

CARVER C40



C40 OWNER'S MANUAL



Carver Yacht
790 Markham Drive
P.O. Box 1010
Pulaski, WI 54162-1010
USA
Phone (920) 822-3214
Fax (920) 822-3213
www.carveryachts.com

Congratulations and Welcome Aboard!

This Owner's Guide was designed to acquaint you with the safe, proper operation and maintenance of your new boat and its systems. Your first duty as Captain of your new Carver should be to read your Owner's Guide and all manufacturer-supplied operating and maintenance instructions found within your Owner's Information kit.

Be sure to mail in all manufacturer registrations and warranty cards to validate your Carver and OEM warranties. These warranty cards have been assembled and are contained in the OEM information packets within your Owner's Information kit.

If you're new to boating, learn the proper rules of seamanship to ensure the safety of your passengers. Refer to *Chapman's Piloting, Seamanship and Small Boat Handling* and attend a safe boating class offered by the U.S. Coast Guard Auxiliary, United States Power Squadron, or any enterprise experienced in conducting safe boating courses.

Thank you for choosing Carver. We're confident your new boat will provide you and your family with years of enjoyable cruising.

Robert VanGrunsvan
President

TABLE OF CONTENTS



PREFACE

Lower Helm Option Illustration	i
Bridge Helm Illustrations	ii
Plan Views: Basic Locations	iii-iv
Sunpad Warning	v
Using the Owner's Information Kit	vi
Explanation of Terms used in Manual	viii-ix
2nd and 3rd Owner Registration Card	Preface End

SECTION 1 - YACHTING SAFETY

Yachting Safety	1
Man Overboard Prevention	2
Adverse Conditions	3
Emergency Procedures	4
Safety Equipment	8
Owner's Responsibilities	10
Carbon Monoxide (CO) Warnings	13
Preventing CO Exposure	13
Identifying CO Exposure	14
Treating CO Exposure	15
Other Health and Safety Information	15
Warning Labels	15

SECTION 2 - DC ELECTRICAL SYSTEM

DC Electrical System	17
Monitoring Battery Voltage Levels	18
Charging the Batteries	19
Battery Maintenance	20
Operating DC Equipment	21
DC Control Panel (Dinette)	21
DC Control Panel Illustration	25
(See Section 9 for DC Schematics)	

SECTION 3 - AC ELECTRICAL SYSTEM

AC Electrical System	27
System Organization	28
AC Power Sources	28
Shore Power	31
Generator Power	34
Operating the AC Equipment	34
AC Control Panel (Galley)	36
AC Control Panel Circuit Breakers	37
Ground Fault Circuit Interrupters	38
GFCI Receptacle Locations	39
Testing GFCI Receptacles	39
Electrical Loads	41
Bonding System	41
Troubleshooting the AC Electrical System	41
(See Section 9 for AC Schematics)	

SECTION 4 - INTERNAL SYSTEMS

Air Conditioning System	43
Fresh Water System	50
Shore Water	53
Bilge System	62
Grey Water System	64
Sanitation System	71

SECTION 5 - PROPULSION

Overview	77
Propulsion: Diesel Engine	77
Exhaust System: Diesel Engines	77
Fuel System: Diesel Engines	78
Cooling System: Diesel Engines	79
Fire Suppression System	80
Engine Room Ventilation: Diesel Engines	82
Helm Controls	83
Preparing for Cruising	85
Pre-Start Checklist	85
Starting the Engines	86

SECTION 6 - OPERATING AND MANEUVERING

Launching the Yacht	89
Navigation	89
Controlling the Yacht	89
Anchoring	92
Getting Underway	94

SECTION 7 - MAINTENANCE

Maintenance Schedule	97
Exterior Maintenance	99
Finish Repair Procedures	104
Interior Maintenance	106
Mechanical Systems	107

SECTION 8 - WINTERIZATION AND STORAGE

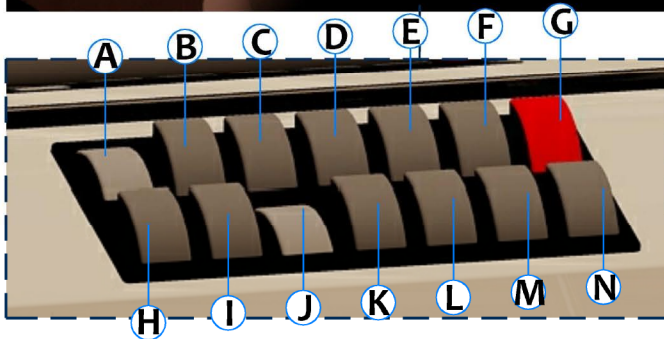
Winterization - Storage/Systems	113
Storage	115
Spring Recommissioning Checklist	117

SECTION 9 - WARRANTY AND PARTS

Warranty Information	119
Obtaining Warranty Service	119
Second and Third Owner Registration	120
Hull Identification Number	120
OEMs	120
Specifications	120
Load Capacity	121
Electrical Schematics	122+

PAGE INTENTIONALLY LEFT BLANK

This image shows the interior of a boat's cockpit, focusing on the dashboard and steering area. The dashboard is equipped with two digital displays (1 and 2) and a central steering wheel. Below the displays is a control panel with several buttons and levers. A dashed blue box highlights the control panel area. Numbered callouts identify the following components: 1. Main display screen, 2. Secondary display screen, 3. Throttle lever, 4. Gear shift lever, 5. Engine start button, 6. Engine stop button, 7. Engine kill switch, and 8. Fuel tank filler.



Component #	Component Description
A	Spare
B	Panel Lights ON/OFF
C	Courtesy Lights ON/OFF
D	Anchor Lights ON/OFF
E	Navigation Lights ON/OFF
F	Bilge Blower ON/OFF
G	Horn

<u>Component #</u>	<u>Component Description</u>
1	Raymarine E127 Chart Display
2	VesselView SmartCraft Engine Display
3	Searchlight Display
4	Bow Thruster
5	Port Engine Ignition Keyswitch
6	Starboard Engine Ignition Keyswitch
7	12V DC Outlet
8	DTS Smartcraft Shift-Throttle Lever

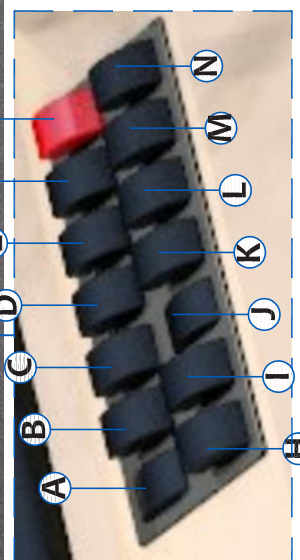
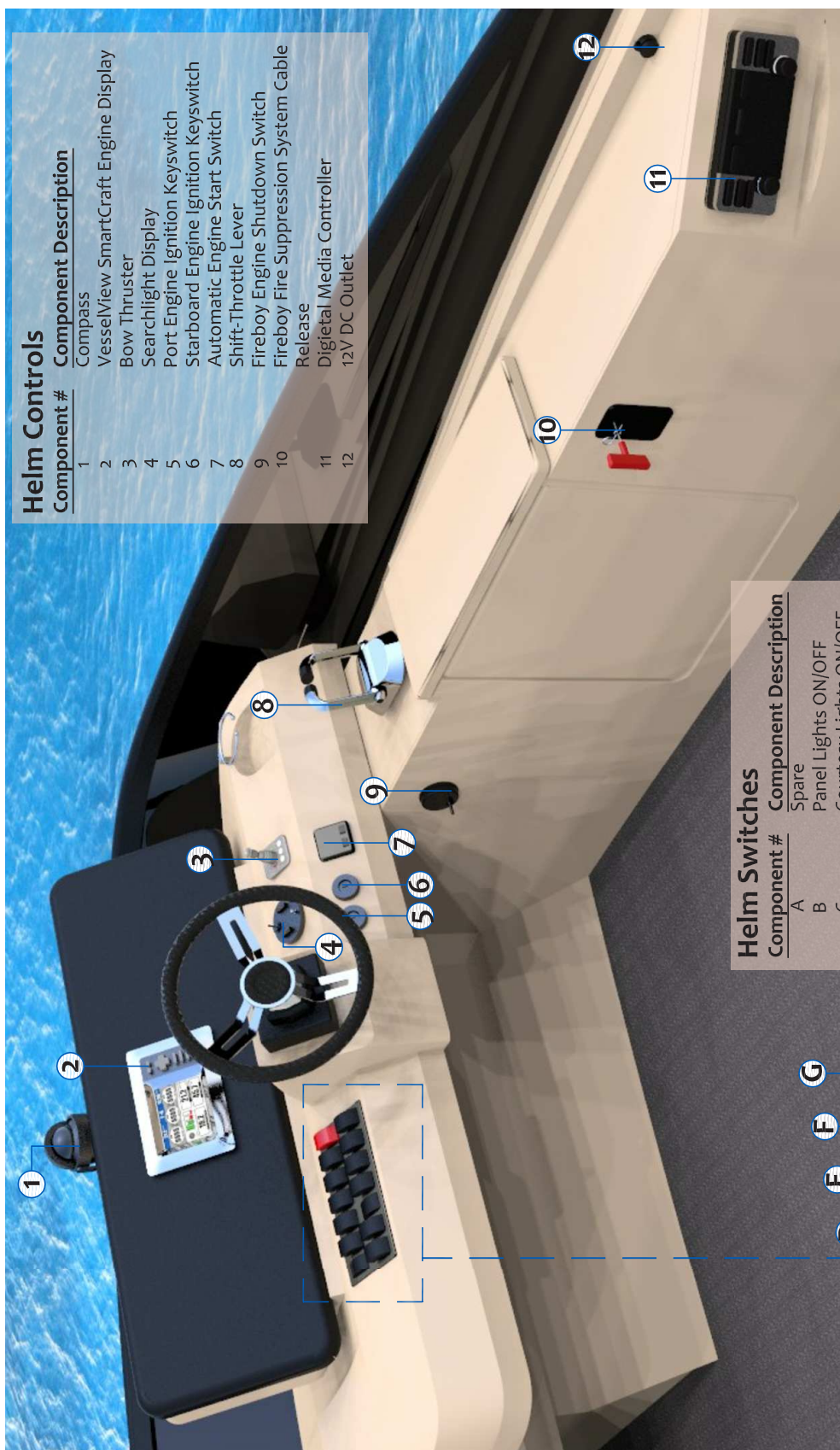
BRIDGE HELM COMPONENTS

Helm Controls

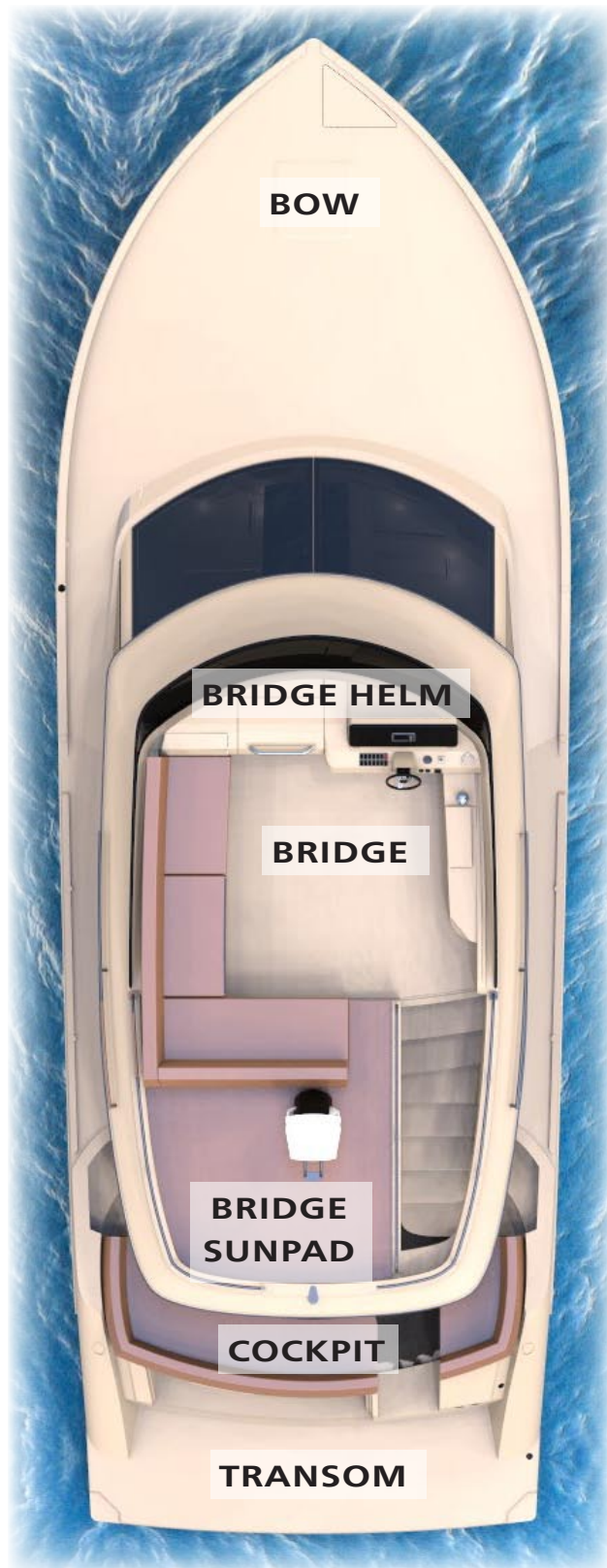
Component #	Component Description
1	Compass
2	VesselView SmartCraft Engine Display
3	Bow Thruster
4	Searchlight Display
5	Port Engine Ignition Keyswitch
6	Starboard Engine Ignition Keyswitch
7	Automatic Engine Start Switch
8	Shift-Throttle Lever
9	Fireboy Engine Shutdown Switch
10	Fireboy Fire Suppression System Cable Release
11	Digital Media Controller
12	12V DC Outlet

Helm Switches

Component #	Component Description
A	Spare
B	Panel Lights ON/OFF
C	Courtesy Lights ON/OFF
D	Anchor Lights ON/OFF
E	Navigation Lights ON/OFF
F	Bilge Blower ON/OFF
G	Horn
H	Windlass UP/DOWN
I	Windlass ON/OFF
J	Spare
K	Bilge Pump 1 ON/OFF
L	Bilge Pump 2 ON/OFF
M	Trim Tab: Bow UP/DOWN
N	Trim Tab: Bow UP/DOWN



PLAN VIEWS: BASIC LOCATIONS

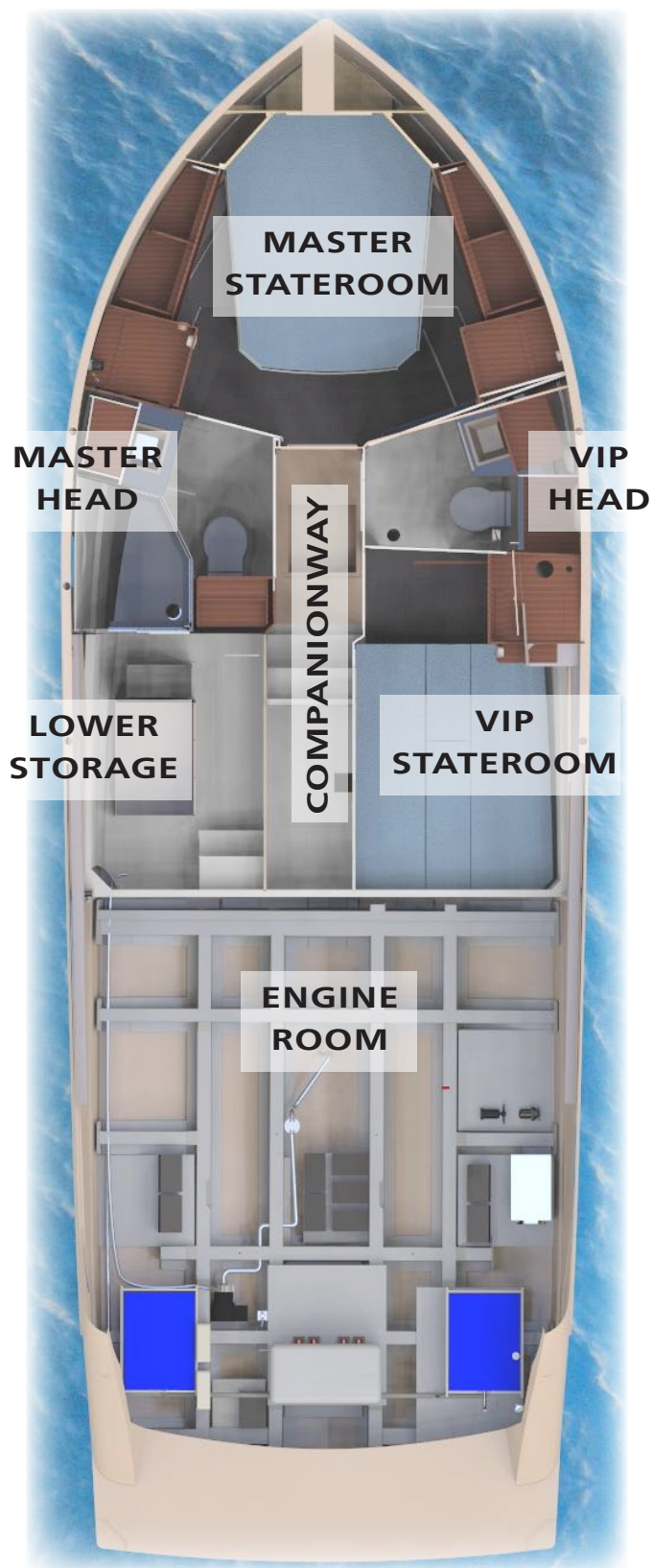


BRIDGE VIEW



MAIN LEVEL

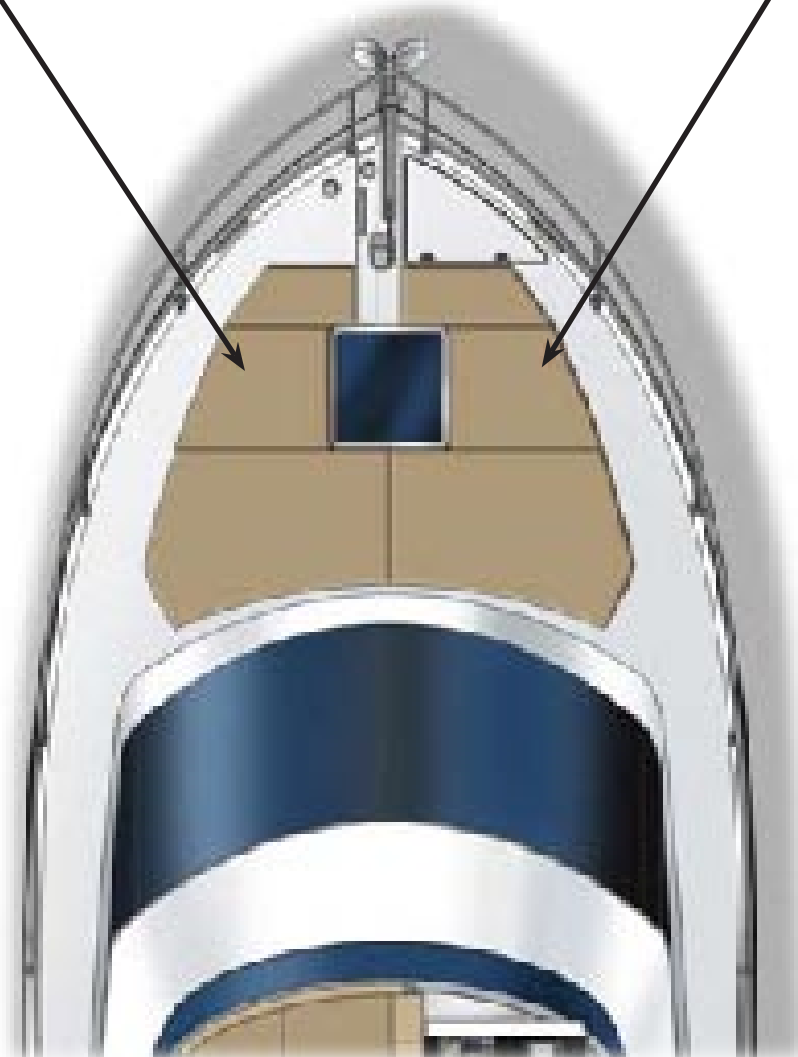
PLAN VIEWS: BASIC LOCATIONS



LOWER LEVEL

WARNING

CARVER RECOMMENDS THAT NO PERSONS BE ALLOWED TO RIDE ON THE FORWARD SUNPAD WHILE THE YACHT IS UNDER POWER. SUDDEN TURNING OF THE YACHT OR UNSEEN WAVE SURGE CAN CAUSE LOSS OF BALANCE RESULTING IN INJURY OR FALLING OVERBOARD.



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. If the yacht gets sold, the new owner must receive the Captains Kit.

OWNER'S GUIDE

The Owner's Guide purpose is to explain 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

Describes a hazard that can cause death or severe injury if the instructions are ignored.

WARNING 

Describes a hazard that can cause serious injury and/or property damage if the instructions are ignored.

CAUTION 

Describes a hazard that can cause damage to the yacht or its components if the instructions are ignored.

NEVER 

Describes a user based hazard that should NEVER be performed.

NOTE:

Provides important information that can help avoid problems.

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 experience is important if this is your first yacht, or if changing to a type of yacht that is unfamiliar. Gaining experience 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."

The information contained within the Owner's Guide is complete and accurate at the time the guide was printed. 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
- Sanitation System
- Pumps and Batteries
- Other additional Item

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. Your Carver Dealer will review the terms of the Carver Yachts warranty, and make sure the warranty is registered with Carver Yachts.

To ensure the warranty remains in effect during its lifetime, 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.

EXPLANATION OF TERMS USED IN THIS MANUAL

TERM	EXPLANATION
AC CONTROL PANEL	Alternating circuit breaker panel that controls the alternating current components onboard, located on the main deck
AFT	The stern or rear of the boat
AMIDSHIPS	An area midway between the bow (front) and stern (back)
BERTH	Sleeping quarters of the yacht
BILGE	The lowest interior area of a hull, water that has collected in the hull
BILGE PUMP	A pump intended for removal of water that has collected in the hull
BOW	The front end of the boat
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 main level
CABLEMASTER	The shore power cable access location on the Port Aft location
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	Circuit breaker panel located on the main deck that controls the direct current components onboard
DC CONTROL CENTER	Circuit panel, located in the Engine Room that controls the direct current components throughout the yacht
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, control panels, seacocks, etc
ENGINE ROOM HATCH	Hatch or cover of the engine room, located in the cockpit
FOREPEAK	The front extreme 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 on the deck at the stern

TERM	EXPLANATION
LOCKER	A storage place, or closet
MASTER DISCONNECT SWITCHES	Switches located in the engine room that turn ON or cut OFF the flow of electricity to various locations on the yacht
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	Circular window used on the hull to admit light and air
RULES OF THE ROAD	The nautical traffic rules for preventing collisions on the water
NAVIGATION LIGHTS	Lights required to be shown on boats underway between sundown and sunup
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 the 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

PAGE INTENTIONALLY LEFT BLANK

CARVER YACHT CORPORATION
PO BOX 1010
PULASKI WI 54162-1010

CARVER YACHT CORPORATION
PO BOX 1010
PULASKI WI 54162-1010



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.



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.

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.

- **DO NOT** operate the craft with an engine of rater power greater than the maximum recommended power.
- 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 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 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.

MAN-OVERBOARD PREVENTION

To prevent falling overboard while the yacht is in motion, the yachter must stay on the working deck at all times. The working deck is the area of the yacht that is safe for use at all times. The NON-working deck/unsafe zone is shown in ORANGE below.

**BRIDGE LEVEL WORKING DECK****MAIN LEVEL WORKING DECK**

 **NON-WORKING DECK/UNSAFE LOCATIONS SHOWN IN ORANGE**

WARNING

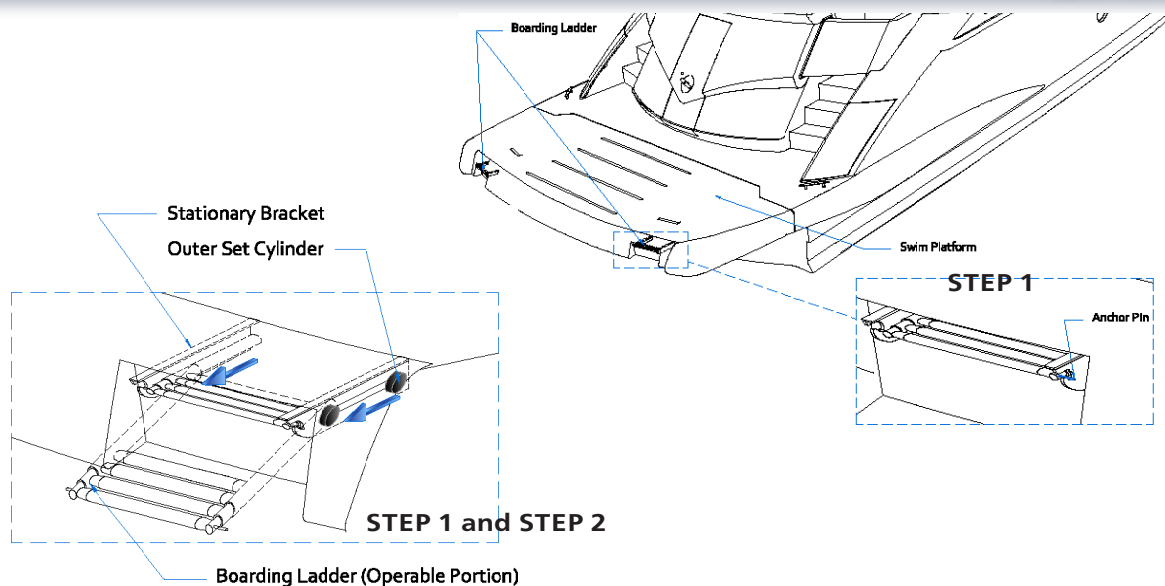
SERIOUS INJURY OR FALLING OVERBOARD CAN OCCUR IF THE YACHTER IS LOCATED OUTSIDE OF THE DESIGNATED WORKING DECK WHILE UNDERWAY.

IF SOMEONE FALLS OVERBOARD

Use the boarding ladder, located in the aft of the yacht on the swim platform to bring the passenger safely back onboard. (See next page for boarding ladder illustration.)

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.



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.

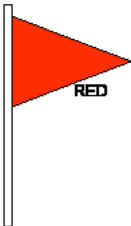
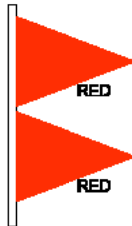
If a marine radio is onboard:

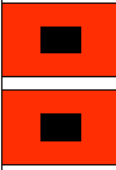
- Listen to the weather reports issued by the U.S. Coast Guard and other sources.

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
DAY FLAGS	 RED	 RED RED
NIGHT FLAGS	 RED  WHITE	 WHITE  RED

	STORM WARNING WINDS: 48 - 63 KNOTS	HURRICAN WINDS: 64+ KNOTS
DAY FLAGS	 BLACK ON RED	 BLACK ON RED BLACK ON 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:

- Close portlights, exterior doors, windows, and hatches and secure them. Stow all loose gear below deck, and tie down any gear on deck.
- 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

IN CASE OF FIRE

- Stop the engines immediately.
- Shut off the bilge blowers immediately if the fire is in the engine room. See Section 5/Engine Room Ventilation for illustration.
- **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.** See the next page for illustrations.
 1. Aim the fire extinguisher at the base of the flames

2. Use a sweeping motion to put out the fire.

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.



FIRE FIGHTING EQUIPMENT AND LOCATIONS

For safety reasons, 5A/34B rated fire extinguishers must be placed throughout the yacht while in service. The fire extinguishers have been shipped with the yacht; however, it is the yacht owner's responsibility to place in appropriate location. Stickers have been placed throughout the yacht to ensure proper placement. See fire extinguisher sticker illustrations.



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



- **NEVER FIT FREE-HANGING CURTAINS OR OTHER FABRICS NEAR, OR ABOVE THE STOVE TOP, OR OTHER HIGH-HEAT DEVICES.**

- NEVER STORE MATERIALS OR EQUIPMENT OF ANY KIND IN THE ENGINE ROOM.

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.

FLOODING

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, assign a crew member or passenger to watch the plugged area and alert others if the plug fails.

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 over the stern, 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 U.S. Coast Guard or other rescue authorities on VHF channel 16 or CB radio channel 22. (VHF channels 9 or 13 or a cellular phone in some states may be available).

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 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 be prevented by having the yacht maintained and checked periodically.
- 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 obtain a radio operator's permit, and 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 unless it is being actively used. Channel 16 is the frequency for emergency calls or initial calls between yachts. Once contact is established on channel 16, go online 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 (Type I, II, or III).
- 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 II, WEARABLE:

- Type II is a near-shore buoyant vest. Type II is intended for calm inland waters when a quick rescue is anticipated.
- Type II turns the person to a face up position, but the turning action is not as evident as the Type I. Type II will not typically turn people over in the same manner as Type I.

PFD TYPE III, WEARABLE:

- Type III is classified as a flotation aid; however, the device **WILL NOT** turn a victim to a face-up position.
- Type III is frequently used in water sports, and **SHOULD BE AVOIDED IN PERSONAL YACHTING.**

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 Carver 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 other yachts with radar reflectors 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 Halon. 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. It is the owners responsibility to 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.

RECOMMENDED EQUIPMENT

In addition to the required equipment, Carver recommends carrying the following:

- | | |
|----------------------|-----------------------|
| • Spare anchor | • Tool kit |
| • Heaving line | • Ring buoy |
| • Fenders | • Navigational charts |
| • Flashlight | • Mooring lines |
| • Mirror | • Binoculars |
| • Suntan lotion | • Spare parts |
| • Spare propeller(s) | • Spare pump |

OWNER'S RESPONSIBILITIES

SAFE YACHTING COURSES

Your local U.S. Coast Guard Auxiliary and the U.S. Power Squadrons offer 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.

Carver recommends reading *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 cars expect that all other drivers know how to drive a car, other yachters expect that all other yachters know how to drive a yacht.

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

1. United States Inland Navigational Rules
2. International Rules

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 U.S. Coast Guard station, your Carver 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.
- **Radio Log**: mandatory on vessels that are required to carry a radio. A radio log can be useful to record unusual events, especially for future litigation.
- **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.
- **GPS Log**: used if a GPS is equipped onboard.

DRUGS AND ALCOHOL

Drugs and alcohol adversely affect a person's ability: to make sound judgments, react quickly, and operate a yacht safely. As a responsible yachter, it is strongly recommended to refrain from using drugs or alcohol while operating the yacht. Operating a motorized yacht while under the influence of drugs or alcohol carries a significant penalty.

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.

GARBAGE

Dumping garbage into the sea is a worldwide problem. U.S. 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.**

OIL

The Federal Water Pollution Control Act prohibits the discharge of oil or oily waste into or upon the navigable waters and contiguous zone of the United States. Violators are 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. If an overboard discharge is installed, check with a local U.S. Coast Guard office to ensure that compliance is met with federal 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.

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.

CARBON MONOXIDE (CO) WARNINGS

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



CO2 Illustration: 1.1

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: 1.2

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 above.

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.

