use the voltmeters to frequently monitor the voltage level of each battery or battery bank while the engines are running and the yacht is used.
- Monitor the charge level with the engines turned off (static condition).
- Recharge the batteries, when not fully charged, using the onboard battery charger or the engine alternators. Refer to Section 2: *Charging the Batteries* for more information. When the battery bank is fully charged, the voltmeter reads between 12.3 and 12.6 volts.
- Do not store partially charged batteries. Recharge each battery, if necessary. Check the voltage level every 30 days while the battery is in storage. Recharge if the voltage reads 12.3 or below.

WARNING

ELECTRICAL SHOCK MAY OCCUR IF THE BATTERIES ARE NOT DISCONNECTED DURING MAINTENANCE OF THE DC ELECTRICAL SYSTEM.

INSPECT THE BATTERIES EVERY MONTH:

- Clean corrosion that has developed on the battery terminals.
- Spray terminal protector on the terminals and battery cable eye connectors.
- Make sure the battery cables are securely fastened to the terminals.
- Tighten the nuts only slightly beyond finger tight with a wrench.

Spray the connections for the bridge instruments and switches with an electrical connection protector every six months.

FRESH WATER SYSTEM

Flush and sanitize the fresh water system at least once every season. See Section 4 for freshwater schematics and layout.

- Flushing involves draining all water from the system.
- Sanitizing involves using a commercially-made fresh water tank sanitizing liquid that is available at many marine supply stores.

SHOWER

The water flow from a shower head may become restricted due to the accumulation of sediment in the shower head. Remove the head and rinse with clean water if water flow is restricted. If necessary, clean the discharge holes with a narrow wire.

WATER TAPS

Periodically remove and clean the filter screens from the sinks' water taps. Rinse the screens with clean water. If necessary, clean the screens with a narrow wire. A buildup of debris in the filter screens can block the water flow enough to cause the pressure water pump to repeatedly cycle on and off.

SUMP

Clean the sump and sump filter frequently. Hair, dirt, and soap scum collects in the sump, and if not removed, eventually can clog the sump pump or sump hoses. An infrequently used sump will promote bacteria growth in the sump. Bacteria growth will promote odors. In addition to keeping the sumps flushed clean, it is a good idea to add waste tank deodorant to the sump when used infrequently. The deodorant can easily be flushed down any of the drains that empty into it.

PRESSURE WATER PUMP

An in-line filter is installed near the pressure water pump. Clean the filter once a month. Refer to Section 4: *Fresh Water System* for a diagram of the exact location of the pump and filter.

WATER TANK VENT SCREEN

A fresh water tank vent is installed through the hull, above the fresh water tank fill plate. A screen is applied over the vent's opening to prevent dirt and insects from entering the fresh water tank. Clean the vent screen once every six months or twice a season.

BILGE SYSTEM

Keeping the bilges clean is important. A dirty bilge leads to clogged bilge pumps and unpleasant odors in the cabin. Keeping the bilges dry helps reduce moisture in the cabin. See Section 4 for Bilge System illustrations and locations. Tips to keep the bilge system clean:

- Periodically inspect and clean each bilge pump's strainer. The strainers prevent dirt and debris from clogging the bilge pump intakes. Refer to Section 4: *Bilge System* diagram for the exact location of the bilge pumps.
- Frequently check the operation of each bilge pump float switch to ensure that it is operating properly.
- Clean the bilge pumps twice per season by wiping dirt or oil from their exterior surfaces.
- Remove any oil, dirt, or debris from the bilges. Treat the bilges with a commercial bilge cleaner twice a season. Bilge cleaner is available from your Carver Dealer.

SANITATION SYSTEM

The sanitation system requires ongoing maintenance to avoid problems. See Section 4 for Sanitation System illustrations and layout.

- Always use sanitation system deodorizer. Use the brand recommended by your Carver Dealer.
- The sanitation system on the yacht is not like the toilet and sewer in a home. DO NOT flush items down the toilet that the toilet was not designed to accommodate. Refer to the OEM information for details on maintaining the toilet.
- Empty the waste tank often. Make sure the tank is empty prior extended periods of time that the yacht is not in use.
- Flush the waste tank with fresh water each time the tank is emptied. Flushing with fresh water helps remove remaining waste from the tank.
- The senders in each tank may need to be cleaned, if waste gauges are reading incorrectly.

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WINTERIZATION: STORAGE

The yacht must be properly “winterized” before storing for an extended period of time, and/or while temperatures could fall below freezing. Winterizing the yacht consists of removing all water from its various systems. Water left on board could cause extensive damage to the yacht and internal systems.

Carver recommends hiring a professional to perform the winterization of the yacht. Carver also recommends storing the yacht in a dry, out-of-water, storage. Some winterizing procedures can be performed only while the yacht is out of the water. Dry storage also provides the opportunity to thoroughly inspect the hull and underwater components for maintenance needs.

LIFTING

Hire an experienced professional to lift the yacht from the water. The individual should have the proper equipment and training with lifting yachts. The yacht’s hull must be properly supported during the lifting operation to avoid serious and permanent hull deformation.

CAUTION

DO NOT PLACE A LIFTING STRAP AROUND THE YACHT’S DRIVES OR OTHER UNDERWATER COMPONENTS.

USE APPROVED LIFTING STRAPS. “SLING” TAGS ARE LOCATED ON THE SIDE DECK OF THE YACHT. THE SIDE DECK IS THE ONLY LOCATION THAT LIFTING STRAPS SHOULD BE PLACED FOR LIFTING.

WARNING

NEVER GO UNDER THE YACHT WHILE IT IS SUSPENDED IN A LIFT.

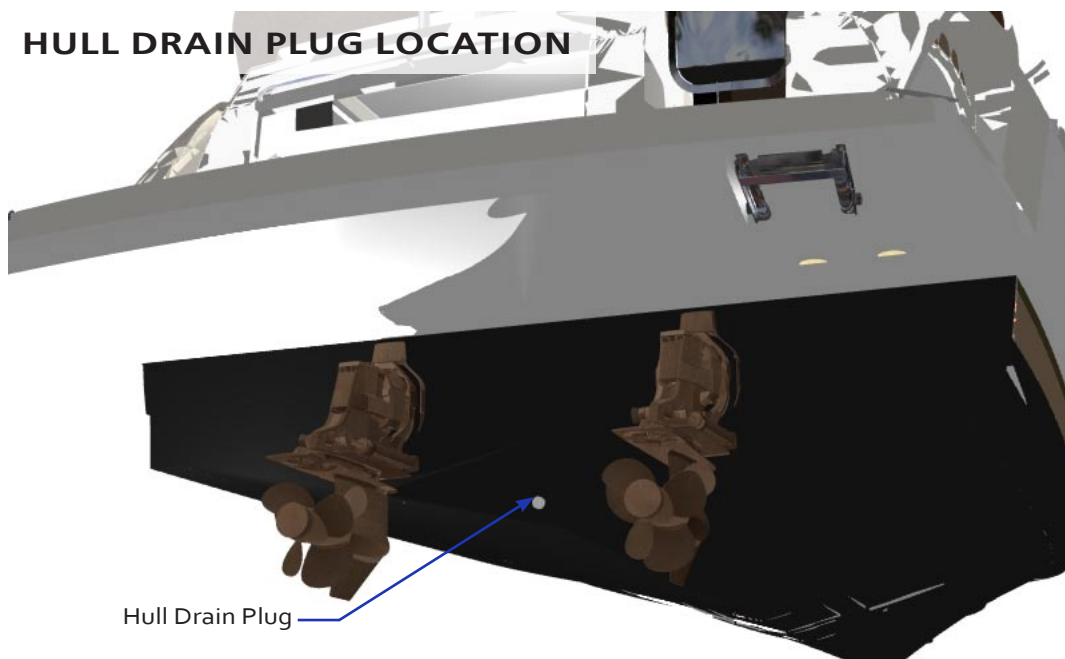
BLOCKING

The hull must be properly blocked to avoid damage while in dry storage. To block, either use a cradle or blocking supports.

If using a cradle, the forward end of the cradle should be slightly elevated to position the yacht in a bow-high attitude. The elevated position allows water in the bilges to flow to the back of the aft bilge and drain through the hull drain.

All of the blocking supports should be setup to prevent the yacht from shifting while in storage. The major portion of the yacht’s weight should rest on keel blocks. Side supports should be used to stabilize the yacht only. A **MINIMUM** of four keel blocks should be used.

HULL DRAIN PLUG LOCATION



WINTERIZATION: SYSTEMS

CAUTION



THE YACHT MUST BE PROPERLY WINTERIZED BEFORE STORAGE. FAILURE TO WINTERIZE THE YACHT COULD DAMAGE THE PIPES, VALVES, FAUCETS, TANKS, HOT WATER HEATER, AND OTHER COMPONENTS.

ENGINES

Refer to the OEM information for details on winterizing the engines.

GENERATOR

Refer to the OEM information for details on winterizing the generator.

MARINE SATCOM UNIT (MSU) STORAGE (OPTION)

If an MSU is equipped on the yacht, during off-season storage, the MSU unit should be deactivated. The MSU should be turned OFF during winter storage.

CAUTION



REMOVE THE INTERNAL BATTERY TO PREVENT FREEZE DAMAGE IF THE YACHT IS NOT STORED IN A HEATED FACILITY. REFER TO THE OEM INFORMATION FOR REMOVAL PROCEDURES.

AIR CONDITIONING SYSTEM

Refer to the OEM information for details on winterizing the air conditioning system. Carver Yachts winterizes the air condition system in-house. Carver recommends having a qualified marina winterize the air conditioning system

FRESH WATER SYSTEM

Refer to Section 4: *Fresh Water System* for a description of the yacht's fresh water system.

CAUTION



DRAIN THE ENTIRE SYSTEM, INCLUDING THE WATER HEATER, WHEN WINTERIZING THE FRESH WATER SYSTEM.

DRAINING THE FRESHWATER SYSTEM

1. Switch OFF the WATER HEATER circuit breaker, located on the AC Control Panel. The panel is located in the below the helm seating, at the companion way. See Section 3 for illustration.

CAUTION



DO NOT SUPPLY POWER TO THE WATER HEATER WHEN EMPTY. DAMAGE MAY OCCUR TO THE UNIT'S HEATING ELEMENT.

2. Locate the DC Control Panel. Panel is located below the helm seating within the cabinetry. See Section 2 for illustration.
 - 2a. Switch ON the SYSTEMS DC MAIN circuit breaker.
 - 2b. Switch ON the AUTO SUMP circuit breakers. Two breakers total.
 - 2c. Switch ON the PRESSURE WATER PUMP circuit breaker.

WINTERIZATION AND STORAGE



3. Turn ON the ACCESSORY Battery master disconnect switch, located on the DC Control Panel, below the helm seating within the cabinetry.
4. Open ALL sink and shower faucets, including the faucets for the transom hand shower and bow and transom fresh water washdowns. See Section 4, *Freshwater System* for faucet locations.
5. When water is no longer draining from the sink taps, shower heads, or fresh water washdowns, switch OFF the PRESSURE WATER PUMP circuit breakers, from STEP 2.
6. Drain the water heater. Refer to the OEM information for details on draining the water heater.

WINTERIZING THE FRESHWATER SYSTEM

1. Pour 20 gallons of nontoxic recreational vehicle antifreeze into the fresh water tank.

NOTE: Additional antifreeze may need to be added to the fresh water tank if the fresh water system loses pressure during the winterization procedure.

CAUTION

DAMAGE CAN OCCUR TO THE FRESH WATER SYSTEM BY USING THE WRONG TYPE OF ANTIFREEZE. USE A NONTOXIC, NON-ALCOHOL, RV-TYPE (PINK) ANTIFREEZE. DAMAGE RESULTING FROM USING THE INCORRECT ANTIFREEZE IS NOT INCLUDED UNDER THE TERMS OF THE CARVER LIMITED WARRANTY.

2. Close all faucets.
3. Switch ON the PRESSURE WATER PUMP, located on the DC Control Panel, panel is located below the helm seating within the cabinetry.
4. If the optional grey water holding tank is **NOT** supplied on the yacht, place a large bucket under the grey water and sump discharge fittings. The bucket catches the antifreeze pumped out described in STEP 5. Refer to Section 4 for the exact location of the fitting.

5. Open the galley sink cold water faucet. Once a steady stream of antifreeze is flowing from the tap, close the faucet.

TRANSOM HAND SHOWER, BOW AND TRANSOM FRESH WATER WASHDOWNS ONLY:

- 5a. Place the shower head in a bucket before turning on the shower faucet. The bucket catches the antifreeze, so the antifreeze can be reused.
 - 5b. Remove the hose(s) from the fresh water washdown fittings.
 - 5c. Place a bucket under the washdown fittings to catch the antifreeze, so the antifreeze can be reused.
 - 5d. Open the washdown faucets. Once a steady stream of antifreeze is flowing from the fittings, close the faucets.
6. Repeat Step 5 for the galley hot water faucet, each cold and hot water faucet on the yacht, and the windshield washer.

NOTE: STEP 6 EXCLUDES: Transom Hand Shower and Bow and Transom Fresh Water Wash Downs.

7. If the optional grey water holding system is **NOT** supplied on the yacht, pour one quart of antifreeze into the shower and each sink drain. Refer to Section 8 (current section): *Grey Water Holding System* for the exact location of the fitting.

ONCE THE YACHT IS REMOVED FROM STORAGE AND PREPARED TO USE AGAIN:

8. Flush the entire fresh water system with fresh water when the yacht is removed from storage and prepared to use it again. Nontoxic antifreeze is colored; the water system is adequately flushed when uncolored water flows from all of the faucets and shower heads. The water tank may need to be filled more than once to flush the system.

BOW AND TRANSOM RAW WATER WASHDOWNS (OPTION)

The yacht should be removed from the water before performing the Raw Water Washdown procedure on the optional bow and transom raw water washdowns.

Refer to Section 4: *Raw Water Washdowns* for a description of the raw water washdown system.

RAW WATER WASHDOWN PROCEDURE:

1. Close the seacock supplying the raw water washdown pump with seawater.
2. Disconnect the end of the hose attached to the washdown side of the seacock.

WARNING

DAMAGE CAN OCCUR TO THE FRESH WATER SYSTEM BY USING THE WRONG TYPE OF ANTIFREEZE. USE A NONTOXIC, NON-ALCOHOL, RV-TYPE (PINK) ANTIFREEZE. DAMAGE RESULTING FROM USING THE INCORRECT ANTIFREEZE IS NOT INCLUDED UNDER THE TERMS OF THE CARVER LIMITED WARRANTY.

3. Place the disconnected hose end into a bucket containing about a gallon of nontoxic recreational vehicle antifreeze.
4. Connect short hoses to the bow and transom raw water washdown fittings and open valves.
5. Place a bucket under the hoses to catch the antifreeze, so the antifreeze can be reused.
6. Locate the DC Control Panel. Panel is in the below the helm seating within the cabinetry. See Section 2 for illustration.
 - 6a. Switch ON the SYSTEMS DC MAIN circuit breaker
 - 6b. Switch ON the WASHDOWN PUMP circuit breaker
7. Once a steady stream of antifreeze flows from the washdown fittings, switch OFF the WASHDOWN PUMP circuit breaker.
8. Disconnect the hoses to the washdown fittings and close valves.
9. Reconnect the hose that was disconnected in STEP 2.

BILGE

Refer to Section 4: *Bilge System*, for a description of the bilge system.

BILGE DRAINAGE PROCEDURE:

1. Open the hull drain. Leave the drain open while the yacht is in storage.
2. Remove all water from the bilge.
3. Clean the bilge as described in Section 7: *Bilge System*.

SANITATION SYSTEM

Pull the yacht from the water before performing the Standard Sanitation System procedure. Refer to the OEM information for more information on winterizing the sanitation system.

Refer to Section 4: *Sanitation System* for a description of the sanitation system.

STANDARD SANITATION SYSTEM

1. Empty the waste tanks as described in Section 4: *Emptying the Waste Tanks*. Remove as much of the fresh water used in flushing the tanks as possible.
2. If the toilet uses seawater to flush, follow steps 2a - 2d below; otherwise, proceed to step 3.
 - 2a. Close the seacock that supplies seawater to the toilet.
 - 2b. Disconnect the toilet seawater hose from the seacock.
 - 2c. Flush the toilet until all water is drained from the seawater hose.
 - 2d. Reconnect the seawater hose to the seacock. Leave the seacock closed.

WARNING

DAMAGE CAN OCCUR TO THE FRESH WATER SYSTEM BY USING THE WRONG TYPE OF ANTIFREEZE. USE A NONTOXIC, NON-ALCOHOL, RV-TYPE (PINK) ANTIFREEZE. DAMAGE RESULTING FROM USING THE INCORRECT ANTIFREEZE IS NOT INCLUDED UNDER THE TERMS OF THE CARVER LIMITED WARRANTY.

WINTERIZATION AND STORAGE



3. Flush 4 gallons of nontoxic recreational vehicle antifreeze through the toilet. Keep the antifreeze in the waste tanks while the yacht is in storage.
4. When removing the yacht from storage and preparing for use the yacht again:
 - 4a. Flush 5 gallons of fresh water through each toilet.
 - 4b. Empty the waste tanks as described in Section 4: *Emptying the Waste Tanks*.
 - 4c. If the toilet uses seawater to flush, open the seacock supplying seawater to the toilet.
 - 4d. Flush the toilet a few times to prime the sanitation system.
 - 4e. Charge the waste tanks by adding deodorizer. Use the brand of deodorizer recommended by your Carver Dealer.

GREY WATER HOLDING SYSTEM

Before performing the optional grey water holding system procedure, the yacht should be pulled from the water. Winterize the grey water holding system only after the fresh water system has been winterized.

There are two types of grey water holding systems: the Gray Water Tank System and the Overboard Discharge System.

GREY WATER OVERBOARD DISCHARGE (STANDARD)

1. Empty the grey water tank as described in Section 4: *Grey Water Holding System*. Remove as much of the fresh water used in flushing the tank as possible.
2. Verify that the AUTO SUMP circuit breakers are ON, located on the DC Control Panel, panel is located below the helm seating within the cabinetry.

WARNING

DAMAGE CAN OCCUR TO THE FRESH WATER SYSTEM BY USING THE WRONG TYPE OF ANTIFREEZE. USE A NONTOXIC, NON-ALCOHOL, RV-TYPE (PINK) ANTIFREEZE. DAMAGE RESULTING FROM USING THE INCORRECT ANTIFREEZE IS NOT INCLUDED UNDER THE TERMS OF THE CARVER LIMITED WARRANTY.

3. Pour 3 gallons of nontoxic recreational vehicle antifreeze through each shower and sink drain.

ONCE THE YACHT IS REMOVED FROM STORAGE AND PREPARED FOR USE AGAIN:

4. Pour 5 gallons of fresh water through each shower and sink drain.

GREY WATER TANK SYSTEM (OPTION)

1. Empty the grey water tank as described in Section 4: *Grey Water Holding System*. Remove as much of the fresh water used in flushing the tank as possible.
2. Verify that the AUTO SUMP circuit breakers are ON, located on the DC Control Panel, panel is located below the helm seating within the cabinetry.

WARNING

DAMAGE CAN OCCUR TO THE FRESH WATER SYSTEM BY USING THE WRONG TYPE OF ANTIFREEZE. USE A NONTOXIC, NON-ALCOHOL, RV-TYPE (PINK) ANTIFREEZE. DAMAGE RESULTING FROM USING THE INCORRECT ANTIFREEZE IS NOT INCLUDED UNDER THE TERMS OF THE CARVER LIMITED WARRANTY.

3. Pour 3 gallons of nontoxic recreational vehicle antifreeze through each shower and sink drain.

ONCE THE YACHT IS REMOVED FROM STORAGE AND PREPARED FOR USE AGAIN:

4. Pour 5 gallons of fresh water through each shower and sink drain.
5. Empty the grey water tank as described in Section 4: *Grey Water Holding System*.
6. Charge the grey water tank by adding deodorizer. Use the brand of deodorizer recommended by your Carver Dealer.

EXTERIOR

As part of the winterization of the yacht, there are a variety of items that should be checked and completed on the yacht's exterior prior to storage. Carver has created a check list as follows:

- Wash the exterior of the yacht, particularly the underwater portions.
- Remove as much aquatic growth as possible while wet. Dried growth it is more difficult to remove.
- Check the zinc sacrificial anodes for deterioration.
- Have the zincs replaced before spring launch if signs of deterioration show
- Check stainless steel rails and fittings for signs of rust.
- Remove rust prior to winter lay-up. Inspect the underwater portions of the hull.
- Review anything that looks out of the ordinary with your Carver Dealer.

INTERIOR

As part of the winterization of the yacht, there are a variety of items that need to be checked and completed to the yacht's interior prior to storage. Carver has created a check list as follows:

- Air out cushions until completely dry. Storing damp cushions leads to mildew.
- Position the cushions to allow air to circulate around them.
- Purchase and position moisture accumulators throughout the yacht. The moisture accumulators help reduce the amount of moisture that accumulates during storage.
- Remove item that could spoil or freeze while the yacht is stored.
- Remove all dried food. Food attracts mice and insects.

STORAGE

Carver recommends storing the yacht in dry storage to maximize protection.

DRY STORAGE

Protecting the yacht from the elements during winter storage is advised. Have a local marina shrink wrap the yacht, or have a winter storage cover made. Occasionally check on the yacht while in storage to make sure that it is in good condition.

OUTSIDE STORAGE

Properly support a storage cover and secure the cover over the yacht. Do not secure the cover too tightly. Allow adequate ventilation to protect against dry rot. Do not store the yacht in a damp storage enclosure. Purchase and position moisture accumulators between the shrink-wrap and the yacht's enclosures to help prevent moisture from accumulating. Excessive dampness can lead to mildew, electrical problems, corrosion and dry rot.

NOTE: If the Hull drain plug is removed for storage make sure to install plug prior to launch.

WET STORAGE

Wet storage procedures vary from region to region. Consult your Carver Dealer before preparing to leave the yacht in the water over the winter.

SPRING RECOMMISSIONING CHECKLIST

Before launching for the first time of the season, complete the following checklist. (See next page for list.)

HULL

- ☐ Fill gelcoat nicks and gouges
- ☐ Inspect props, struts, rudders
- ☐ Inspect thru-hull fittings
- ☐ Apply new antifouling bottom paint or touch up failing areas
- ☐ Buff out minor hull scratches
- ☐ Remove dirt, stains
- ☐ Apply wax

DECK AND CABIN

- ☐ Inspect hatches and windows for leaks
- ☐ Wax non-walk surfaces

ENGINES

- ☐ Follow manufacturer's recommissioning guidelines
- ☐ Inspect belts, hoses
- ☐ Tune-up engines
- ☐ Replace fuel filters

ELECTRICAL SYSTEM

- ☐ Check battery water level
- ☐ Charge batteries
- ☐ Inspect connections for corrosion

PLUMBING

- ☐ Purge fresh water system of antifreeze
- ☐ Replace Sealand vent filters.
- ☐ Inspect seacocks
- ☐ Inspect heads
- ☐ Chemically charge waste and grey water tanks
- ☐ Fill fresh water tank

SAFETY EQUIPMENT

- ☐ Inspect PFDs
- ☐ Replace old distress signals
- ☐ Inspect fire extinguishers
- ☐ Inspect, test bilge pumps
- ☐ Inspect mooring lines, fenders
- ☐ Test, recalibrate and/or replace CO detectors

AFTER LAUNCH

- ☐ Check for engine cooling water flow
- ☐ Check propeller shaft alignment
- ☐ Check propeller shaft seals
- ☐ Check crankcase (yacht must be in-water)
- ☐ Check transmission oil levels
- ☐ Have compass professionally calibrated
- ☐ Inspect thru-hulls, exhaust, etc.