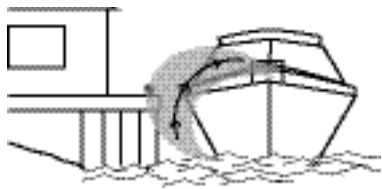
- Minimize the time spent getting underway; CO production is greater when the engines are cold.
- Maintain the propulsion and generator engines to optimize efficiency, which reduces CO emissions.

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®.

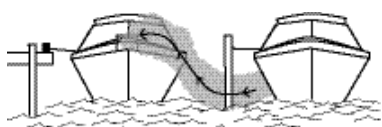
- U.S. Coast Guard Auxiliary: 1-800-368-5647 or on the Internet at: www.cgaux.org
- U.S. Power Squadrons: 1-888-FOR-USPS (1-888-367-8777) or on the Internet at: www.usps.org

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.



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.

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.

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 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:

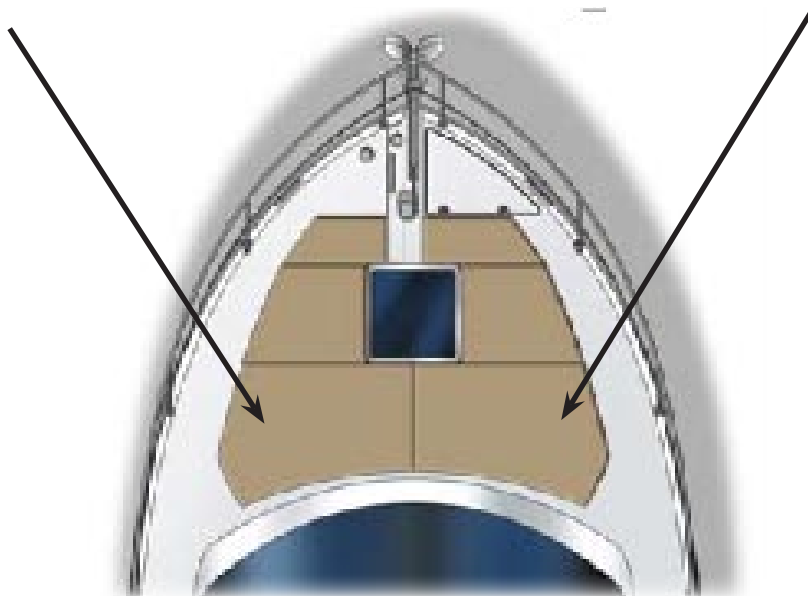
- Any change in disposition of the masses aboard may significantly affect the stability, trim, and performance of the craft.
- Bilge water should be kept to a minimum.
- Stability is reduced by any weight added up high.
- In rough weather, hatches, locker, and doorways should be closed to minimize the 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.



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 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. Connections are made using crimped connector points. The electrical system is virtually maintenance free, with only the batteries requiring periodic inspection and maintenance.

DANGER

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

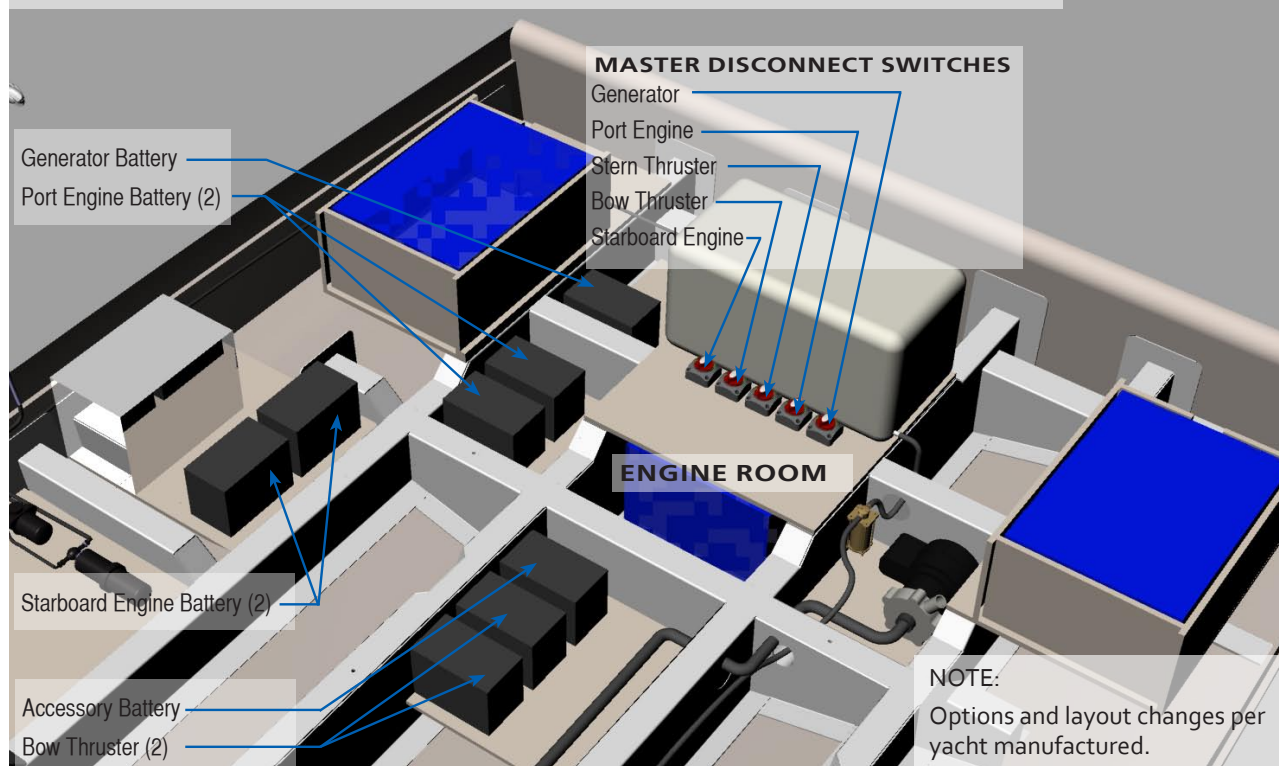
BATTERIES/MASTER DISCONNECT SWITCHES

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 (4) - Two 12-volt batteries are designated for each engine
- Accessory Batteries (1) - Three 12-volt batteries are designated for the accessory items onboard
- Generator Battery (1) - One 12-volt battery designated for the generator
- Stern Thruster (2) - Two 12-volt batteries designated for each stern thruster (If installed)
- Bow Thruster (2) - Two 12-volt batteries designated for each bow thruster (If installed)

BATTERY AND MASTER DISCONNECT SWITCH LAYOUT



MASTER DISCONNECT SWITCHES

Master disconnect switches control electricity from the batteries to the DC Control Panel, engines, and accessory items. A total of five master disconnect switches control the flow of electricity to the DC components. The switches are allocated as follows: accessory, 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 (Dinette aft, Starboard cabinet), and the breakers control the flow of electricity the DC panel's allocated items.

ENGINE BATTERIES AND MASTER DISCONNECT SWITCHES

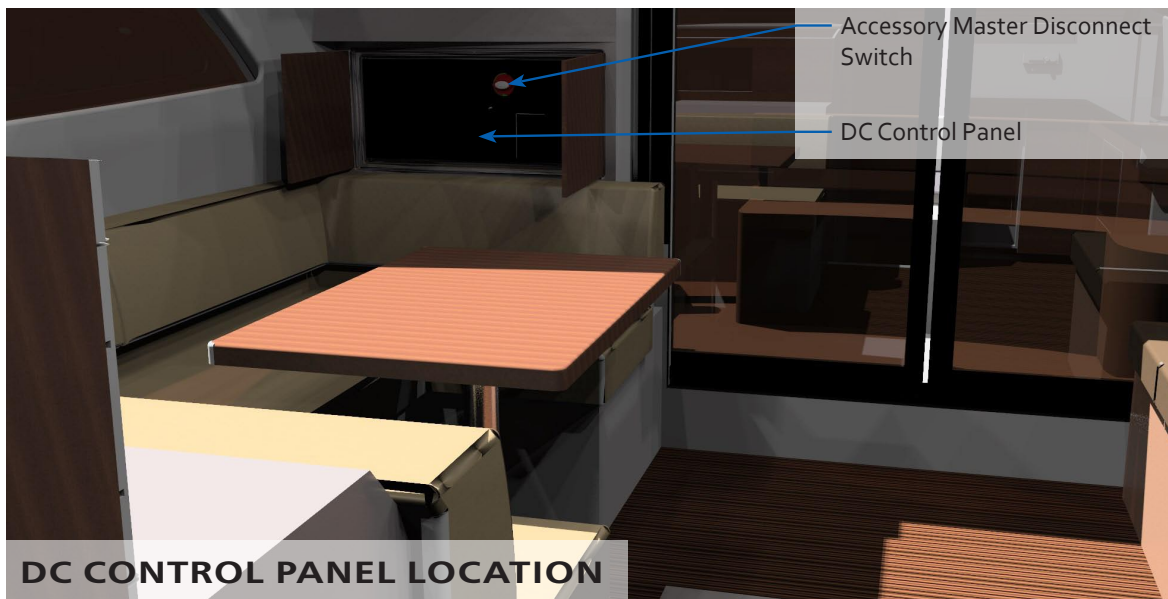
Each propulsion engine has two designated engine batteries. Each engine battery set is located outboard of the designated engine.

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

ACCESSORY BATTERY AND MASTER DISCONNECT SWITCH

The accessory equipment is controlled by the DC Control Panel (Dinette Aft, Starboard cabinet). 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, Dinette aft, Starboard cabinet. Circuit breakers on the DC Control Panel control the flow of electricity to the other DC circuit breaker panels.



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 and master disconnect switch location.

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.



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. To activate each engine's voltmeter, turn the engine's ignition key one position to the right.

NOTE:

Starting the engines is not necessary to activate the fuel gauge. Refer to the OEM information for details on operating the engines.

DC ELECTRICAL SYSTEM



Voltmeter (Left) needs to be cycled to voltmeters and the engines need to run at idle to indicate correct running volt.

DANGER

BEFORE STARTING THE ENGINES, FOLLOW THE PROCEDURES DESCRIBED IN SECTION 5. IMPROPERLY STARTING THE ENGINES CAN BE HAZARDOUS

ACCESSORY BATTERY

The voltage level of the accessory batteries is determined by using the voltmeter, labeled "DC VOLTS", located on the DC Control Panel (Dinette aft, Starboard cabinet).

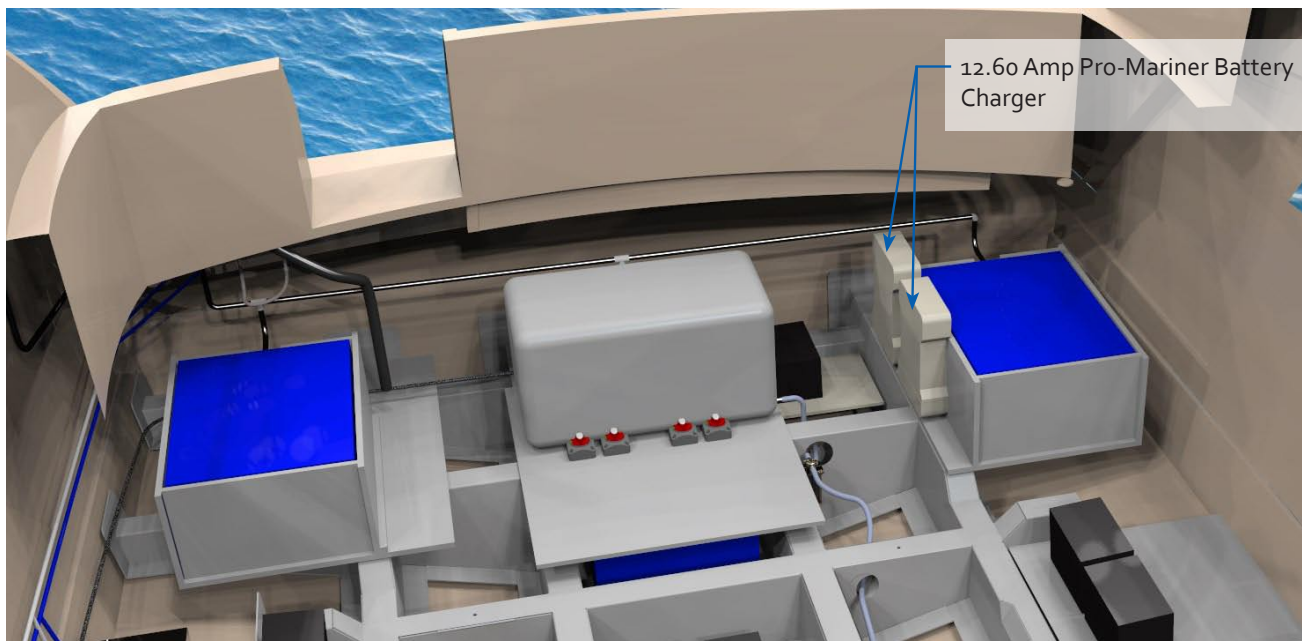
ACTIVATING THE VOLTMETER:

1. Turn ON the Accessory battery master disconnect switch. The Accessory master disconnect switch is located on the DC Control Panel (Dinette aft, Starboard side cabinet).
2. Switch ON the SYSTEMS DC MAIN circuit breaker on the DC Control Panel (Dinette aft, Starboard cabinet).

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 equipped with an alternator that charges the 12-volt accessory battery bank. The DC equipment will eventually drain the batteries being used without the engines running.



BATTERY CHARGER LOCATION

NEVER

NEVER ALLOW THE YACHT'S BATTERIES TO BECOME COMPLETELY DISCHARGED. COMPLETELY DISCHARGING A BATTERY CAN DAMAGE IT SO THAT THE BATTERY CAN NO LONGER BE RECHARGED.

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. See previous page 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

Each battery charger monitors and maintains the voltage levels of one or more 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 at the port transom, outboard corner of the yacht. The chargers are mounted against the port freshwater tank. See previous page for illustration.

The voltage levels of the generator battery are monitored and maintained by a single battery charger. The generator battery charger is mounted against the port freshwater tank. See previous page 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.

IF THE BATTERY IS DAMAGED AND ELECTROLYTE GETS SPILLED:

1. Ventilate the area of the spill.
2. Neutralize the acid in the electrolyte 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 that are kept fully or near fully charged last longer than batteries stored with a partial charge. The charge level of the batteries can be monitored using the voltmeters on the helm instrument panel (engine batteries) or tribulation 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.

DC ELECTRICAL SYSTEM



- 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 once every three months 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. AVOID OVERCHARGING THE BATTERIES.

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.

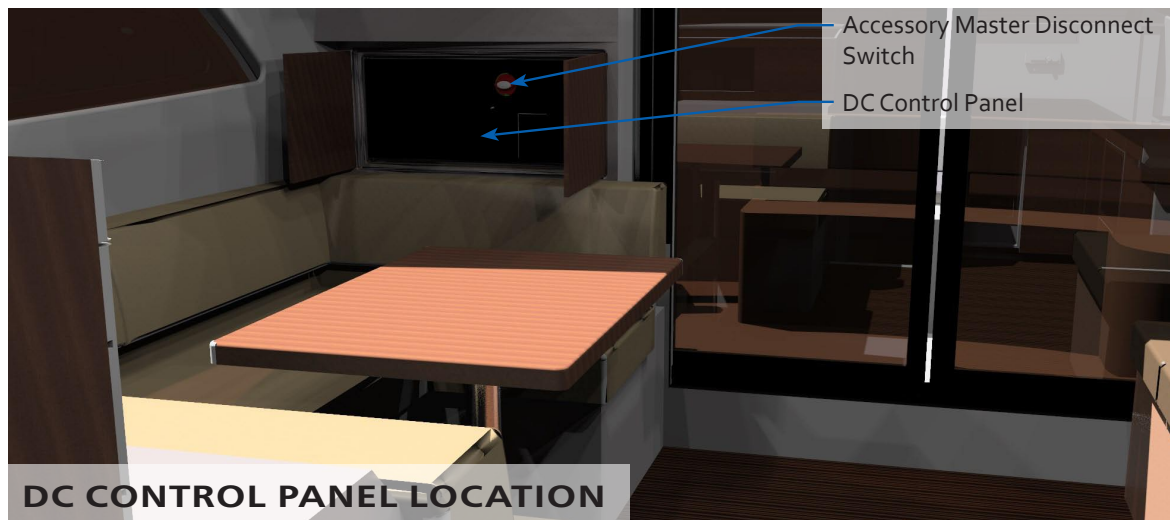
IF A SAFETY SYSTEM CIRCUIT BREAKER TRIPS:

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 placing two moist fingers on the two round raised areas located on the inside of the switch. The switch is located next to the pump. The pump should turn on after a few seconds of finger contact.

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 CONTROL PANEL (DINETTE, AFT CABINET)

The DC Control Panel manages the power supply to the DC components listed on the panel. The DC panel is located in a cabinet in the aft Starboard corner of the salon, and contains the circuit breakers described in this section. The panel also contains additional controls and meters, described in the vendor literature.

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.

Thermal circuit breakers are also installed in many circuits to provide added protection.

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. For a description of the sump system.

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 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 switch at the helm is connected to a relay that operates the switch's designated bilge pump.

BRIDGE ACCESSORY

The Bridge Accessory breaker controls the accessory items on the bridge. Switch the breaker ON to enable the bridge accessories.

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.

DC ELECTRICAL SYSTEM



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 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 (OPTION)

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 (OPTIONAL LOWER HELM)

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 STBD aft cabinet. 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 bridge.

FUEL TRANSFER PUMP (DIESEL ENGINE OPTION ONLY)

The Fuel Transfer Pump breaker controls the pump that transfers the fuel in the engine room.

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.

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.

MASTER HEAD FAN

The master head fan breakers controls the fans in the Master 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 horns.

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 (OPTION)

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

PORT WIPER (LOWER HELM OPTION ONLY)

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 (LOWER HELM OPTION ONLY)

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

STEREO

The Stereo breaker controls the auto-switch located on 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 activates the trim tab controls at each helm individually or at both helms. 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. Switch the breaker ON to supply power to the system.

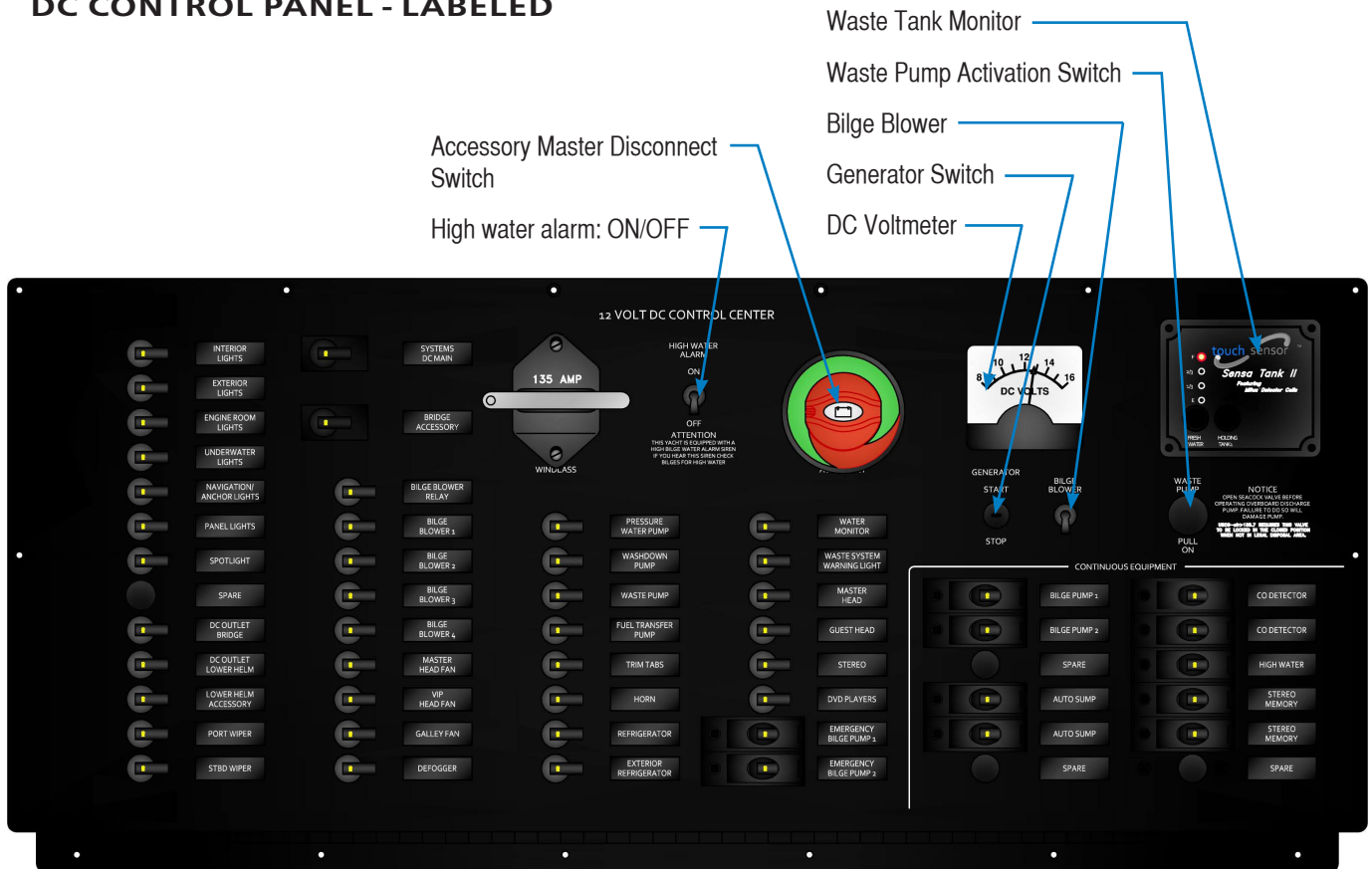
DC ELECTRICAL SYSTEM



WATER MONITOR

The Water Monitor breaker controls the fresh water monitoring system, including the water level display. The water level display is located on the STDB side of the bridge helm.

DC CONTROL PANEL - LABELED



DC CONTROL PANEL (SALON AFT)

SEE SECTION 9 FOR COMPREHENSIVE SET ELECTRICAL SCHEMATICS

PAGE INTENTIONALLY LEFT BLANK

AC ELECTRICAL SYSTEM

A 30 amp AC (alternating current) electrical system is installed onboard. 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.

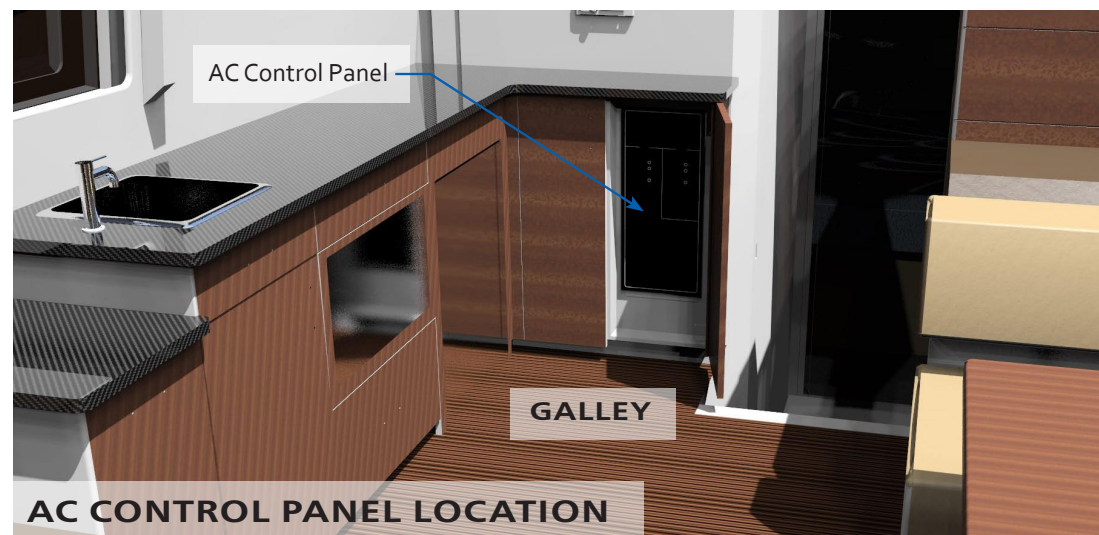
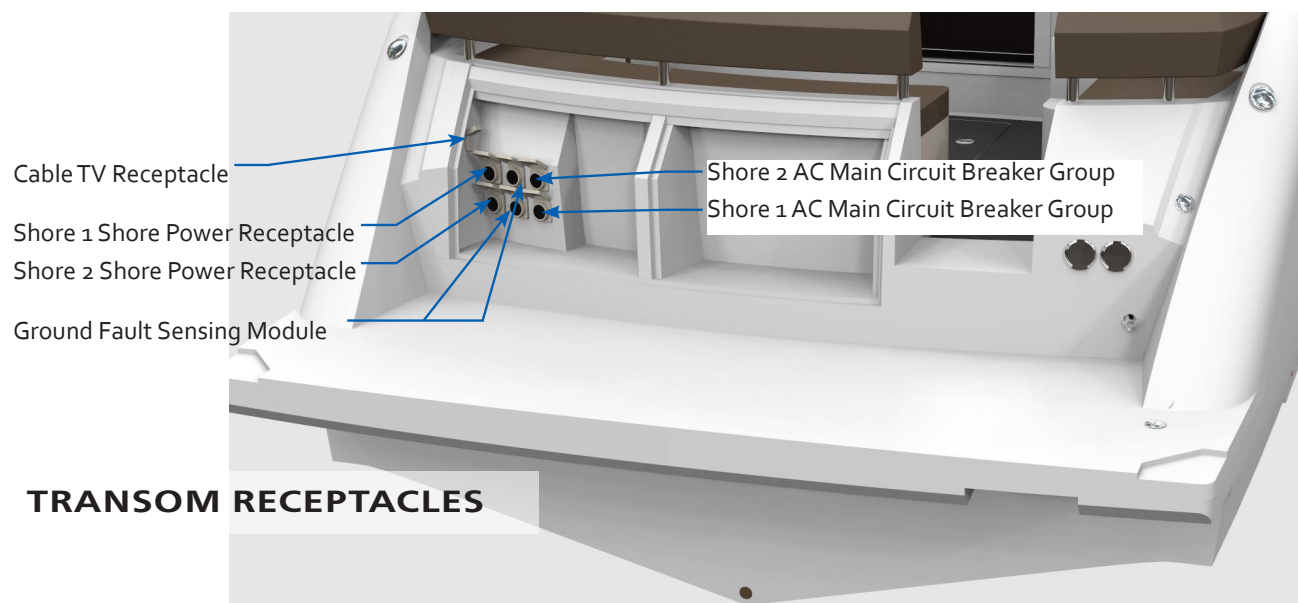
- Shore 1/Shore 2 (120V/60Hz) AC electrical system is designed for use in North America and EC Countries.
- AC Control Panel, located in the Galley forward cabinet

DANGER

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

DANGER

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



SYSTEM ORGANIZATION

NORTH AMERICA/PACIFIC RIM/EUROPEAN ELECTRICAL SYSTEM

SHORE 1

Shore 1 (30 amp) circuit on the AC electrical system provides power to all of the AC equipment except, the air conditioning system. Shore 1 is configured as 120 volts 60 Hertz.

SHORE 2

Shore 2 (30 amp) circuit, located on the AC electrical system 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 120 volts 30 Hz.

WIRING SYSTEM

The AC electrical system uses four types of color-coded wires. The color coding is as follows:

BLACK WIRE (110 volt): Carries the current from the power source to the equipment or receptacle. Each black wire is connected to and protected by a circuit breaker installed on the AC Control Center.

WHITE WIRE: Returns the current from the equipment or receptacle to the power source.

GREEN WIRE: Safety ground wire. During normal operation, the current does not flow through the ground wires.

Buss bars are used in the AC electrical system to help route and organize the wires. The system's white, or neutral, wires are connected together at buss bars. The ground wires are also connected together at a separate buss bar.

DANGER

DO NOT TOUCH THE BLACK, RED, OR WHITE WIRES WHILE THE AC ELECTRICAL SYSTEM IS CONNECTED TO A POWER SOURCE. EACH WIRE CARRIES ENOUGH CURRENT TO KILL OR CAUSE SERIOUS INJURY.

AC Power Sources

SHORE POWER

The stern shore power connectors and the AC Main circuit breaker groups for the stern shore power connectors are located on the transom storage locker on the PORT side.

NOTE: Remove all perishables from the refrigerator if the yacht is unoccupied for more than forty-eight hours. The shore power supply to the refrigerator may be interrupted and food may spoil.

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 INCUR 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 HANG THE SHORE POWER CORD INTO THE WATER. NEARBY SWIMMERS OR PASSENGERS CAN BE KILLED OR SERIOUSLY INJURED FROM THE SURROUNDING ELECTRICAL FIELD.

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

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 YOU DO NOT DO SO. SEE EARLIER IN THIS SECTION FOR AC MAIN BREAKER LOCATION.

WARNING

TO MINIMIZE SHOCK AND FIRE HAZARD:

1. BEFORE USING THE SHORE POWER CORD, EXAMINE THE CABLE FOR DAMAGE. DO NOT USE THE SHORE POWER CORD IF IT APPEARS CUT OR DAMAGED.
2. TURN OFF THE BOAT'S SHORE CONNECTION SWITCH BEFORE CONNECTING OR DISCONNECTING THE CORD.
3. CONNECT THE SHORE POWER CORD AT THE BOAT FIRST.
4. IF THE BOAT IS EQUIPPED WITH A POLARITY INDICATOR WHICH ACTIVATES, DISCONNECT THE SHORE POWER CORD AND CORRECT THE POLARITY.
5. DISCONNECT THE SHORE POWER CORD AT THE SHORE OUTLET FIRST.
6. DO NOT LEAVE THE SHORE POWER CORD CONNECTED TO THE SHORE-OUTLET WHEN THE CORD IS NOT IN USE.

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

WARNING

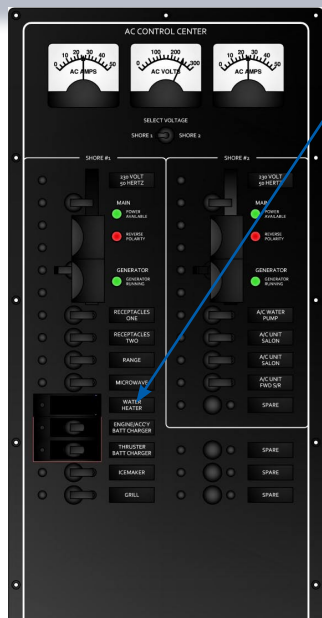
DO NOT WORK ON AN ENERGIZED AC SYSTEM.

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 SHORE POWER CONNECTOR. SERIOUS INJURY OR DEATH MAY OCCUR.

(SEE NEXT PAGE FOR 'SHORE POWER CONNECTION'.

AC ELECTRICAL SYSTEM



AC CONTROL PANEL

SHORE POWER CONNECTION PROCESS:

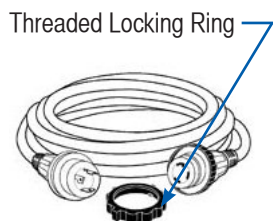
- STEP 1:** Switch OFF the WATER HEATER circuit breaker on the AC Control Panel, located in the galley, forward cabinet at the companionway. Do not switch the breaker on again until the fresh water system has been filled, pressurized, and primed. (See first page of this section for AC Control Panel location)
- STEP 2:** Switch OFF the AC Main circuit breaker group(s), located in the port transom storage locker. AC Main breakers are labeled SHORE 1/SHORE 2 (See first page of this section for illustration of the location)

DANGER

ELECTRICAL SHOCK RESULTING IN DEATH OR SERIOUS INJURY CAN INCUR 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.

NOTE:

Switch OFF the main circuit breakers before connecting to the shore power to prevent 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.



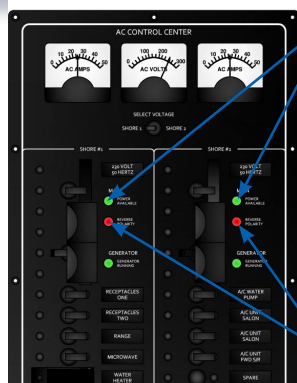
SHORE POWER CORD

- 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 first page of this section 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 10:** Switch ON the SHORE 1 and SHORE 2 AC Main Circuit Breaker Groups located in the PORT transom storage locker. See first page of this section for illustration.



AC CONTROL PANEL

STEP 11: Make sure the GREEN Indicator lights are on lit on the AC Control Panel, located in the Galley Forward Cabinet, Port side. The Green Indicator Lights indicate that power is available.

IF THE GREEN INDICATOR LIGHT IS NOT LIT:

- Recheck all connections and check circuit breakers on AC Control Panel.
- Monitor voltmeter and ammeter while connected to shore power.

STEP 12: Check to make sure that the **Reverse Polarity Indicator** is not lit. **IF THE INDICATOR LIGHT ILLUMINATES, SWITCH THE MAIN CIRCUIT BREAKER GROUPS OFF.**

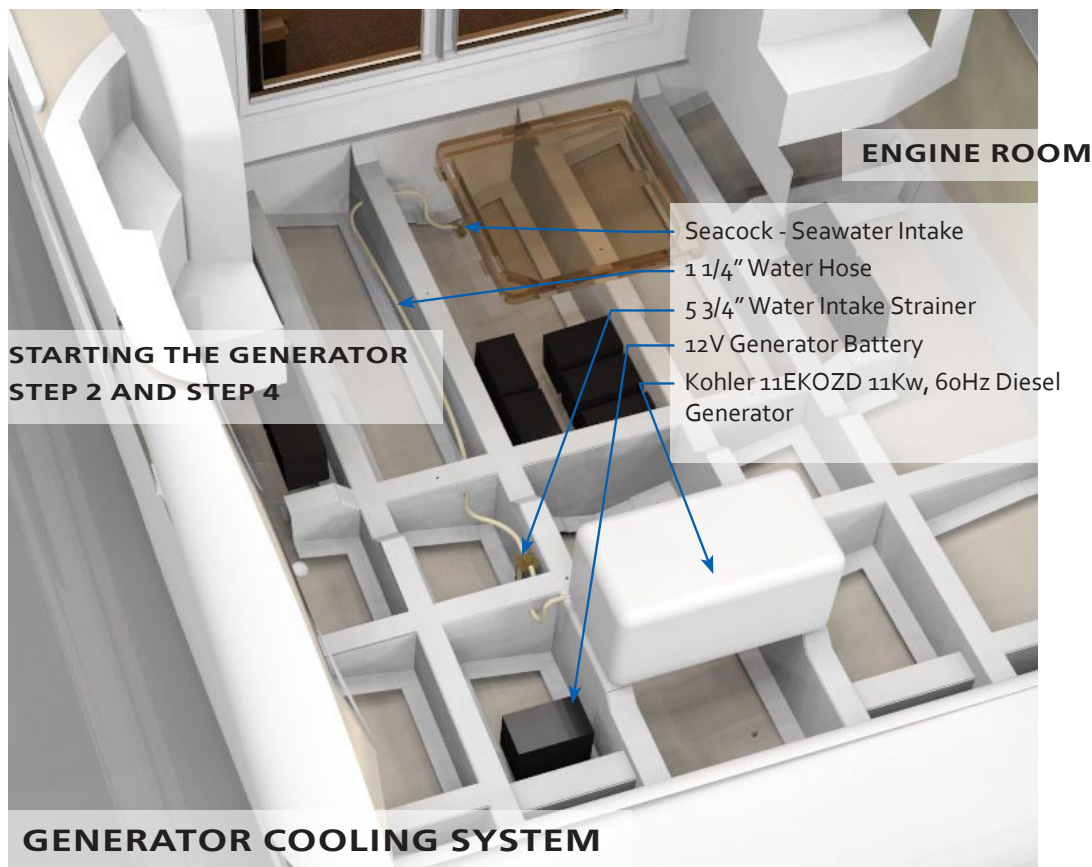
GENERATOR POWER

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 aft transom, port side of the engine room. See next page for illustration.

The generator starter is powered by a designated 12-volt battery. The generator battery is located with the engine batteries in the engine room. Power to the generator from the battery is controlled by a master disconnect switch, located directly behind the starboard engine. See the next two pages for illustration.

CAUTION

NEVER TURN OFF THE GENERATOR MASTER DISCONNECT SWITCH WHILE THE GENERATOR IS OPERATING. THE GENERATOR AND/OR ALTERNATOR WIRING CAN BE DAMAGED.



AC ELECTRICAL SYSTEM



PRIOR TO STARTING THE GENERATOR

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

- STEP 1:** Turn the generator OFF.
- STEP 2:** Shut-off the Generator Circuit Breaker located on the AC Control Panel. See next page for illustration.
- 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 strainer. The strainer is located next to the PORT engine.
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.

A Tip From Carver!

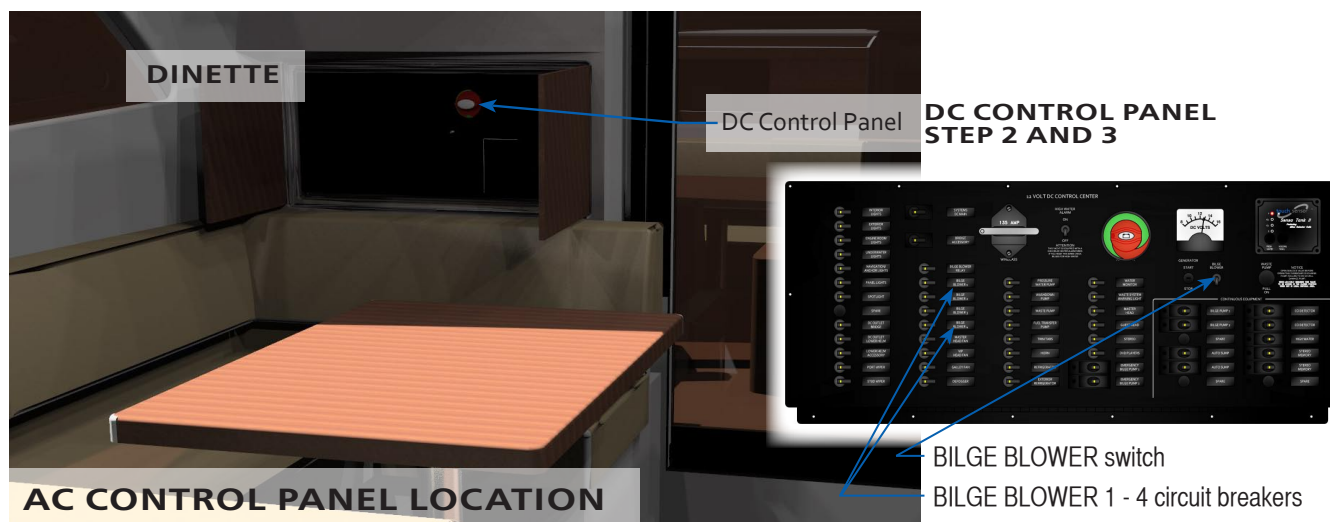
Dedicating a 12-volt battery to the generator provides an important safety feature. A dedicated battery enables you to start the generator regardless of the condition of the propulsion engine batteries. If the batteries become discharged to the point where they are unable to start an engine: start the 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 *Generator Cooling System* Illustration on previous page for location.
- STEP 2:** Switch BILGE BLOWER 1 - BILGE BLOWER 4 circuit breakers ON, located on the DC Control Panel (Dinette aft, Starboard cabinet).
- STEP 3:** Turn ON the BILGE BLOWER switch on upper right corner the DC Control Panel (Dinette aft, Starboard cabinet).



WARNING

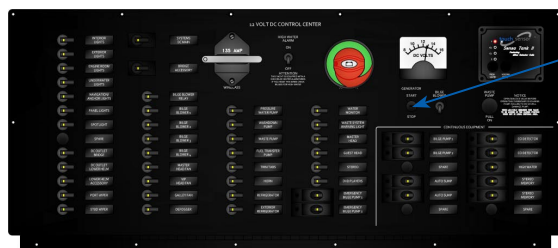
GASOLINE VAPORS CAN EXPLODE, RESULTING IN INJURY OR DEATH. BEFORE STARTING THE ENGINES OR GENERATOR, PERFORM THE FOLLOWING:

- CHECK 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.

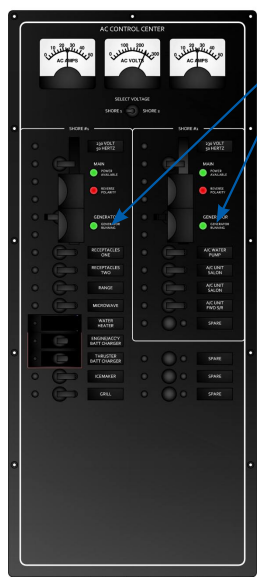
NEVER HOLD THE STOP/START SWITCH IN THE START POSITION FOR MORE THAN 10 SECONDS.



Generator Start/Stop Switch

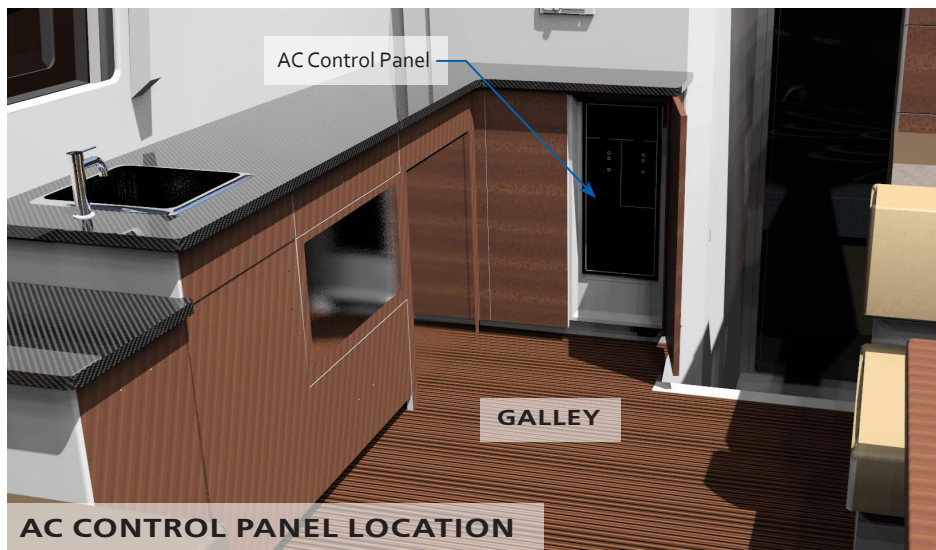
DC CONTROL PANEL STEP 4 AND STEP 5

- STEP 4:** Locate the DC Control Panel in the Dinette aft, starboard cabinet. Press and hold the Generator START/STOP switch until the generator starts. Release the switch once the generator starts.
- STEP 5:** Once the generator is running smoothly, switch the GENERATOR circuit breaker group ON, located on the AC Control Center. 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 Center.
- STEP 6:** To turn the generator OFF, push the START/STOP, switch to the STOP position, located on the DC Control Panel.
- 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 directly aft of the PORT engine.



Generator Circuit Breaker

AC CONTROL PANEL



AC Control Panel

GALLEY

AC CONTROL PANEL LOCATION

AC ELECTRICAL SYSTEM



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

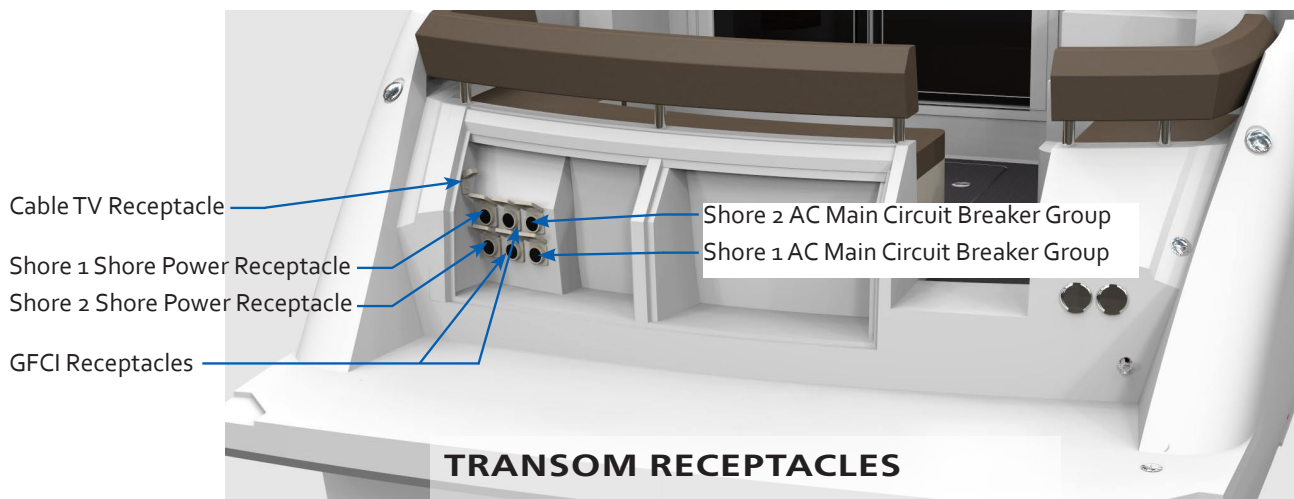
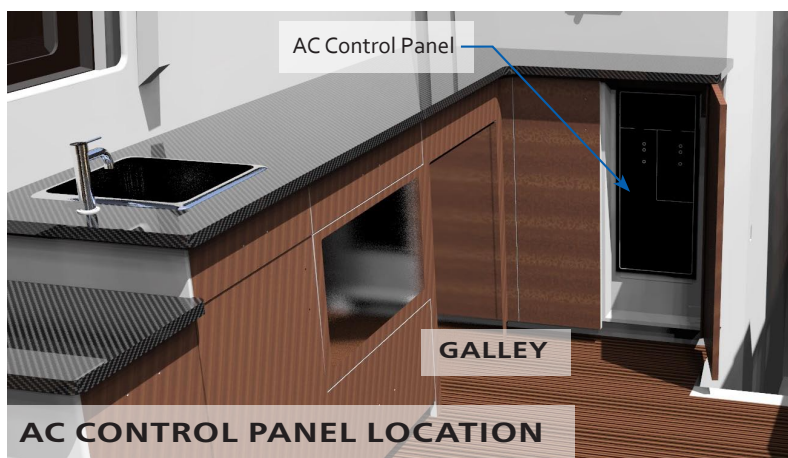
DO NOT INHALE GENERATOR EXHAUST. GENERATOR EXHAUST CONTAINS CARBON MONOXIDE, A POISONOUS GAS. REFER TO SECTION 1: CARBON MONOXIDE WARNINGS FOR MORE INFORMATION ON ENGINE EXHAUST AND CARBON MONOXIDE.

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 in the Galley, forward cabinet at the companionway.

Two AC MAIN Circuit Breaker locations are installed onboard:

- AC Main Circuit Breaker Group(s), labeled SHORE 1/SHORE 2 (Transom Storage Compartment)
- AC Control Panel (Galley, Forward Lower Cabinet)



Electricity to the AC components can be controlled by switching the breakers from 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 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.

NOTE: A circuit breaker location may be labeled, but no circuit breaker is present. In this situation, the component named on the label is an option that is not installed on the purchased model.

AC CONTROL PANEL



The AC Panel manages the power supply to all of AC equipment installed onboard. The AC Panel is located in the Dinette aft, starboard cabinet.

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.

NORTH AMERICAN/PACIFIC RIM/EUROPEAN AC CONTROL CENTER

- **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.

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 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:

AC ELECTRICAL SYSTEM



- 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, 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 AC Main 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 Center 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

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, Galley, 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. 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.

SHORE 1 CIRCUIT BREAKERS

ENGINE/ACC'Y BATTERY CHARGER

The Engine 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 charger is located in the engine room aft, port side. Refer to the OEM information for details on operating the battery charger.

THRUSTER BATTERY CHARGER

The Thruster Battery Charger breaker controls the flow of electricity to the battery charger that maintains the voltage levels in the battery supplying power to the stern thruster.

GRILL

The Grill breaker controls the flow of electricity to the grill located on the bridge. Switch the breaker ON to supply power to the grill. Refer to the OEM information for details on operating the grill.

ICEMAKER

The Icebreaker breaker controls the flow of electricity to the optional icemaker or located below the optional wet bar on the bridge. Switch the breaker ON to supply power to 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 and VIP stateroom and Master Head and VIP Head. Switch the breaker ON to supply power to the Master Stateroom receptacles. The receptacles are used the same as in-home outlets.

NOTE: The circuit's GFCI breaker may have tripped if the Receptacles - Master Stateroom circuit breaker is ON, but power is not available to the receptacles in this group. 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, dinette, and pilothouse. Switch the breaker ON to supply power to the Salon receptacles. The receptacles are used the same as in-home outlets.

NOTE: The circuit's GFCI breaker may have tripped if the Receptacles - Master Stateroom circuit breaker is ON, but power is not available to the receptacles in this group. Refer to *Ground Fault Circuit Interrupters* later in this section for more information.

THRUSTER BATTERY CHARGER

The Thruster Battery Charger breaker controls the flow of electricity to the battery charger that maintains the voltage levels in the battery supplying power to the bow thruster. Switch the breaker ON to supply power to the battery charger. The generator battery charger is located in the engine room aft, port 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. DO NOT supply power to the water heater when the water heater is empty.

GROUND FAULT CIRCUIT INTERRUPTERS



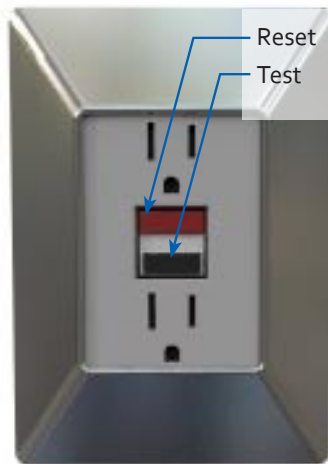
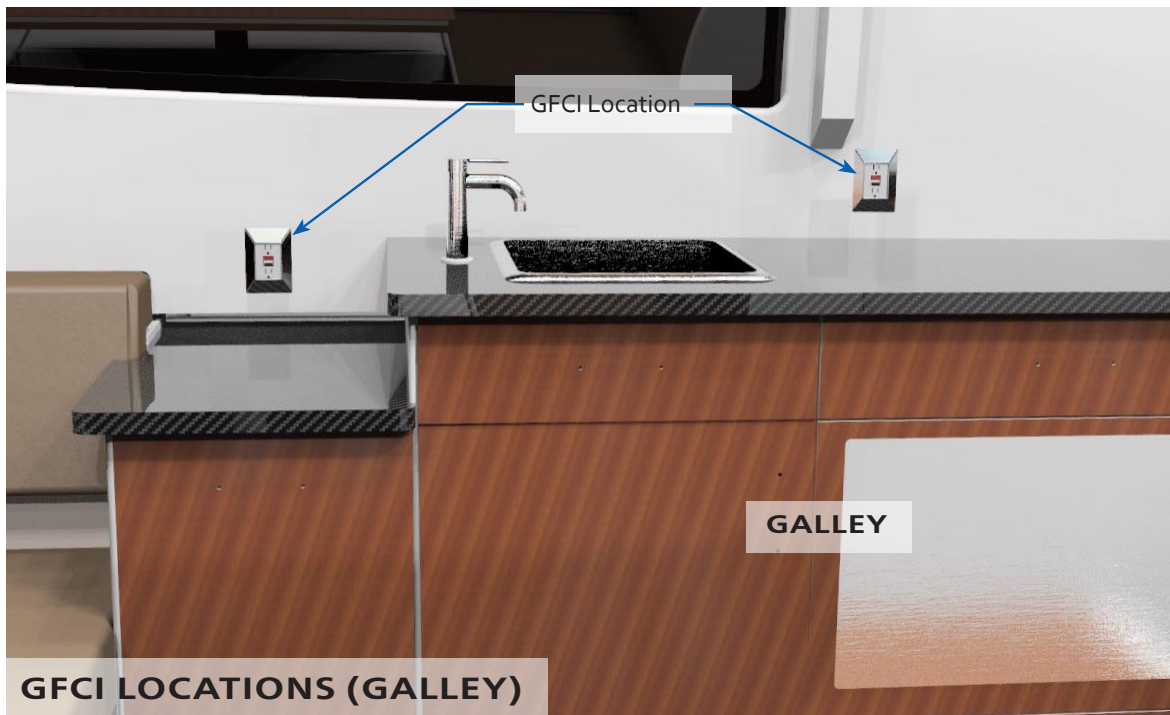
GROUND FAULT CIRCUIT INTERRUPTER (GFCI)

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.

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

A Test Button and ON/OFF switch is mounted on each GFCI. Switch the ON/OFF switch to ON, to reset a GFCI that has tripped.

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

7. Press the Test button. If operating normally, it cuts the electricity to the receptacle on the GFCI.
8. Plug a lamp or other AC powered device into the receptacle, and turn ON the device. The device should NOT operate.
9. Press the Test button. **DO NOT** use the receptacle if the receptacle still has power. Contact a qualified electrician to make the appropriate repairs.
10. 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 SHORE circuit has an electrical load capacity of 30 amps.

The breaker for the MAIN circuit 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. See AC Panel illustration below. The AC Control Panel is located in the galley on cabinet end at the companionway. See ‘Operating the AC Equipment’ for panel location.

WARNING

DO NOT OVERLOAD THE ELECTRICAL CIRCUITS. TURN OFF ALL DEVICES CONNECTED TO THE CIRCUIT, THEN SWITCH THE BREAKER BACK ON IF AN EXCESSIVE LOAD TRIPS A CIRCUIT BREAKER.

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

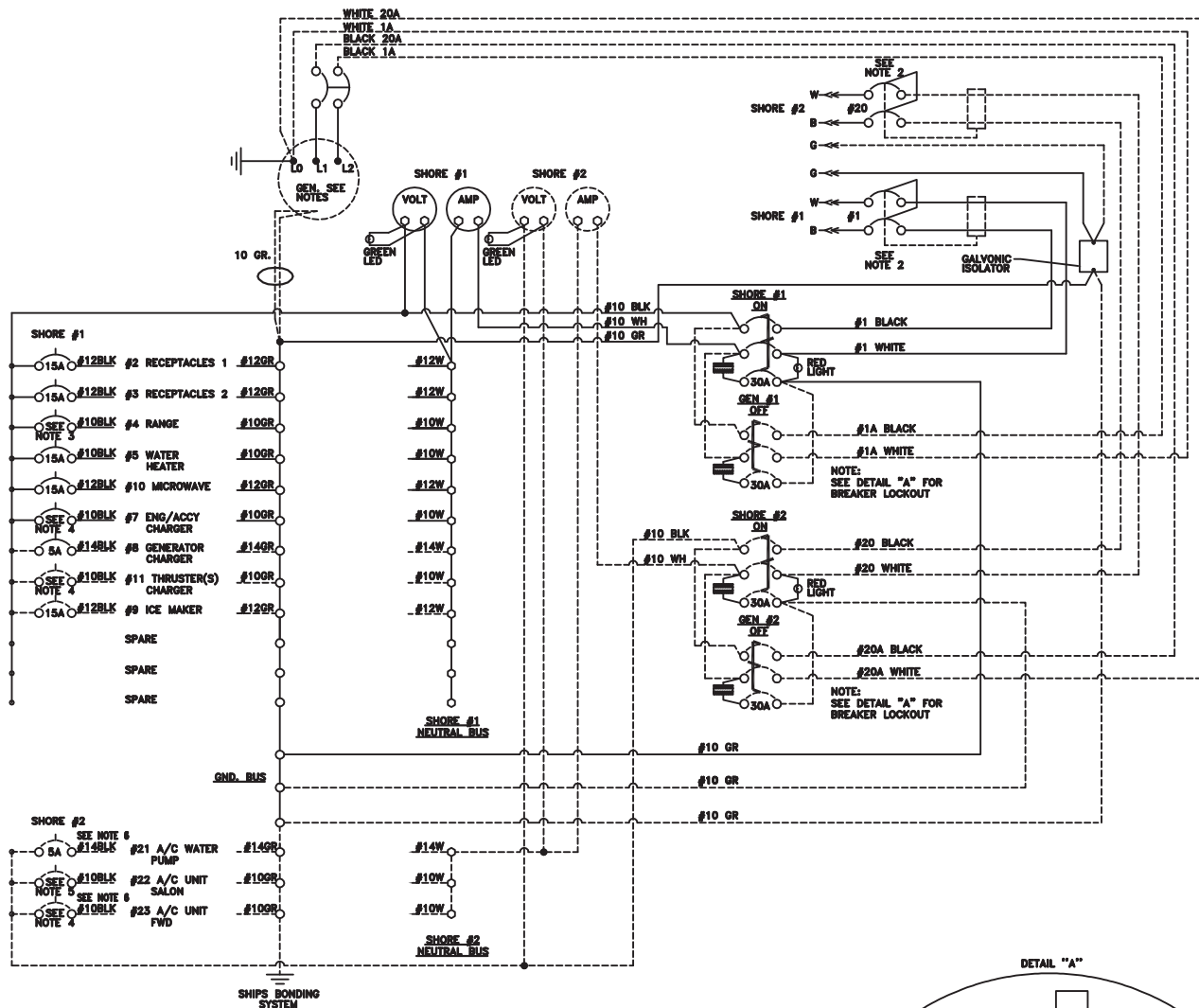
MONITOR THE CONDITION OF THE YACHT'S ZINC ANODES. REPLACE THE ZINC ANODES WHEN THEY HAVE DETERIORATED TO 30% OF THE ORIGINAL SIZE. DO NOT ALLOW THE ZINC ANODES TO COMPLETELY DETERIORATE. REFER TO SECTION 7: *MAINTENANCE SCHEDULE* FOR RECOMMENDED INSPECTION INTERVALS.

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

TROUBLESHOOTING THE AC ELECTRICAL SYSTEM

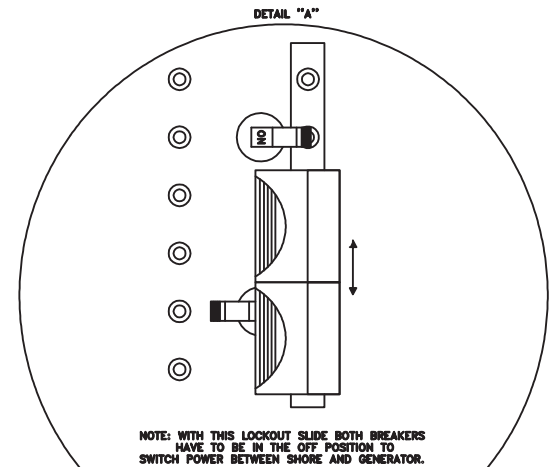
Problem	Problem Cause	Possible Solution
VOLTMETER ON AC CONTROL PANEL READS ZERO	Shore power cord is not connected	Connect the shore power cord
	No power is at the shore power source box	Contact marina management
	The breaker installed in the shore power source box is OFF	Switch ON the circuit breaker
	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

60 Hz AC ELECTRICAL SCHEMATIC



NOTES:

- 1) ----- LINES DENOTE OPTIONS
- 2) INLET BREAKER SIZE:
WHEN 110V=Y 60HZ - 2 POLE 30A ELCI
WHEN 110V=N 50HZ - 2 POLE 16A RCD
- 3) BREAKER SIZE FOR RANGE:
WHEN 110V=Y - 25A
WHEN 110V=N - 15A
- 4) BREAKER SIZE FOR ENGINE/ACCESSORY, THRUSTER
BATTERY CHARGERS & FWD S/R A/C UNIT:
WHEN 110V=Y - 15A
WHEN 110V=N - 10A
- 5) BREAKER SIZE FOR SALON A/C UNIT:
WHEN 110V=Y - 20A
WHEN 110V=N - 15A
- 6) A/C BREAKERS #21 & #23 ARE ONLY
USED WHEN AC=SOUTH
- 7) A/C WATER PUMP IS NOT USED WITH ONE A/C UNIT,
THE PUMP IS ONLY USED WHEN THERE ARE TWO OR
MORE A/C UNITS INSTALLED.



NOTE: WITH THIS LOCKOUT SLIDE BOTH BREAKERS
HAVE TO BE IN THE OFF POSITION TO
SWITCH POWER BETWEEN SHORE AND GENERATOR.

SEE SECTION 9 FOR COMPREHENSIVE SET ELECTRICAL SCHEMATICS

AIR CONDITIONING SYSTEM

Section 4 applies ONLY, to the Interior Air Conditioning System installed at Carver. An aftermarket air conditioning system may not operate the same as the system outlined in this section.

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

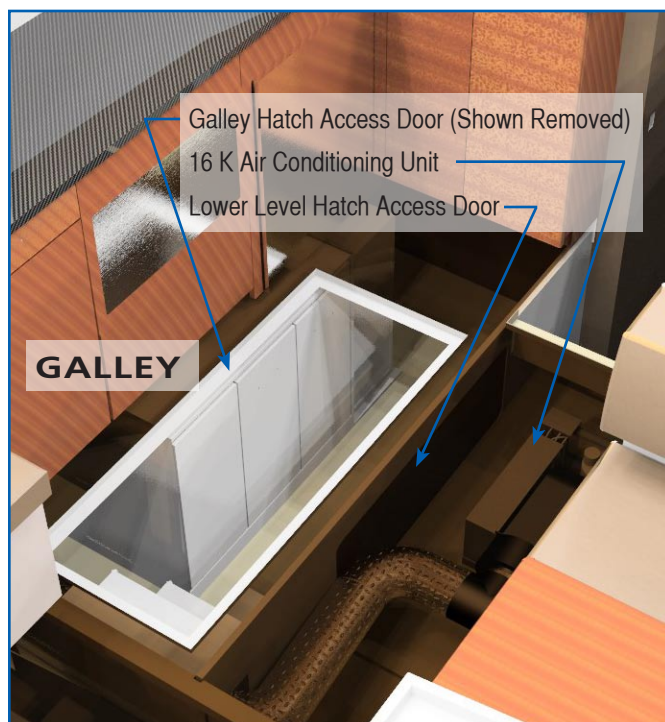
The onboard air conditioning system has two design layouts depending on the location that the yacht is shipped to.

STANDARD

The Standard air conditioning system consists of a single factory-installed 16,000 BTU air conditioning unit with ventilation supplied to each room.