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WARRANTY INFORMATION

Carver Yachts warrants every yacht we manufacture, explained in the Carver Limited Warranty. A copy of the warranty is located at the end of this section. Please review the warranty carefully.

To ensure that the warranty remains in effect during its lifetime, Carver Yachts, your Carver Dealer, and you (the owner) all must uphold specific responsibilities. Carver's responsibilities are described in the Carver Limited Warranty.

CARVER DEALER'S RESPONSIBILITIES

WARRANTY INFORMATION

Your Carver Dealer will review the terms of the warranty and make certain the warranty is registered with Carver. Your Dealer will also give instruction on how to obtain warranty service.

PRE-DELIVERY SERVICE PROCEDURE

Your Carver Dealer will prepare the yacht for delivery in accordance with the procedures detailed on the Pre-Delivery Service Record. Your dealer will sign the Pre-Delivery Service Record and provide a copy.

Registration is required for the yacht and its engines by the Federal Safe Yachting Act of 1971. Your Carver Dealer will complete and mail the engine warranty cards as part of the Pre-Delivery Service procedure.

YACHT AND SYSTEMS REVIEW

A representative from your Carver Dealer will review the operation of the yacht and its systems.

OWNER'S RESPONSIBILITIES

PRE-DELIVERY SERVICE RECORD

Verify that the yacht's pre-delivery service record has been completed and mailed to Carver. The pre-delivery service record is attached in front of this owner's manual. Review the Pre-Delivery Service procedure with your dealer. Read the Pre-Delivery Service Record. Sign a copy of the Pre-Delivery Service Record and retain a copy for your records.

OEM COMPONENTS

Many of the OEM components installed in the yacht are warranted by their manufacturers. Complete and mail all OEM warranty cards to activate the manufacturers warranties. The warranty card for each component warranted is located with the Preface of this Owner's Manual. Many of the OEMs also have programs designed to resolve problems experienced with their products. Your Carver Dealer can assist in gaining access to the programs.

NOTE: ALL WARRANTY CARDS MUST BE COMPLETED AND FORWARDED TO THE APPROPRIATE COMPANY WITHIN 5 DAYS OF THE YACHT'S DELIVERY.

DELIVERY

Make a complete inspection of the yacht and its systems at the time of delivery. Document work that needs to be completed by the dealer to meet the terms of agreement.

OWNER'S INFORMATION KIT

Read, understand, and follow the instructions provided in the Owner's Manual, and all other manuals and manuals supplied with the yacht, including all OEM information.

Contact your Carver Dealer if any questions regarding warranty responsibilities arise.

OBTAINING WARRANTY SERVICE

The following requirements must be met before warranty work can be performed on the yacht.

1. Registration of the yacht with Carver Yachts is required. Register by completing, and submitting the Pre-Delivery Service Record to Carver Yachts, P.O. Box 1010, Pulaski, WI 54162-1010.
2. Pre-Delivery Service must be completed by your Carver Dealer. Information about the Pre-Delivery Service is attached in front of this Owner's Manual. The Pre-Delivery Service Record must be signed by both the dealer and the owner.

NOTE: ONLY your Carver Dealer is authorized to approve warranty work. Your Carver Dealer must be contacted first if warranty service is needed. There are no exceptions to this policy.

Your Carver Dealer has knowledgeable professionals who are familiar with Carver Yachts, and are capable of providing the highest level of service. The Carver Dealer's service personnel will communicate with Carver Yachts to ensure fast and satisfactory solutions to any problem will be addressed.

SECOND & THIRD OWNER REGISTRATION

A "Second Owner Registration" card and "Third Owner Registration" card are located in the Preface of this Owner's Manual. The purchaser of a previously owned Carver yacht should complete the appropriate card, and mail it as soon as taking title of the yacht.

Registration of a previously owned Carver yacht does not extend or in any way modify the yacht's original limited warranty. However, purchasers of a previously owned Carver yacht should register the yacht, so if necessary Carver can contact the current owner.

HULL IDENTIFICATION NUMBER

The U.S. Coast Guard has established an identification system which assigns a unique hull identification number (HIN) to each yacht. The HIN consists of 12 alphanumeric characters which provide coded information about the yacht.

Provide your Carver Dealer with the yacht's HIN when contacting for parts or service.

OEM's

Contact your Carver Dealer first when information is needed about a system or component on the yacht. If your Dealer is unable to provide the information, contact the manufacturer (OEM) of the system or component. Refer to the OEM information for telephone numbers and addresses.

Be ready to provide the component's Serial Number when contacting an OEM for information. A Serial Number Record Sheet is attached in front of this Owner's Manual. Use the provided sheet as a convenient location to record the serial numbers of the yachts OEM components.

DESIGN SPECIFICATIONS

The specifications listed below are based on a standard model with no options installed. Some options may change the listed specifications.

LOA (with platform & gunnel molding).....	37' 8".....	11,48 m
Beam (with gunnel molding).....	13' 0".....	3,97 m
Draft (with full fuel & water)	42".....	1,07 m
Bridge Clearance (top mast head light with full fuel & water)	12' 4".....	3,76 m
Fuel System.....	250 U.S. gallons	946 liters
Holding Tank	35 U.S. gallons.....	132 liters
Water System.....	90 U.S. gallons.....	341 liters
Weight (Dry)	18500 lbs. (Dry).....	8391 kg
Cabin Headroom	6' 5".....	1,96 m
Sleeps.....	6	

WARRANTY AND PARTS



LOAD CAPACITY

INTERNATIONAL MODEL

The certification plate is located near the helm if an International model has been purchased. The certification plate indicates the maximum weight and capacity the yacht is designed for under calm sea conditions. The number of individuals on board must be reduced if the weather is poor and water is rough.

DOMESTIC MODEL

It is the Captain's responsibility to maintain a safe capacity if a domestic model has been purchased.

Carver Yachts, LLC is a continuous improvement manufacturer. Carver may change product specifications, features, options and prices at any time including changes during the model year, without prior notification or obligation to other Carver yachts. Carver makes no warranty or representation to performance or fuel range of an individual yacht due to the many factors that may affect the performance obtained.

WARNING



WHEN LOADING THE CRAFT, NEVER EXCEED THE MAXIMUM RECOMMENDED LOAD. ALWAYS LOAD THE CRAFT CAREFULLY AND DISTRIBUTE LOADS APPROPRIATELY TO MAINTAIN DESIGN TRIM (APPROXIMATELY LEVEL). AVOID PLACING HEAVY WEIGHTS HIGH UP.

ISO STANDARDS: DESIGN SPECIFICATIONS

DESIGN CATEGORY

B

This craft is designed to operate in winds up to Beaufort force 8 and the associated wave heights (significant wave height up to 4m, see Note 1 below). such conditions may be encountered on offshore voyages of sufficient length, or on coastal waters when unsheltered from the wind and waves for several dozens of nautical miles. These conditions may also be experienced on inland seas of sufficient size for the wave height to be generated.

LENGTH OF HULL

M

MAIN DIMENSIONS: L_{MAX}

M

MAIN DIMENSIONS: B_{MAX}

M

MAX. HEIGHT (AIR DRAFT)

M

MAX. DRAFTS IN THE FULLY LOADED CONDITION

M

MASS (LIGHT CRAFT CONDITION)

KG

MASS OF CRAFT FULLY LOADED

KG

MASS OF CRAFT IN THE FULLY LOADED CONDITION

KG

TOTAL WEIGHT OF LIQUIDS, when all permanently installed tanks are full, is:

KG

MAX. NUMBER OF PERSONS

PERSONS

MAX. RECOMMENDED LOAD

KG

The maximum recommended load includes the weight of all person onboard, all provisions and personal effects, any equipment not included in the light craft mass, cargo (if any) and all consumable liquids (water, fuel, etc.).

DANGER

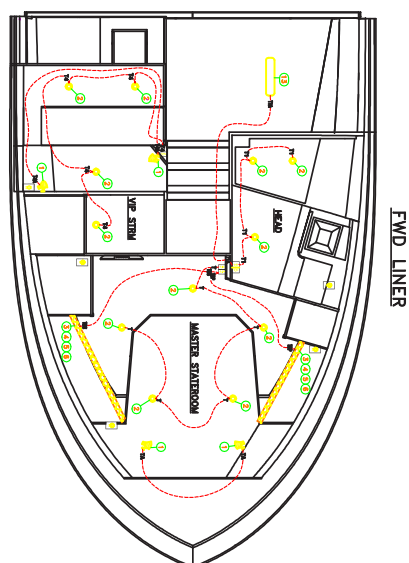
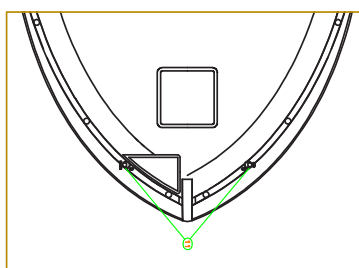
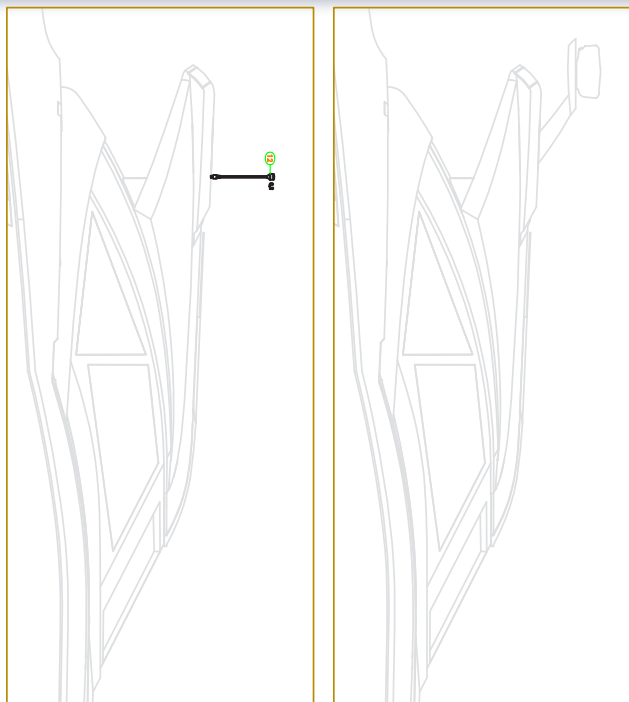
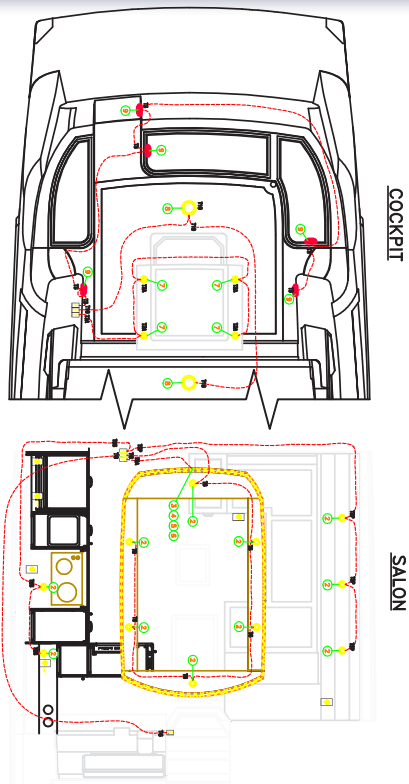


DO NOT EXCEED THE LOAD CAPACITIES STATED.

WARNING



DO NOT EXCEED THE MAXIMUM RECOMMENDED NUMBER OF PERSONS. REGARDLESS OF THE NUMBER OF PERSONS ON BOARD, THE TOTAL WEIGHT OF PERSONS AND EQUIPMENT MUST NEVER EXCEED THE MAXIMUM RECOMMENDED LOAD. ALWAYS USE THE SEATS/SEATING SPACES PROVIDED.



ITEM QTY	UNITS	PART DESCRIPTION	OPTIONS	WIRE LABEL	LOCATION	QTY
1	2	6413007	L73ARMED READING LED 12V	TPA	MASTER STRM	3537
2	2	6427004	L73ARMED READING LED 12V/24V	TPA	MASTER STRM	3538
3	2	6427005	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3539
4	2	6427006	L73ARMED LED 12/24 W/ WS	TPA	WIP STRM	3540
5	2	6427007	L73ARMED LED 12/24 W/ WS	TPA	HEAD	3541
6	2	6427008	L73ARMED LED 12/24 W/ WS	TPA,TPA,TPA	STRM	3542
7	2	6427009	L73ARMED LED 12/24 W/ WS	TPA	STRM	3543
8	2	6427010	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3544
9	2	6427011	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3545
10	2	6427012	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3546
11	2	6427013	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3547
12	2	6427014	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3548
13	2	6427015	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3549
14	2	6427016	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3550
15	2	6427017	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3551
16	2	6427018	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3552
17	2	6427019	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3553
18	2	6427020	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3554
19	2	6427021	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3555
20	2	6427022	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3556
21	2	6427023	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3557
22	2	6427024	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3558
23	2	6427025	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3559
24	2	6427026	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3560
25	2	6427027	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3561
26	2	6427028	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3562
27	2	6427029	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3563
28	2	6427030	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3564
29	2	6427031	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3565
30	2	6427032	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3566
31	2	6427033	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3567
32	2	6427034	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3568
33	2	6427035	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3569
34	2	6427036	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3570
35	2	6427037	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3571
36	2	6427038	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3572
37	2	6427039	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3573
38	2	6427040	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3574
39	2	6427041	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3575
40	2	6427042	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3576
41	2	6427043	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3577
42	2	6427044	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3578
43	2	6427045	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3579
44	2	6427046	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3580
45	2	6427047	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3581
46	2	6427048	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3582
47	2	6427049	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3583
48	2	6427050	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3584
49	2	6427051	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3585
50	2	6427052	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3586
51	2	6427053	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3587
52	2	6427054	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3588
53	2	6427055	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3589
54	2	6427056	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3590
55	2	6427057	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3591
56	2	6427058	L73ARMED LED 12/24 W/ WS	TPA	MASTER STRM	3592
57	2					

[illegible]

WARRANTY AND PARTS



TERMINAL TYPE	WIRE LABEL	COLOR	GA	LENGTH	WIRE LABEL	TERMINAL TYPE
3/8" EYE	ACC BATT	RED	2/0	1½ FT	ACC FUSE	5/16" EYE
5/16" EYE	ACC FUSE	RED	2/0	27 FT	ACC SW B	3/8" EYE
3/8" EYE	ACC BATT	YELLOW	2/0	1½ FT	A 4-STUD	3/8" EYE
3/8" EYE	A1	YELLOW	4 GA	6 IN	A1	1/4" EYE

NOTE: THERE IS A DIFFERENT LABEL FOR EACH END OF THE CABLE

P1-17SEP13-SR	PRELIMINARY RELEASE
RV-DATE-EDTR	DESCRIPTION
REVISION HISTORY	
Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.	

Drawing Title HARN:BATT CBLS HOUSE 3737			
Hull No. X4	Model 3737	Sheet 1 of 1	Rev. No. P1
TOLERANCES X.X ±0.062 X.XX ±0.031 X.XXX ±0.005 < ±30" UNLESS OTHERWISE SPECIFIED		Status: PRELIM	Drawing No. 5900428

TERMINAL TYPE	WIRE LABEL	COLOR	GA	LENGTH	WIRE LABEL	TERMINAL TYPE
5/16" EYE	S BATT	RED	2 GA	3 FT	S SWITCH	3/8" EYE
5/16" EYE	P BATT	RED	2 GA	3 FT	P SWITCH	3/8" EYE
3/8" EYE	S SWITCH	RED	2 GA	11 FT	S STARTER	5/16" EYE
3/8" EYE	P SWITCH	RED	2 GA	10 FT	P STARTER	5/16" EYE
3/8" EYE	S 4-STUD	YELLOW	2/0	10 FT	A 4-STUD	3/8" EYE
3/8" EYE	P OUTSIDE	YELLOW	2 GA	7 FT	P BATT	5/16" EYE
3/8" EYE	S OUTSIDE	YELLOW	2 GA	8 FT	S BATT	5/16" EYE
3/8" EYE	S OUTSIDE	YELLOW	2 GA	7 FT	S 4-STUD	3/8" EYE
3/8" EYE	P 4-STUD	YELLOW	2 GA	17 FT	S 4-STUD	3/8" EYE
3/8" EYE	P INSIDE	YELLOW	2 GA	7 FT	S INSIDE	3/8" EYE
3/8" EYE	P OUTSIDE	YELLOW	2 GA	12 FT	S OUTSIDE	3/8" EYE

NOTE: THERE IS A DIFFERENT LABEL FOR EACH END OF THE CABLE



Drawing Title

HARN:BATT CBLS MERC I/O

Hull No.

X4

Model

3737

Sheet

1 of 1

Rev. No.

P1

TOLERANCES

X.X ±0.062

X.XX ±0.031

X.XXX ±0.005

< ±30"

UNLESS OTHERWISE SPECIFIED

Status:

PRELIM

Drawing No.

5900429

-18OCT13-SR

PRELIMINARY RELEASE

-DATE-EDTR

DESCRIPTION

REVISION HISTORY

Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.

WARRANTY AND PARTS



TERMINAL TYPE	WIRE LABEL	COLOR	GA	LENGTH	WIRE LABEL	TERMINAL TYPE
1/4" EYE	WNDLS BRKR	RED	2/0	18 FT	WNDLS RLY	5/16" EYE
1/4" EYE	WNDLS	YELLOW	2/0	18 FT	WNDLS STUD	3/8" EYE

NOTES:

- 1) THERE IS A DIFFERENT LABEL FOR EACH END OF THE CABLE
- 2) INSTALL 2" PIECE HEATSHRINK OVER JOINT WHERE CABLE INSULATION MEETS THE CABLE TERMINAL EYE END.



Drawing Title

HARN:BATT CBL WNDLS POWER

Hull No.

X4

Model

3737

Sheet

1 of 1

Rev. No.

P1

TOLERANCES

X.X ±0.062
X.XX ±0.031
X.XXX ±0.005
< ±30'
UNLESS OTHERWISE SPECIFIED

Status:

PRELIM

Drawing No.

5900430

P1-100CT13-SR

PRELIMINARY RELEASE

RV-DATE-EDTR

DESCRIPTION

REVISION HISTORY

Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.

TERMINAL TYPE	WIRE LABEL	COLOR	GA	LENGTH	WIRE LABEL	TERMINAL TYPE
3/8" EYE	GEN SWITCH	RED	2 GA	3 FT	GEN BATT	5/16" EYE
3/8" EYE	GEN	RED	2 GA	10 FT	GEN SWITCH	3/8" EYE
3/8" EYE	GEN	YELLOW	2 GA	6 FT	P 4-STUD	3/8" EYE
3/8" EYE	GEN	YELLOW	2 GA	9 FT	GEN BATT	5/16" EYE

NOTE: THERE IS A DIFFERENT LABEL FOR EACH END OF THE CABLE



Drawing Title

HARN:BATT CBL GEN GAS I/O

Hull No.

X4

Model

3737

Sheet

1 of 1

Rev. No.

P1

TOLERANCES

X.X ±0.062

X.XX ±0.031

X.XXX ±0.005

< ±30°

UNLESS OTHERWISE SPECIFIED

Status:

PRELIM

Drawing No.

5900432

P1-18OCT13-SR

PRELIMINARY RELEASE

RV-DATE-EDTR

DESCRIPTION

REVISION HISTORY

Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.

WARRANTY AND PARTS



TERMINAL TYPE	WIRE LABEL	COLOR	GA	LENGTH	WIRE LABEL	TERMINAL TYPE
1/4" EYE	P TRIM BRKR	RED	6 GA	9 FT	P TRIM PUMP	5/16" EYE
3/8" EYE	P 4-STUD	YELLOW	6 GA	7 FT	P TRIM PUMP	5/16" EYE
1/4" EYE	S TRIM BRKR	RED	6 GA	11½ FT	S TRIM PUMP	5/16" EYE
3/8" EYE	S 4-STUD	YELLOW	6 GA	9 FT	S TRIM PUMP	5/16" EYE

NOTE: THERE IS A DIFFERENT LABEL FOR EACH END OF THE CABLE



Drawing Title

HARN:BATT CBLS TRIM PUMP

Hull No.

X4

Model

3737

Sheet

1 of 1

Rev. No.

P1

TOLERANCES

X.X ±0.062
X.XX ±0.031
X.XXX ±0.005
< ±30°
UNLESS OTHERWISE SPECIFIED

Status:

PRELIM

Drawing No.

5900433

-25OCT13-SR

PRELIMINARY RELEASE

-DATE-EDTR

DESCRIPTION

REVISION HISTORY

Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.

TERMINAL TYPE	WIRE LABEL	COLOR	GA	LENGTH	WIRE LABEL	TERMINAL TYPE
NONE	C4	YELLOW	4 GA	2½ FT	A 4-STUD	3/8" EYE
1/4" EYE	C4 CASE	YELLOW	6 GA	2½ FT	A 4-STUD	3/8" EYE
NONE	C4	RED	4 GA	2 FT	C4 H BRKR	1/4" EYE
NONE	C1	RED	4 GA	6½ FT	C1 P BRKR	1/4" EYE
NONE	C2	RED	4 GA	2 FT	C2 S BRKR	1/4" EYE
1/4" EYE	C4 H BRKR	RED	4 GA	3 FT	C4 H BATT	3/8" EYE
3/8" EYE	P ISO INPUT 1	RED	4 GA	11 FT	P ALT	1/4" EYE
3/8" EYE	S ISO INPUT 2	RED	4 GA	8 FT	S ALT	1/4" EYE
3/8" EYE	P ISO ENG 1	RED	4 GA	8 FT	P ISO BRKR	1/4" EYE
3/8" EYE	S ISO ENG 2	RED	4 GA	3 FT	S ISO BRKR	1/4" EYE
3/8" EYE	H ISO 3	RED	4 GA	3 FT	H ISO BRKR	1/4" EYE
#10 EYE	ISO GRD	YELLOW	14 GA	3½ FT	ISO GRD	#10 EYE
#10 EYE	P ISO IGN 1	PURPLE	16 GA	35 FT	P IGN	NONE
#10 EYE	S ISO IGN 2	PURPLE	16 GA	35 FT	S IGN	NONE

NOTE: THERE IS A DIFFERENT LABEL FOR EACH END OF THE CABLE



Drawing Title

HARN:BATT CBLS CHRGR I/O

Hull No.

X4

Model

3737

Sheet

1 of 1

Rev. No.

P1

TOLERANCES

X.X ±0.062
X.XX ±0.031
X.XXX ±0.005
< ±30°
UNLESS OTHERWISE SPECIFIED

Status:

PRELIM

Drawing No.