ACCESSING THE 16,000 BTU A/C UNIT

1. Remove the Galley hatch access door and proceed down the steps.
2. Remove the lower-level, access panel on the Starboard side of the maintenance room to access the air conditioning unit.



**AIR CONDITIONING UNIT LOCATION
(STANDARD SHOWN. HIGH VELOCITY SIMILAR)**

HIGH-VELOCITY

The High-Velocity air conditioning system consists of three air conditioning units placed throughout the yacht with ventilation supplied to each room. The A/C units and locations are as follows:

MASTER STATEROOM

A single 8,000 BTU unit is installed in the master stateroom within the frame of the bed. See next

GALLEY

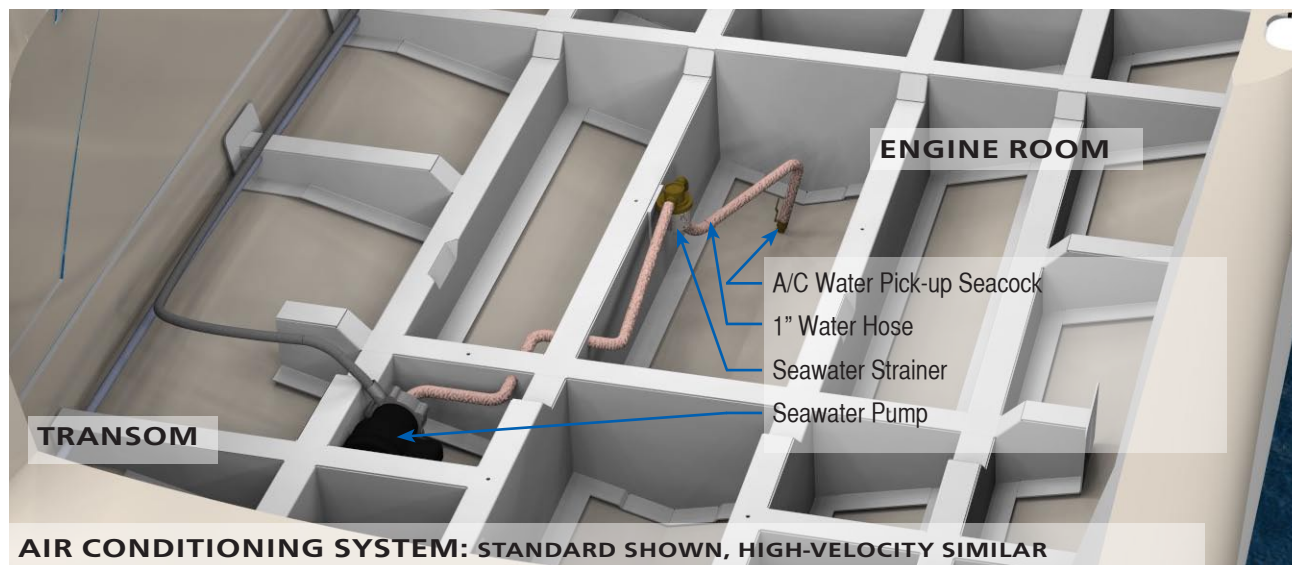
Two 9,000 BTU units are installed below the galley in the hatch access. Access same as detail shown above.

PRODUCING HEAT

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

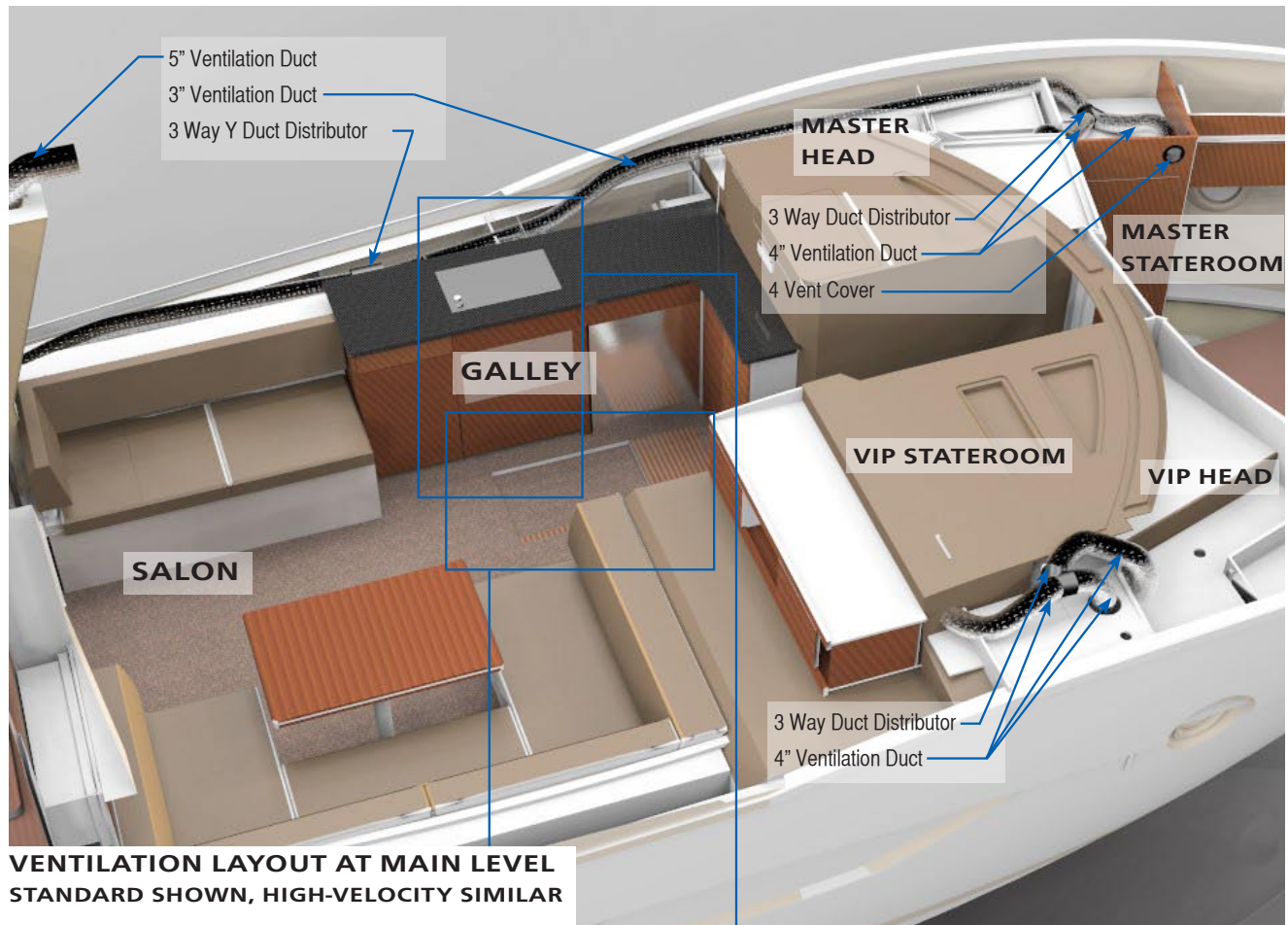
DO NOT SWITCH THE A/C SYSTEM WATER PUMP BREAKER ON UNTIL AFTER THE SEACOCKS SUPPLYING THE AIR CONDITIONING SYSTEM WITH SEAWATER HAVE BEEN OPENED. THE PUMP AND SEACOCKS ARE LOCATED IN THE ENGINE ROOM, FORWARD OF THE STDB ENGINE.

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 (Galley Forward Cabinet, STBD Side).
7. Switch the AUTO SUMP circuit breaker to ON, located on the DC Control Panel (Dinette Aft Cabinet, Starboard Side). 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 Center (Galley Forward Cabinet, STBD Side).
9. Switch ON the desired Air Conditioning Unit circuit breakers, located on AC Control Center.
10. Verify that seawater is pumping through the air conditioning units. 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.

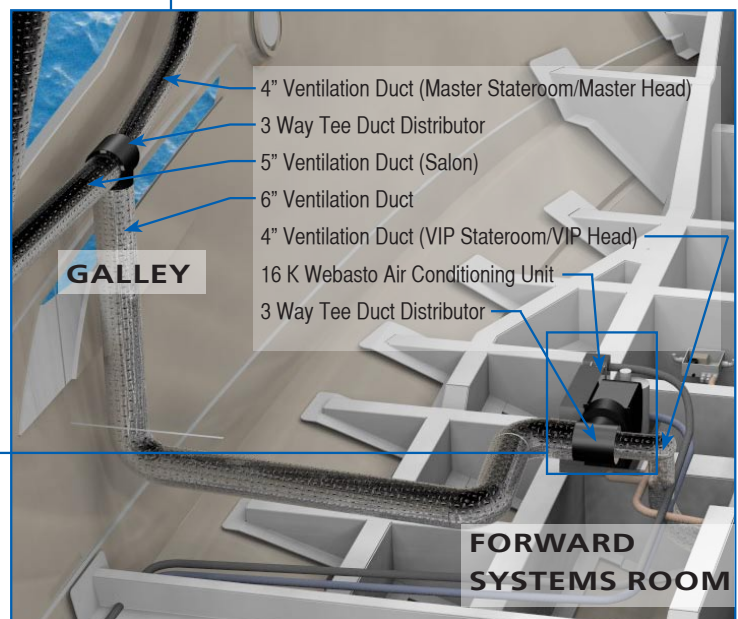
INTERNAL SYSTEMS



AIR CONDITIONING SYSTEM LAYOUT: NORTHERN OPTION

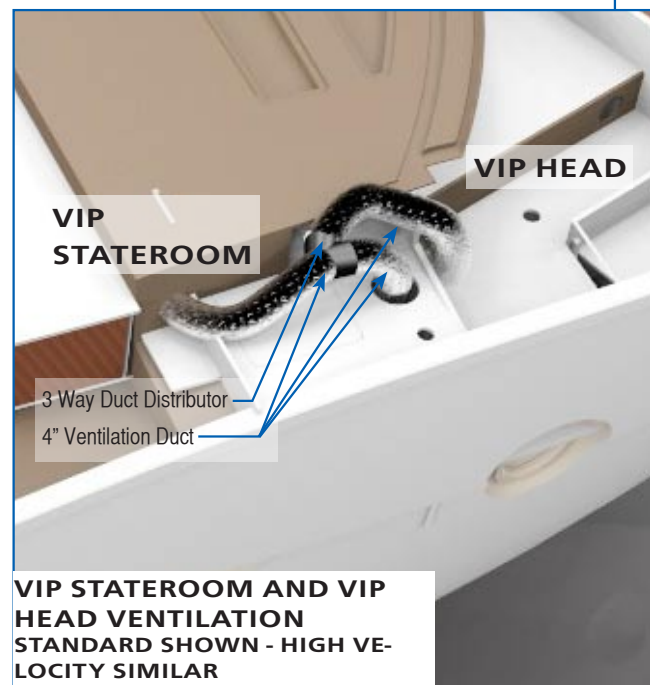
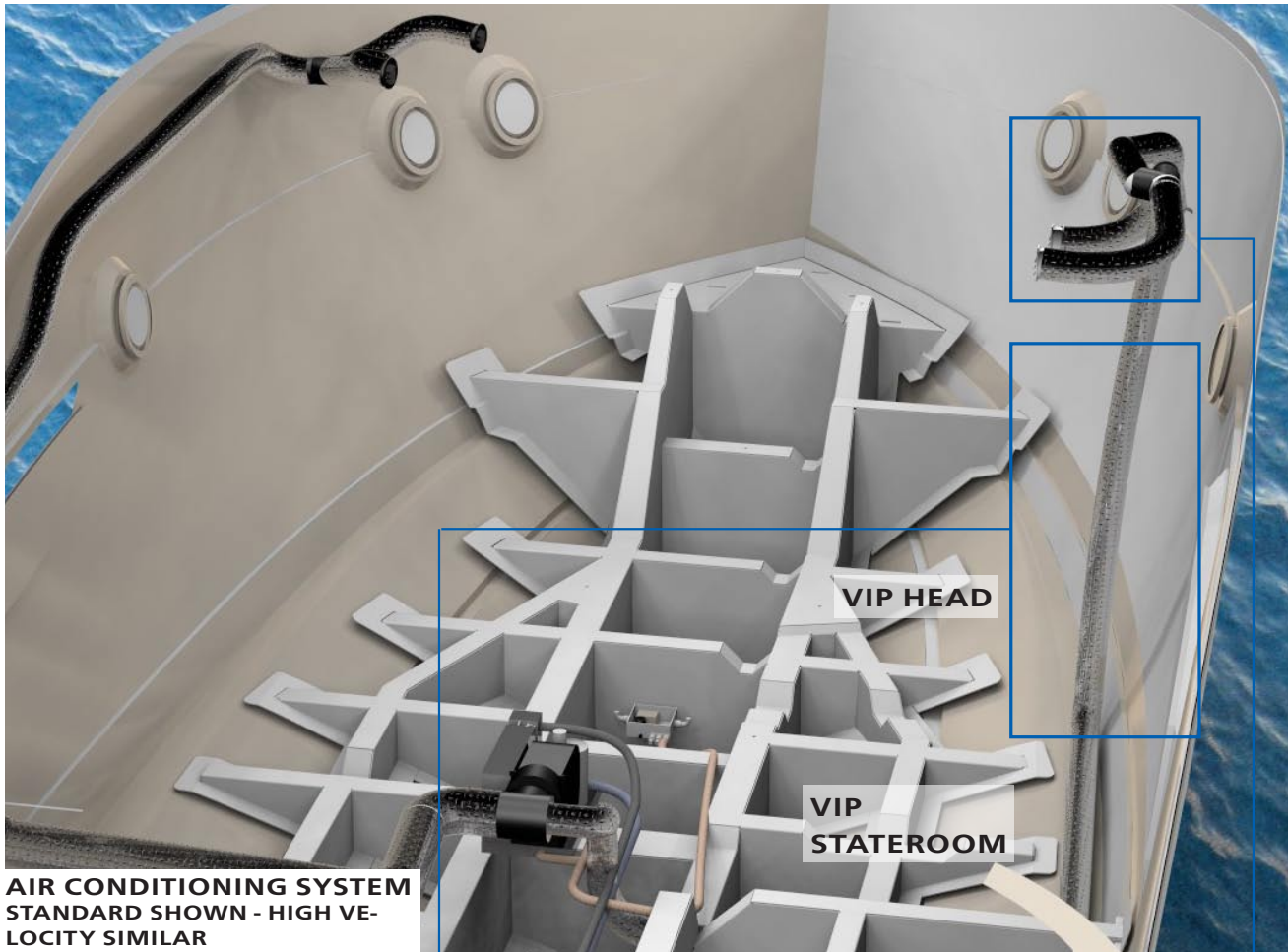


AIR CONDITIONING UNIT LOCATION
STANDARD SHOWN - HIGH VELOCITY SIMILAR



AIR CONDITIONING VENTILATION BELOW SALON: STANDARD SHOWN - HIGH VELOCITY SIMILAR

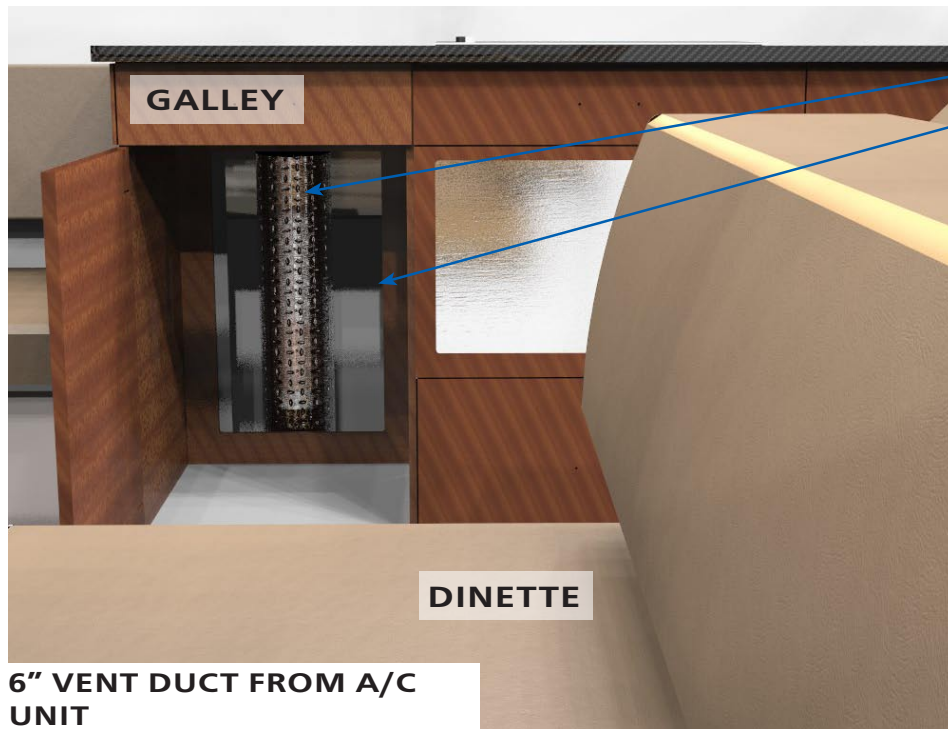
AIR CONDITIONING VENTILATION LAYOUT: NORTHERN OPTION



INTERNAL SYSTEMS

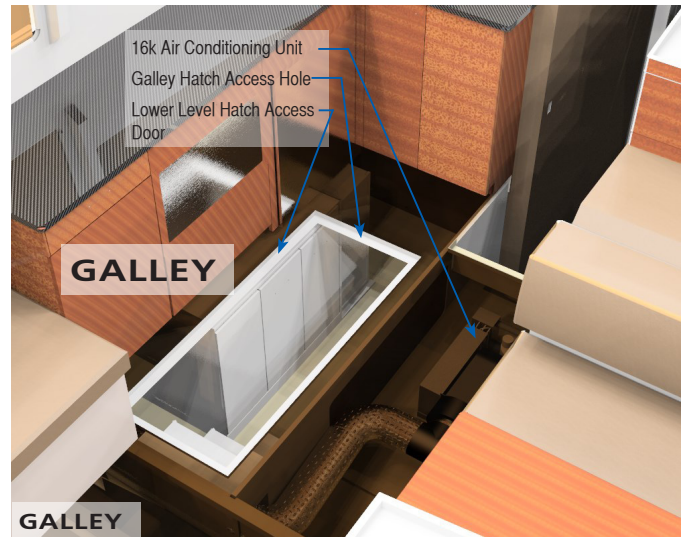
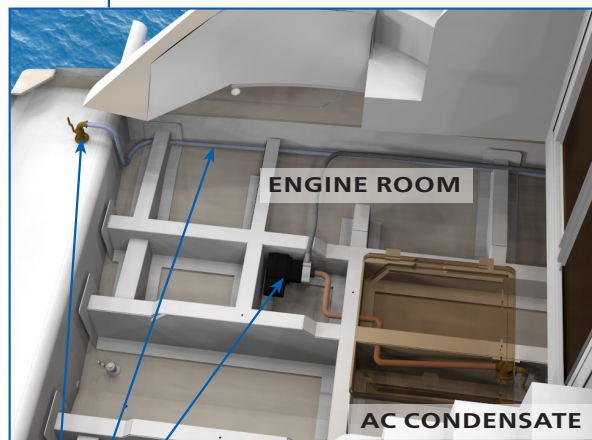
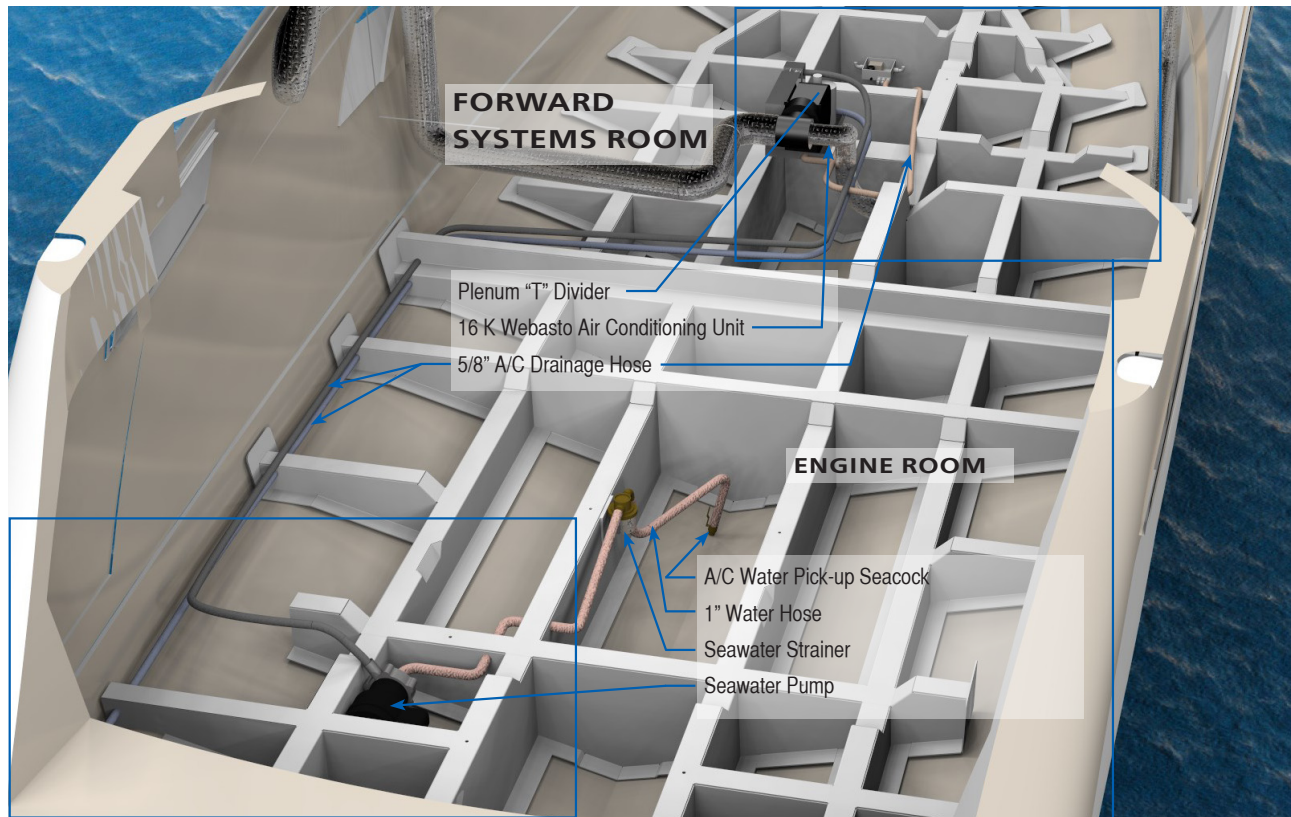


AIR CONDITIONING VENTILATION LAYOUT: NORTHERN OPTION



AIR CONDITIONER RETURN VENT

AIR CONDITIONING SUPPLY AND DRAINAGE: NORTHERN OPTION

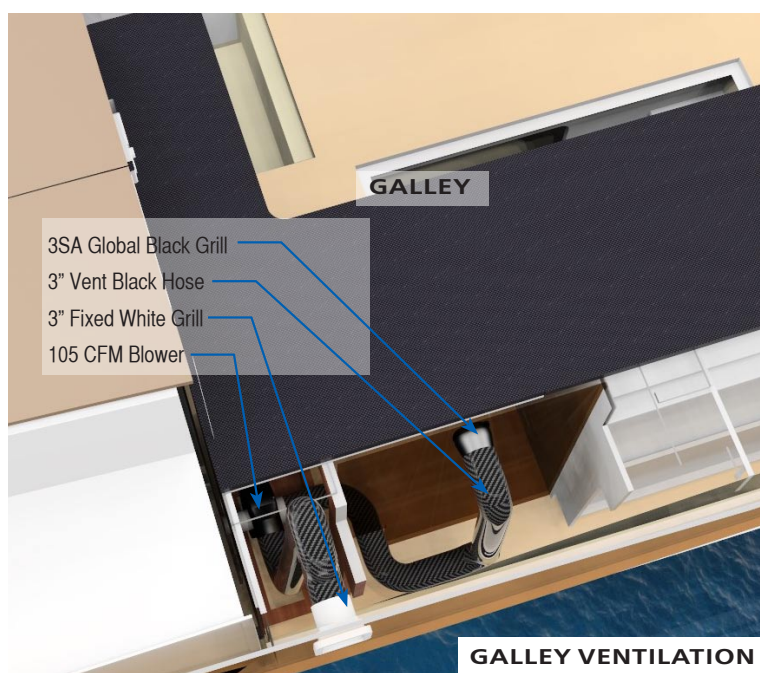
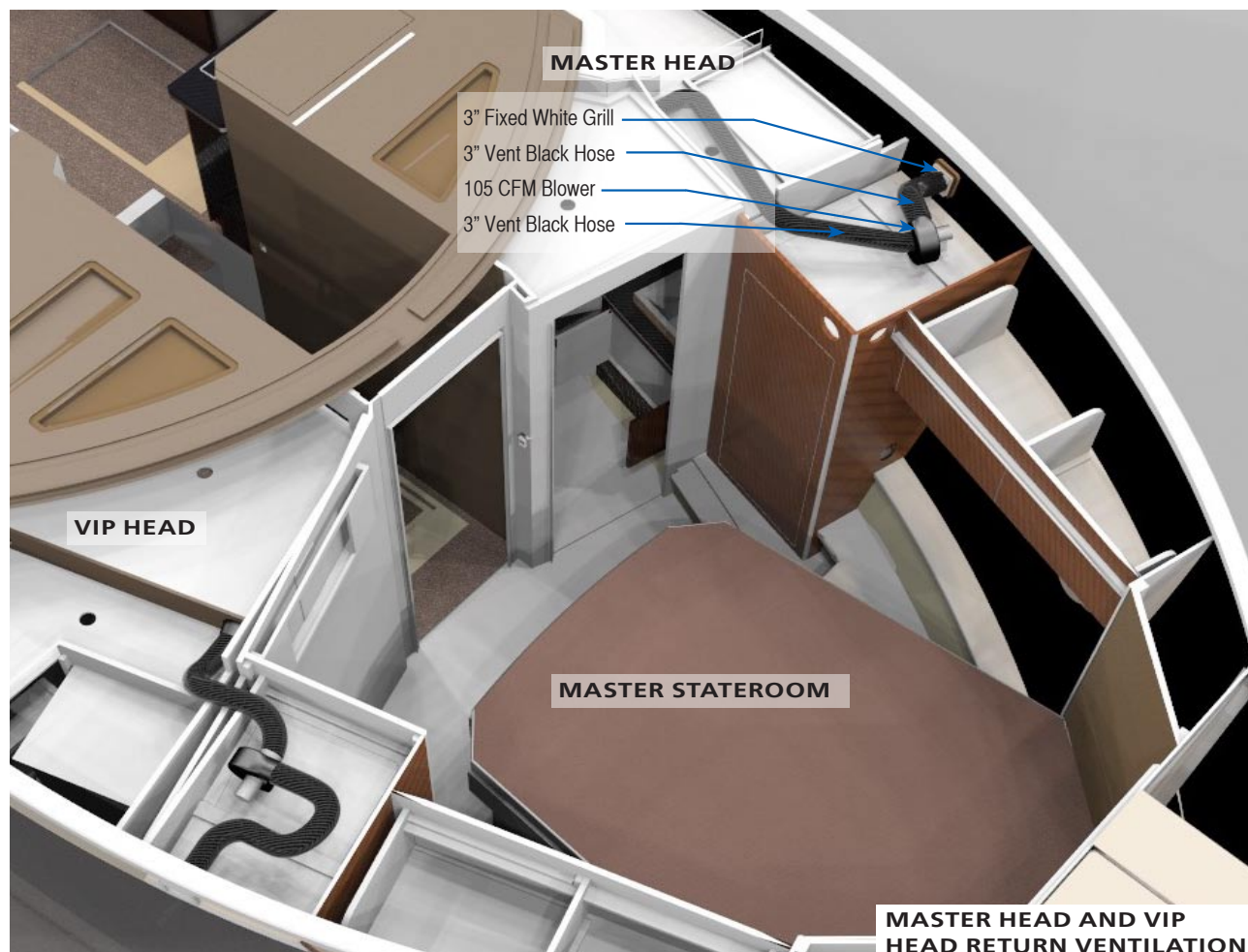


Seawater Pump
5/8" Water Hose - A/C Condensate Drainage
5/8" Thru-Hull

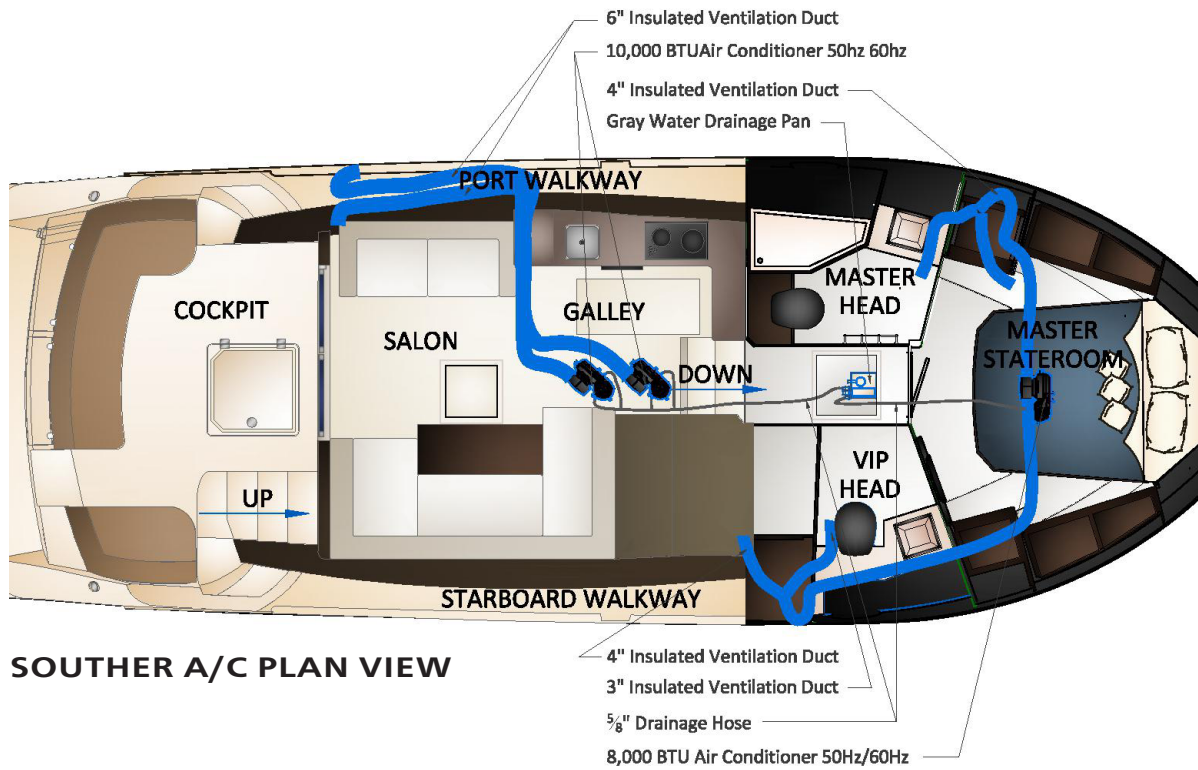
STANDARD SHOWN - HIGH VELOCITY SIMILAR

SEE "GRAY WATER DRAINAGE" FOR AIR CONDITIONING DRAINAGE ILLUSTRATIONS

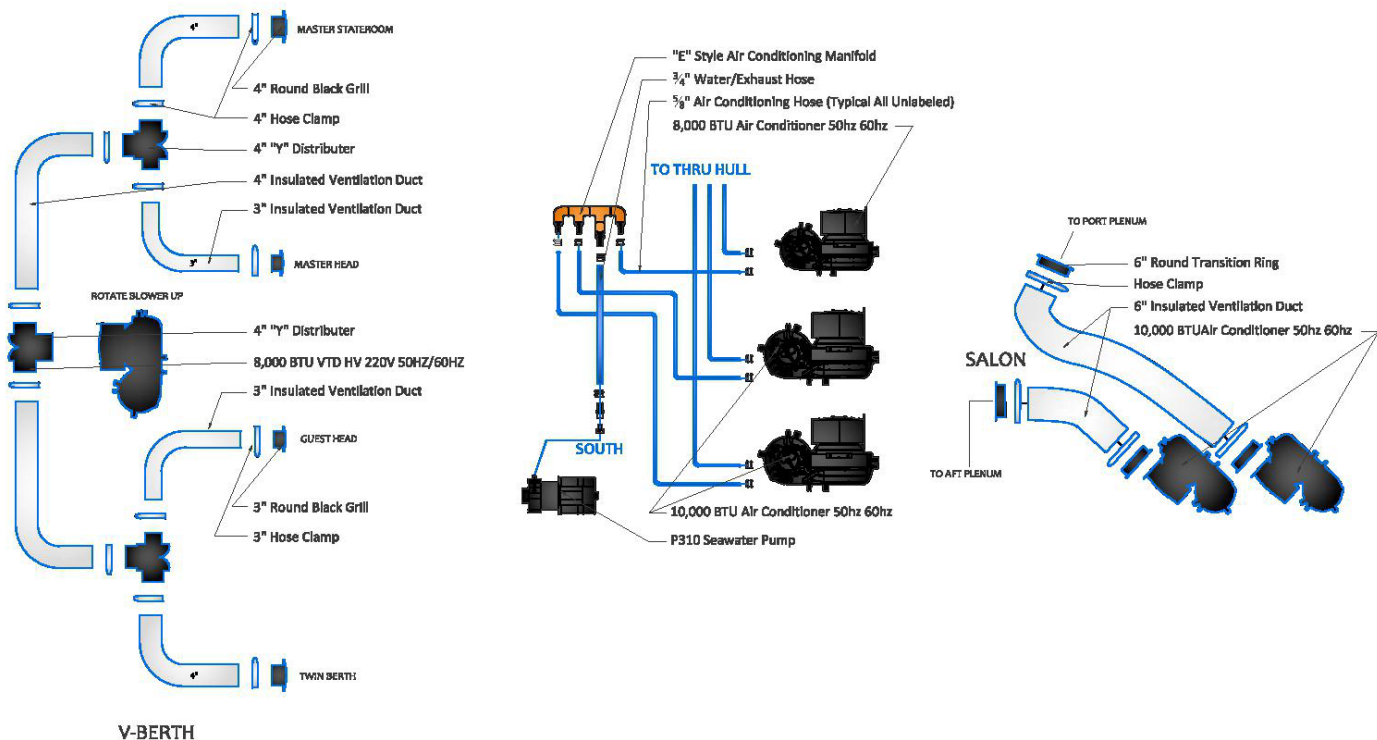
AIR CONDITIONING RETURN VENTILATION



SOUTHER AIR CONDITIONING SYSTEM



SOUTHER A/C PLAN VIEW



SOUTHER A/C DETAILS

FRESH WATER SYSTEM

The freshwater system contains three 40 gallon freshwater tanks that supplies the water to the sinks, showers, and heads. The freshwater tanks are located in the engine room in the aft. The water heater is also located in the engine room, forward the starboard freshwater tank.

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 with a plate labeled, WATER. The plate 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 illustration on Page 54.

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

NOTE: PRESSURIZE AND PRIME THE WATER SYSTEM ONLY AFTER THE FRESH WATER TANK IS FULL.

PRESSURIZING AND PRIMING THE WATER SYSTEM:

1. Verify that the DC Control Panel has power. The DC Control Panel is located in Dinette aft, Starboard side, beside the Salon entry doors. 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 tank in the engine room. The hot water tank is located forward the starboard freshwater tank in the engine room. See illustration on page 61.
 - 3a. Open the hot and cold water shut-off valves on the hot water tank. See illustration on page 61.
 - 3b. Close the water relief valve. See illustration on page 61.
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 (Salon aft, Starboard side, beside the Salon entry doors). 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 starting from the transom.
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.

USING THE WATER SYSTEM

The freshwater system is designed to operate in 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 above.

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 (Galley forward cabinet, at companionway. See Section 3 for illustration and location):
 - 3a. Switch ON the two 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 each Head.

SINK

A total of three sinks are installed onboard. The sink locations are as follows:

- Galley
- Master Head
- VIP Head

If supplied, used (grey) water from the sinks and showers drain into the 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.

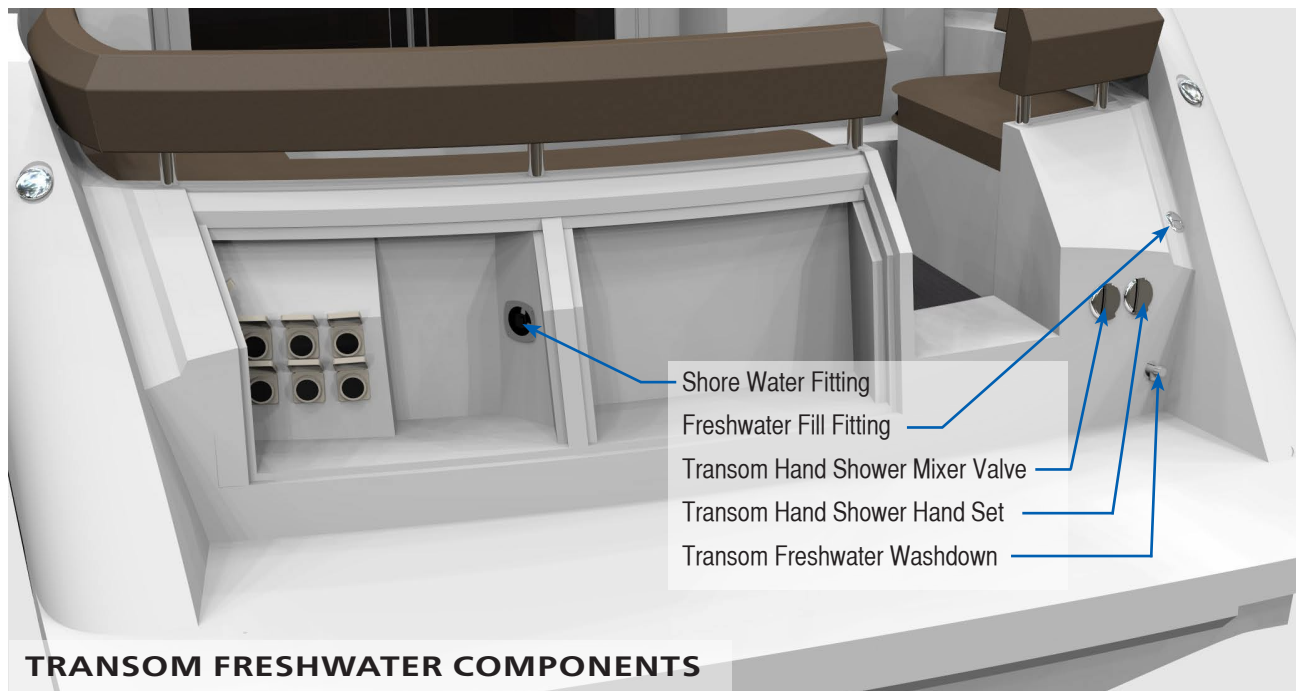
The sump pump operates automatically when water in the sump rises above the pump's manufactured level. The automatic operation occurs only when the AUTO SUMP circuit breaker is ON. The breaker is located on the DC Control Center (Dinette aft, Starboard side).

INTERNAL SYSTEMS



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 STBD side.



FRESH WATER WASHDOWNS (OPTION)

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 aft fresh water washdown is located at the transom, beside the latch gate.

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 on the transom, beside the latch gate.
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.

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 above for illustration.

When connecting to shore water, switch OFF the AC WATER PUMP circuit breaker, located on the AC Control Panel (Galley Forward

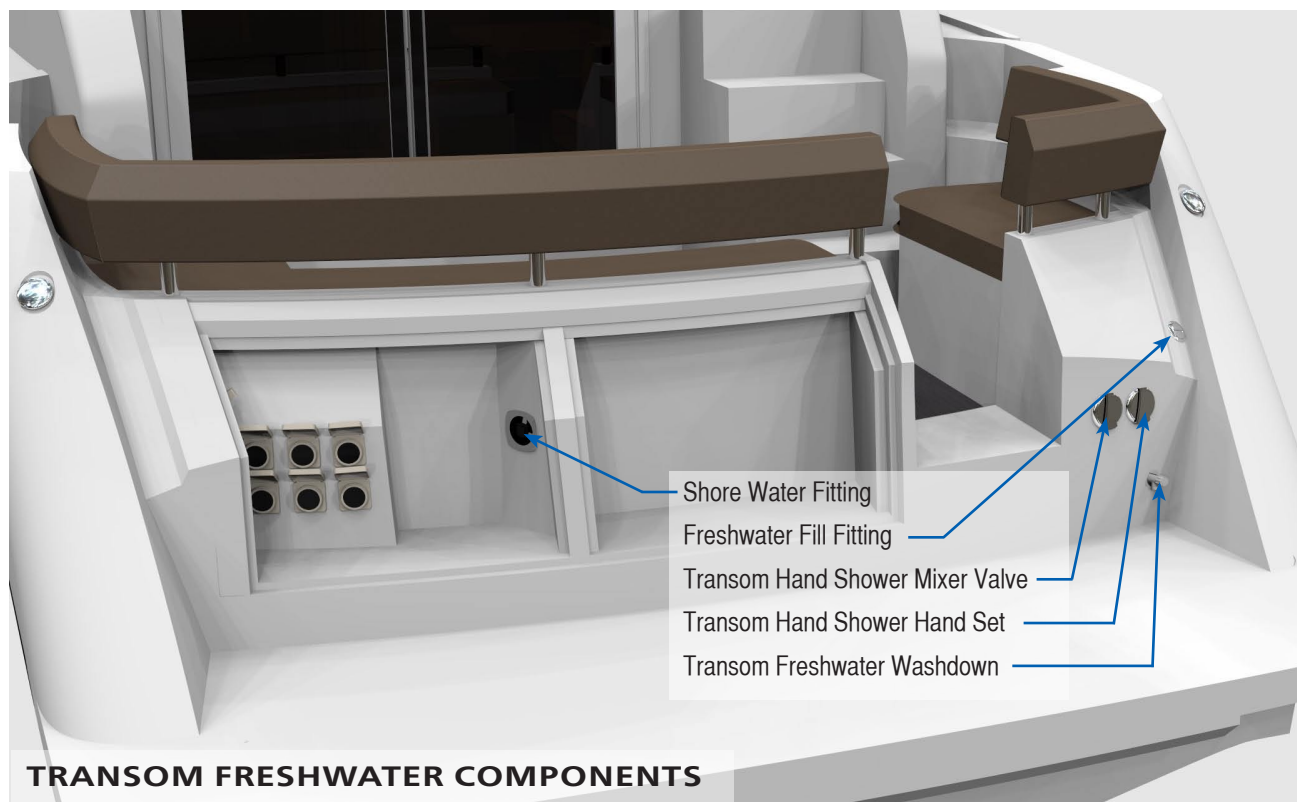
Cabinet, Port side, beside steps to staterooms).

CAUTION

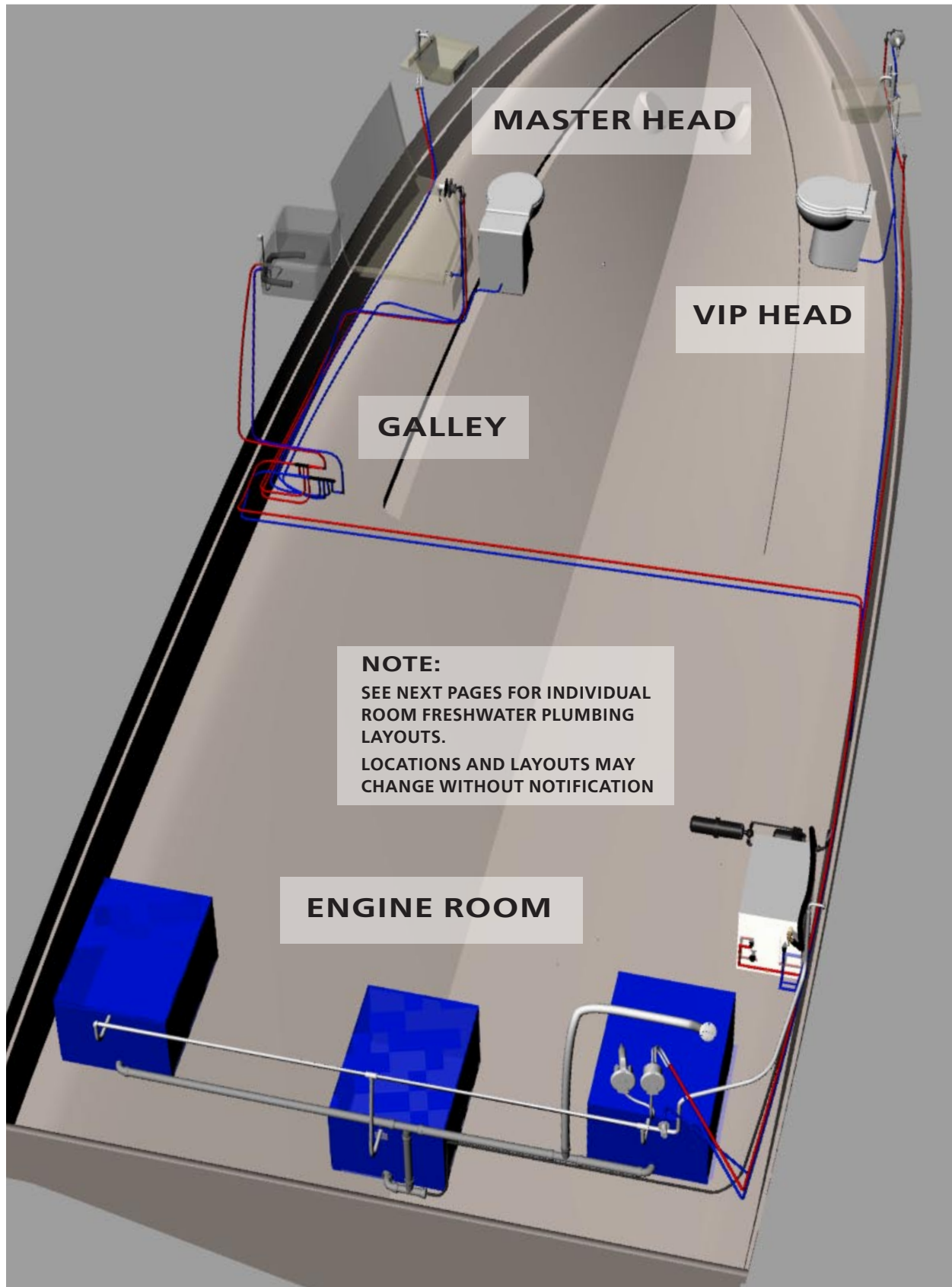
DO NOT LEAVE THE YACHT UNATTENDED WHILE CONNECTED TO SHORE WATER. WATER MAY DEVELOP ONBOARD IF A WATER LINE LEAKS.

CONNECTING TO SHORE WATER:

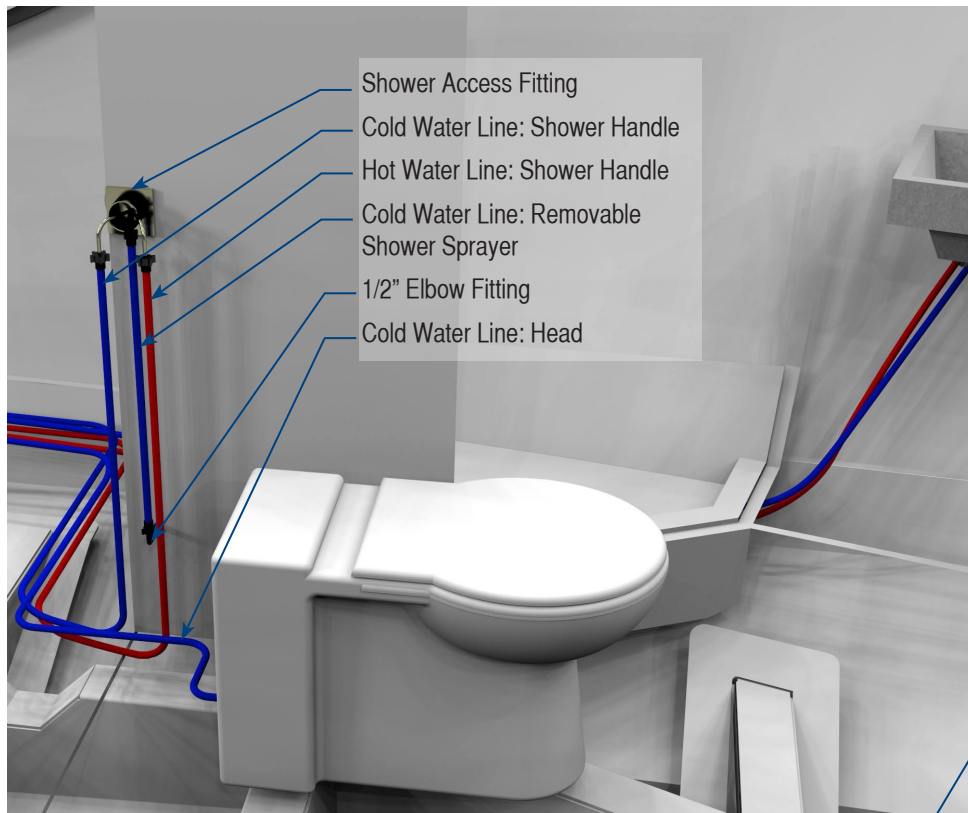
1. Locate the shore water fitting labeled, SHORE WATER. The shore water fitting is located on the boarding platform, starboard side, beside the latch gate. See illustration below.
2. Attach one end of a water hose to the shore water fitting.
3. Attach opposite end of the hose to the dock side water tap.
4. Close all sink and shower faucets.
5. Turn on the AUTO SUMP circuit breaker, located on the DC Control Panel (Salon aft cabinet, starboard side).
6. Turn the dock side water tap ON.



FRESHWATER SYSTEM OVERALL LAYOUT

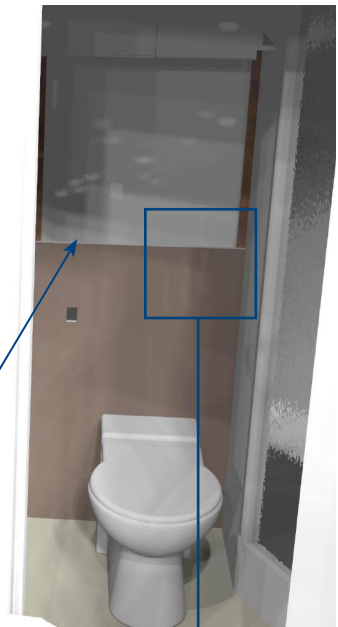


MASTER STATEROOM HEAD FRESHWATER SYSTEM



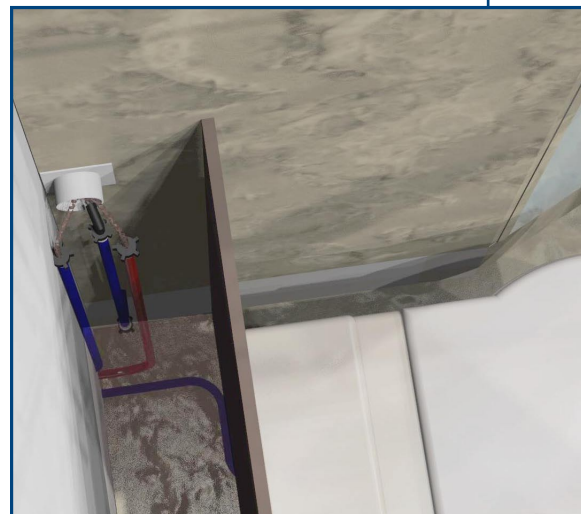
**MASTER HEAD: SHOWER
FIXTURE PLUMBING**

Shower Plumbing Access: Shown
with Access Panel Removed



**MASTER HEAD: SHOWER
FIXTURE ACCESS**

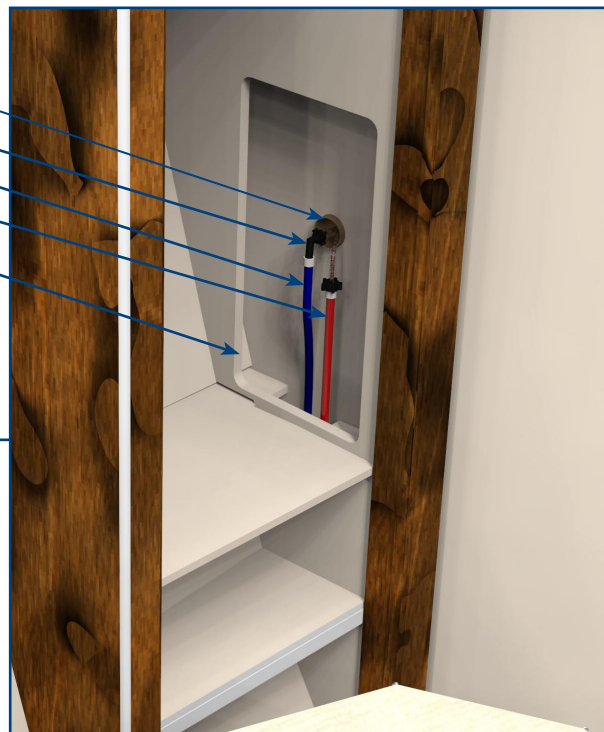
MASTER SINK



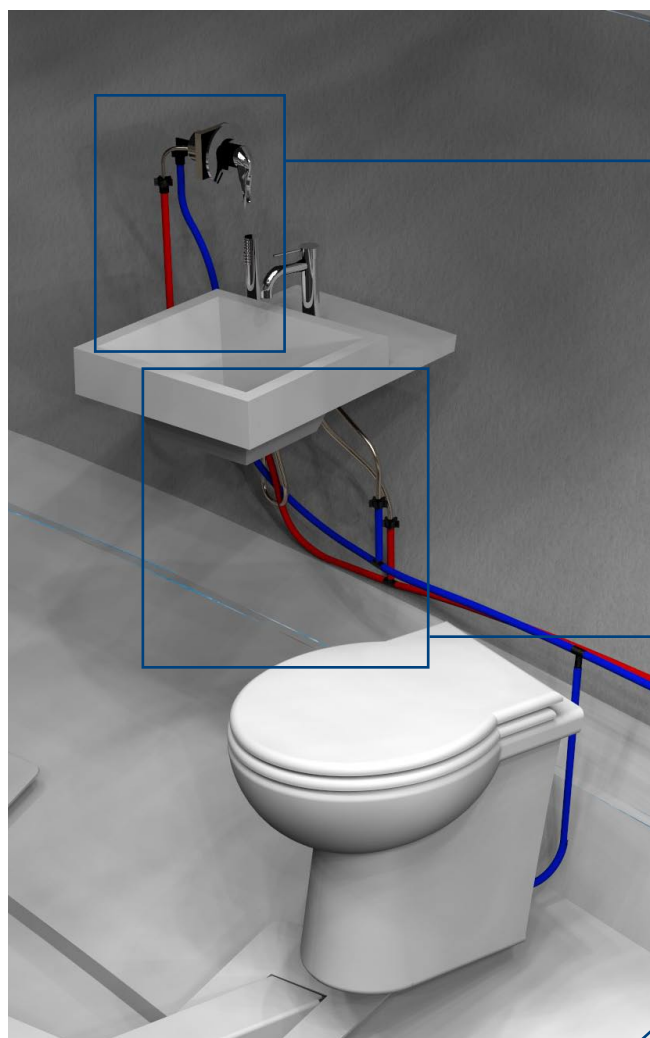
MASTER HEAD: TOP VIEW

VIP STATEROOM HEAD FRESHWATER SYSTEM

- Shower Access Fitting
- 1/2" Elbow Fitting
- Cold Water Line: Shower Handle
- Hot Water Line: Shower Handle
- Hatch Access Panel (Shown Removed)

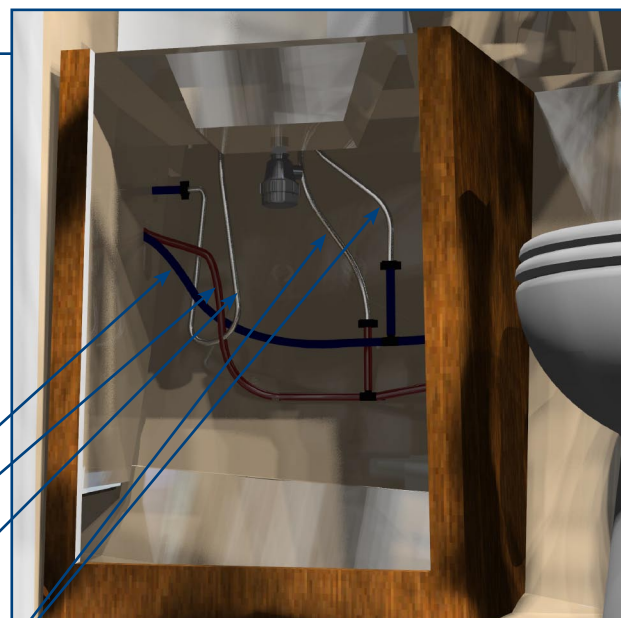


**MASTER STATEROOM CLOSET:
VIP SHOWER FIXTURE ACCESS**



VIP HEAD PLUMBING

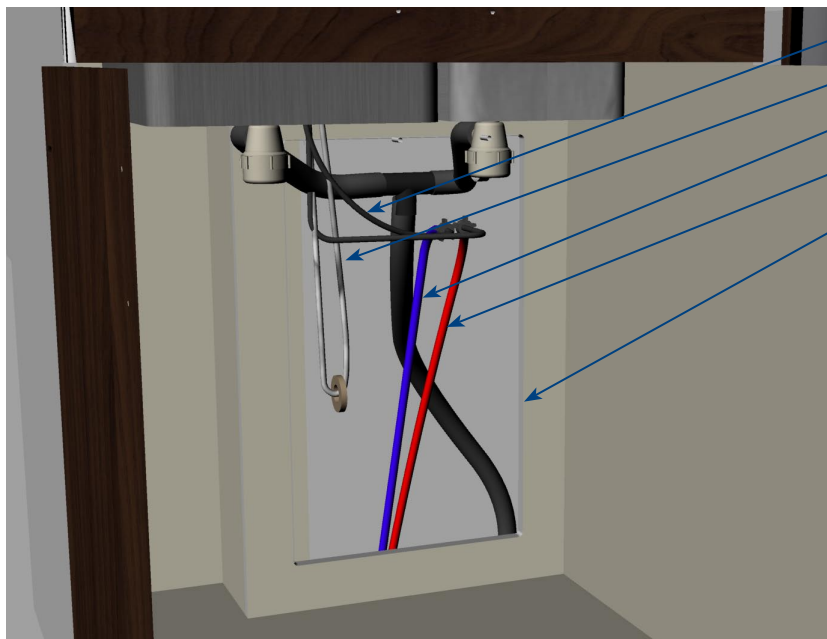
- Cold Water Line
- Hot Water Line
- Shower Handle Flex Line
- Sink Faucet Hot and Cold Flex Line



**VIP HEAD: SHOWER FIXTURE
ACCESS**

NOTE:
LOCATIONS AND LAYOUTS MAY
CHANGE WITHOUT NOTIFICATION

GALLEY FRESHWATER SYSTEM



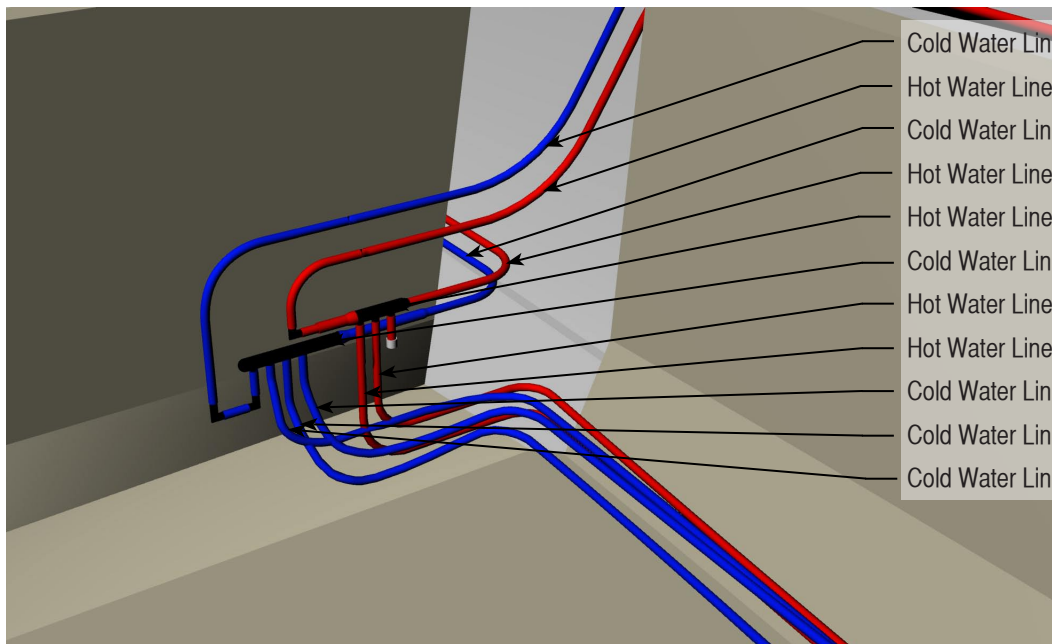
GALLEY SINK PLUMBING

- Galley Sink Faucet Flex Line
- Faucet Stainless Steel Line
- Cold Water Line
- Hot Water Line
- Access Panel Shown Removed

NOTE:

LOCATIONS AND LAYOUTS MAY
CHANGE WITHOUT NOTIFICATION

GALLEY HATCH ACCESS FRESHWATER SYSTEM



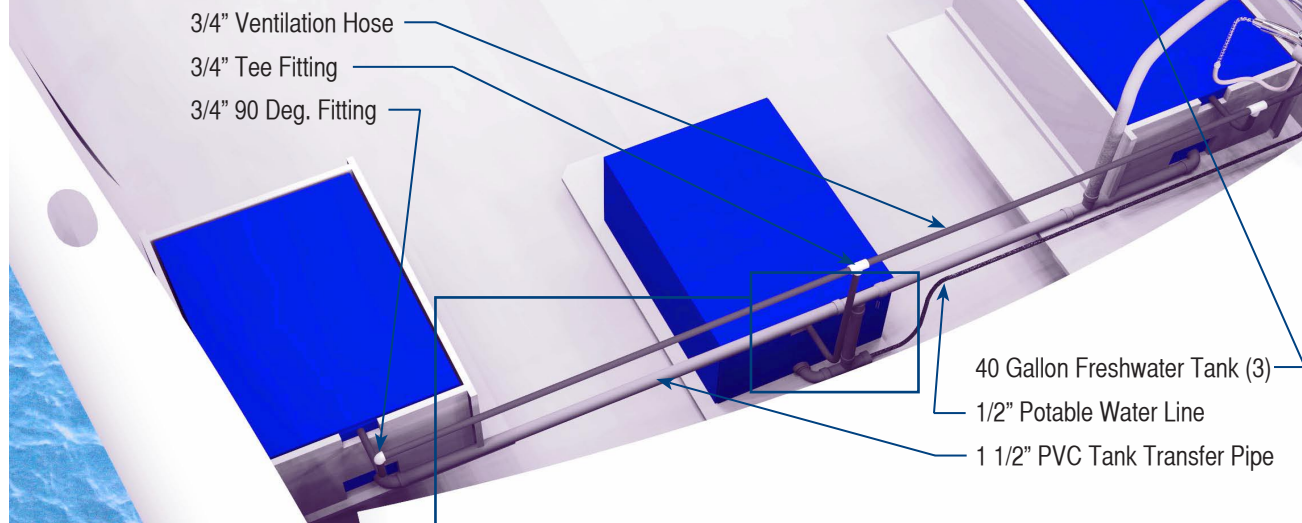
SALON HATCH PLUMBING

- Cold Water Line to Galley Sink
- Hot Water Line to Galley Sink
- Cold Water Line to Hot Water Heater
- Hot Water Line to Hot Water Heater
- Hot Water Line Diverter
- Cold Water Line Diverter
- Hot Water Line to Master SR Head Shower
- Hot Water Line to Master SR Head Sink
- Cold Water Line to Master SR Head Shower
- Cold Water Line to Master SR Head
- Cold Water Line to Master SR Head Sink

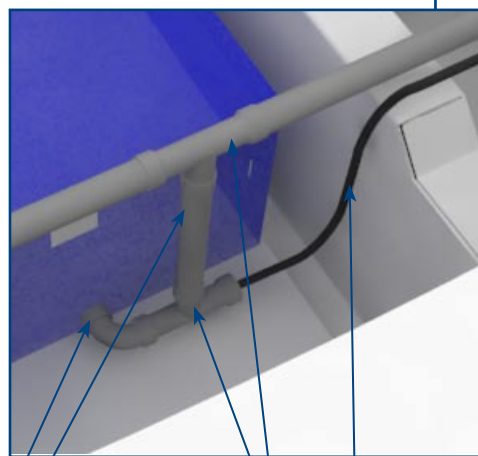
INTERNAL SYSTEMS

CARVER

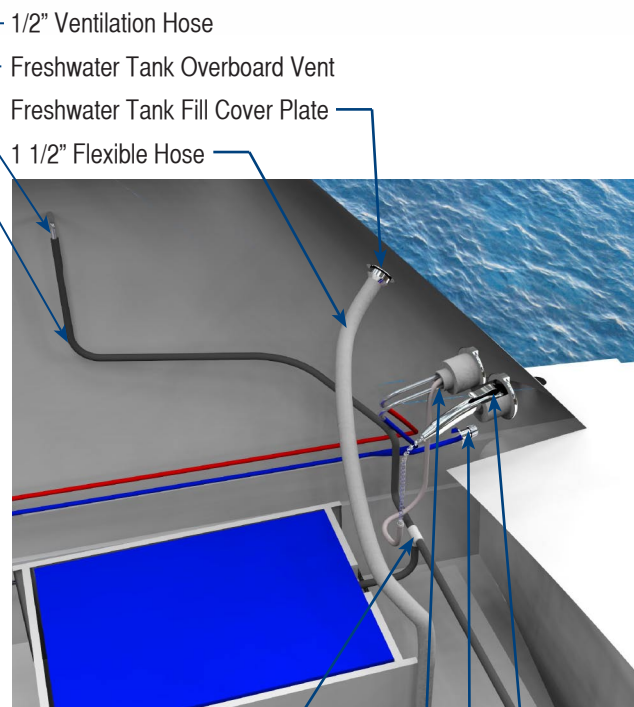
ENGINE ROOM FRESHWATER SYSTEM



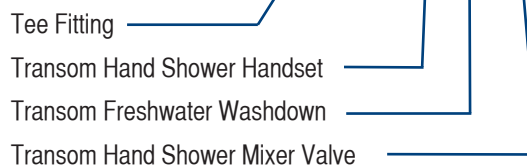
FRESHWATER TANK DETAIL



FRESHWATER TANK DETAIL

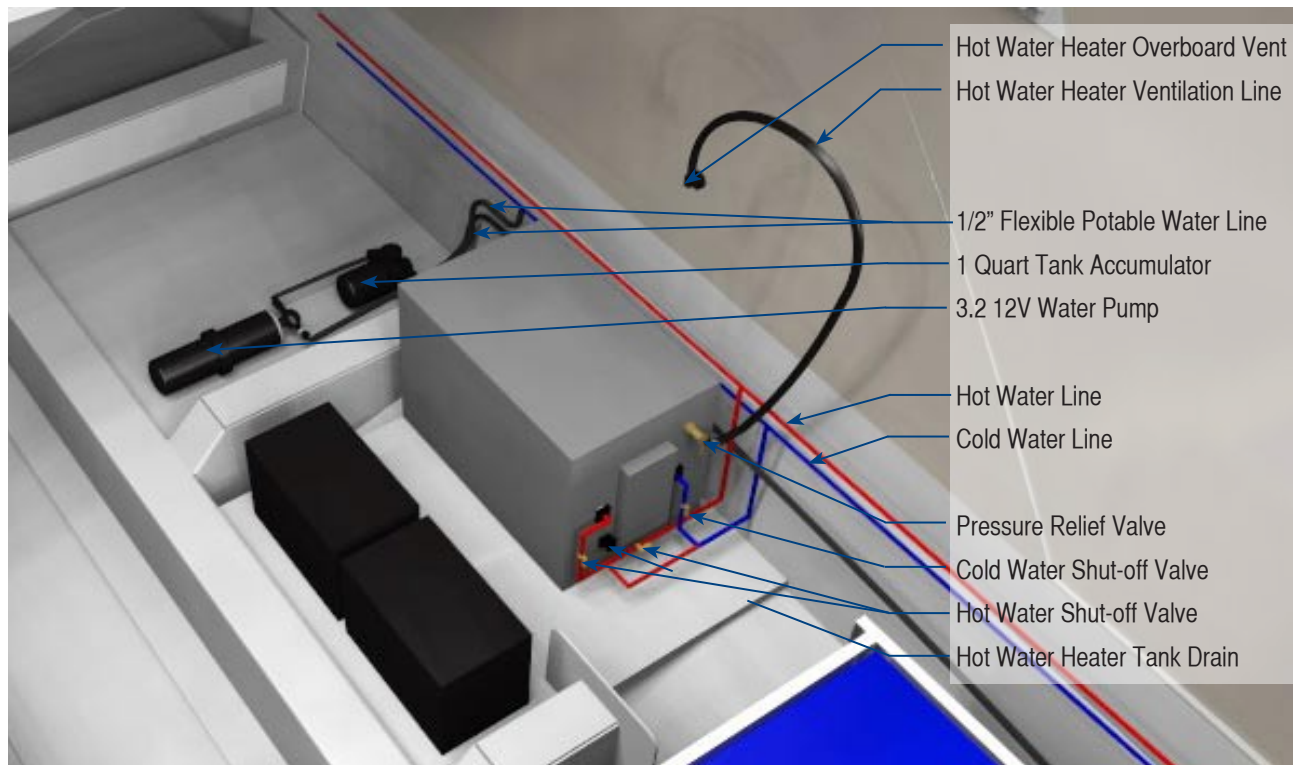


TRANSOM FRESHWATER FIXTURES

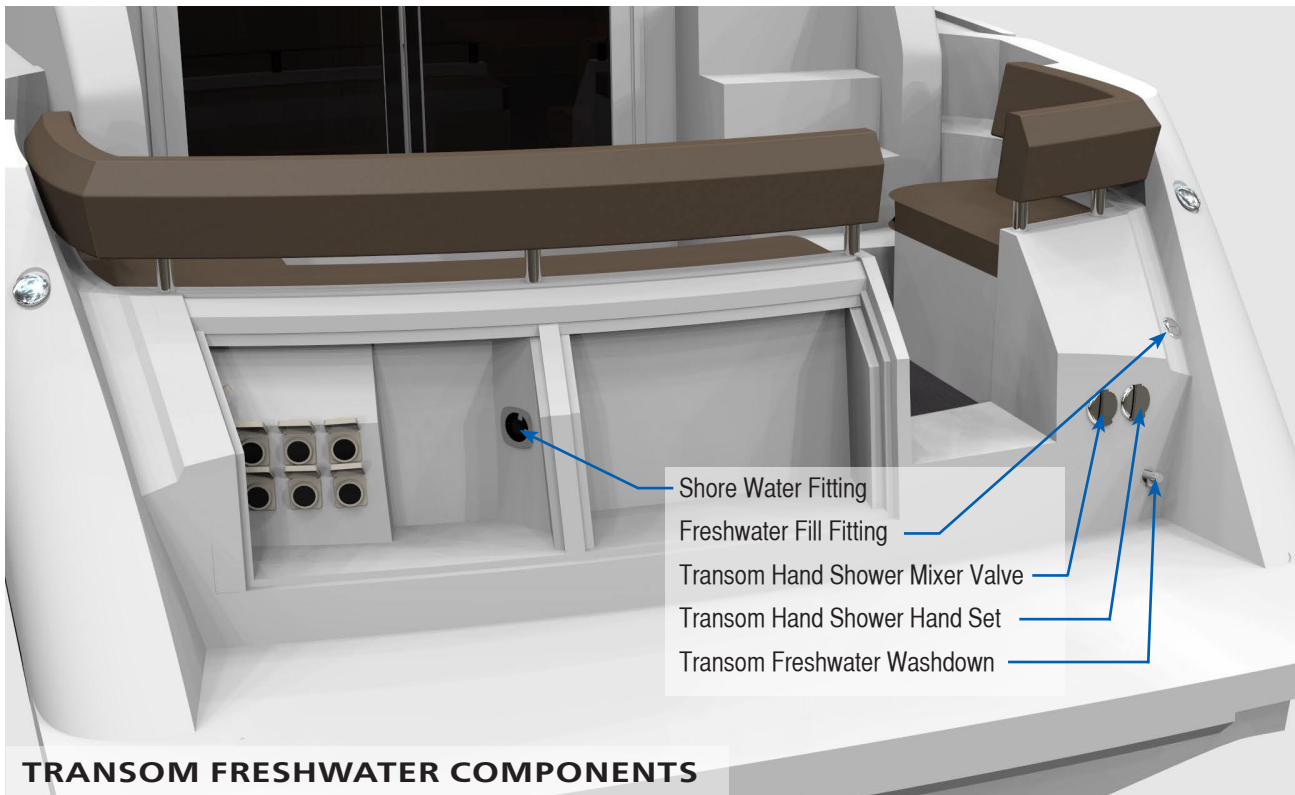


SEE NEXT PAGE FOR TRANSOM ASSEMBLED WITH FRESHWATER COMPONENTS

ENGINE ROOM FRESHWATER SYSTEM



WATER HEATER AND PUMPS



TRANSOM FRESHWATER COMPONENTS

BILGE SYSTEM

The bilge system on the C40 contains the following bilge pumps quantities based upon region:

NORTH AMERICAN

- 2 Automatic Bilge Pumps

CE/INTERNATIONAL

- 2 Standard Bilge Pumps
- 2 Automatic 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

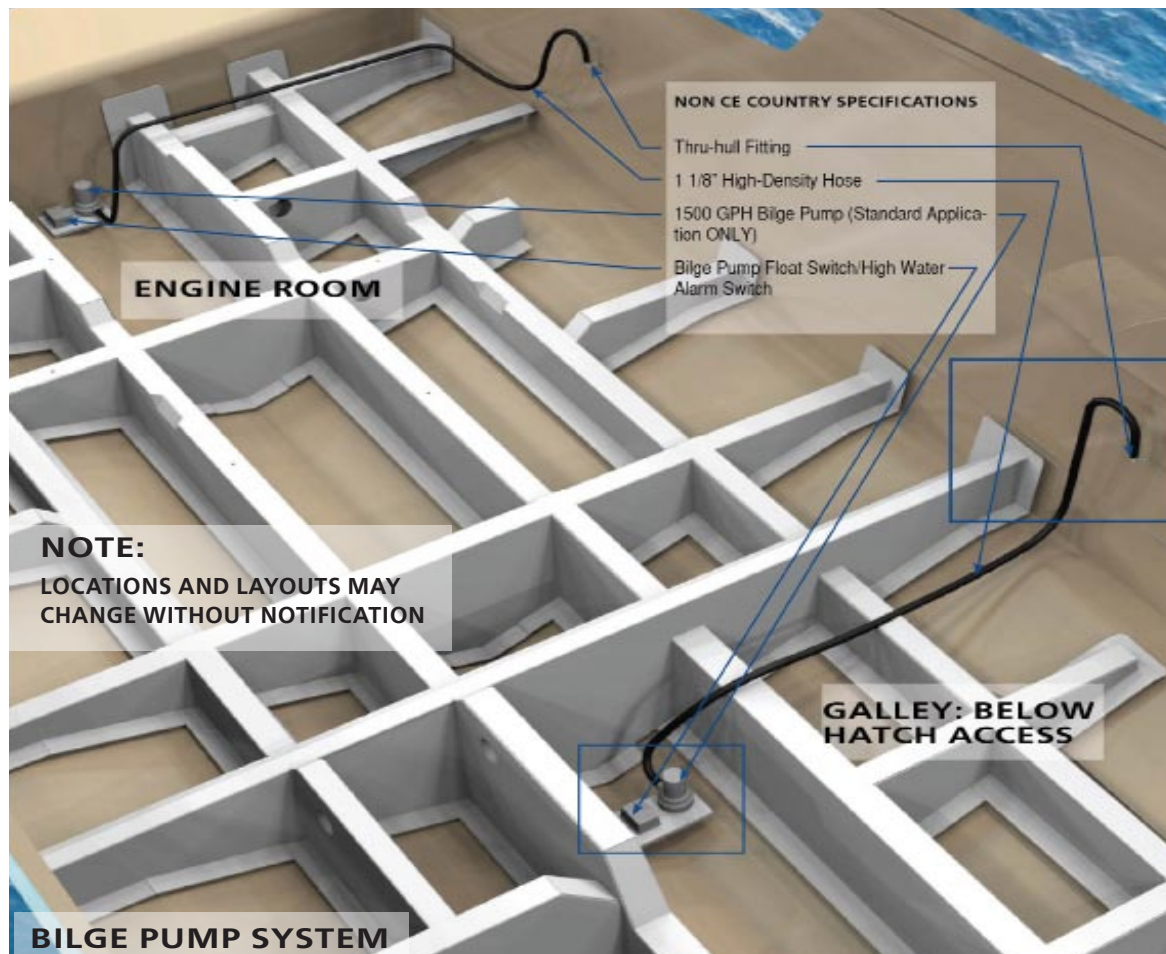
The forward bilge pump is located below the Galley companionway. The bilge pump can be accessed through the VIP Stateroom access panel. See next page for illustration.

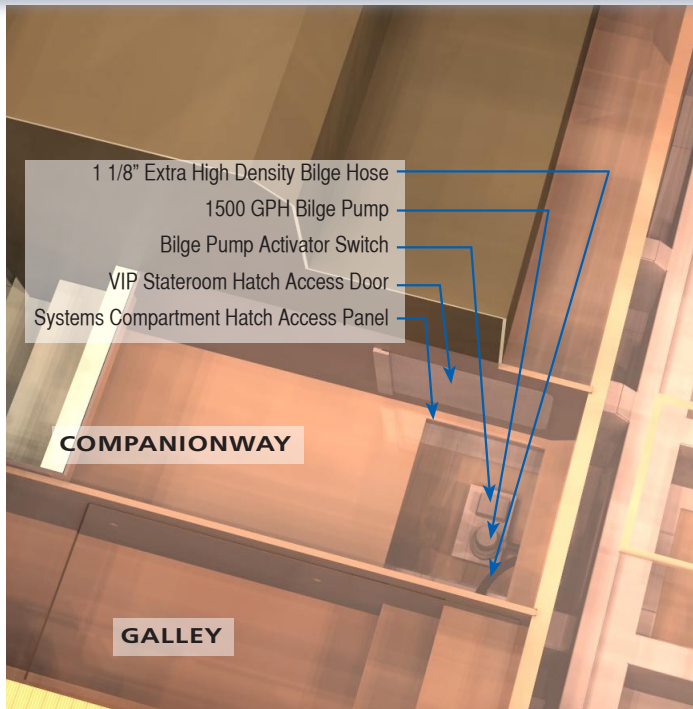
AFT BILGE

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

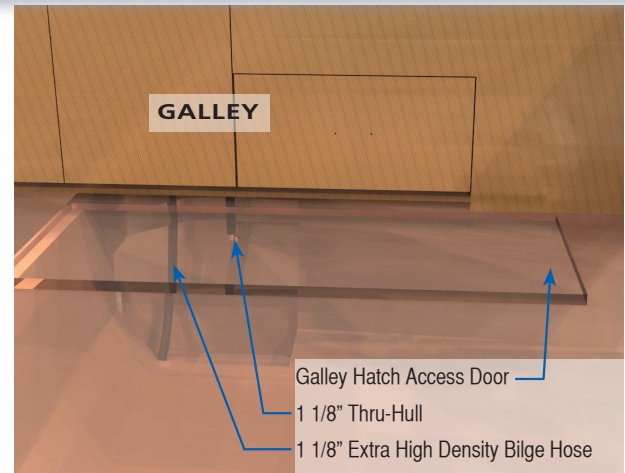
NOTE: Wipe up any oil that may have accumulated in the bilges before operating the bilge pumps. Pumping oil overboard contributes to water pollution, and is in violation of the Federal Water Pollution Control Act. Violators are subject to a substantial penalty.

NOTE: It is the responsibility of the owner/operator to provide a bucket or bailer to remove normal accumulations of water in the bilge.





FORWARD BILGE PUMP LOCATION



FORWARD BILGE PUMP DISCHARGE LOCATION

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 (panel is located, Dinette aft, Starboard Cabinet) 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 Lower 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.

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.

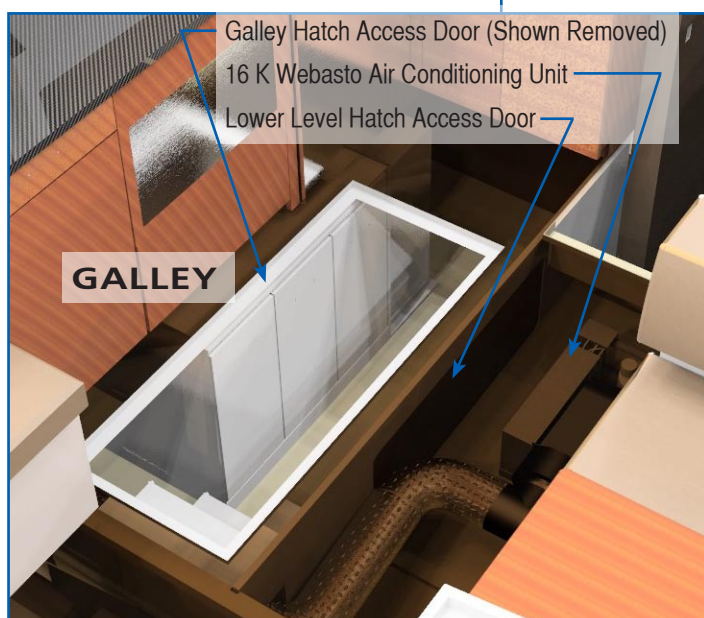
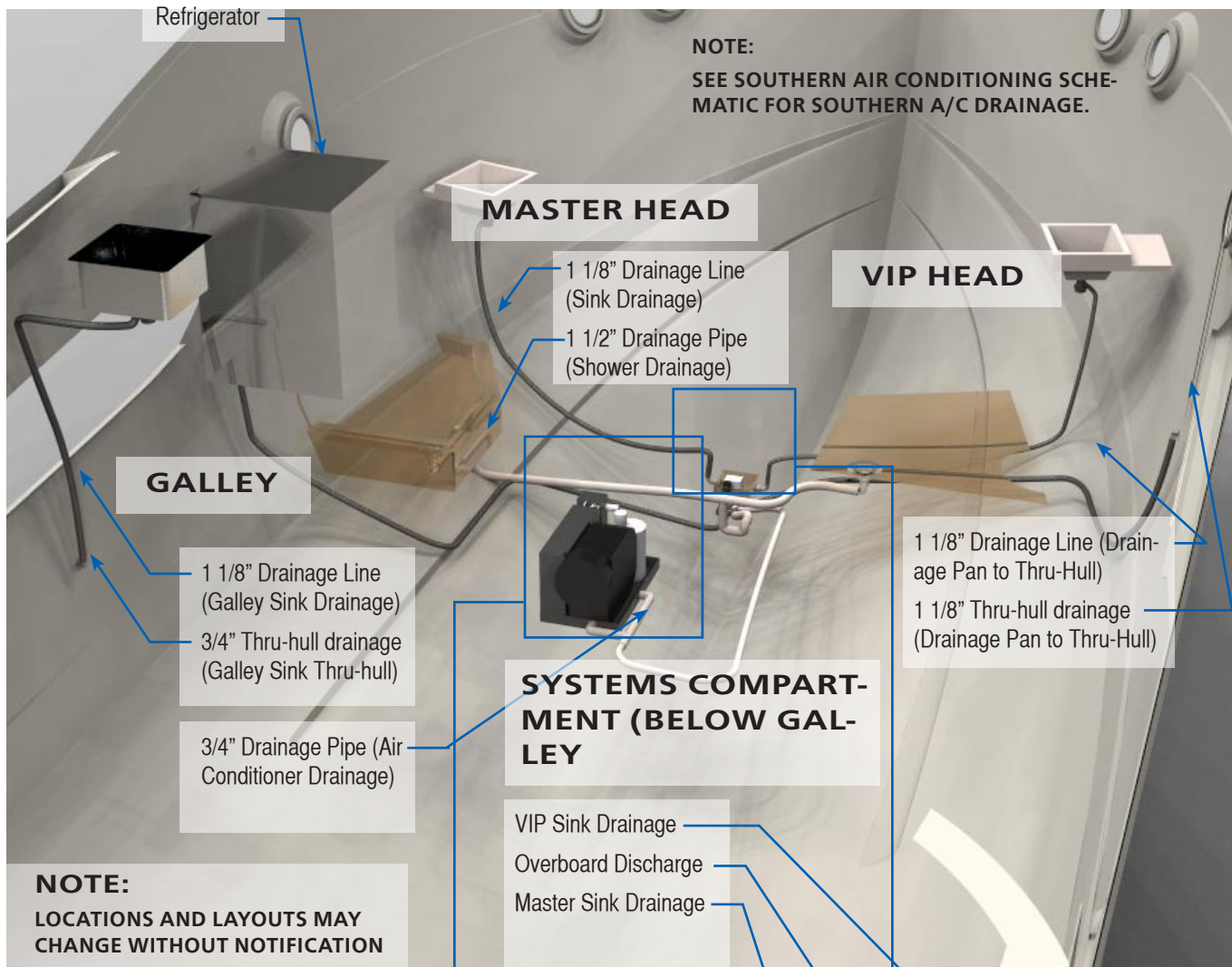
GRAY WATER TANK (OPTION)

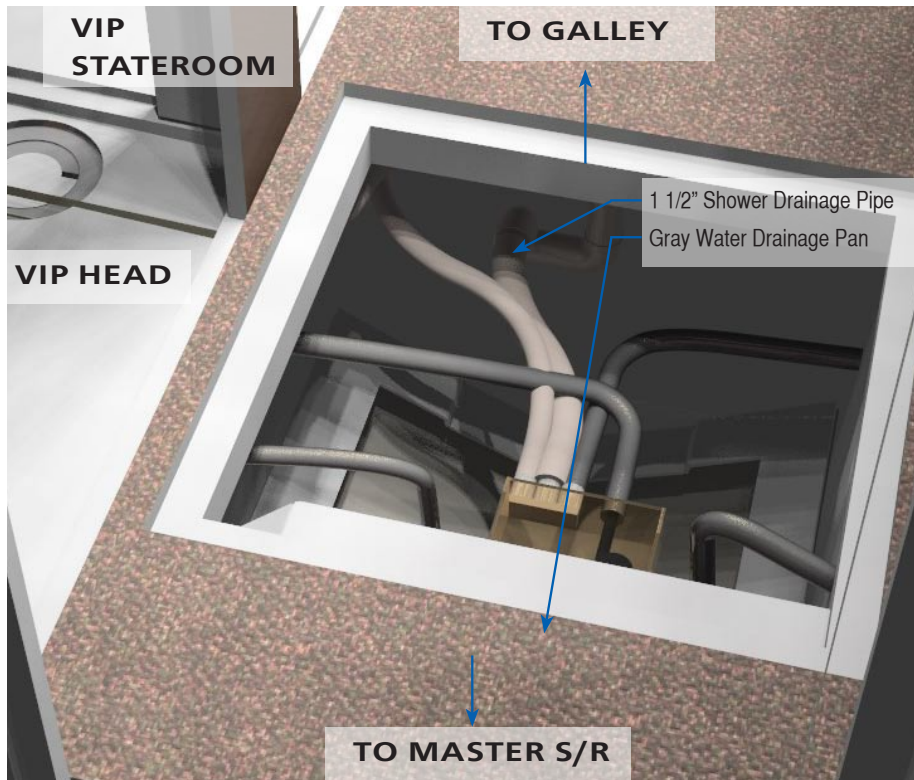
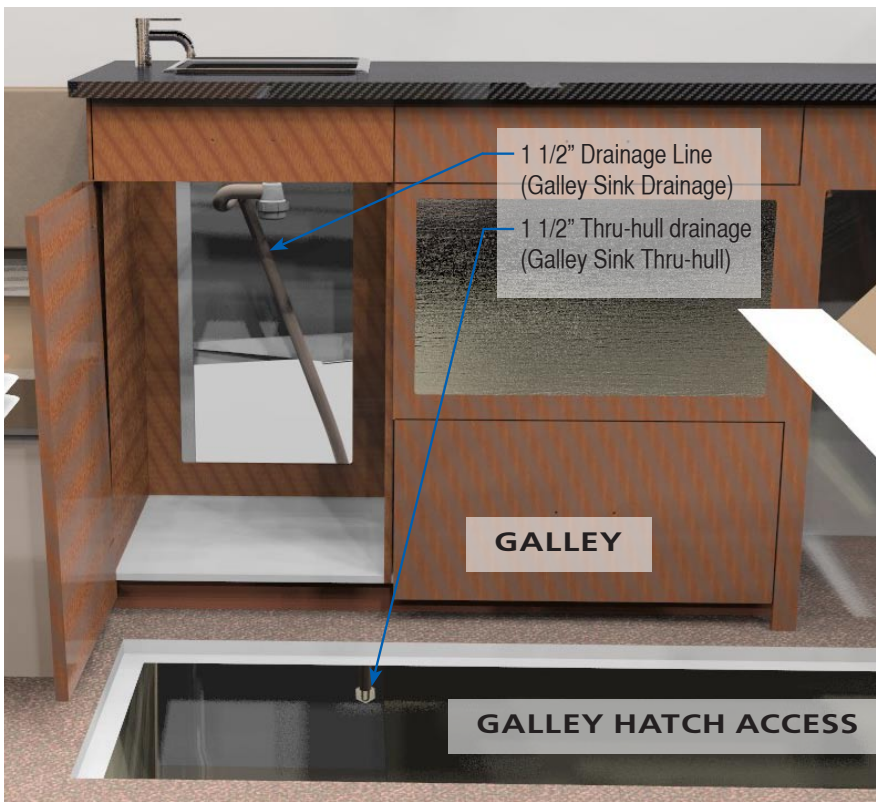
Once the grey water tank is full, the tank can be emptied at dock side with the procedure described on the next page, titled: *Emptying The Waste/Grey Water Tank*.