5900434

-25OCT13-SR

PRELIMINARY RELEASE

-DATE-EDTR

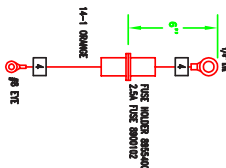
DESCRIPTION

REVISION HISTORY

Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.

CARVER

Diagram showing the wiring for a 9 Pin Socket to a Plug L7. The socket pins are numbered 1-9. The plug wires are color-coded: ORANGE (pins 1, 2, 3, 4), YELLOW (pins 5, 6, 7), ORANGE (pin 8), YELLOW (pin 9), and PURPLE (pin 10). The plug L7 is shown with pins 1-9. The wiring is as follows: Socket 1 to Plug 1 (ORANGE), Socket 2 to Plug 2 (ORANGE), Socket 3 to Plug 3 (ORANGE), Socket 4 to Plug 4 (ORANGE), Socket 5 to Plug 5 (YELLOW), Socket 6 to Plug 6 (YELLOW), Socket 7 to Plug 7 (YELLOW), Socket 8 to Plug 8 (ORANGE), and Socket 9 to Plug 9 (YELLOW).



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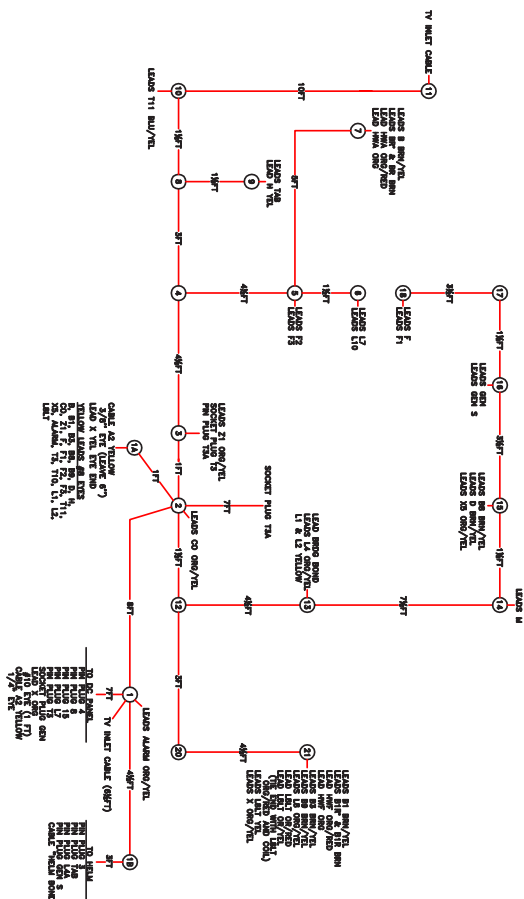
NAME	SEX	UNIT	GRADE	DOB	UNIT	DATE	TIME
JOHN SMITH	M	1	1				
JANE SMITH	F	1	1				
JOHN SMITH	M	2	1-1	01/01/50	01/01/50	01/01/50	01/01/50
JANE SMITH	F	2	1-1	01/01/50	01/01/50	01/01/50	01/01/50
JOHN SMITH	M	3	1-1	01/01/50	01/01/50	01/01/50	01/01/50
JANE SMITH	F	3	1-1	01/01/50	01/01/50	01/01/50	01/01/50
JOHN SMITH	M	4	1-1	01/01/50	01/01/50	01/01/50	01/01/50
JANE SMITH	F	4	1-1	01/01/50	01/01/50	01/01/50	01/01/50
JOHN SMITH	M	5	1-1	01/01/50	01/01/50	01/01/50	01/01/50
JANE SMITH	F	5	1-1	01/01/50	01/01/50	01/01/50	01/01/50
JOHN SMITH	M	6	1-1	01/01/50	01/01/50	01/01/50	01/01/50
JANE SMITH	F	6	1-1	01/01/50	01/01/50	01/01/50	01/01/50
JOHN SMITH	M	7	1-1	01/01/50	01/01/50	01/01/50	01/01/50
JANE SMITH	F	7	1-1	01/01/50	01/01/50	01/01/50	01/01/50
JOHN SMITH	M	8	1-1	01/01/50	01/01/50	01/01/50	01/01/50
JANE SMITH	F	8	1-1	01/01/50	01/01/50	01/01/50	01/01/50
JOHN SMITH	M	9	1-1	01/01/50	01/01/50	01/01/50	01/01/50
JANE SMITH	F	9	1-1	01/01/50	01/01/50	01/01/50	01/01/50
JOHN SMITH	M	10	1-1	01/01/50	01/01/50	01/01/50	01/01/50
JANE SMITH	F	10	1-1	01/01/50	01/01/50	01/01/50	01/01/50

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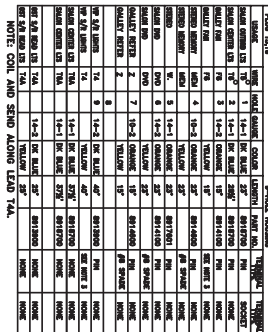
NAME	AGE	RELIGION	COLOUR	STATUS	SEX	AGE	RELIGION	COLOUR	STATUS	SEX
1. A. J. J. J.	1	1-1-1	SPERM	SP	MALE	1	1-1-1	SPERM	SP	MALE
2. A. J. J. J.	2	1-1-1	SPERM	SP	MALE	2	1-1-1	SPERM	SP	MALE
3. A. J. J. J.	3	1-1-1	SPERM	SP	MALE	3	1-1-1	SPERM	SP	MALE
4. A. J. J. J.	4	1-1-1	SPERM	SP	MALE	4	1-1-1	SPERM	SP	MALE
5. A. J. J. J.	5	1-1-1	SPERM	SP	MALE	5	1-1-1	SPERM	SP	MALE
6. A. J. J. J.	6	1-1-1	SPERM	SP	MALE	6	1-1-1	SPERM	SP	MALE
7. A. J. J. J.	7	1-1-1	SPERM	SP	MALE	7	1-1-1	SPERM	SP	MALE
8. A. J. J. J.	8	1-1-1	SPERM	SP	MALE	8	1-1-1	SPERM	SP	MALE
9. A. J. J. J.	9	1-1-1	SPERM	SP	MALE	9	1-1-1	SPERM	SP	MALE
10. A. J. J. J.	10	1-1-1	SPERM	SP	MALE	10	1-1-1	SPERM	SP	MALE
11. A. J. J. J.	11	1-1-1	SPERM	SP	MALE	11	1-1-1	SPERM	SP	MALE
12. A. J. J. J.	12	1-1-1	SPERM	SP	MALE	12	1-1-1	SPERM	SP	MALE
13. A. J. J. J.	13	1-1-1	SPERM	SP	MALE	13	1-1-1	SPERM	SP	MALE
14. A. J. J. J.	14	1-1-1	SPERM	SP	MALE	14	1-1-1	SPERM	SP	MALE
15. A. J. J. J.	15	1-1-1	SPERM	SP	MALE	15	1-1-1	SPERM	SP	MALE
16. A. J. J. J.	16	1-1-1	SPERM	SP	MALE	16	1-1-1	SPERM	SP	MALE
17. A. J. J. J.	17	1-1-1	SPERM	SP	MALE	17	1-1-1	SPERM	SP	MALE
18. A. J. J. J.	18	1-1-1	SPERM	SP	MALE	18	1-1-1	SPERM	SP	MALE
19. A. J. J. J.	19	1-1-1	SPERM	SP	MALE	19	1-1-1	SPERM	SP	MALE
20. A. J. J. J.	20	1-1-1	SPERM	SP	MALE	20	1-1-1	SPERM	SP	MALE
21. A. J. J. J.	21	1-1-1	SPERM	SP	MALE	21	1-1-1	SPERM	SP	MALE
22. A. J. J. J.	22	1-1-1	SPERM	SP	MALE	22	1-1-1	SPERM	SP	MALE
23. A. J. J. J.	23	1-1-1	SPERM	SP	MALE	23	1-1-1	SPERM	SP	MALE
24. A. J. J. J.	24	1-1-1	SPERM	SP	MALE	24	1-1-1	SPERM	SP	MALE
25. A. J. J. J.	25	1-1-1	SPERM	SP	MALE	25	1-1-1	SPERM	SP	MALE
26. A. J. J. J.	26	1-1-1	SPERM	SP	MALE	26	1-1-1	SPERM	SP	MALE
27. A. J. J. J.	27	1-1-1	SPERM	SP	MALE	27	1-1-1	SPERM	SP	MALE
28. A. J. J. J.	28	1-1-1	SPERM	SP	MALE	28	1-1-1	SPERM	SP	MALE
29. A. J. J. J.	29	1-1-1	SPERM	SP	MALE	29	1-1-1	SPERM	SP	MALE
30. A. J. J. J.	30	1-1-1	SPERM	SP	MALE	30	1-1-1	SPERM	SP	MALE
31. A. J. J. J.	31	1-1-1	SPERM	SP	MALE	31	1-1-1	SPERM	SP	MALE
32. A. J. J. J.	32	1-1-1	SPERM	SP	MALE	32	1-1-1	SPERM	SP	MALE
33. A. J. J. J.	33	1-1-1	SPERM	SP	MALE	33	1-1-1	SPERM	SP	MALE
34. A. J. J. J.	34	1-1-1	SPERM	SP	MALE	34	1-1-1	SPERM	SP	MALE
35. A. J. J. J.	35	1-1-1	SPERM	SP	MALE	35	1-1-1	SPERM	SP	MALE
36. A. J. J. J.	36	1-1-1	SPERM	SP	MALE	36	1-1-1	SPERM	SP	MALE
37. A. J. J. J.	37	1-1-1	SPERM	SP	MALE	37	1-1-1	SPERM	SP	MALE
38. A. J. J. J.	38	1-1-1	SPERM	SP	MALE	38	1-1-1	SPERM	SP	MALE
39. A. J. J. J.	39	1-1-1	SPERM	SP	MALE	39	1-1-1	SPERM	SP	MALE
40. A. J. J. J.	40	1-1-1	SPERM	SP	MALE	40	1-1-1	SPERM	SP	MALE
41. A. J. J. J.	41	1-1-1	SPERM	SP	MALE	41	1-1-1	SPERM	SP	MALE
42. A. J. J. J.	42	1-1-1	SPERM	SP	MALE	42	1-1-1	SPERM	SP	MALE

FLOOR LBS		STOCK ROOM		THERMAL		TEMP	
SEAL	100	0.00	0.00	1.00	1.00	1.00	1.00
CRT GRID L3	13	1-4	PK BLK	1"	BOCKET	PM	
	5						
CRT GRID L2	13	1	YELLOW	1"	BOCKET	PM	
	5						

PLUG TO	SOCKET	WIRE	WIRE
7	8	1	2
8	9	2	3
9		3	4
		4	5
		5	6
		6	7

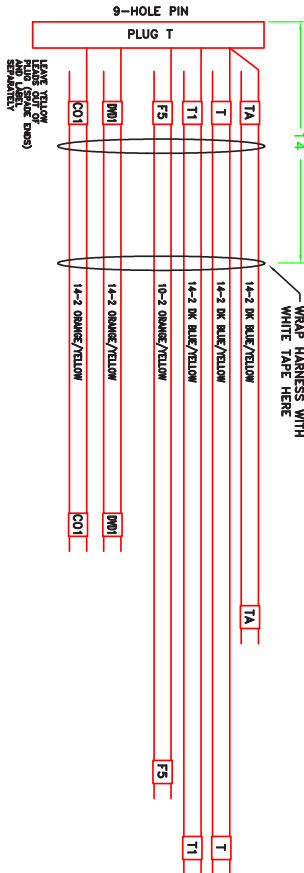
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4-HOLE SOCKET HOUSING			
PLUS SIZE			
WIRE	HOUL	GALVER	COLOR
SIZE	3	10-1	RED
SIZE	8	10-1	BROWN
SIZE	8	10-1	BLACK
	8		

[illegible]133

PLUG T	WIRE	HOLE GAUGE	COLOR	LENGTH	PART NO.	TERMINAL TYPE	TERMINAL
V/B LIGHTS	T	1	14-2 DK BLUE	79"	8913900	PIN	NONE
V/B READING LITS	TA	14-2	DK BLUE	44"	8913900		NONE
V/B LIGHTS	T		YELLOW	79"		#8 SPADE	NONE
V/B READING LITS	TA		YELLOW	44"			NONE
HEAD LIGHTS	T1	2	14-2 DK BLUE	69"	8913900	PIN	NONE
HEAD LIGHTS	T1		YELLOW	69"		SEE NOTE 1	NONE
HEAD FAN	F5	4	10-2 ORANGE	62"	8914600	PIN	NONE
HEAD FAN	F5		YELLOW	62"		#8 SPADE	NONE
V/B DVD	DVD1	5	14-2 ORANGE	26"	8914100	PIN	NONE
V/B DVD	DVD1		YELLOW	26"		#8 SPADE	NONE
PMD CO DETECTORS	CO1	7	14-2 ORANGE	36"	8914100	PIN	NONE
PMD CO DETECTORS	CO1		YELLOW	36"		SEE NOTE 1	NONE
		8					
		9					

NOTES:
1) YELLOW LEADS T1 AND CO1 GO INTO ONE #8 SPADE.

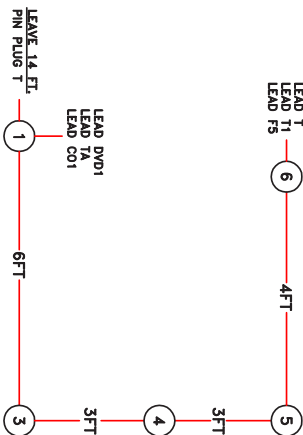


STORAGE LIGHT	WIRE	HOLE GAUGE	COLOR	LENGTH	PART NO.	TERMINAL TYPE	TERMINAL
STORAGE LIGHT	T1A	14-2	DK BLUE	25"	8913900	NONE	NONE
STORAGE LIGHT	T1A		YELLOW	29"		NONE	NONE

NOTE: COIL AND SEND LEAD T1A WITH HARNESS.

WASTE TANK 3/4 FULL LIGHT	WIRE	HOLE GAUGE	COLOR	LENGTH	PART NO.	TERMINAL TYPE	TERMINAL
3/4 FULL LIGHT	L8LT	14-2	ORANGE	10"	8914100	NONE	NONE
3/4 FULL LIGHT	L8LT		YELLOW	10"		NONE	NONE

NOTE: COIL AND SEND LEAD L8LT WITH HARNESS.



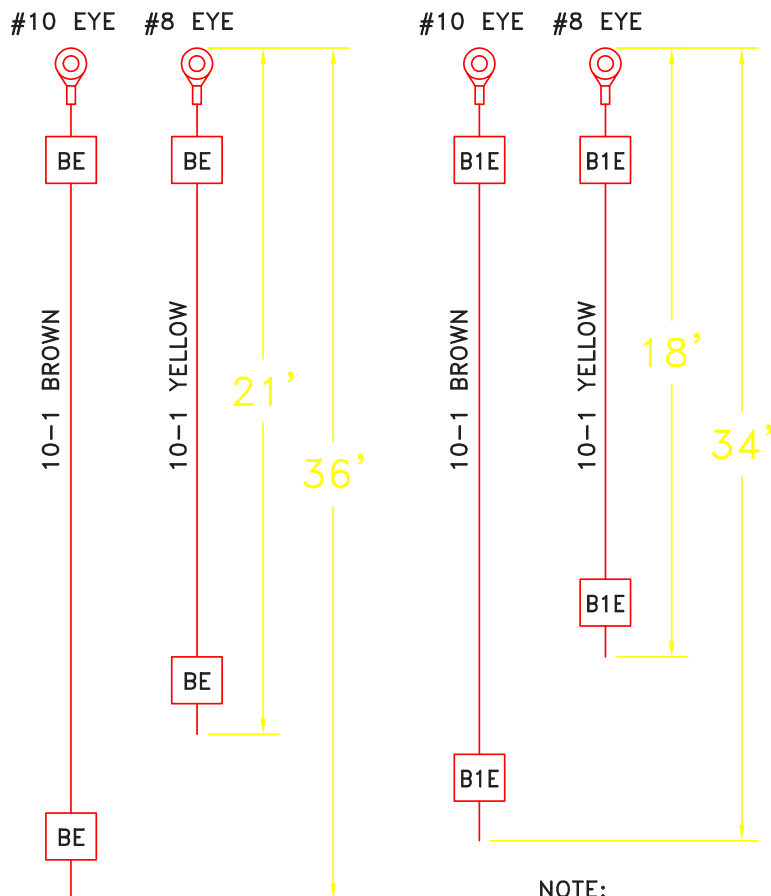
DRAWING NUMBER	DRAWING TITLE
X4321002	SYSTEM FWD LINER WIRING

P2-02DEC13-SR	X4002	PRELIMINARY RELEASE
P1-02OCT13-SR		PRELIMINARY RELEASE
RV-DATE-EDIR		REVISION HISTORY
MODEL	OPTION	QTY
3737	STD	1
		321
Spec'ifications cannot be changed without the approval of the Engineering Dept. All components must be suitable for marine environment. Use prohibited without approval of the Engineering Dept. DATE: 02/02/2014 X4321002 X4321002 X4321002 Model: 3737 Status: PRELIM Drawing No.: 6897813		
Drawing Title: HARN:FWD LINER 3737		
Sheet: 1 of 1 Rev. No.: P2		

CARVER

[illegible][illegible]

EMERGENCY BILGE PUMP LEADS							
USAGE	WIRE	GA.	COLOR	LENGTH	PART NO.	TERMINAL TYPE	TERMINAL TYPE
AFT EMER PUMP	BE	10-1	BROWN	36'	8932000	#10 EYE	NONE
AFT EMER PUMP	BE	10-1	YELLOW	21'	8931801	#8 EYE	NONE
FWD EMER PUMP	B1E	10-1	BROWN	34'	8932000	#10 EYE	NONE
FWD EMER PUMP	B1E	10-1	YELLOW	18'	8931801	#8 EYE	NONE



NOTE:
1) LABEL WIRES AS SHOWN



Drawing Title
HARN:EMERGENCY BILGE PUMP

Hull No.
X4

Model
3737

Sheet
1 of 1

Rev. No.
P1

TOLERANCES

X.X ±0.062
X.XX ±0.031
X.XXX ±0.005
< ±30'
UNLESS OTHERWISE SPECIFIED

Status:
PRELIM

Drawing No.
6897819

P1-26SEP13-SR

PRELIMINARY RELEASE

RV-DATE-EDTR

DESCRIPTION

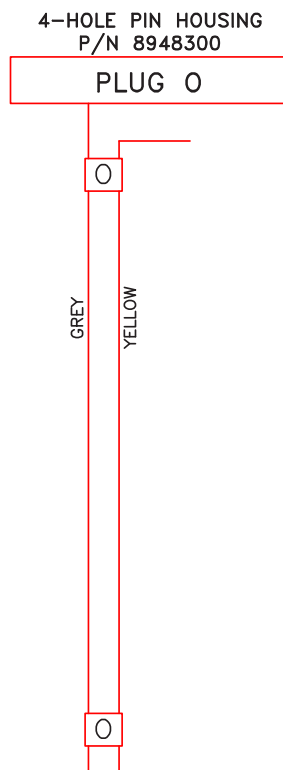
REVISION HISTORY

Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.

WARRANTY AND PARTS



PLUG 0					4-HOLE PIN HOUSING			
USAGE	WIRE	HOLE	GA.	COLOR	LENGTH	PART NO.	TERMINAL TYPE	TERMINAL TYPE
SIDE LIGHTS	0	3	14-2	GREY	25'	8914000	PIN	NONE
SIDE LIGHTS	0			YELLOW	25'		NONE	NONE



NOTES:

- 1) LABEL PLUGS AND WIRES AS SHOWN.



Drawing Title
HARN:SIDE NAV LTS

Hull No.
X4

Model
3737

Sheet
1 of 1

Rev. No.
P1

TOLERANCES

X.X ±0.062
X.XX ±0.031
X.XXX ±0.005
< ±30'
UNLESS OTHERWISE SPECIFIED

Status:
PRELIM

Drawing No.
6897820

P1-030CT13-SR

PRELIMINARY RELEASE

RV-DATE-EDTR

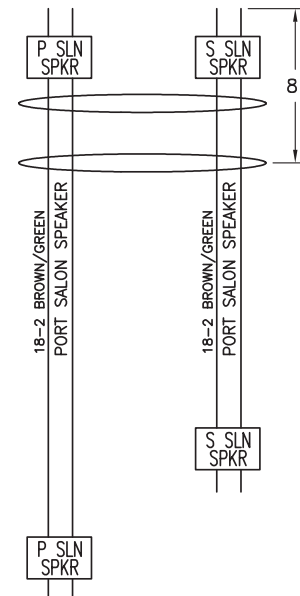
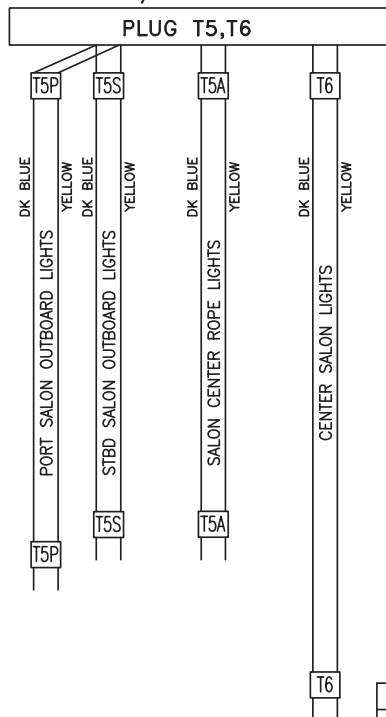
DESCRIPTION

REVISION HISTORY

Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.