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

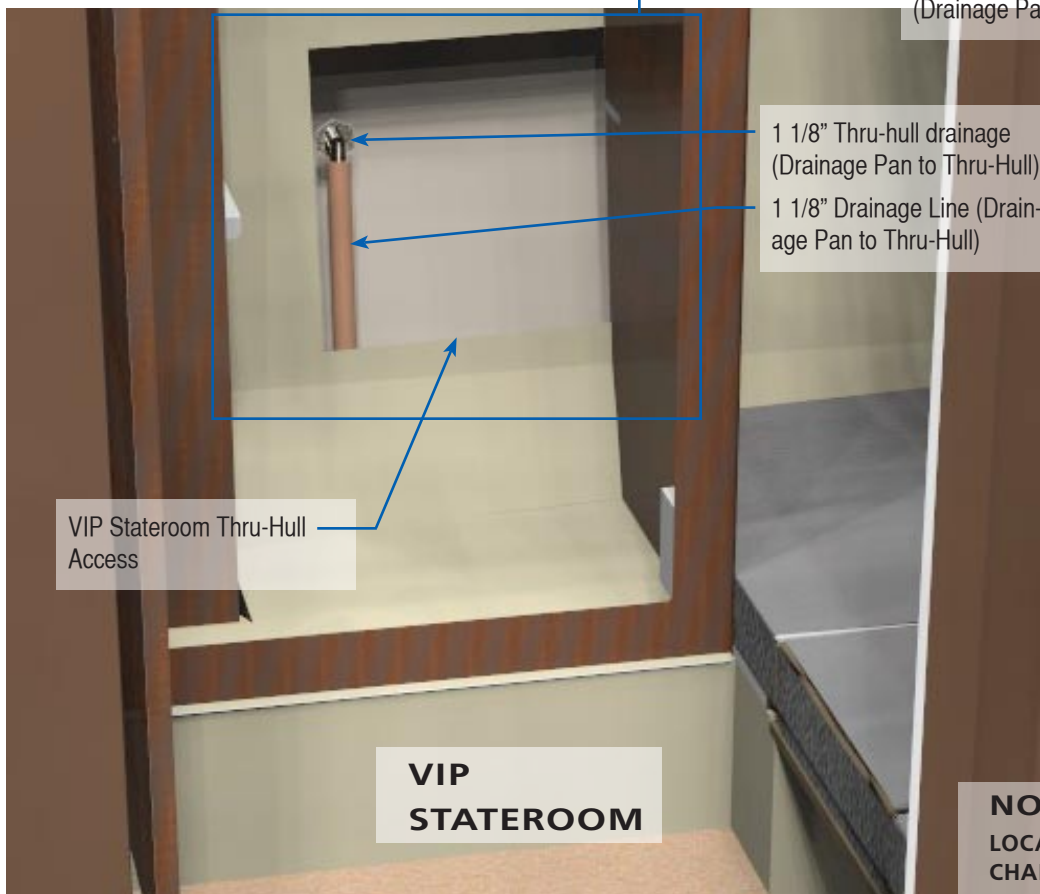
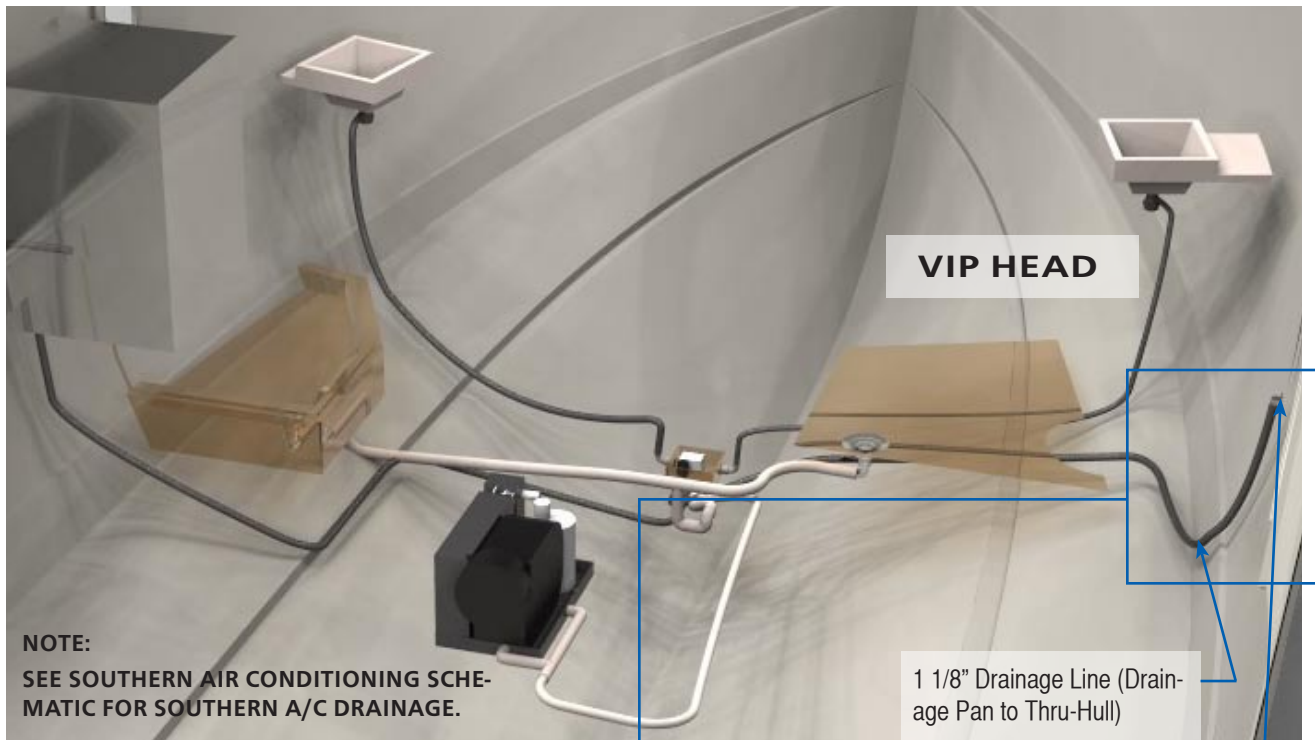
(SEE NEXT PAGE FOR GRAY WATER ILLUSTRATIONS)

GRAY WATER SYSTEM: NORTHERN OPTION

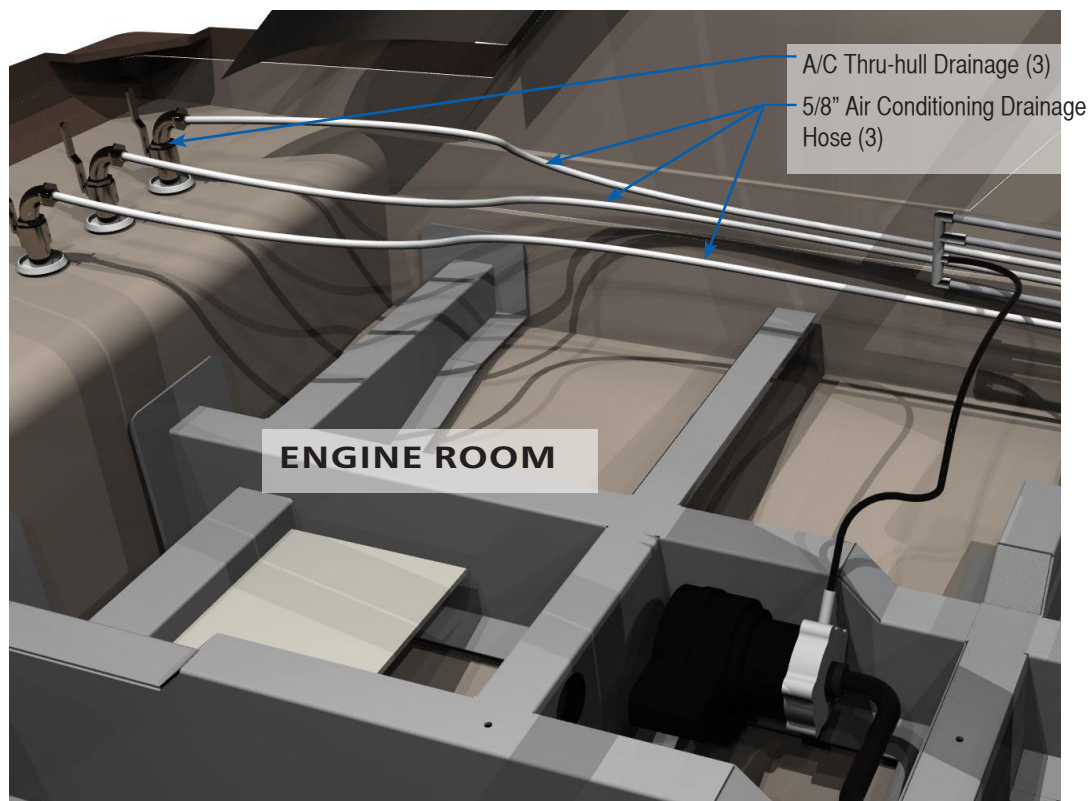
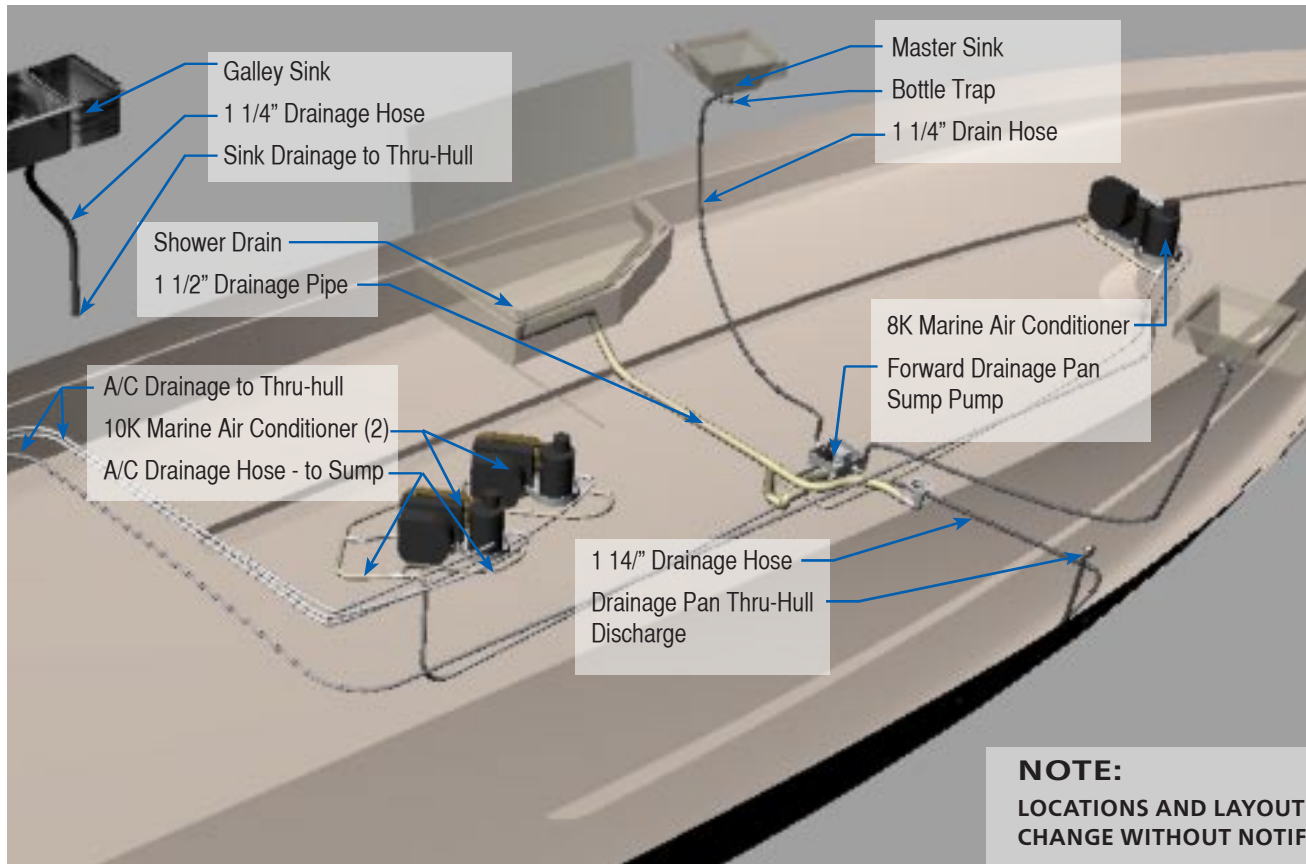


GRAY WATER SYSTEM: NORTHERN**FORWARD COMPANIONWAY SHOWER DRAINAGE PIPE CONFIGURATION**

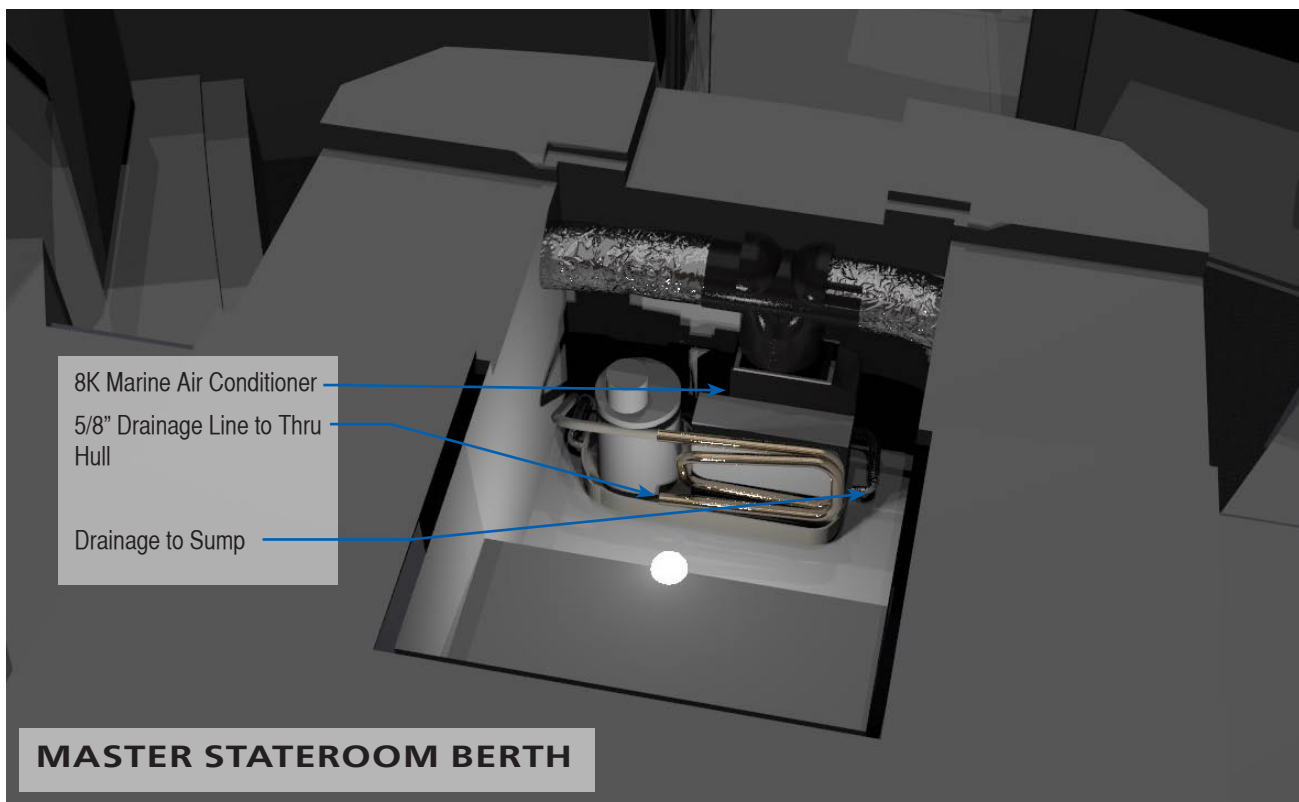
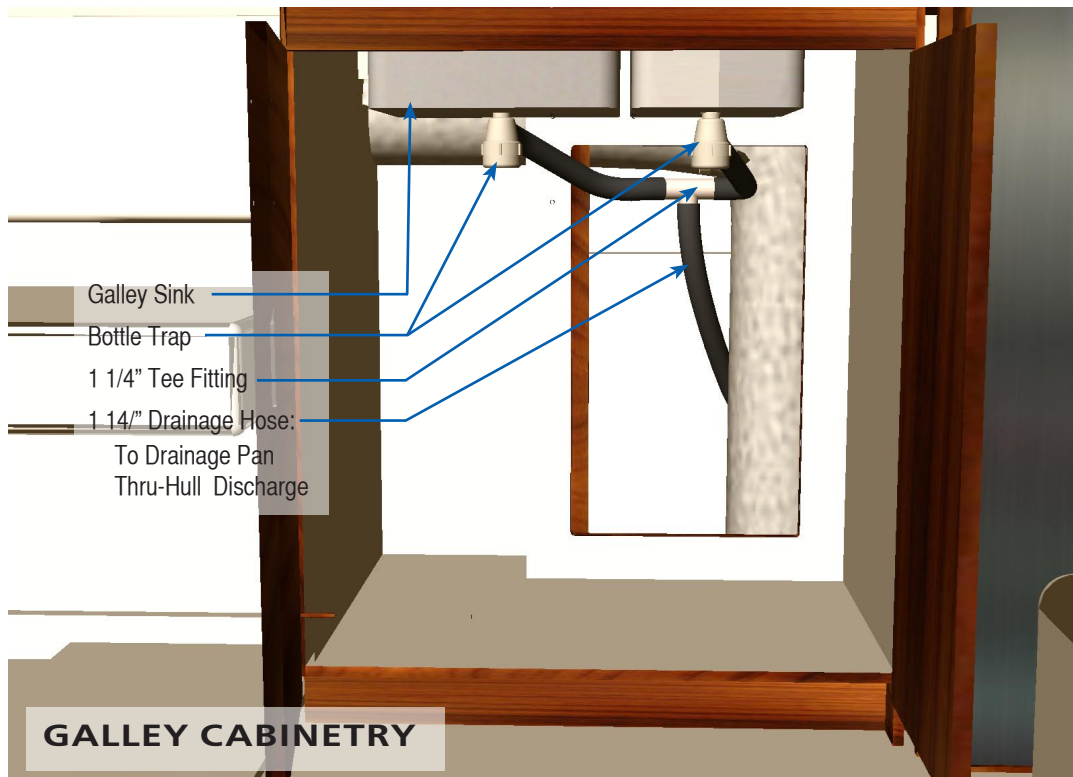
GRAY WATER SYSTEM: NORTHERN



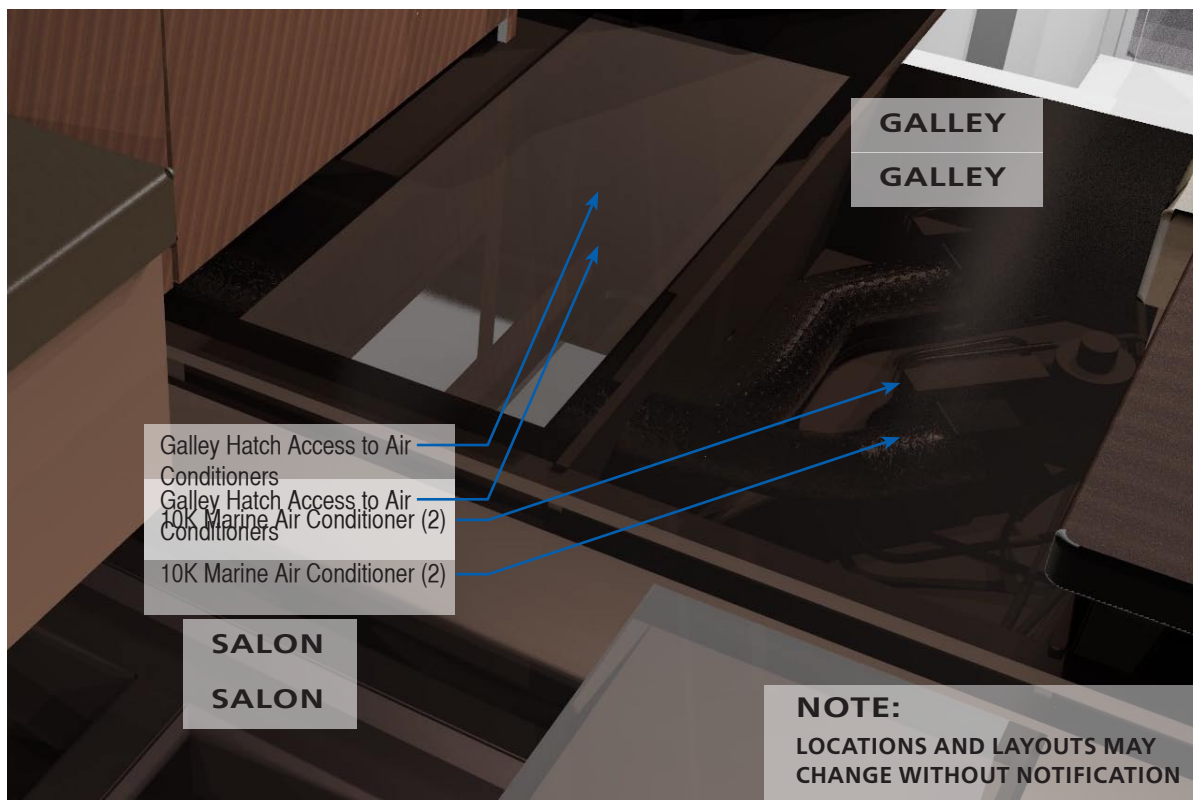
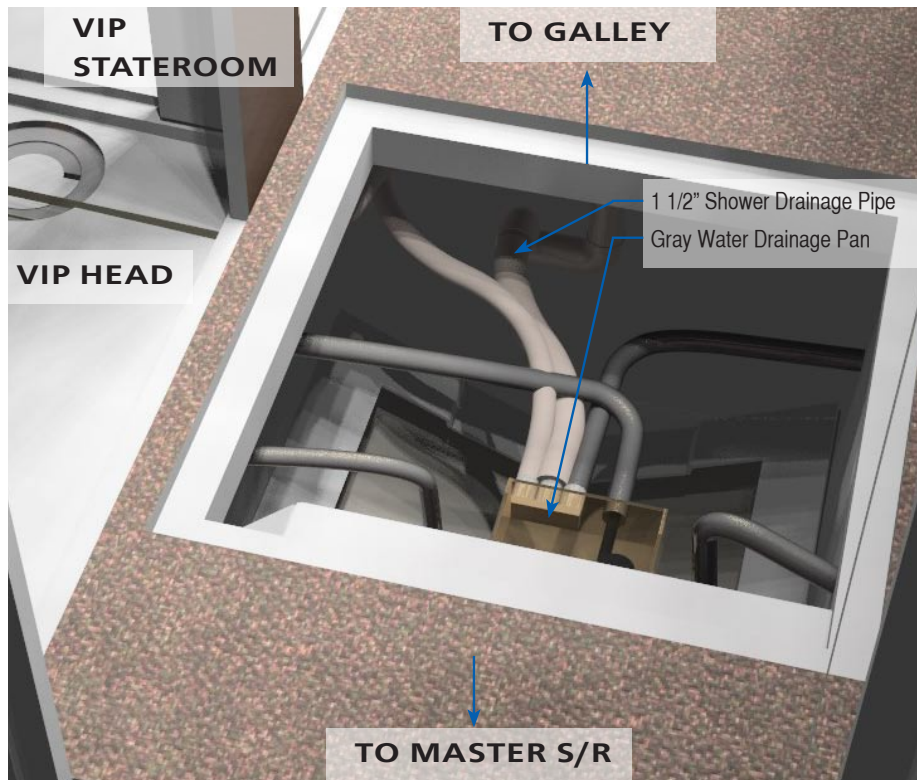
GRAY WATER SYSTEM: SOUTHERN



GRAY WATER SYSTEM: SOUTHERN



GRAY WATER SYSTEM: NORTHERN



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 on proper toilet usage.



OPERATING THE VACUUM FLUSH SYSTEM:

1. Confirm DC power is available at DC Control Panel (Dinette aft, STBD side.)
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/Grey 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 OPTIONAL GREY WATER TANK

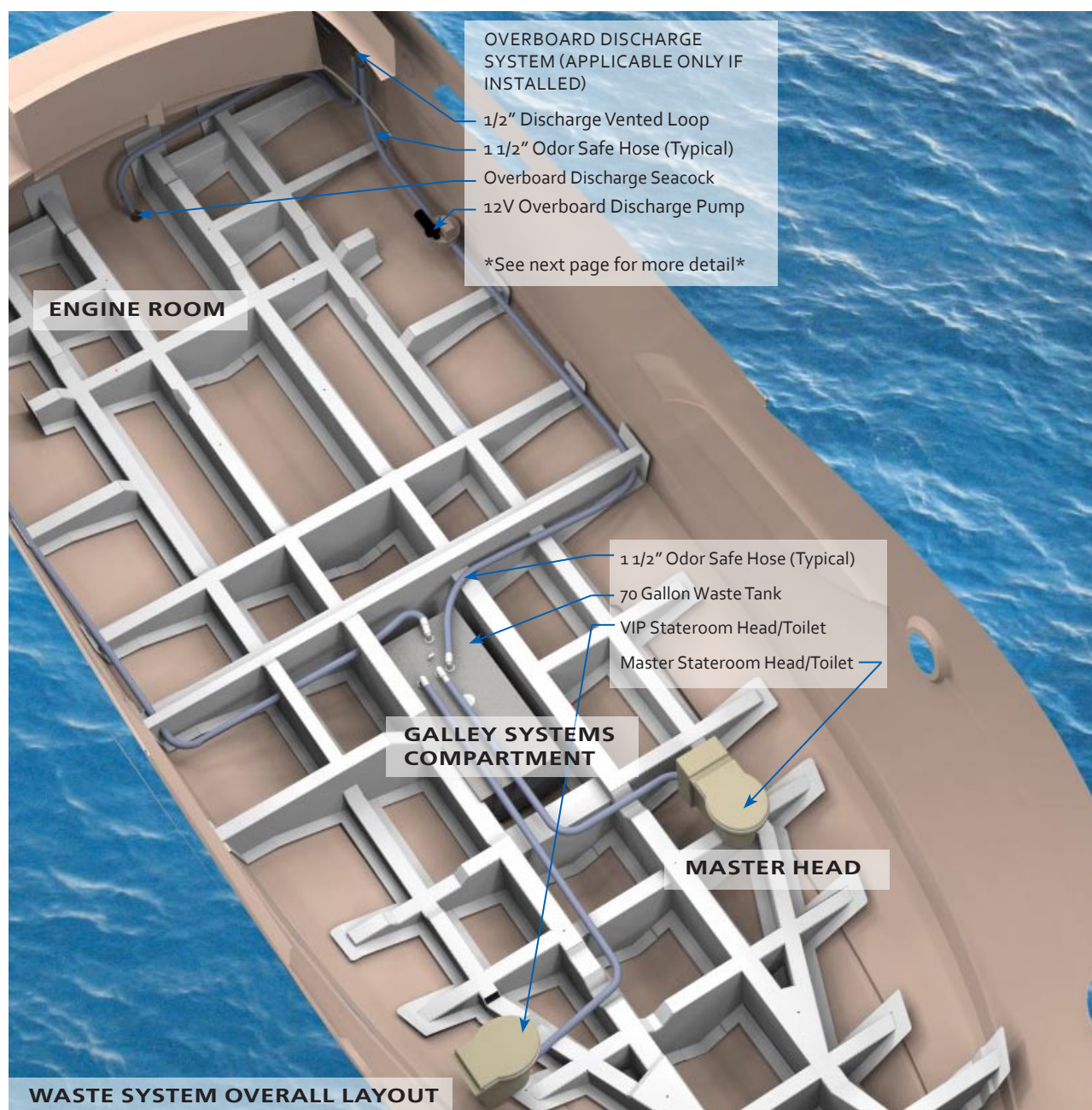
The sanitation system contains a single centrally located polyethylene waste tank. The waste tank can be accessed through the galley hatch access floor panel, located amidships, in the companionway leading to the staterooms. See *Sanitation System Details* on the following pages for illustration.

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 DOCKSIDE DISCHARGE TANK:

1. Locate a dockside pumpout station.
2. 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 *Waste Plate Location* on the next pages for illustration.
3. Attach the pumpout vacuum hose to the WASTE deck fitting. Make sure to have a secure connection between the transfer hose and the deck fitting.
4. Activate the pumpout vacuum. The pumpout vacuum transfers onboard waste to the dockside holding station.
5. 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.



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.

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.

RAW WATER WASHDOWNS (OPTION)

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

USING THE RAW WATER WASHDOWNS:

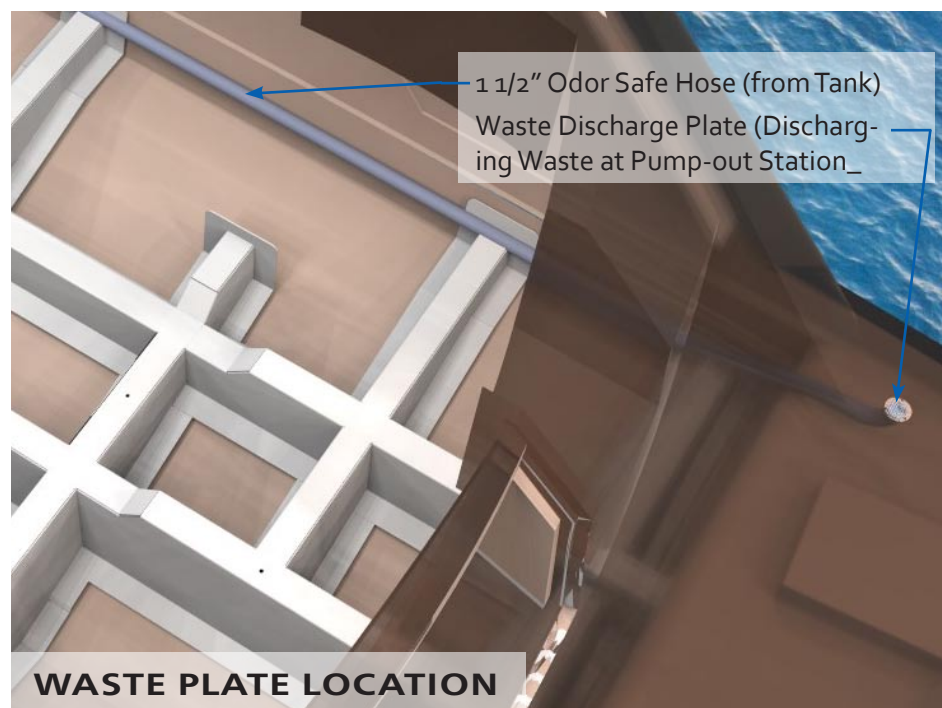
1. Locate the bow and transom mounted hose fittings. Each location is as follows:
 - The bow-mounted fitting: located on the forepeak deck under the hatch.
 - Transom-mounted fitting: located in the starboard aft stairs.
2. Attach one end of an appropriately sized nylon water hose (with nozzle) to the 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 in the Salon aft, PORT cabinet.

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.

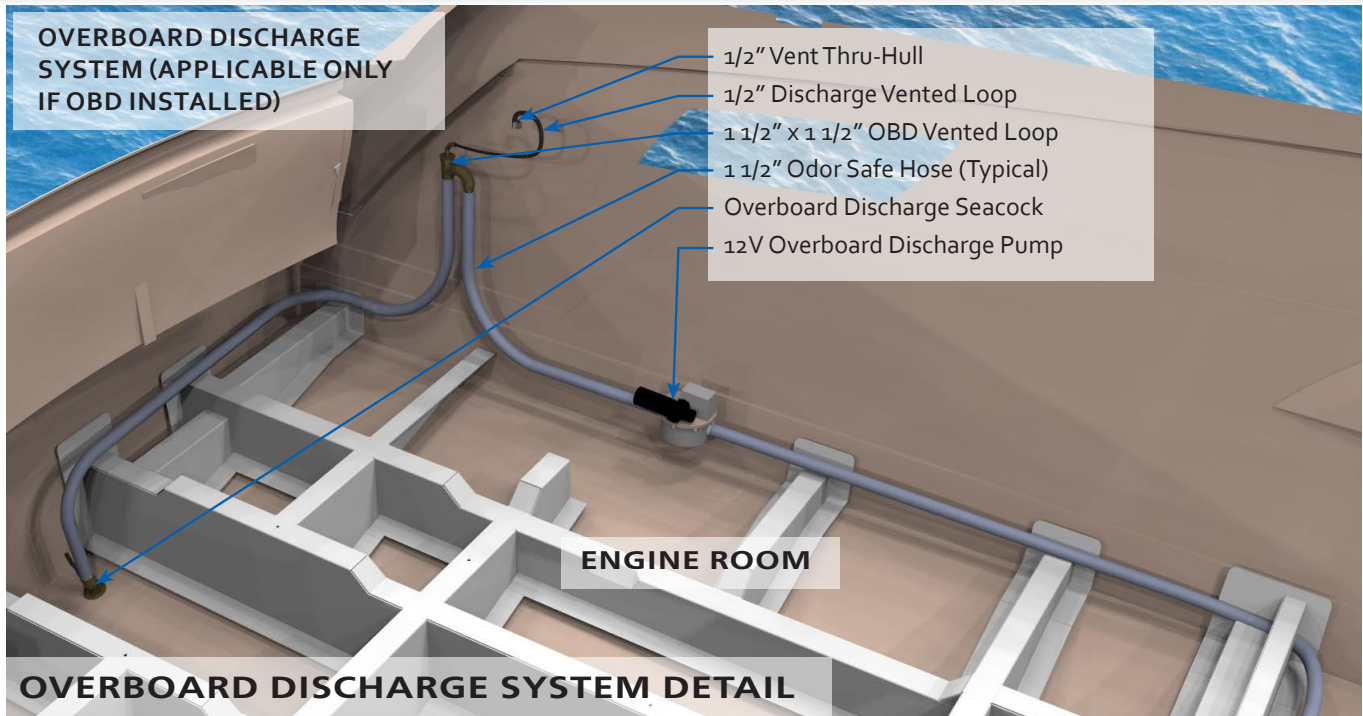
SANITATION SYSTEM DETAILS



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 DO 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.