PLUG T5,T6				4-HOLE PIN HOUSING			
USAGE	WIRE	HOLE	GA.	COLOR	LENGTH	PART NO.	TERMINAL TYPE
P SLN OUTBD LTS	T5P	1	14-2	DK BLUE	35'	8913900	PIN
S SLN OUTBD LTS	T5S		14-2	DK BLUE	25'	8913900	
P SLN OUTBD LTS	T5P	2		YELLOW	35'		PIN
S SLN OUTBD LTS	T5S			YELLOW	25'		
SALON ROPE LTS	T5A	3	14-2	DK BLUE	23'	8913900	PIN
SALON ROPE LTS	T5A	4		YELLOW	23'		PIN
SLN CENTER LTS	T6	5	14-2	DK BLUE	50'	8913900	PIN
SLN CENTER LTS	T6	6		YELLOW	50'		PIN

9-HOLE PIN HOUSING
P/N 8948500



SALON SPEAKER LEADS							
USAGE	WIRE	GA.	COLOR	LENGTH	PART NO.	TERMINAL TYPE	TERMINAL TYPE
P SALON SPKR	P SLN SPKR	18-2	BROWN	26'	8909900	NONE	NONE
P SALON SPKR	P SLN SPKR		GREEN	26'		NONE	NONE
S SALON SPKR	S SLN SPKR	18-2	BROWN	20'	8909900	NONE	NONE
S SALON SPKR	S SLN SPKR		GREEN	20'		NONE	NONE

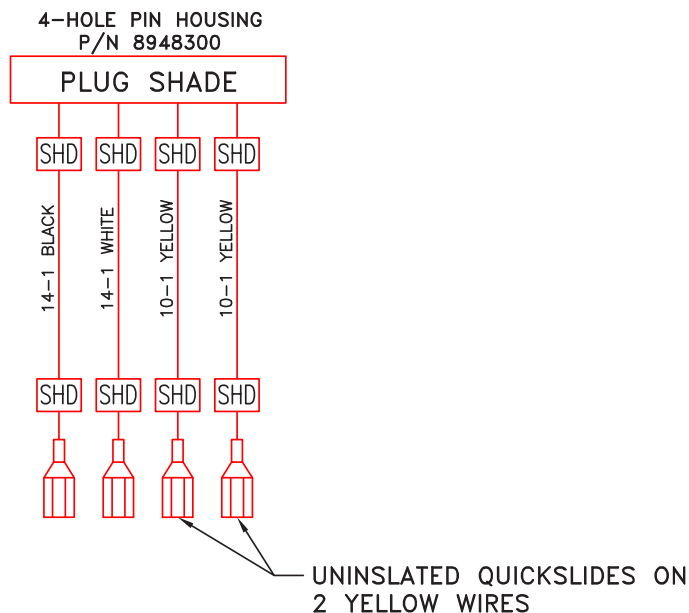
NOTES:

- 1) LABEL PLUGS AND WIRES AS SHOWN.

WARRANTY AND PARTS



PLUG SHADE				4-HOLE PIN HOUSING				
USAGE	WIRE	HOLE	GA.	COLOR	LENGTH	PART NO.	TERMINAL TYPE	TERMINAL TYPE
SHADE SW FWD	SHD	3	14-1	BLACK	8"	8917700	PIN	QUICKSLIDE
SHADE SW REV	SHD	5	14-1	WHITE	8"	8915200	PIN	QUICKSLIDE
SHADE GROUND	SHD	6	10-1	YELLOW	8"	8931801	PIN	QUICKSLIDE
SHADE GROUND	SHD	8	10-1	YELLOW	8"	8931801	PIN	QUICKSLIDE



NOTES:

- 1) LABEL PLUGS AND WIRES AS SHOWN.



Drawing Title

HARN:CKPT SHADE PLUG 3737

Hull No.

X4

Model

3737

Sheet

1 of 1

Rev. No.

P1

TOLERANCES

X.X ±0.062

X.XX ±0.031

X.XXX ±0.005

< ±30'

UNLESS OTHERWISE SPECIFIED

Status:

PRELIM

Drawing No.

6897823

P1-08OCT13-SR

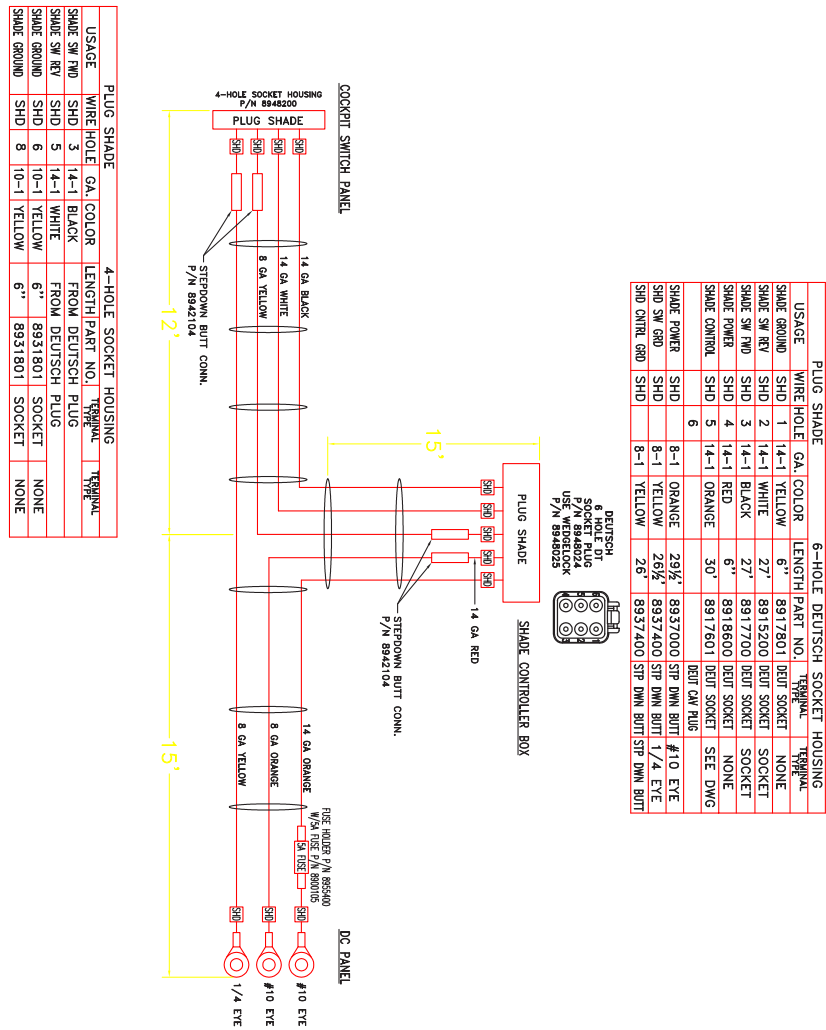
PRELIMINARY RELEASE

RV-DATE-EDTR

DESCRIPTION

REVISION HISTORY

Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.



P1-080CT13-SR		PRELIMINARY RELEASE	
RV-DATE-EDTR		DESCRIPTION	
MODELS & OPTIONS		REVISION HISTORY	
MODEL	OPTION	QTY	CMC
3737	STD	1	321
Drawing Title			
HARN:CKPT SHADE 3737			
Hull No.	Model	Sheet	Rev. No.
X4	3737	1 of 1	P1
TOLERANCES		Status:	
XX .±0.02 XXX .±0.05 XXX .±0.10 UNLESS OTHERWISE SPECIFIED		PRELIM Drawing No. 6897824	

Specifications cannot be changed without the written approval of the Carrier Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carrier Yachts.

WARRANTY AND PARTS

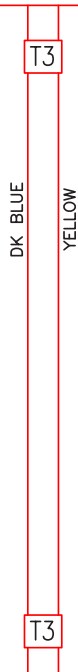


PLUG T3				4-HOLE PIN HOUSING				
USAGE	WIRE	HOLE	GA.	COLOR	LENGTH	PART NO.	TERMINAL TYPE	TERMINAL TYPE
CKPT LTS	T3	3	14-2	DK BLUE	35'	8913900	PIN	NONE
		5						
CKPT LTS	T3	6		YELLOW	35'		PIN	NONE
		8						

4-HOLE PIN HOUSING
P/N 8948300

PLUG T3

(COCKPIT SW PANEL)



NOTES:

- 1) LABEL PLUGS AND WIRES AS SHOWN.



Drawing Title

HARN:CKPT LTS 3737

Hull No.

X4

Model

3737

Sheet

1 of 1

Rev. No.

P1

TOLERANCES

X.X ±0.062
X.XX ±0.031
X.XXX ±0.005
< ±30'
UNLESS OTHERWISE
SPECIFIED

Status:

PRELIM

Drawing No.

6897826

P1-300CT13-SR

PRELIMINARY RELEASE

RV-DATE-EDTR

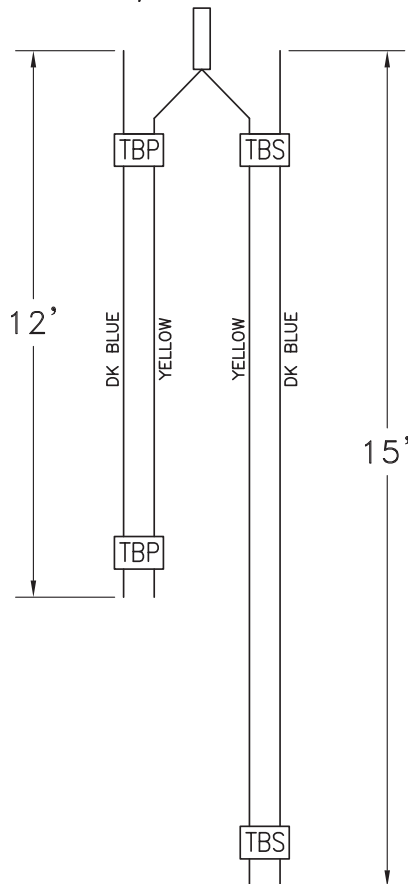
DESCRIPTION

REVISION HISTORY

Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.

V-BERTH ROPE LIGHT LEADS					
USAGE	WIRE	GA.	COLOR	LENGTH	PART NO.
P V/B ROPE LTS	TBP	14-2	DK BLUE/YELLOW	12'	8913900
S V/B ROPE LTS	TBS	14-2	DK BLUE/YELLOW	15'	8913900

YELLOW BUTT CONN.
P/N 8942001



NOTES:

- 1) LABEL PLUGS AND WIRES AS SHOWN.



Drawing Title

HARN:V-BERTH ROPE LTS C7

Hull No.

X4

Model

3737

Sheet

1 of 1

Rev. No.

P1

TOLERANCES

X.X ±0.062
X.XX ±0.031
X.XXX ±0.005
< ±30°
UNLESS OTHERWISE
SPECIFIED

Status:

PRELIM

Drawing No.

6897827

P1-01NOV13-SR

PRELIMINARY RELEASE

RV-DATE-EDTR

DESCRIPTION

REVISION HISTORY

Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.

WARRANTY AND PARTS



USAGE	CIRCUIT NUMBER	MINIMUM WIRE GA.	CABLE LENGTH	TERMINAL TYPE	TERMINAL TYPE	WIRE PART NUMBER
TV FWD GLLY TO AFT P V/B	2B	12-3	40'	NONE	NONE	8929900
AFT P V/B TO HEAD	2C	12-3	5½'	NONE	NONE	8929900
HEAD TO FWD DINETTE	2D	12-3	22'	NONE	NONE	8929900
FWD TO AFT DINETTE	2E	12-3	15'	NONE	NONE	8929900
GST S/R TO V/B TV	3C	12-3	10'	NONE	NONE	8929900
V/B TV TO FWD S V/B	3D	12-3	16'	NONE	NONE	8929900

NOTE:
1) LABEL WIRES AS INDICATED.



Drawing Title

HARN:FWD LINER AC JUMPERS

Hull No.

X4

Model

3737

Sheet

1 of 1

Rev. No.

P1

TOLERANCES

X.X ±0.062

X.XX ±0.031

X.XXX ±0.005

< ±30°

UNLESS OTHERWISE SPECIFIED

Status:

PRELIM

Drawing No.

6897828

P1-01NOV13-SR

PRELIMINARY RELEASE

RV-DATE-EDTR

DESCRIPTION

REVISION HISTORY

Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.

PLUG 12					9-HOLE PIN HOUSING			
USAGE	WIRE	HOLE	GA.	COLOR	LENGTH	PART NO.	TERMINAL TYPE	TERMINAL TYPE
		1						
		2						
MAST LIGHT	Q	3	14-2	GREY	15'	8914000	PIN	NONE
ANCHOR LT	R	4	14-2	GREY	15'	8914000	PIN	NONE
		5						
MAST LIGHT	Q	6		YELLOW	15'		PIN	NONE
ANCHOR LT	R	7		YELLOW	15'		PIN	NONE
HORN	K	8	10-2	ORANGE	15'	8914600	PIN	NONE
HORN	K	9		YELLOW	15'		PIN	NONE

9-HOLE PIN HOUSING
P/N 8948500



NOTES:

- 1) LABEL PLUGS AND WIRES AS SHOWN.



Drawing Title

HARN:NAV LTS 3737

Hull No.

X4

Model

3737

Sheet

1 of 1

Rev. No.

P1

TOLERANCES

X.X ±0.062
X.XX ±0.031
X.XXX ±0.005
< ±30°
UNLESS OTHERWISE SPECIFIED

Status:

PRELIM

Drawing No.

6897838

P1-05DEC13-SR

PRELIMINARY RELEASE

RV-DATE-EDTR

DESCRIPTION

REVISION HISTORY

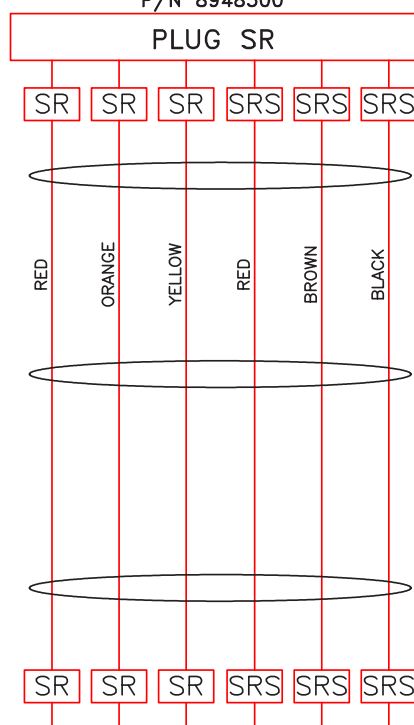
Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.

WARRANTY AND PARTS



PLUG SR						9-HOLE PIN HOUSING		
USAGE	WIRE	HOLE	GA.	COLOR	LENGTH	PART NO.	TERMINAL TYPE	TERMINAL TYPE
SUNROOF PWR	SR	1	10-1	RED	20'	8932101	PIN	NONE
SUNROOF PWR	SR	2	10-1	ORANGE	20'	8931601	PIN	NONE
SUNROOF GRD	SR	3	10-1	YELLOW	20'	8931801	PIN	NONE
SUNROOF CLOSE	SRS	4	10-1	RED	20'	8932101	PIN	NONE
SUNROOF OPEN	SRS	5	10-1	BROWN	20'	8932000	PIN	NONE
SUNROOF SWITCH	SRS	6	10-1	BLACK	20'	8931001	PIN	NONE
		7						
		8						
		9						

9-HOLE PIN HOUSING
P/N 8948500



NOTES:

- 1) LABEL PLUGS AND WIRES AS SHOWN.



Drawing Title

HARN:SUNROOF 3737

Hull No.

X4

Model

3737

Sheet

1 of 1

Rev. No.

P1

TOLERANCES

X.X ±0.062
X.XX ±0.031
X.XXX ±0.005
< ±30'
UNLESS OTHERWISE
SPECIFIED

Status:

PRELIM

Drawing No.

6897839

P1-05DEC13-SR

PRELIMINARY RELEASE

RV-DATE-EDTR

DESCRIPTION

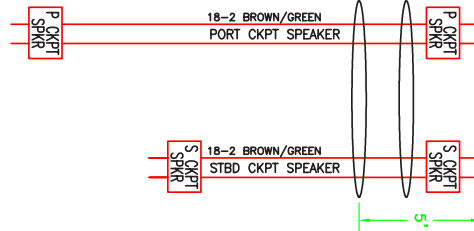
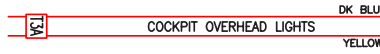
REVISION HISTORY

Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.

PLUG T3A				4-HOLE PIN HOUSING			
USAGE	WIRE	HOLE GA.	COLOR	LENGTH	PART NO.	TERMINAL TYPE	TERMINAL TYPE
CKPT OVRHD LTS T3A	T3A	3	14-2 DK BLUE	26"	8913900	PIN	NONE
CKPT OVRHD LTS T3A		5					
CKPT OVRHD LTS T3A		6	YELLOW	26"		PIN	NONE
CKPT OVRHD LTS T3A		8					

4-HOLE PIN HOUSING
P/N 8948300

PLUG T3A



COCKPIT SPEAKER LEADS							
USAGE	WIRE	GA.	COLOR	LENGTH	PART NO.	TERMINAL TYPE	TERMINAL TYPE
P CKPT SPKR	P CKPT SPKR	18-2	BROWN	21"	8909900	NONE	NONE
P CKPT SPKR	P CKPT SPKR		GREEN	21"		NONE	NONE
S CKPT SPKR	S CKPT SPKR	18-2	BROWN	9"	8909900	NONE	NONE
S CKPT SPKR	S CKPT SPKR		GREEN	9"		NONE	NONE

NOTES:
1) LABEL PLUGS AND WIRES AS SHOWN.

P1-12DEC13-SR		PRELIMINARY RELEASE	
RV-DATE-EDITR		DESCRIPTION	
MODELS & OPTIONS		REVISION HISTORY	
MODEL	OPTION	QTY	CMC
3737	STD	1	321
 Carver Yachts			
Drawing Title			
HARN:CKPT OVRHD LT & SPKR			
Hull No.	Model	Sheet	Rev No.
X4	3737	1 of 1	P1
Status:		Drawing No.	
PRELIM		6897840	
TOLERANCES: XXX .0002 XXX .0005 XXX .0010 UNLESS OTHERWISE SPECIFIED			

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WARRANTY AND PARTS



USAGE	WIRE P/N	LENGTH	LABEL	TERMINAL TYPE	TERMINAL TYPE
SALON TV SPLITTER/ V-BERTH TV	RG/6 8909802	20 FT	V/B TV	F59	F59



Drawing Title

HARN:V-BERTH TV ANT CBL

Hull No.

X4

Model

3737

Sheet

1 of 1

Rev. No.

P1

TOLERANCES

X.X ±0.062
X.XX ±0.031
X.XXX ±0.005
< ±30'

UNLESS OTHERWISE
SPECIFIED

Status:

PRELIM

Drawing No.

6960761

P1-100CT13-SR

PRELIMINARY RELEASE

RV-DATE-EDTR

DESCRIPTION

REVISION HISTORY

Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.

COAX CABLES						
USAGE	WIRE P/N	LENGTH	LABEL	LABEL	TERMINAL TYPE	TERMINAL TYPE
SALON TV SPLITTER	RG/6 8909802	21 FT	SLN TV	SLN TV	F59	F59
A/B SWITCH TO SALON SPLITTER	RG/6 8909802	3 FT	A/B SW	A/B SW	F59	F59



Drawing Title

HARN:SLN TV CBLS 3737

Hull No.

X4

Model

3737

Sheet

1 of 1

Rev. No.

P1

TOLERANCES

X.X ±0.062

X.XX ±0.031

X.XXX ±0.005

< ±30'

UNLESS OTHERWISE
SPECIFIED

Status:

PRELIM

Drawing No.

6960762

P1-17OCT13-SR

PRELIMINARY RELEASE

RV-DATE-EDTR

DESCRIPTION

REVISION HISTORY

Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.

WARRANTY AND PARTS



COAX CABLES						
USAGE	WIRE P/N	LENGTH	LABEL	LABEL	TERMINAL TYPE	TERMINAL TYPE
TV ANTENNA	RG/6 8909802	30 FT	TV ANT	TV ANT	F59	F59



Drawing Title

HARN:TV ANTENNA CBL 3737

Hull No.

X7

Model

3737

Sheet

1 of 1

Rev. No.

P1

TOLERANCES

X.X ±0.062
X.XX ±0.031
X.XXX ±0.005
< ±30'

UNLESS OTHERWISE
SPECIFIED

Status:

PRELIM

Drawing No.

6960763

P1-170CT13-SR

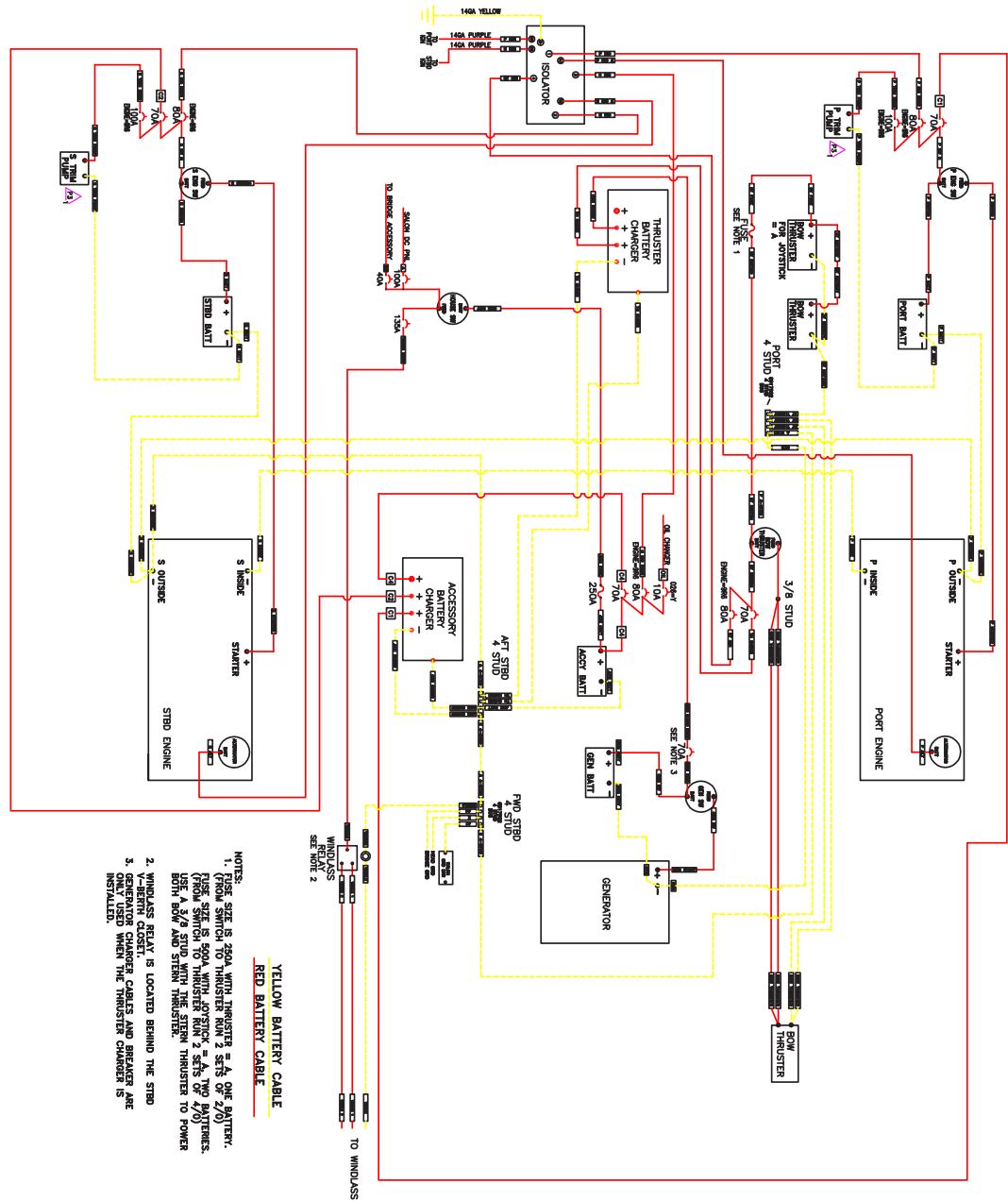
PRELIMINARY RELEASE

RV-DATE-EDTR

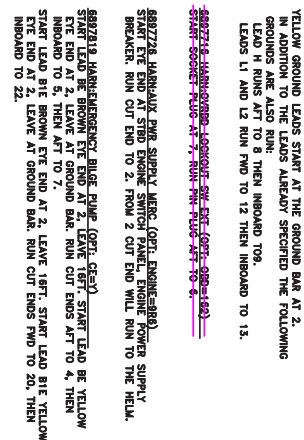
DESCRIPTION

REVISION HISTORY

Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.



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151151

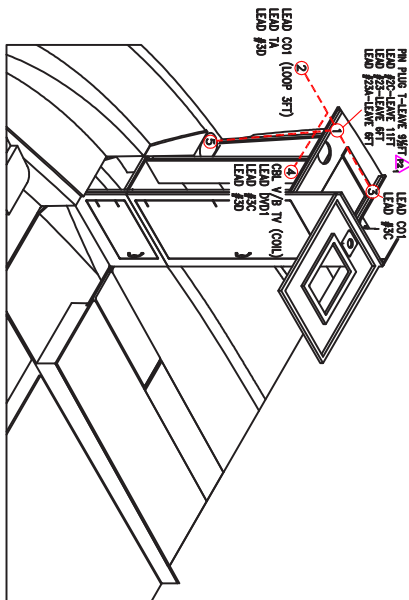
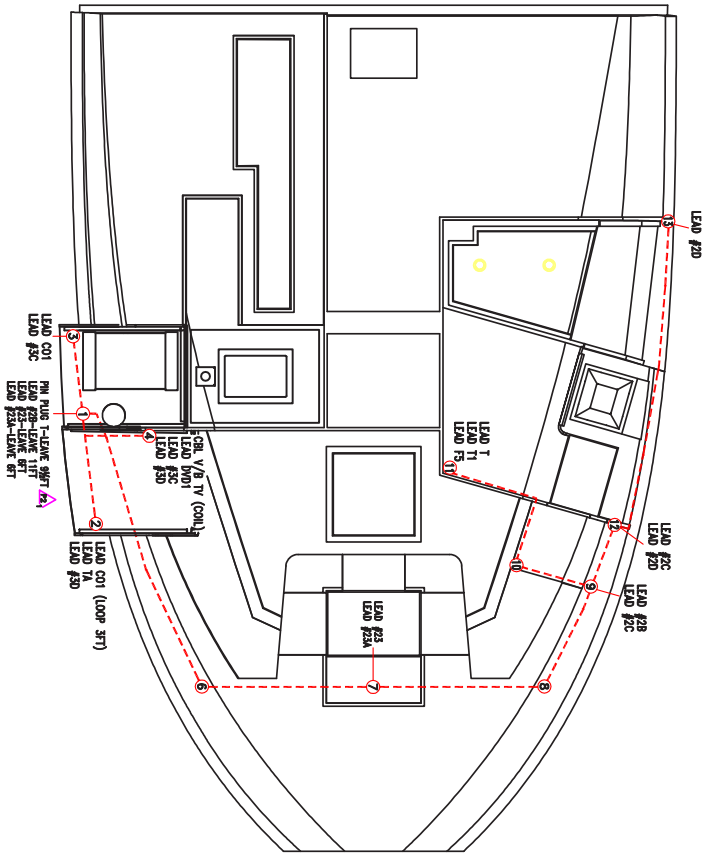
6892813 HARBOR LINER
START RUN PLUG TV THE HOLE AT 1. (TOP OF VIP CLOSET) LEAVE 9'6". LEAVE LEADS 1A
RUN LEADS 1A FWD AND LEAVE AT 2.
RUN LEADS CO1 FWD TO 2. LOOP 3FT AT THE V/B CLOSET THEN RUN AFT TO 3 AND LEAVE.
RUN LEADS DVD1 TO 4.
RUN LEADS 1, 11, AND F5 FWD DOWN TO 5, THEN FWD TO 6, THEN OVER TO 8, THEN
AFT TO 9, THEN UP AND INBOARD TO 10. AT 10, RUN UP TO TOP OF CLOSET, THEN
RUN ALONG THE TOP AND THEN INBOARD TO 7 AND DOWN TO THE SWITCHES.

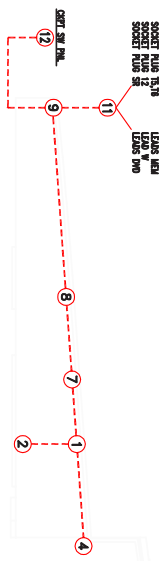
6892897 HARBOR LINER AC JUMPER
START LEAD 2B AT 1. LEAVE 11FT. THEN RUN DOWN TO 5, THEN FWD TO 6
THEN OVER TO 8, THEN AFT TO 9.
START LEAD 2C AT 9 WITH PORT V-BERTH RECEPTACLE THEN RUN AFT TO HEAD AT 12.
START LEAD 2D AT 12 WITH HEAD RECEPTACLE THEN RUN AFT TO 13.
START LEAD 3C AT GUEST S/R RECEPTACLE. THEN RUN FWD TO V-BERTH TV
RECEPTACLE.
START LEAD 3D AT V-BERTH TV RECEPTACLE THEN COIL AT TOP OF CLOSET.

6892898 HARBOR LINER AIR CONDITIONING JUMPER (AC=NORTH or SOUTH)
START LEADS 23 AND 23A AT 1. LEAVE 8FT. THEN RUN DOWN TO 5, THEN FWD
TO 6, THEN TO THE FWD A/C UNIT LOCATION AT 7.

6890742 HARBOR LINER TV ANT. CABLE
START V/B TV CABLE V/B TV AND COIL. WILL RUN AFT TO SALON TV AFTER SALON
LINER IS INSTALLED.

NOTES:
1. KEEP ANTENNA CABLE SEPARATE FROM AC WIRES.



[illegible]

5900394. HARN:BATT CABLES WINDLASS (OPT: GT=A or B)
 START RED CABLES WNDLS 1, WNDLS 2 AND YELLOW CABLE WNDLS AT 1, LEAVE 4 FT.
 RUN CABLES AFT TO 2 AND LEAVE.

6897708. HARN:WINDLS CONTROL DECK (OPT: GT=A or B)
 START CUT ENDS UP, DWN, COM AT 1, LEAVE 4 FT. RUN PLUG END AFT TO 2 AND LEAVE.

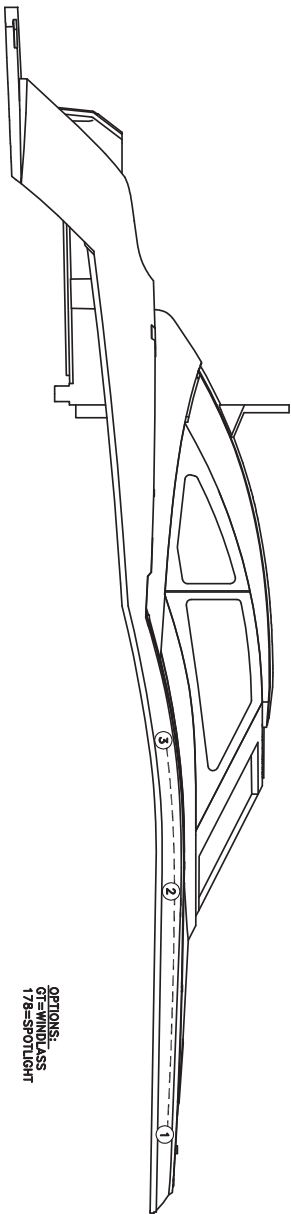
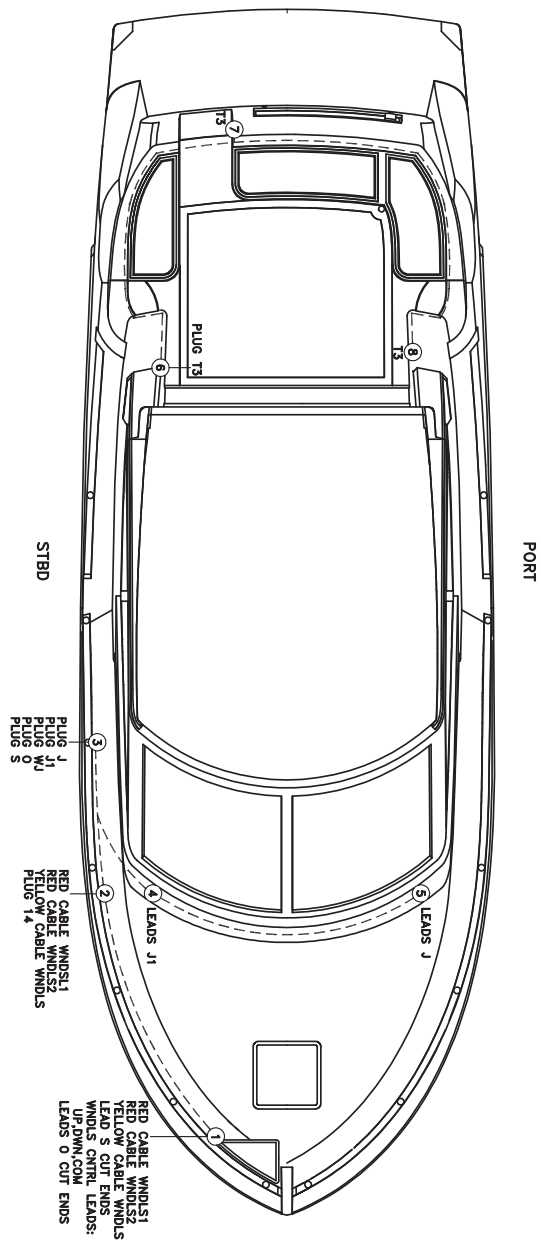
6897741. HARN:SPLIT EXIT TO HELM (OPT: 178=X)
 START LEAD S CUT ENDS AT 1, LEAVE 3 FT. THEN RUN PLUG END AFT TO 3 AND LEAVE
 FOR THE LOWER HELM.

6897757. HARN:WIPER/WASHER DECK
 START PLUGS J, J1 AND WJ AT 3, LEAVE 4 FT.

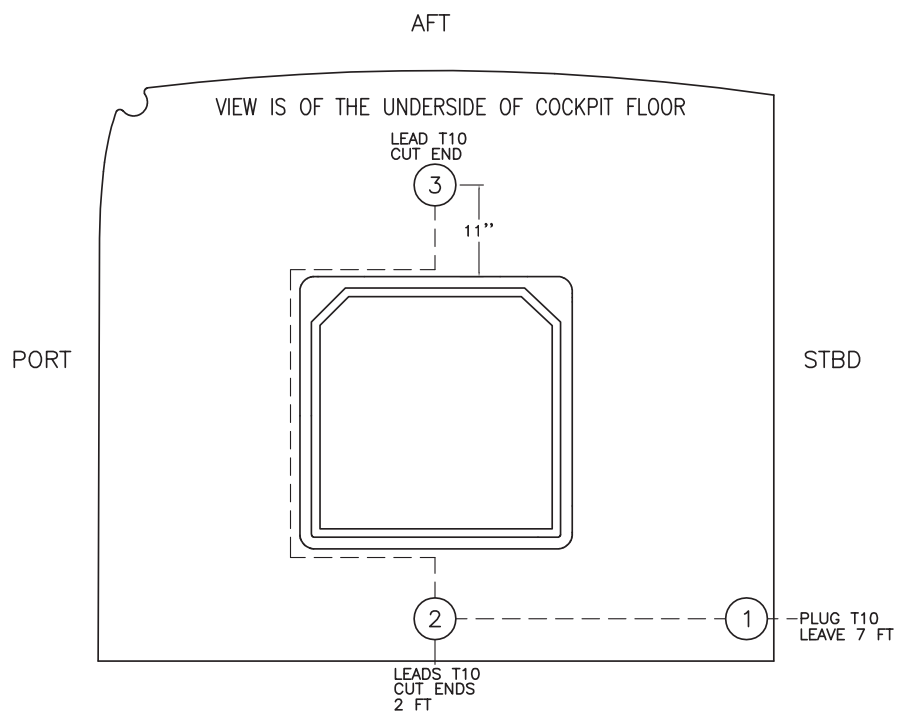
RUN LEADS J OVER TO THE PORT WIPER MOTOR AT 5.
 RUN LEADS J1 OVER TO THE STBD WIPER MOTOR AT 4.
 RUN LEADS WJ FWD TO THE WASHER SOLENOID.

6897820. HARN:SIDE NAV LTS
 START PLUG O AT 3, LEAVE 4 FT. THEN RUN LEADS O FWD TO 1 AND LEAVE.

6897826. HARN:COCKPIT LIGHTS
 START PLUG T3 AT 6, (COCKPIT SWITCH PANEL). RUN LEAD T3 DOWN TO STBD FWD LIGHT
 LOCATION, LOOP 6", THEN RUN AFT TO 7, LOOP 6", THEN RUN TO 8 AND LEAVE.



OPTIONS:
 GT=A-WINDLASS
 178=STOUTLIGHT

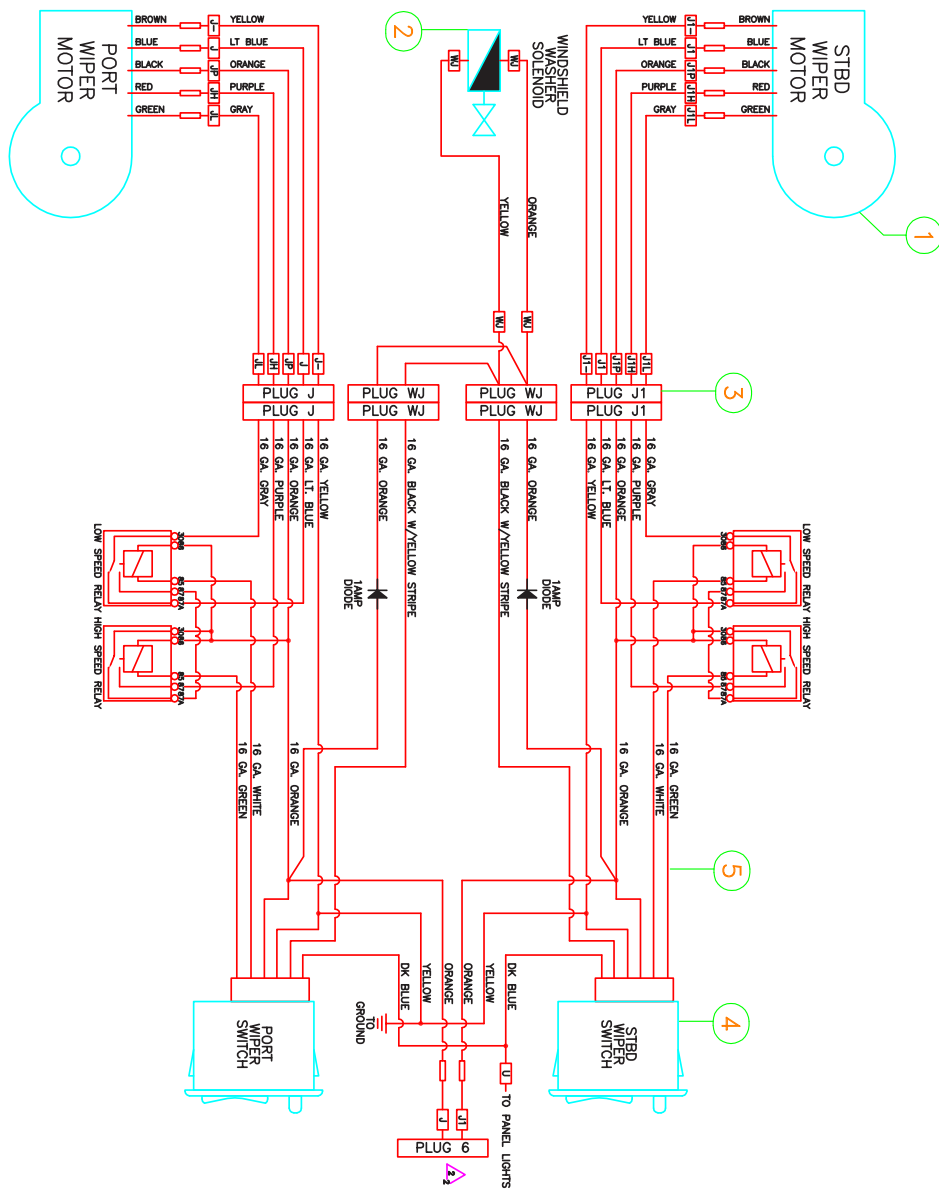


6897715 ENGINE ROOM LIGHTS

START PLUG 10 AT 1, LEAVE 7 FT. THEN RUN LEAD T10 TO 2, LEAVE BUTT CONNECTOR ENDS 2 FT. THEN RUN LEAD T10 CUT ENDS TO THE AFT ENGINE ROOM LIGHT AT 3.

NOTE:

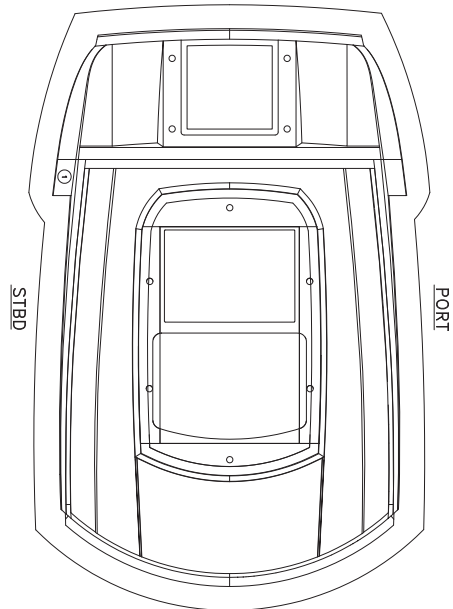
- 1) THE ENGINE ROOM LIGHT IS LOCATED ON THE CENTER LINE, 11" AFT OF THE HATCH.
- 2) WRAP THE WIRE IN WHITE WIRE LOOM AND USE THE PLASTIC "P" CLIPS TO SECURE THE WIRE TO THE CKPT FLOOR HATCH.



2

PARTS LIST		
ITEM	QTY	PART NUMBER
1	2	7345631
2	1	7345642
3	1	6897757
4	2	8960401
5	2	8960402

02-27DEC13-SR		2. WAS PLUG 6A
01-04NOV13-SR		1. WAS WIPER MOTOR P/N 7345689
RV-DATE-EDTR		FIRST ISSUE
MODELS & OPTIONS		DESCRIPTION
MODEL	OPTION	QTY
3737	STD	1
3737	STD	1
SYSTEM:WIPER WIRING 3737		REVISION HISTORY
Hull No.		Model
X4		3737
Status		Sheet
ORIG		1 of 1
Drawing No.		Rev. No.
X4321006		1



6960763 HARN:TV ANTENNA CABLE
START TV ANT CABLE AT

CABINTOP INNER

6897821 HARN:SALON LTS
START PLUG T5,T6 AT 1, LEAVE 5 FT.
PIN LEAD T5C

RUN	LEAD	T5S
RUN	LEAD	T5P
RUN	LEAD	T5A
RUN	LEAD	T6

START SPEAKER LEADS P SLN SPKR AND S SLN SPKR AT 1, LEAVE 6 FT,
RUN LEAD P SLN SPKR
RUN LEAD S SLN SPKR

6897718 HARN:CKPT OVRHD LT & SPKR
START PLUG T3A AT 1, LEAVE 5 FT.
RUN LEAD T3A

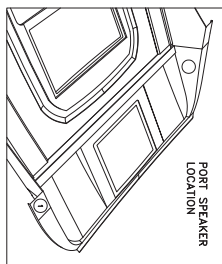
START SPEAKER LEADS P CKPT SPKR AND S CKPT SPKR AT 1, LEAVE 6 FT.
RUN LEAD P CKPT SPKR
RUN LEAD S CKPT SPKR

RUN LEAD S CKPT SPKR

6897838 HARN:NAV LTS
START PLUG 12 AT 1, LEAVE 5 FT.
PIN LEADS O R AND K

RUN LEADS Q, R AND K

6897839 HARN:SUNROOF
START PLUG SR AT 1, LEAVE 5 FT.
RUN LEADS SR AND SRS



PN-000633-3-98 RI-DATE-EDIR PRELIMINARY DRAWING		REVISION HISTORY DESCRIPTION									
MODELS & OPTIONS <table border="1"> <thead> <tr> <th>TOILET</th> <th>OPTION</th> <th>OT</th> <th>CAN</th> </tr> </thead> <tbody> <tr> <td>3757</td> <td>510</td> <td>1</td> <td>251</td> </tr> </tbody> </table>		TOILET	OPTION	OT	CAN	3757	510	1	251		
TOILET	OPTION	OT	CAN								
3757	510	1	251								
SYSTEMS/CABINETS Drawn: J.											
Hold Time X4 3757		Model 3757									
PRELIM		SHELVE 3757									

OPTION	BREAKER	CIRCUIT NUMBER	BREAKER SIZE 120V/250V	MINIMUM WIRE GAUGE	CABLE LENGTH	TERMINAL TYPE	WIRE P/N
STD	#1 MAIN	1	30	10		NONE	8935900
GEN-Y	GENERATOR MAIN	1A	SEE NOTE 3			NONE	NOTE 3
STD	RECEPTACLES ONE	2	15	12		NONE	8929900
STD	RECEPTACLES TWO	3	15	12		NONE	8929900
STD	RANGE	4	25/15	10		NONE	8935900
STD	WATER HEATER	5	15	10		NONE	8935900
STD	ENG/ACC BATT CHARGER	7	15/10	10		NONE	8935900
STD	ICE MAKER / EXT REFER	9	15	12		NONE	8929900
STD	MICROWAVE	10	15	12		NONE	8929900
THRUSTER A, B or JOSTACK	THRUSTER BATT CHARGER	11	15/10	10		NONE	8935900
STD	GROUND BUS	19		8		#10 ETC	8935900
AC-NORTH or SOUTH	#2 MAIN	20	30	10		NONE	8935900
AC-NORTH or SOUTH & GEN-Y	GENERATOR MAIN	20A	SEE NOTE 4			NONE	NOTE 4
AC-SOUTH	A/C WATER PUMP	21	15	14		NONE	8930200
AC-NORTH or SOUTH	A/C UNIT (SALON)	22	20/15	10		NONE	8935900
AC-NORTH or SOUTH	A/C UNIT (FWD)	23	15/10	10		NONE	8935900

THE FOLLOWING CABLES (3-WIRE) ARE INCLUDED AS PART OF THIS KIT

USAGE	CIRCUIT NUMBER	MINIMUM WIRE GA.	CABLE LENGTH	TERMINAL TYPE	TERMINAL TYPE	WIRE P/N
AFT GILTY TO TV BOOSTER	2A	12		NONE	NONE	8929900
TV BOOSTER TO TV REC	2B	12		NONE	NONE	8929900
FWD GILTY TO REFER	3A	12		NONE	NONE	8929900
REFER TO GST S/R	3B	12		NONE	NONE	8929900

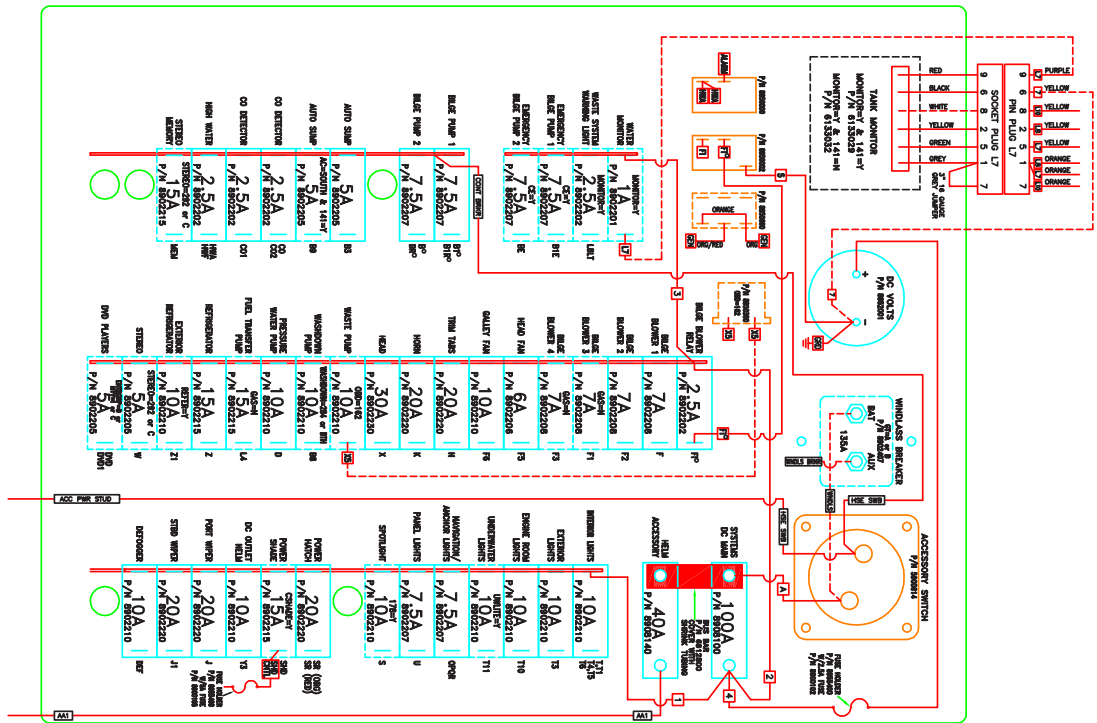
NOTES:

- 1) STRIP ALL ROWEX 2' FOR INSIDE BOX
- 2) LEADS #1A, #11, #20, #20A, #21, #22 AND #23 ARE OPTIONAL
- 3) WHEN GENERATOR=248, 555, 594, 589, 595, OR 596:
USE A 30 AMP BREAKER AND 10-3 ROWEX, P/N 8935900
WHEN GENERATOR=191 OR 245:
USE A 50 AMP BREAKER AND 8-3 ROWEX, P/N 8937600
WHEN GENERATOR=244:
USE A 50 AMP BREAKER AND 6-3 ROWEX, P/N 8930000
- 4) WHEN GENERATOR=248, 555, 594, 589, 595, OR 596:
USE A 30 AMP BREAKER AND 10-3 ROWEX, P/N 8935900
WHEN GENERATOR=191, 244, OR 245:
DO NOT MAKE LEAD 20A

DRAWING NUMBER	REFERENCE PRINTS	DRAWING TITLE
X4324001	SYSTEMS:AC MDP WIRING	

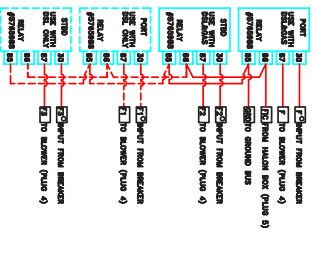
P1-06SEP13-SR		PRELIMINARY RELEASE									
RV-DATE-EDTR		DESCRIPTION									
REVISION HISTORY											
<table border="1"> <thead> <tr> <th>MODEL</th> <th>OPTION</th> <th>QTY</th> <th>CMC</th> </tr> </thead> <tbody> <tr> <td>3737</td> <td>STD</td> <td>1</td> <td>324</td> </tr> </tbody> </table>				MODEL	OPTION	QTY	CMC	3737	STD	1	324
MODEL	OPTION	QTY	CMC								
3737	STD	1	324								
 CARVER YACHTS											
Drawing Title PNL:ASY AC MDP											
Hull No. X4	Model 3737	Sheet 1 of 1	Rev No. P1								
TOLERANCES XX .0002 XXX .001 XXX .005 UNLESS OTHERWISE SPECIFIED		Status: PRELIM	Drawing No. 6897807								

Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.

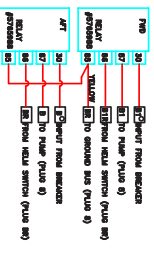


- NOTES:
1. PLUG ALL OPTION HOLES NOT IN USE.
 2. TAPE ENDS & SECURE OPT. LEADS.
 3. USE WIRE COVER ON THE BUS BARS.
 4. LEAVE PLUGS OFF THE BOTTOM OF PANEL 9".
 5. STAGGER ALL WIRE LEADS FROM PLUG TO BREAKER.
 6. ROUTE AND TIE DOWN WIRES NEATLY BETWEEN THE BREAKERS.
 7. BREAKERS DESIGNATED BY DASHED LINES ARE OPTIONAL. INSTALL ONLY WHEN OPTION IS ORDERED.
 8. PUT TOGGLE GUARDS ON ALL CONTINUOUS EQUIPMENT BREAKERS.
 9. PUT TOGGLE GUARDS ON OPTIONAL EMERGENCY BILGE PUMP BREAKERS.

BLOWER RELAY WIRING

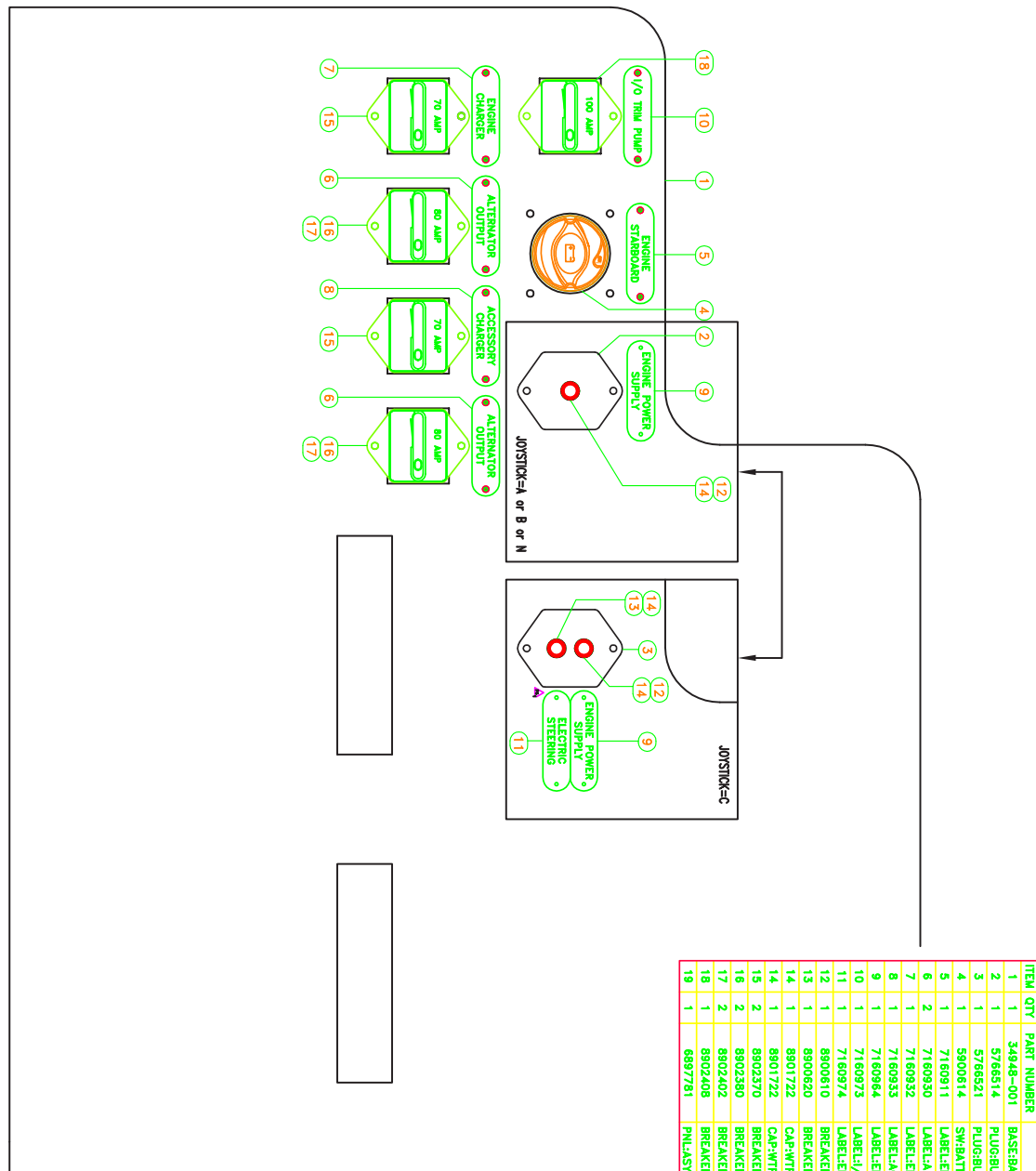


BILGE PUMP RELAY WIRING



ASSEMBLY P/N: 6897708
PANEL P/N: 5766478
PLUGS P/N: 6897709

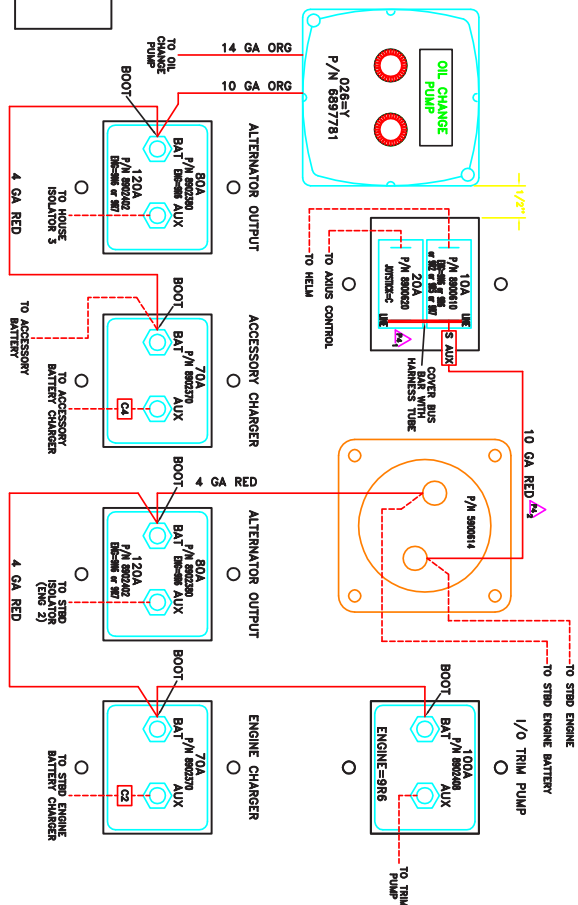
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P/N: 6897708-03		P/N: 6897708-04	
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P/N: 6897708-07		P/N: 6897708-08	
P/N: 6897708-09		P/N: 6897708-10	
P/N: 6897708-11		P/N: 6897708-12	
P/N: 6897708-13		P/N: 6897708-14	
P/N: 6897708-15		P/N: 6897708-16	
P/N: 6897708-17		P/N: 6897708-18	
P/N: 6897708-19		P/N: 6897708-20	
P/N: 6897708-21		P/N: 6897708-22	
P/N: 6897708-23		P/N: 6897708-24	
P/N: 6897708-25		P/N: 6897708-26	
P/N: 6897708-27		P/N: 6897708-28	
P/N: 6897708-29		P/N: 6897708-30	
P/N: 6897708-31		P/N: 6897708-32	
P/N: 6897708-33		P/N: 6897708-34	
P/N: 6897708-35		P/N: 6897708-36	
P/N: 6897708-37		P/N: 6897708-38	
P/N: 6897708-39		P/N: 6897708-40	
P/N: 6897708-41		P/N: 6897708-42	
P/N: 6897708-43		P/N: 6897708-44	
P/N: 6897708-45		P/N: 6897708-46	
P/N: 6897708-47		P/N: 6897708-48	
P/N: 6897708-49		P/N: 6897708-50	
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P/N: 6897708-53		P/N: 6897708-54	
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P/N: 6897708-63		P/N: 6897708-64	
P/N: 6897708-65		P/N: 6897708-66	
P/N: 6897708-67		P/N: 6897708-68	
P/N: 6897708-69		P/N: 6897708-70	
P/N: 6897708-71		P/N: 6897708-72	
P/N: 6897708-73		P/N: 6897708-74	
P/N: 6897708-75		P/N: 6897708-76	
P/N: 6897708-77		P/N: 6897708-78	
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P/N: 6897708-81		P/N: 6897708-82	
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P/N: 6897708-85		P/N: 6897708-86	
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P/N: 6897708-89		P/N: 6897708-90	
P/N: 6897708-91		P/N: 6897708-92	
P/N: 6897708-93		P/N: 6897708-94	
P/N: 6897708-95		P/N: 6897708-96	
P/N: 6897708-97		P/N: 6897708-98	
P/N: 6897708-99		P/N: 6897708-100	



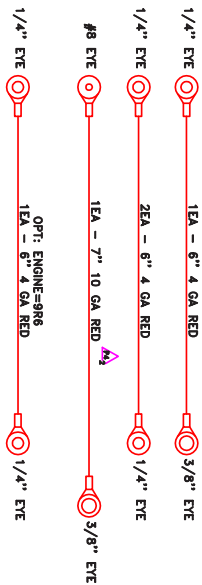
ITEM QTY	PART NUMBER	PART DESCRIPTION	OPTIONS	CMC
1	34948-001	BASE:BATT SW STBD	STD	324
2	5766514	PLUG:BUSMAN BRKR BLK W/3/8	ENGINE=9R6 or 9R6 or 9R7	324
3	5766521	PLUG:BUSMAN BRKR BLK 3-5/8	JOYSTICK=C	324
4	5900614	SW:BAT ON/OFF PM BEP275A	ENGINE=9R6 or 9R6 or 9R7	324
5	7160911	LABEL:ENGINE STBD	STD	324
6	7160930	LABEL:ALTERNATOR OUT	STD	324
7	7160932	LABEL:ENGINE CHARGER	STD	324
8	7160933	LABEL:ACCESSORY CHARGER	ENGINE=9R6 or 9R6 or 9R7	324
9	7160964	LABEL:ENGINE POWER SUPPLY	ENGINE=9R6	324
10	7160973	LABEL:/O TRIM PUMP	JOYSTICK=C	324
11	7160974	LABEL:ELECTRIC STEERING	ENGINE=9R6 or 9R6 or 9R7	324
12	8900610	BREAKER:10A DC MU	ENGINE=9R6 or 9R6 or 9R7	324
13	8900620	BREAKER:20A DC MU	JOYSTICK=C	324
14	8901722	CAP:WTR PRF F/8901700(CLR)	ENGINE=9R6 or 9R6 or 9R7	324
15	8902370	BREAKER:70A BSMN PNL MNT	STD	324
16	8902380	BREAKER:90A BSMN PNL MNT	ENGINE=9R6	324
17	8902402	BREAKER:120A BSMN PNL MNT	ENGINE=9R6 or 9R7	324
18	8902408	BREAKER:100A BSMN PNL MNT	ENGINE=9R6	324
19	8897781	PNL:AST OIL CHANGER BRKR/	026=V (MOUNTED BEHIND PANEL)	282

Drawing Title			
PNL:ASY STBD ENG SW 3737			
HULL No.	Model	Sheet	Rev. No.
X4	3737	2 of 2	P4

BACK VIEW



JUMPERS

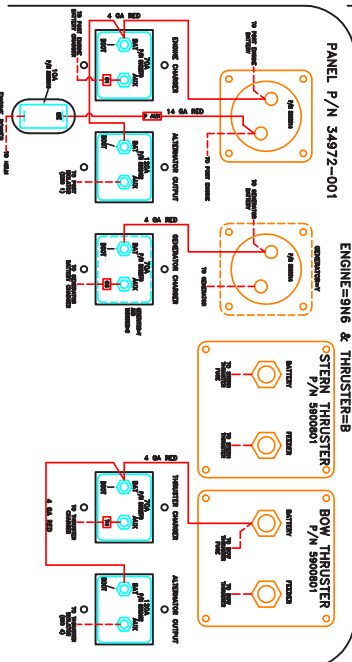
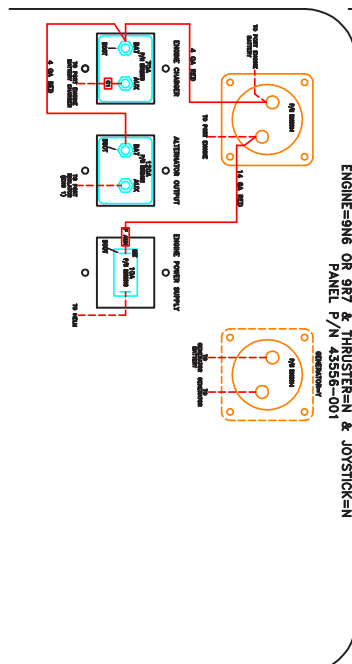
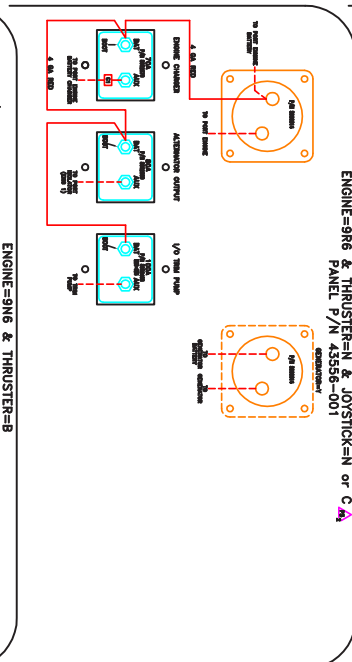
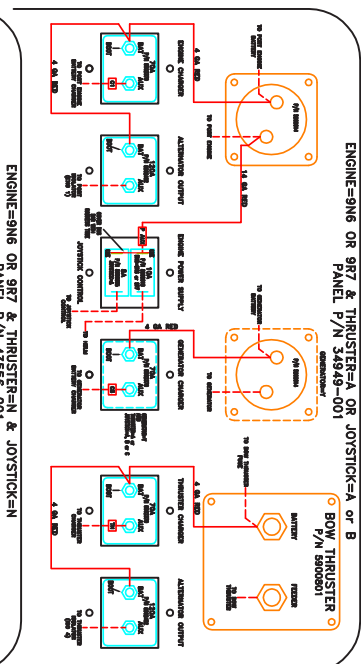
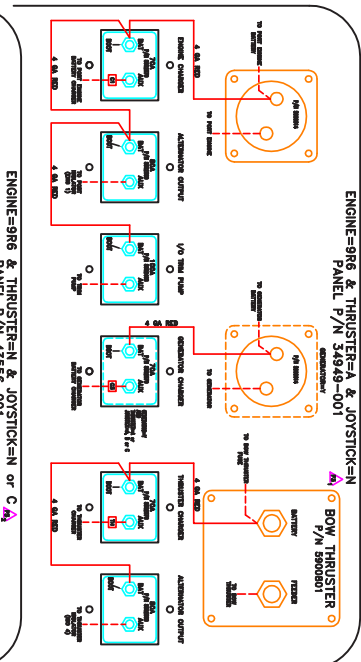


NOTE:
1) PUT BOOTS ON CABLES WHERE INDICATED.

PANEL P/N: 34948-001

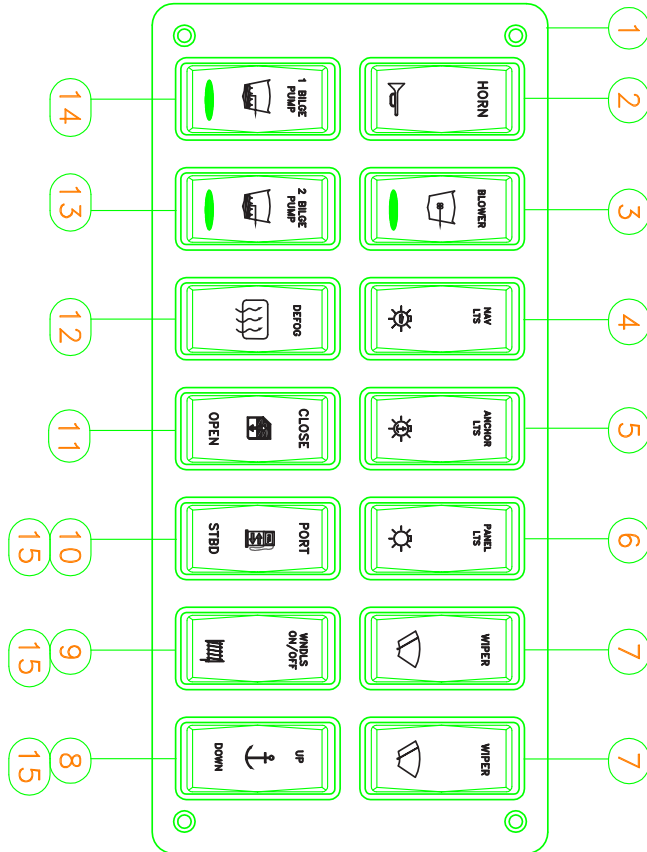
P4-10JAN14-SR		2. WAS 14 GA RED JUMPER	X4003
P3-03JAN14-SR		1. ADDED 20A BREAKER AND LABEL FOR JOYSTICK=C OPTION	HULL X4003
P2-25OCT13-SR		ADDED OPTIONAL OIL CHANGE BREAKER ASSEMBLY 6897781	HULL X4002
P1-16SEP13-SR		PRELIMINARY RELEASE	
RV-DATE-EDTR		PRELIMINARY RELEASE	
REVISION HISTORY			
DESCRIPTION			
MODELS & OPTIONS			
MODEL	OPTION	QTY	CNC
3737	STD	1	324
TOLERANCES			
FRACTIONS			
DECIMALS			
ANGLES			
DIMENSIONS			
UNLESS OTHERWISE SPECIFIED			
DRAWING TITLE			
PNL:ASY STBD ENG SW 3737			
HULL No.	Model	Sheet	Rev. No.
X4	3737	1 of 2	P4
Status:	Drawing No.		
PRELIM	6897814		

BACK VIEW



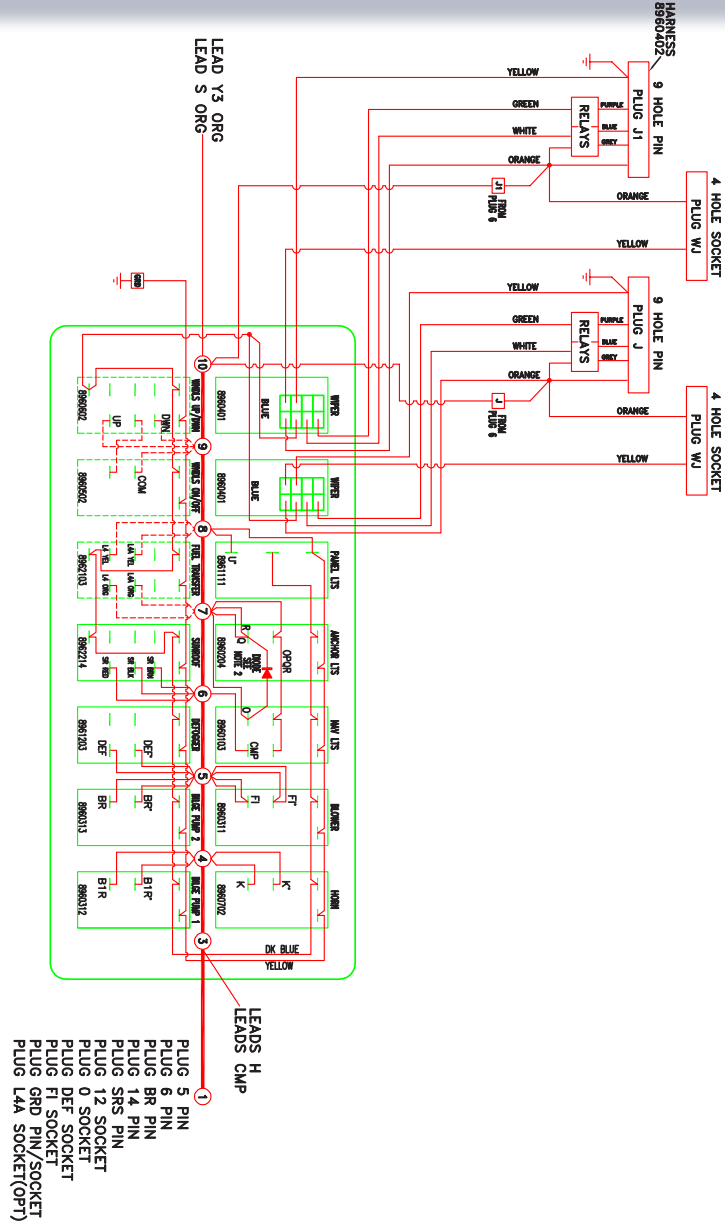
72-110V11-38 1. 1.000 2. 1.000 3. 1.000 4. 1.000 5. 1.000 6. 1.000 7. 1.000 8. 1.000 9. 1.000 10. 1.000 11. 1.000 12. 1.000 13. 1.000 14. 1.000 15. 1.000 16. 1.000 17. 1.000 18. 1.000 19. 1.000 20. 1.000 21. 1.000 22. 1.000 23. 1.000 24. 1.000 25. 1.000 26. 1.000 27. 1.000 28. 1.000 29. 1.000 30. 1.000 31. 1.000 32. 1.000 33. 1.000 34. 1.000 35. 1.000 36. 1.000 37. 1.000 38. 1.000 39. 1.000 40. 1.000 41. 1.000 42. 1.000 43. 1.000 44. 1.000 45. 1.000 46. 1.000 47. 1.000 48. 1.000 49. 1.000 50. 1.000 51. 1.000 52. 1.000 53. 1.000 54. 1.000 55. 1.000 56. 1.000 57. 1.000 58. 1.000 59. 1.000 60. 1.000 61. 1.000 62. 1.000 63. 1.000 64. 1.000 65. 1.000 66. 1.000 67. 1.000 68. 1.000 69. 1.000 70. 1.000 71. 1.000 72. 1.000 73. 1.000 74. 1.000 75. 1.000 76. 1.000 77. 1.000 78. 1.000 79. 1.000 80. 1.000 81. 1.000 82. 1.000 83. 1.000 84. 1.000 85. 1.000 86. 1.000 87. 1.000 88. 1.000 89. 1.000 90. 1.000 91. 1.000 92. 1.000 93. 1.000 94. 1.000 95. 1.000 96. 1.000 97. 1.000 98. 1.000 99. 1.000 100. 1.000 101. 1.000 102. 1.000 103. 1.000 104. 1.000 105. 1.000 106. 1.000 107. 1.000 108. 1.000 109. 1.000 110. 1.000 111. 1.000 112. 1.000 113. 1.000 114. 1.000 115. 1.000 116. 1.000 117. 1.000 118. 1.000 119. 1.000 120. 1.000 121. 1.000 122. 1.000 123. 1.000 124. 1.000 125. 1.000 126. 1.000 127. 1.000 128. 1.000 129. 1.000 130. 1.000 131. 1.000 132. 1.000 133. 1.000 134. 1.000 135. 1.000 136. 1.000 137. 1.000 138. 1.000 139. 1.000 140. 1.000 141. 1.000 142. 1.000 143. 1.000 144. 1.000 145. 1.000 146. 1.000 147. 1.000 148. 1.000 149. 1.000 150. 1.000 151. 1.000 152. 1.000 153. 1.000 154. 1.000 155. 1.000 156. 1.000 157. 1.000 158. 1.000 159. 1.000 160. 1.000 161. 1.000 162. 1.000 163. 1.000 164. 1.000 165. 1.000 166. 1.000 167. 1.000 168. 1.000 169. 1.000 170. 1.000 171. 1.000 172. 1.000 173. 1.000 174. 1.000 175. 1.000 176. 1.000 177. 1.000 178. 1.000 179. 1.000 180. 1.000 181. 1.000 182. 1.000 183. 1.000 184. 1.000 185. 1.000 186. 1.000 187. 1.000 188. 1.000 189. 1.000 190. 1.000 191. 1.000 192. 1.000 193. 1.000 194. 1.000 195. 1.000 196. 1.000 197. 1.000 198. 1.000 199. 1.000 200. 1.000 201. 1.000 202. 1.000 203. 1.000 204. 1.000 205. 1.000 206. 1.000 207. 1.000 208. 1.000 209. 1.000 210. 1.000 211. 1.000 212. 1.000 213. 1.000 214. 1.000 215. 1.000 216. 1.000 217. 1.000 218. 1.000 219. 1.000 220. 1.000 221. 1.000 222. 1.000 223. 1.000 224. 1.000 225. 1.000 226. 1.000 227. 1.000 228. 1.000 229. 1.000 230. 1.000 231. 1.000 232. 1.000 233. 1.000 234. 1.000 235. 1.000 236. 1.000 237. 1.000 238. 1.000 239. 1.000 240. 1.000 241. 1.000 242. 1.000 243. 1.000 244. 1.000 245. 1.000 246. 1.000 247. 1.000 248. 1.000 249. 1.000 250. 1.000 251. 1.000 252. 1.000 253. 1.000 254. 1.000 255. 1.000 256. 1.000 257. 1.000 258. 1.000 259. 1.000 260. 1.000 261. 1.000 262. 1.000 263. 1.000 264. 1.000 265. 1.000 266. 1.000 267. 1.000 268. 1.000 269. 1.000 270. 1.000 271. 1.000 272. 1.000 273. 1.000 274. 1.000 275. 1.000 276. 1.000 277. 1.000 278. 1.0
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WARRANTY AND PARTS



ITEM	QTY	PART NUMBER	PART DESCRIPTION	OPTIONS	CMC
1	1	5766511	PULASTY HELM SW 3457	STD	324
2	1	8960702	SWLS HORN	STD	324
3	1	8960311	SWLS BLOWER	STD	324
4	1	8960103	SWLS NAV LIGHT	STD	324
5	1	8960204	SWLS ANCHOR LIGHT	STD	324
6	1	8961111	SWLS DIMMER W/ETCH 12V	STD	324
7	2	8960401	SW-DELAY-WIPER-WASH	STD	324
8	1	8960602	SWLS WINDS UP/DOWN	GT=A or B	324
9	1	8960502	SWLS WINDS ON/OFF	GT=A or B	324
10	1	8962101	SWLS FUEL TRNSFR P/S	ENGINE=9N6 or 9R2 or 9R3 or 9R7	324
11	1	8962214	SWLS SUNROOF 12V	STD	324
12	1	8961203	SWLS DEFOGGER	STD	324
13	1	8960313	SWLS BILGE PUMP #2	STD	324
14	1	8960312	SWLS BILGE PUMP #1	STD	324
15	2	8962900	PLUG-SW L-SERIES	GT=N	324
15	1	8962900	PLUG-SW L-SERIES	ENGINE=9P3 or 9R6	324

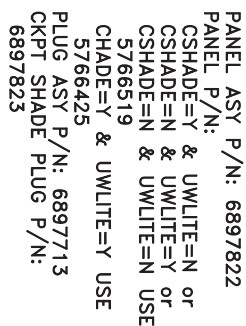
Drawing Title			
PULASTY HELM SW 3737			
Hull No.	Model	Sheet	Rev. No.
X4	3737	2 of 2	P3

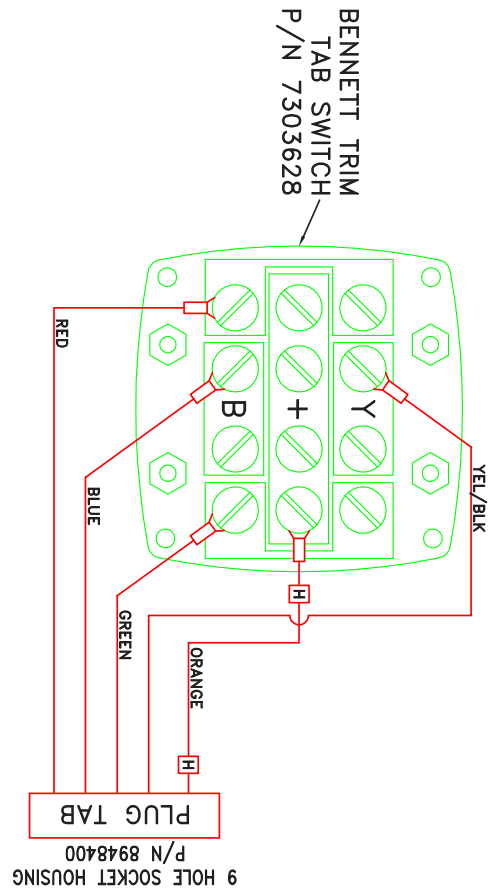


PANEL ASSEMBLY P/N: 6897817
 PANEL P/N: 5766511
 HARNESS P/N: 6897818

P3-19DEC13-SR	MOVED PLUGS TO OTHERSIDE OF PANEL		
P2-03DEC13-SR	PRELIMINARY RELEASE		
P1-24SEP13-SR	PRELIMINARY RELEASE		
RV-DATE-EDTR	DESCRIPTION		
REVISION HISTORY			
MODELS & OPTIONS			
MODEL	OPTION	QTY	CMC
3737	STD	1	324
</			

CARVER

165

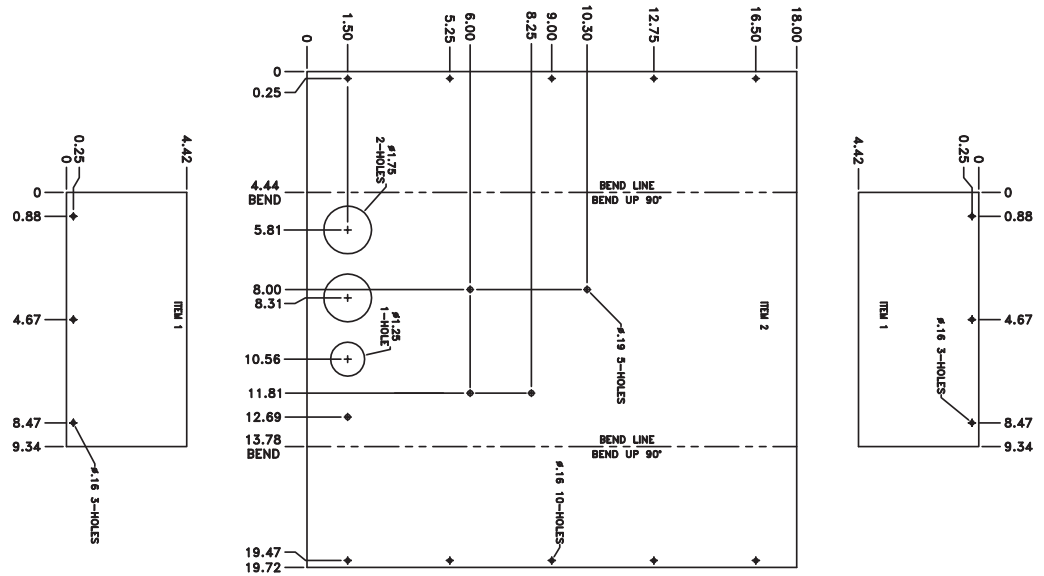


PLUG TAB				9-HOLE SOCKET HOUSING			
WIRE	HOLE GAUGE	COLOR	LENGTH	PART NO.	TERMINAL TYPE	TERMINAL TYPE	TERMINAL TYPE
TAB 1	16-4	RED	12"	8913700	SOCKET	#8 EYE	#8 EYE
TAB 2		BLUE	12"		SOCKET	#8 EYE	#8 EYE
TAB 3		GREEN	12"		SOCKET	#8 EYE	#8 EYE
TAB 4		YEL/BLK	12"		SOCKET	#8 EYE	#8 EYE
H	5	14-1	ORANGE	8917601	SOCKET	#8 EYE	#8 EYE

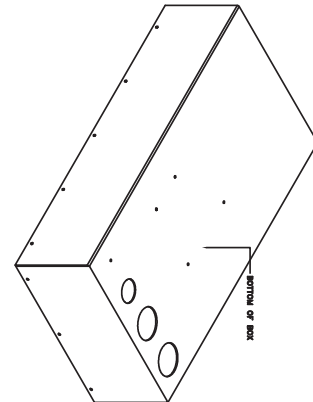
P1-19DEC13-SR		PRELIMINARY RELEASE	
RV-DATE-EDTR		DESCRIPTION	
REVISION HISTORY			
MODEL	OPTION	QTY	CMC
3737	STD	1	324
CARVER YACHTS			
Drawing Title			
PNL:ASY TRIM TAB BENNETT			
Hull No.	Model	Sheet	Rev No.
X4	3737	1 of 1	P1
TOLERANCES		Status:	Drawing No.
XX .0002 XXX .0001 XXX .0005 UNLESS OTHERWISE SPECIFIED		PRELIM	6897841

Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.

WARRANTY AND PARTS

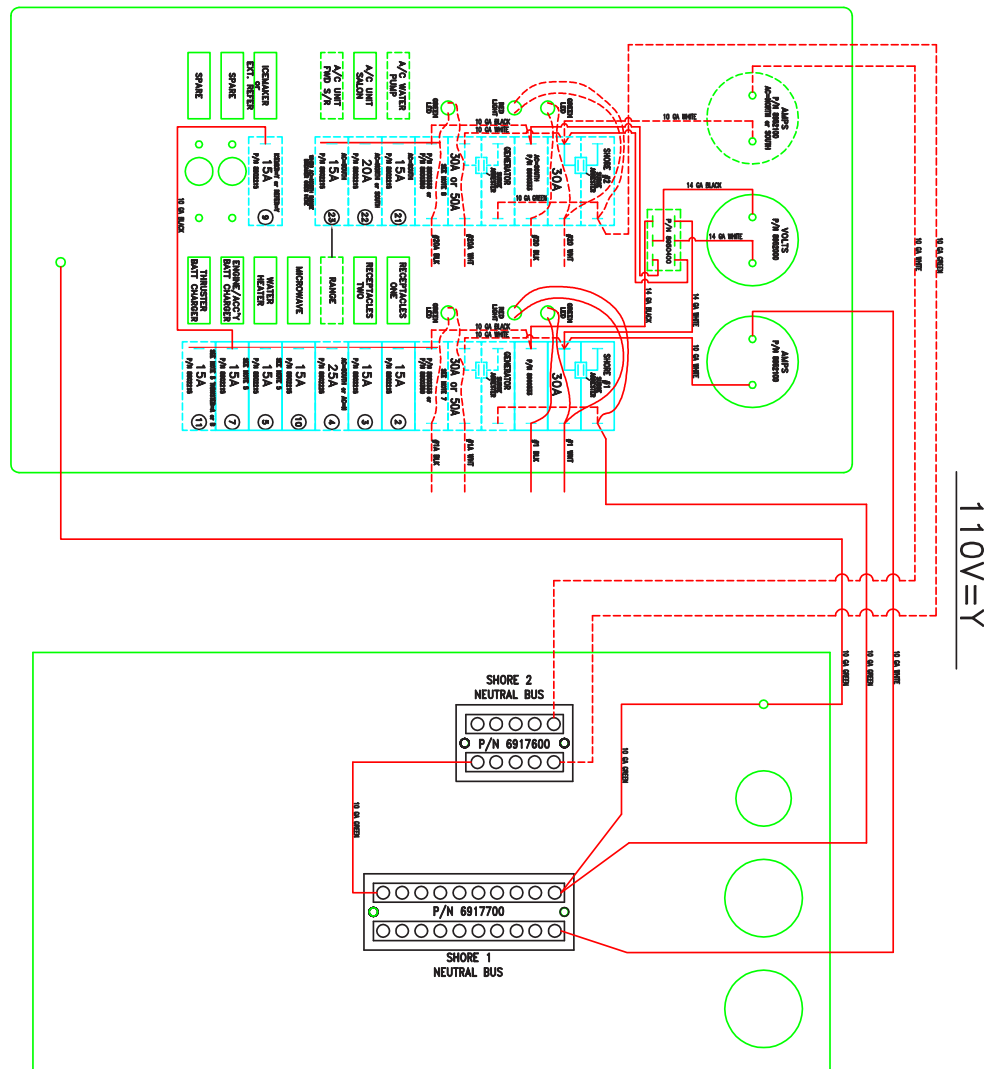


NOTES:
1) THE FINISHED BOX DIMENSIONS ARE 9.5" WIDE X 18" HIGH AND 4.5" DEEP
2) WELD ALL CORNERS.

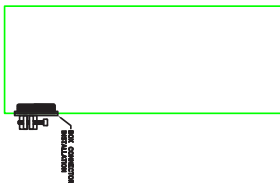


ITEM QTY	MATERIAL SIZE	PART NUMBER	RAW MATERIAL DESCRIPTION
2	1/8 X 4.42 X 9.34	8388408	SPRCL 5052H32 8002408
2	1/8 X 18 X 19.72	8388408	SPRCL 5052H32 8002408

61-00827-1-08		PRODUCTION RELEASE	
REV. DATE-02/14		REVISION HISTORY	
MODEL X 400000 BOX 07/00 STD 1 884		ENCLOSURE AC WDP 3737 Drawing file: 3737	
CARVER VALVE		ENCLOSURE AC WDP 3737 Drawing file: 3737	
080 080		080 080	

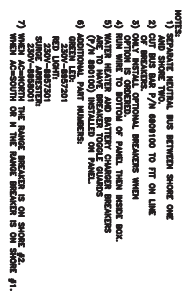


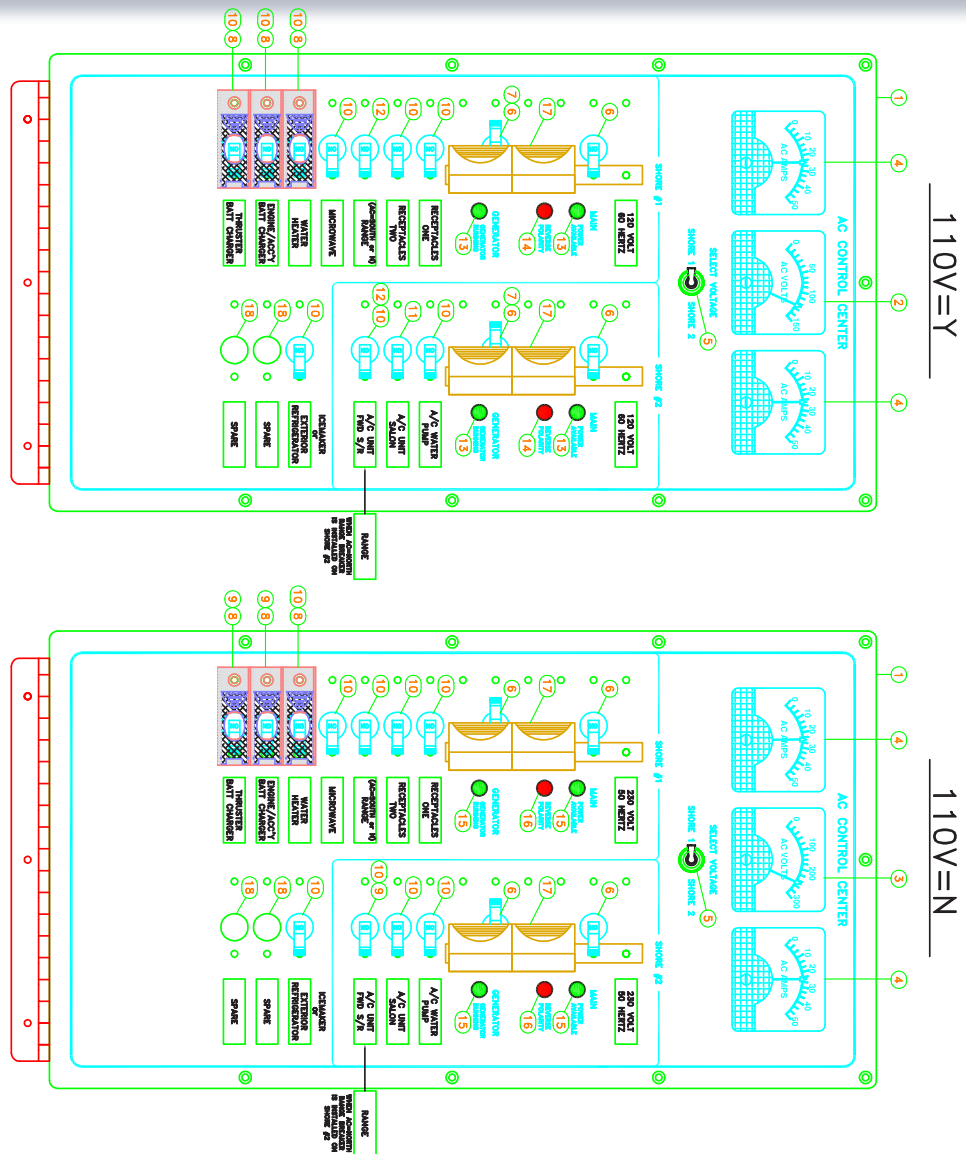
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PANEL ASY P/N: 6897807
PANEL P/N: 5766518
BOX P/N: 6956045
JUMPER HARN: 6897753

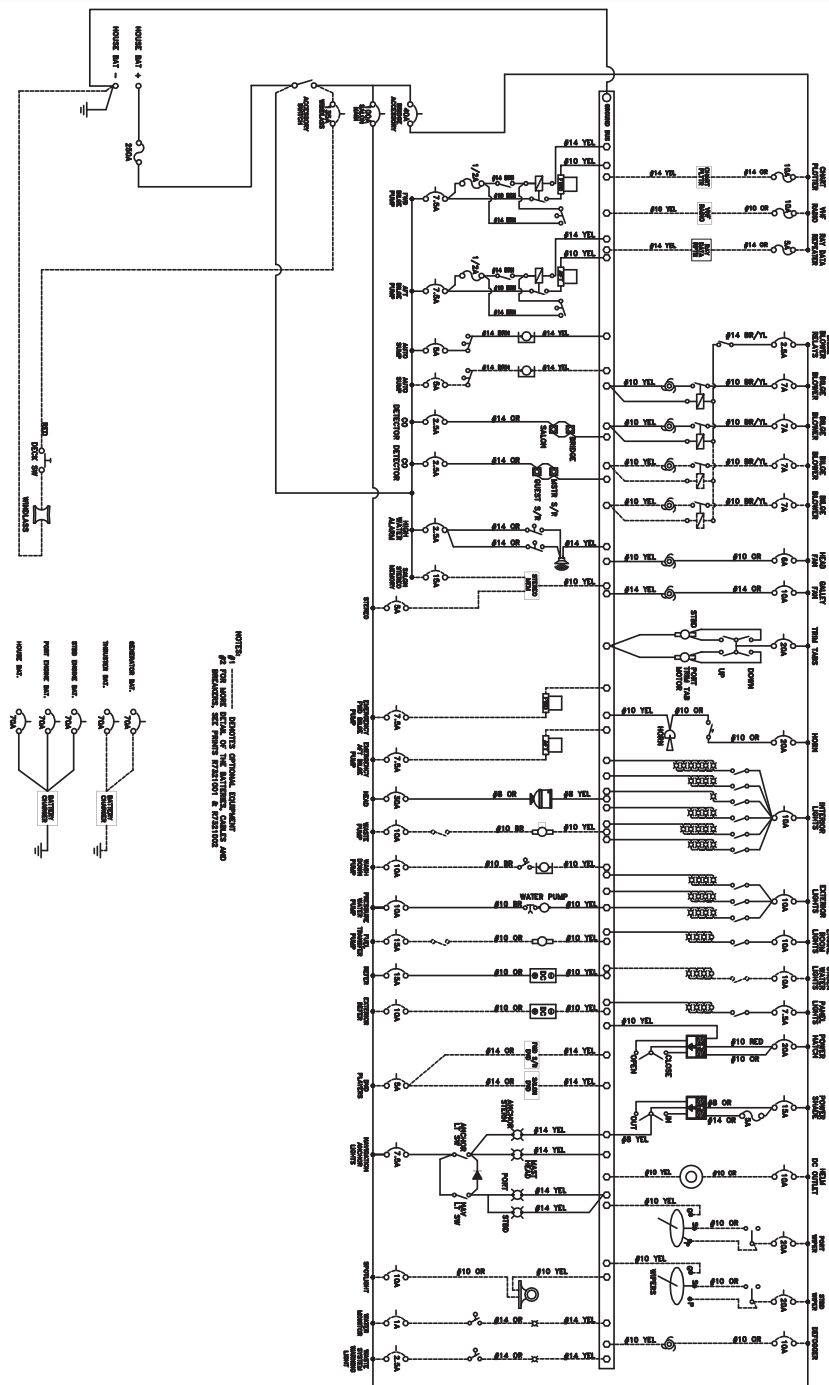
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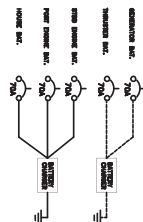


ITEM	QTY	UNIT	PAKET	DESCRIPTION	QTY
1	1	000000	PLATEAU JURY BUL. 30x 375	STP (1100W)	32
2	1	000000	LYTHNE-150 W4	STP (1100W)	32
3	1	000010	QUADRANTE 0-300A	ACCOMPTER DE SORTIR	32
4	1	000010	QUADRANTE 0-300A	STP (1100W)	32
5	1	000033	PROTECTOR 300V 3 POLE 100W	ACCOMPTER DE SORTIR	32
6	1	000033	PROTECTOR 300V 3 POLE 100W	STP (1100W)	32
7	1	000033	PROTECTOR 300V 3 POLE 100W	ACCOMPTER DE SORTIR	32
8	1	000033	PROTECTOR 300V 3 POLE 100W	STP (1100W)	32
9	1	000033	PROTECTOR 300V 3 POLE 100W	ACCOMPTER DE SORTIR	32
10	1	000033	PROTECTOR 300V 3 POLE 100W	STP (1100W)	32
11	1	000033	PROTECTOR 300V 3 POLE 100W	ACCOMPTER DE SORTIR	32
12	1	000033	PROTECTOR 300V 3 POLE 100W	STP (1100W)	32
13	1	000033	PROTECTOR 300V 3 POLE 100W	ACCOMPTER DE SORTIR	32
14	1	000033	PROTECTOR 300V 3 POLE 100W	STP (1100W)	32
15	1	000033	PROTECTOR 300V 3 POLE 100W	ACCOMPTER DE SORTIR	32
16	1	000033	PROTECTOR 300V 3 POLE 100W	STP (1100W)	32
17	1	000033	PROTECTOR 300V 3 POLE 100W	ACCOMPTER DE SORTIR	32
18	1	000033	PROTECTOR 300V 3 POLE 100W	STP (1100W)	32
19	1	000033	PROTECTOR 300V 3 POLE 100W	ACCOMPTER DE SORTIR	32
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23	1	000033	PROTECTOR 300V 3 POLE 100W	ACCOMPTER DE SORTIR	32
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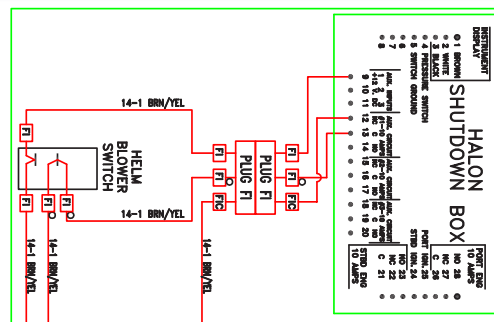
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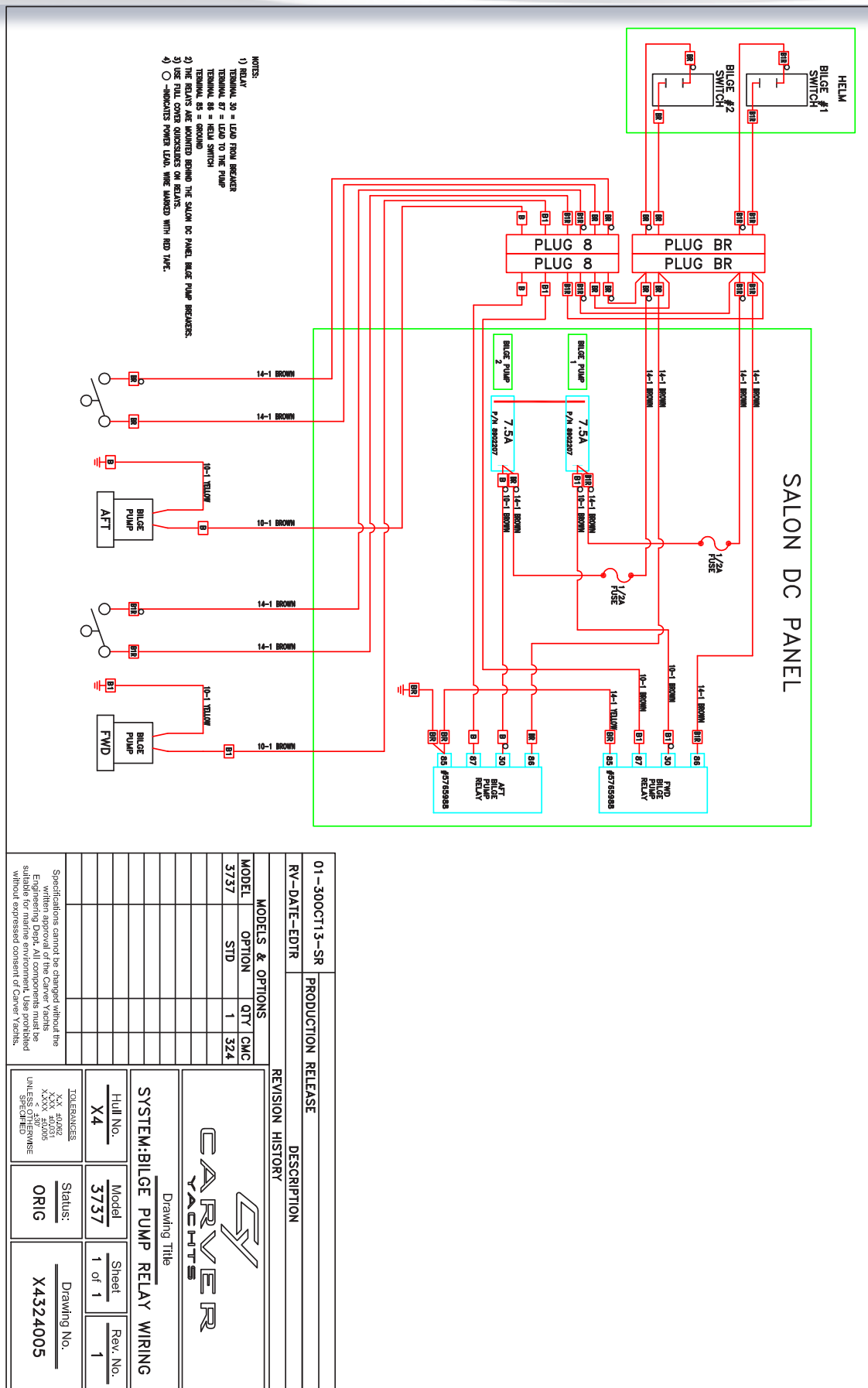


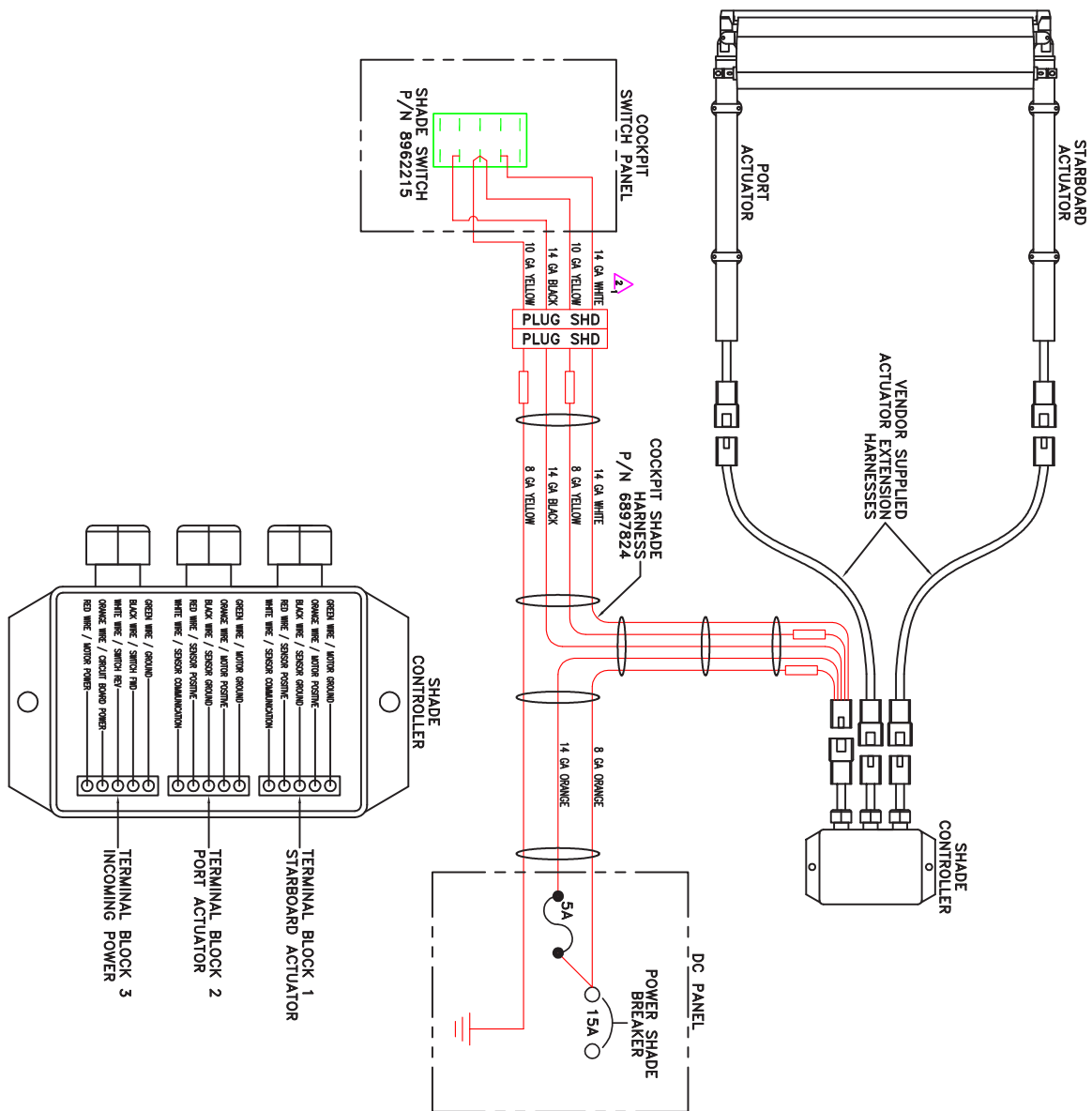
NOTES: 01 ----- DENOTES OPTIONAL EQUIPMENT
02 FOR MORE DETAIL OF THE BATTERIES, CABLES AND
BREAKERS, SEE PRINTS R7/211001 & R7/211002



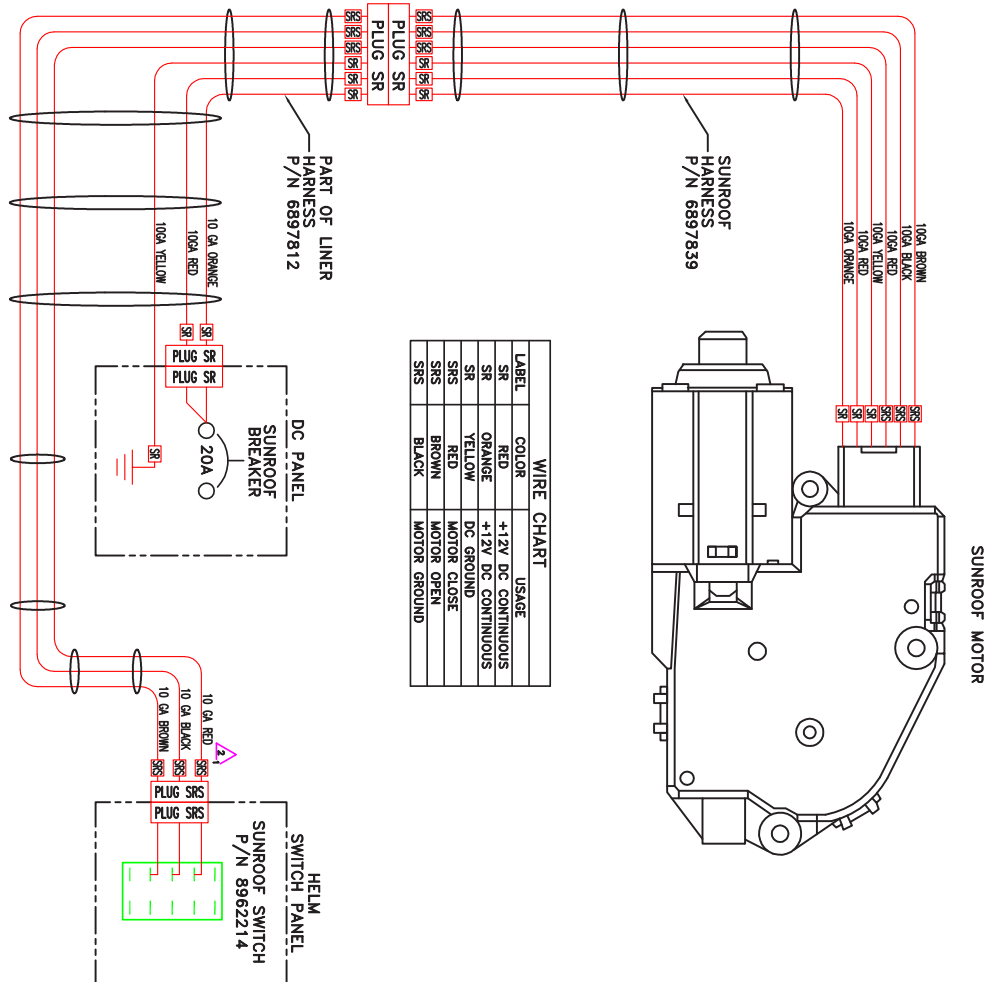
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IN-DATE-07/04		DESCRIPTION																
KITCHEN SINK																		
																		
MODEL & OPTIONS <table><tr><th>MODEL</th><th>OPTION</th><th>QTY</th><th>PRICE</th></tr><tr><td>3757</td><td>810</td><td>1</td><td>583</td></tr></table>				MODEL	OPTION	QTY	PRICE	3757	810	1	583							
MODEL	OPTION	QTY	PRICE															
3757	810	1	583															
Check for any damage or if any special features to be noted on this order. If you are not satisfied with the product, please return it to the supplier within 30 days of the date of purchase. No refund will be given for any other reason.																		
<table><tr><td>QUANTITY</td><td>UNIT PRICE</td><td>TOTAL PRICE</td></tr><tr><td>1</td><td>583</td><td>583</td></tr><tr><td colspan="2">SUBTOTAL</td><td>583</td></tr><tr><td colspan="2">TAXES</td><td>0.00</td></tr><tr><td colspan="2">TOTAL</td><td>583</td></tr></table>				QUANTITY	UNIT PRICE	TOTAL PRICE	1	583	583	SUBTOTAL		583	TAXES		0.00	TOTAL		583
QUANTITY	UNIT PRICE	TOTAL PRICE																
1	583	583																
SUBTOTAL		583																
TAXES		0.00																
TOTAL		583																

173



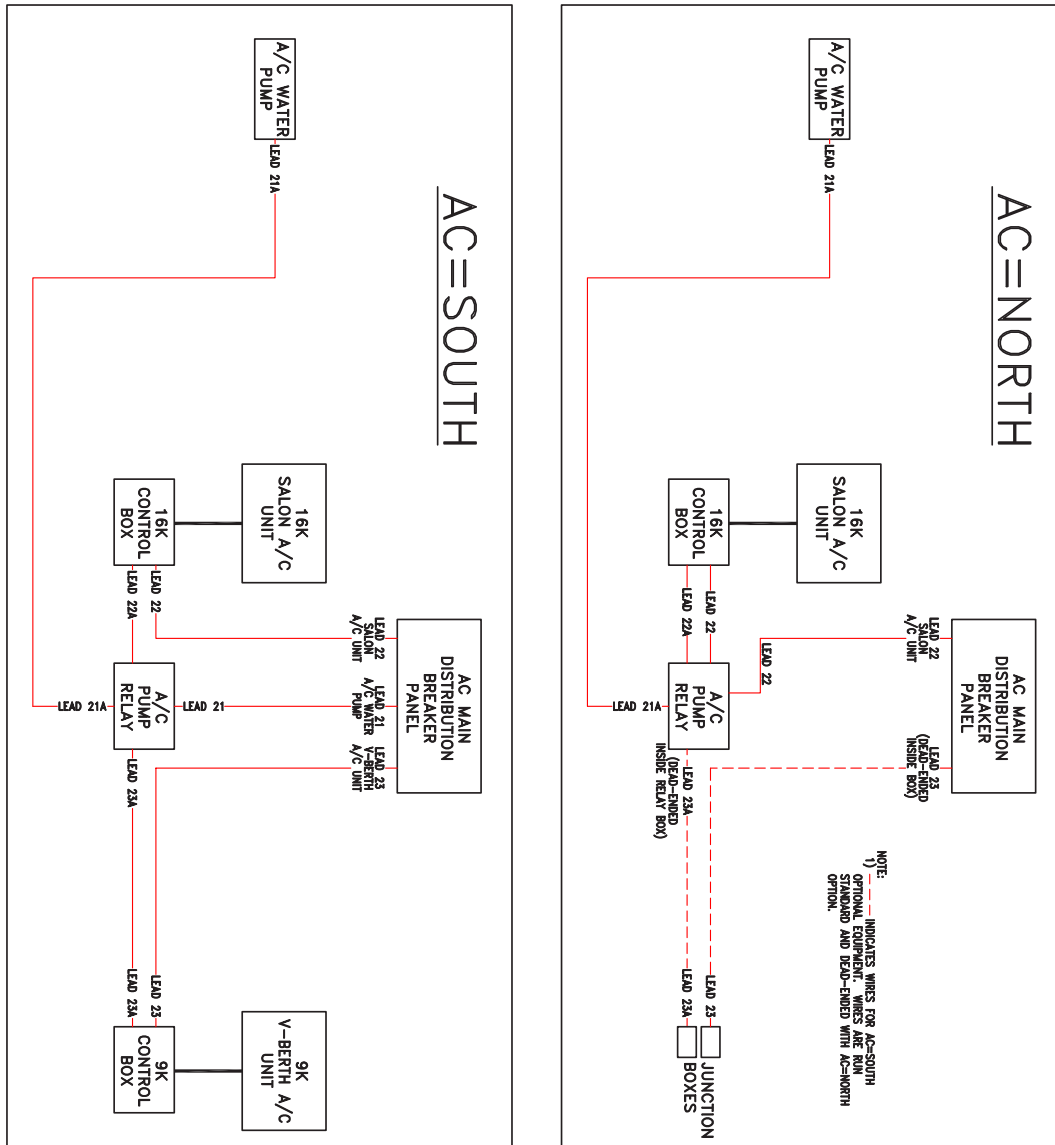


02-09JAN14-SR		1. REVERSED BLACK AND WHITE WIRES ON SWITCH	
01-05DEC13-SR			
RV-DATE-EDTR		PRODUCTION RELEASE	
MODELS & OPTIONS		DESCRIPTION	
MODEL	OPTION	QTY	CNC
3737	CSHADE=Y	1	324



WIRE CHART		
LABEL	COLOR	USAGE
SR	RED	+12V DC CONTINUOUS
SR	ORANGE	+12V DC CONTINUOUS
SR	YELLOW	DC GROUND
SRS	RED	MOTOR CLOSE
SRS	BROWN	MOTOR OPEN
SRS	BLACK	MOTOR GROUND

[illegible]



01-07JAN14-SR				PRODUCTION RELEASE											
RV-DATE-EDTR				DESCRIPTION											
MODELS & OPTIONS				REVISION HISTORY											
MODEL	OPTION	QTY	CNC	 SYSTEM:A/C UNIT SCHEMATIC Drawing Title <table><tr><td>Hull No.</td><td>Model</td><td>Sheet</td><td>Rev. No.</td></tr><tr><td>X4</td><td>3737</td><td>1 of 1</td><td>1</td></tr></table>				Hull No.	Model	Sheet	Rev. No.	X4	3737	1 of 1	1
Hull No.	Model	Sheet	Rev. No.												
X4	3737	1 of 1	1												
3737	AC=North or SOUTH	1	324												

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