INTERNAL SYSTEMS



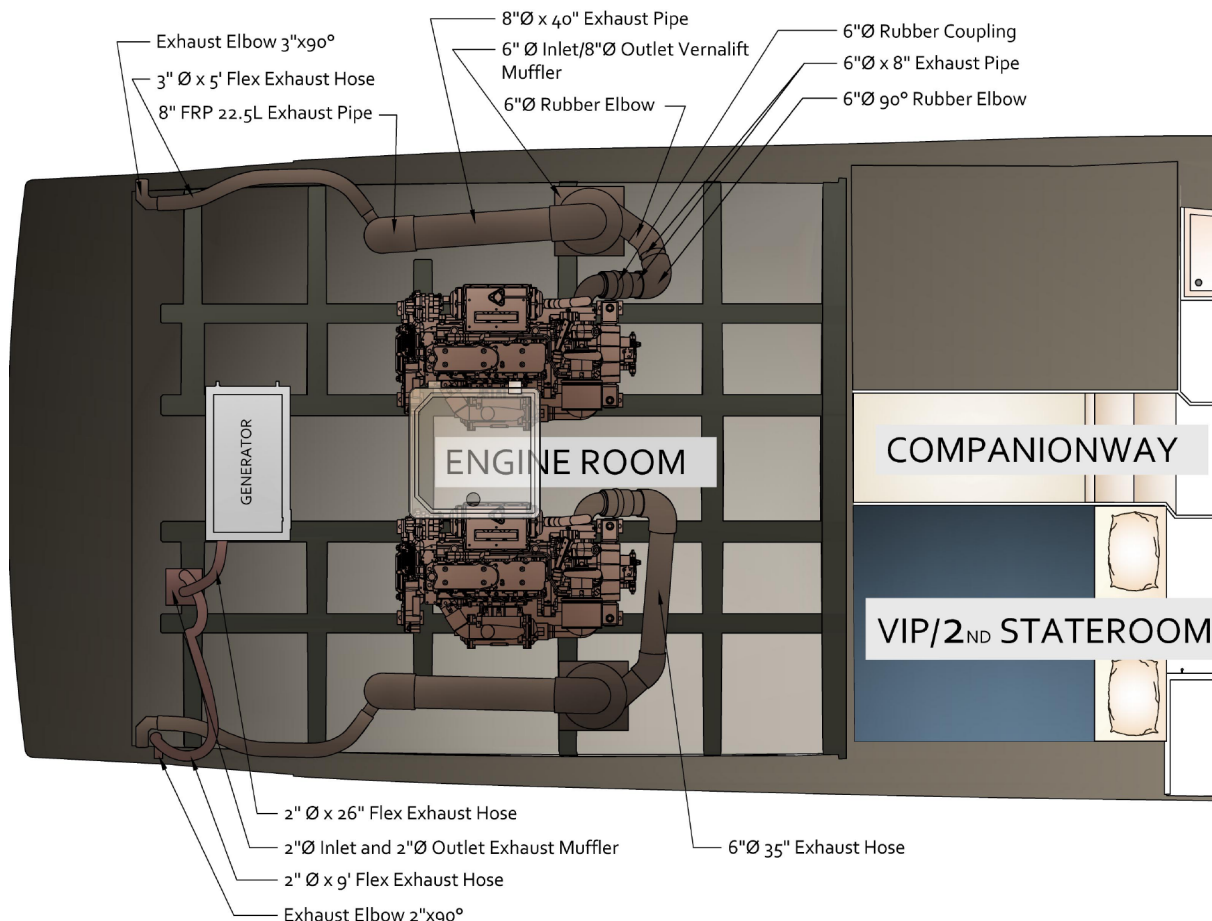
PAGE INTENTIONALLY LEFT BLANK

OVERVIEW

Section 5: *Propulsion* covers the standard Carver factory installed Diesel engines and the optional Carver factory installed diesel engines. Section 5 covers the engines and the engine's attributing components in the engine room and at the helm.

PROPULSION: DIESEL ENGINES

The Cummins 6.7 L 380 HP Diesel Engines are equipped on the C40. 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.



DIESEL ENGINE EXHAUST SYSTEM

EXHAUST SYSTEM: DIESEL 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.

SEE NEXT PAGE FOR DIESEL FUEL SYSTEM

FUEL SYSTEM: DIESEL ENGINES

CAUTION

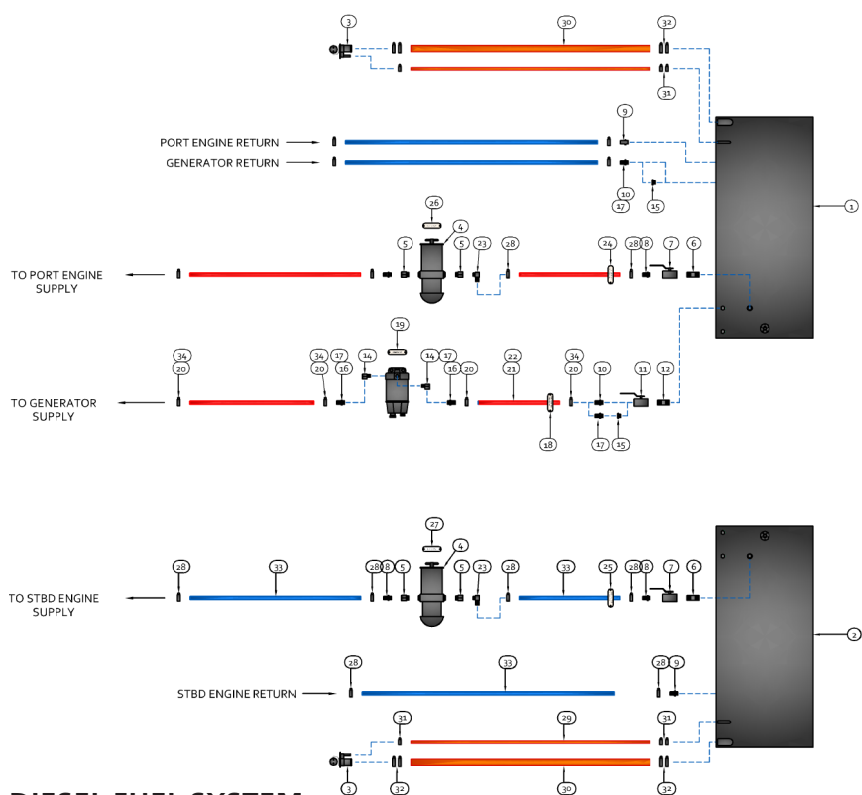
OVER TIME, WATER CAN CONDENSE INSIDE THE FUEL TANKS, ESPECIALLY IN AREAS WITH HIGH HUMIDITY. THE CONDENSATION CAN REACT WITH THE FUEL IN THE TANKS TO CREATE A MIXTURE THAT CAN CORRODE THE TANKS FROM THE INSIDE.

AVOIDING TANK CORROSION:

- USE THE FUEL IN THE FUEL TANKS AS OFTEN
- KEEP THE TANKS FULL OF FUEL WHEN THE BOAT IS STORED AND WHEN IT IS USED INFREQUENTLY
- DO NOT PUT ALCOHOL-BASED FUELS IN THE TANKS

FUEL TANKS

Two tanks are installed onboard to create a combined fuel amount of 250 gallons. A maximum of 125 gallons of fuel can be stored in each fuel tank. The fuel system meets or exceeds the standards set by the U.S. Coast Guard, National Marine Manufacturers. See next page for fuel tank location and illustration.



ITEM	QTY	PART NUMBER	PART DESCRIPTION	OPTIONS
1	1	61128	TANK FUEL PORT DIESEL	ENG=9N6
2	1	61128	TANK FUEL STBD DIESEL	ENG=9N6
3	2	6216805	PLY-DECK DSL 2" W/VENT	ENG=9N6
4	2	6003310	FLTR-FUEL RACOR 900MA10	ENG=9N6
5	4	7409900	FIT-RACOR ADP 7/8x1/2 FPT	ENG=9N6
6	2	7422100	FIT-1/2 FPT 1/2-1/8 LGBR	ENG=9N6
7	2	7421700	VALVE 1/2" BALL	ENG=9N6
8	4	7417001	FIT-H5BRB 1/2x1/2 MPT BR	ENG=9N6
9	2	7417000	FIT-H5BRB 3/8x1/2 MPT BR	ENG=9N6
10	2	7408900	FIT-H5BRB 3/8x3/8 MPT BR	GEN=245 OR 595
11	1	7417100	VALVE 1/2" BALL	GEN=245, 595, 596
12	1	7422200	FIT-1/2 FPT 1/2-1/8 LGBR	GEN=245, 595, 596
13	1	6003300	FLTR-FUEL RACOR 900MA10	GEN=245, 595, 596
14	2	7402000	FIT-ST ELB 90 DEG 1/4" PT	GEN=245, 595, 596
15	2	7410501	FIT-B5HG 3/8 MPT 1/4" FPT BR	GEN=596
16	2	7417005	FIT-H5BRB 3/8x1/4 MPT BR	GEN=245 OR 595
17	4	7417021	FIT-H5BRB 1/4x1/4 MPT BR	GEN=596
18	1	7150924	LABEL FUEL SHUTOFF P ENG	GEN=245, 595, OR 596
19	1	7150911	LABEL GENERATOR	GEN=245, 595, OR 596
20	5	7500100	CLAMP HOSE #8	GEN=245 OR 595
21	2	A0000033	HOSE 3/8 X 16' FUEL	GEN=245 OR 595
22	2	A0000005	HOSE 1/4 X 16' FUEL	GEN=596
23	2	7417012	FIT-H5BRB 1/2x1/2 MPT 90° BR	ENG=9N6
24	1	7150922	LABEL FUEL SHUTOFF P ENG	ENG=9N6
25	1	7150923	LABEL FUEL SHUTOFF S ENG	ENG=9N6
26	1	7150930	LABEL ENGINE PORT	ENG=9N6
27	1	7150931	LABEL ENGINE STBD	ENG=9N6
28	12	7500200	CLAMP HOSE #8	ENG=9N6
29	2	B0000001	HOSE 5/8 X 15' FUEL VENT	ENG=9N6
30	2	A0019974	HOSE 3/4 X 14' FUEL FILL	ENG=9N6
31	6	7500100	CLAMP HOSE #10	ENG=9N6
32	8	7500136	CLAMP HOSE #36	ENG=9N6
33	4	A0013139	HOSE 3/8 X 18' FUEL	ENG=9N6
34	5	7500100	CLAMP HOSE 5/16 TO 1/2	GEN=596

DIESEL FUEL SYSTEM

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.

Both propulsion engines are plumbed to the allocated fuel tank located on the same side as the engine. The diesel 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 above.

CAUTION

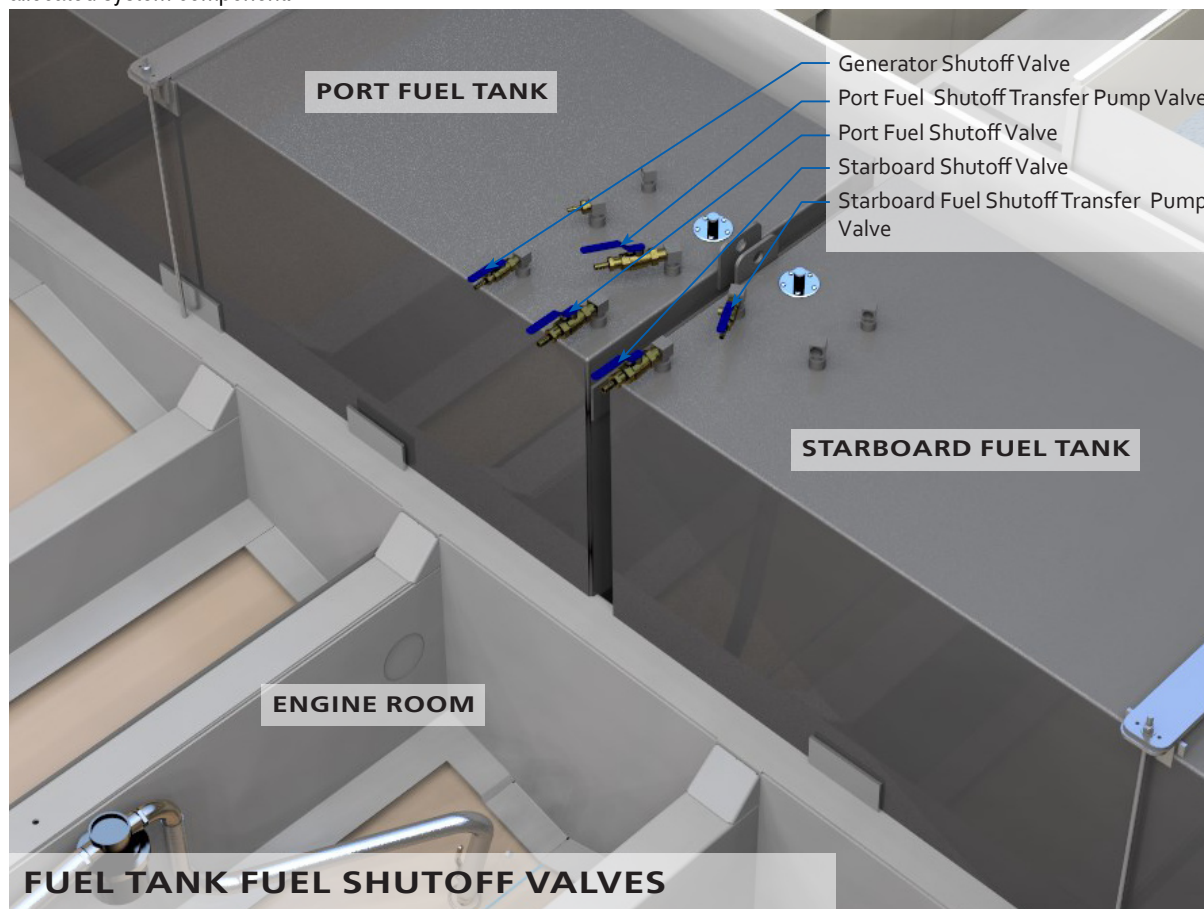
CORROSION CAN OCCUR IN THE FUEL TANK OVER TIME. WATER CONDENSES INSIDE THE FUEL TANKS, ESPECIALLY IN HUMID REGIONS. THE WATER CAN REACT WITH THE FUEL IN THE TANKS TO CREATE A MIXTURE THAT CAN CORRODE THE TANKS ON THE INSIDE.

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

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.



FUEL TANK VENTS

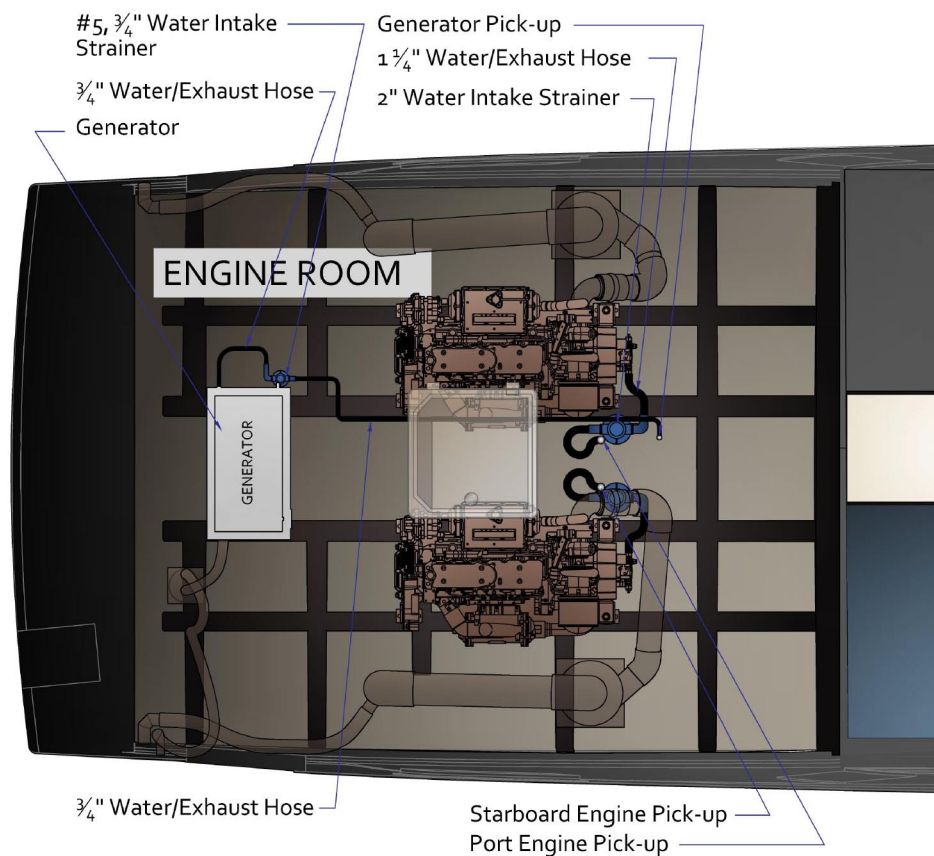
Each fuel tank is vented overboard. As the fuel tanks get filled, air is displaced from inside the tanks, and escapes through the vents. However, when the engines are running, air enters the fuel tanks through the vents to displace the fuel being used. See previous page for illustration.

COOLING SYSTEM: DIESEL ENGINES

Each propulsion engine has a closed cooling system that removes heat from the engine and the exhaust system. Closed systems

use a freshwater/antifreeze mixture to cool the engine. The coolant mixture runs through a heat exchanger that transfers the heat to seawater taken in through a seacock for each engine.

Make sure that a sufficient level of coolant mixture is kept in each system. **OPEN THE COOLING SYSTEM SEACOCKS BEFORE STARTING THE ENGINES.** The inlet seacocks for each engine are labeled, ENGINE WATER SUPPLY.



ENGINE AND GENERATOR COOLING SYSTEM

Clean the seawater strainer (located on the FWD INBOARD of each engine) every 14 days or sooner as necessary. See illustration below for strainer location.

CAUTION

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

The cooling system may need to be repaired if an above normal temperature registers on the engine temperature gauge. If the engine temperature rises quickly, immediately shut off the affected engine, and have the cooling system inspected and repaired.

FIRE SUPPRESSION SYSTEM

An automatic fire suppression system is installed in the engine room. The suppression system is located in the aft transom area of the engine room, port side, behind the freshwater tank. (See next page for fire suppression tank illustration.) The 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.

WARNING

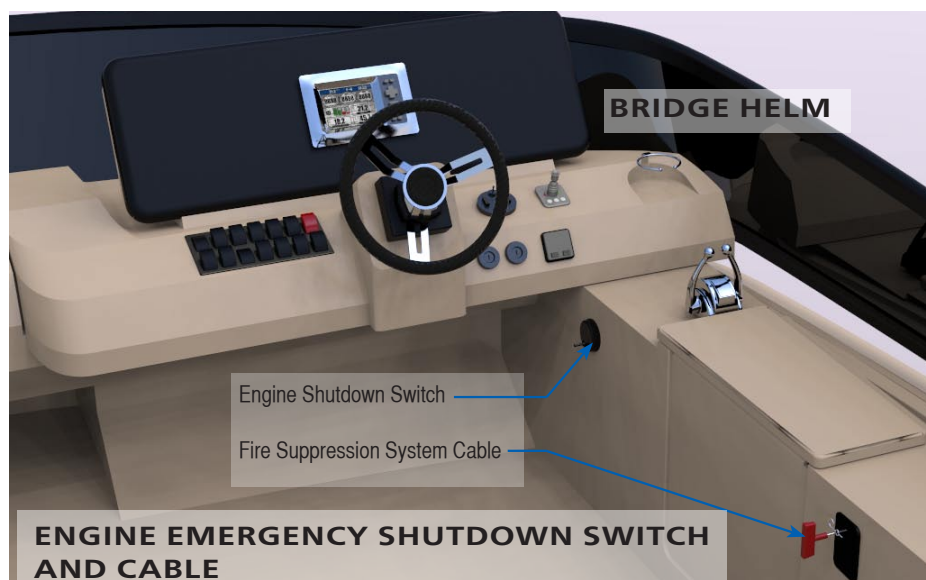
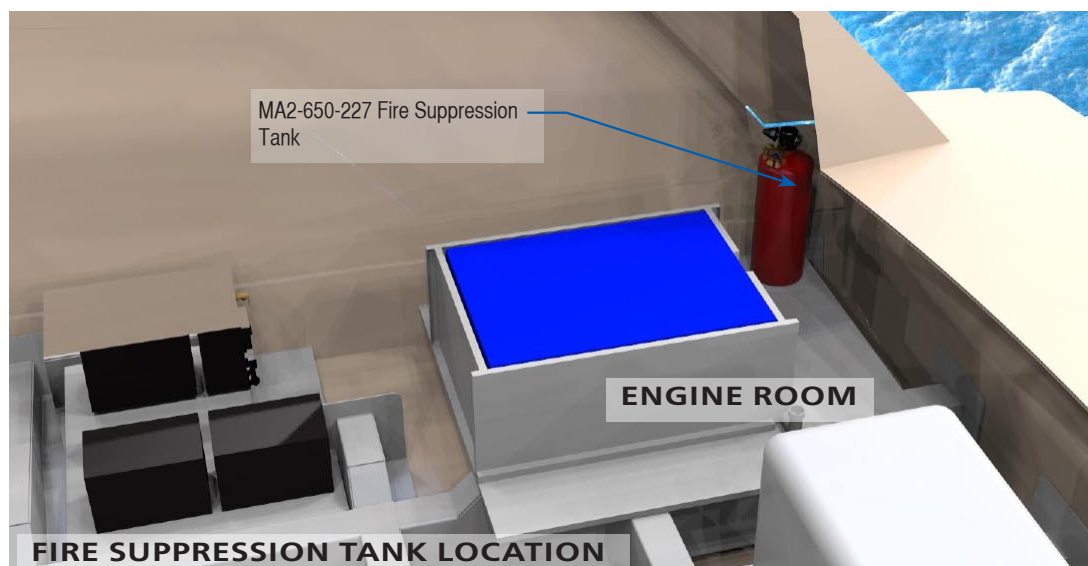
IMMEDIATELY EVACUATE THE ENGINE ROOM AND THE AFT BILGE AREA IF THE FIRE SUPPRESSION SYSTEM IS ACTIVATED. ASPHYXIATION CAN RESULT IF THE FIRE SUPPRESSION SYSTEM CHEMICALS ARE INHALED.

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 below the lower helm controls. 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.

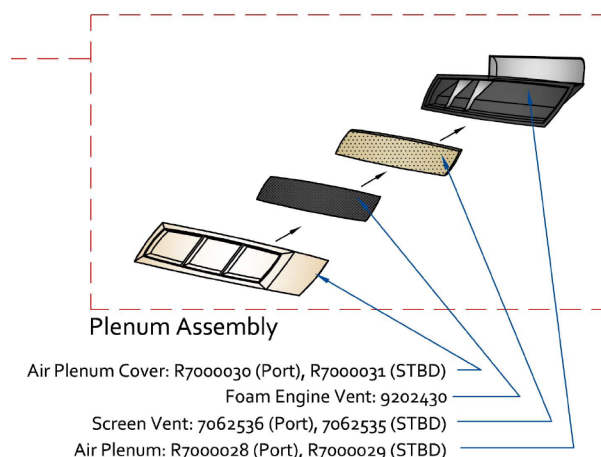


ENGINE ROOM VENTILATION: DIESEL ENGINES

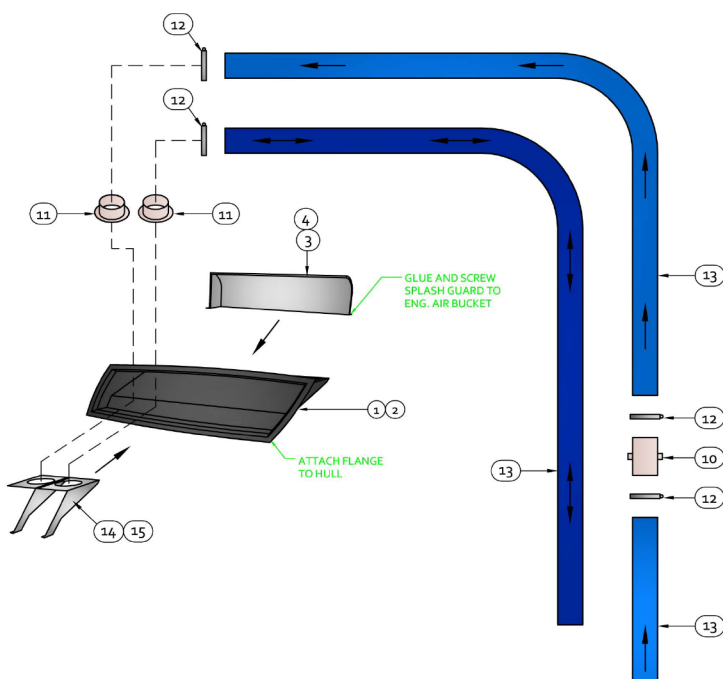
The engine room is equipped with a ventilation system that consists of intake ducts, exhaust ducts, and bilge blowers. The ventilation system is designed to remove fuel vapor and excess heat from the engine room. The bilge blowers operate when the engines are running, as long as BILGE BLOWER 1 - BILGE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



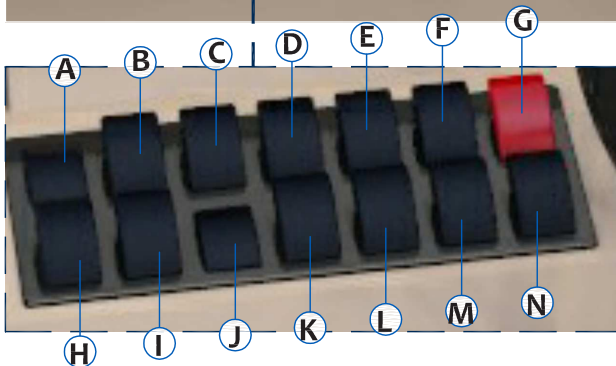
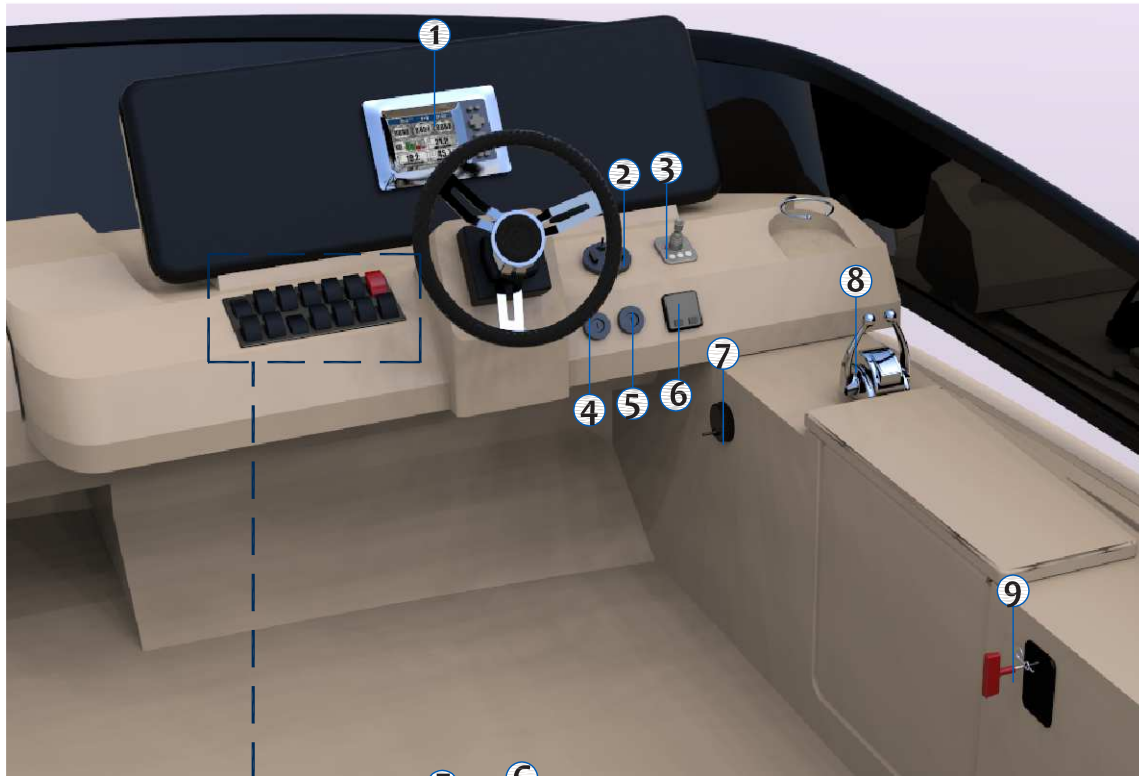
ITEM	QTY	PART NUMBER	PART DESCRIPTION
1	1	R7000028	FRP:ENG AIR PLENUM PORT
2	1	R7000029	FRP:ENG AIR PLENUM STBD
3	1	R7000024	FRP:ENG AIR SPLASHGUARD P
4	1	R7000025	FRP:ENG AIR SPLASHGUARD S
5	2	9202430	FOAM:ENGINE VENT R7
6	1	7062535	SCREEN:E/R VENT STBD 3457
7	1	7062536	SCREEN:E/R VENT PORT 3457
8	1	R7000030	FRP:ENG AIR CVR PORT
9	1	R7000031	FRP:ENG AIR CVR STBD
10	2	6502701	BLOWER:BILGE 4" 240CFM
11	4	9003200	TRANSITION:4"TR
12	8	7500900	CLAMP:HOSE #64
13	48	7514510	HOSE:4" HITECH VENT
14	1	6502307	VENT:GAS BLOWER INSERT P
15	1	6502308	VENT:GAS BLOWER INSERT S
16	1	6502309	VENT:DSL BLOWER INSERT S



ENGINE ROOM VENTILATION DETAILS

HELM CONTROLS

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



Helm Controls

Component #	Component Description
1	Engine Display Monitor
2	Searchlight Control
3	Stern Thruster
4	Port Engine Keyswitch
5	Starboard Engine Keyswitch
6	Automatic Keystack
7	Engine Shutdown Switch
8	Shift-Throttle Lever
9	Fire Suppression System Cable Release

Helm Switches

Component #	Component Description	Component #	Component Description
A	Spare	H	Anchor UP/DOWN
B	Panel Lights ON/OFF	I	Windlass ON/OFF
C	Courtesy Lights ON/OFF	J	Fuel Tank Locator: Port/STBD
D	Anchor Lights ON/OFF	K	Bilge Pump 1 ON/OFF
E	Navigation Lights ON/OFF	L	Bilge Pump 2 ON/OFF
F	Bilge Blower ON/OFF	M	Trim Tab (Port): Bow UP/DOWN
G	Horn	N	Trim Tab (STBD): Bow UP/DOWN

ENGINE/MULTI-FUNCTION DISPLAY MONITOR (1)

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 (2)

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

STERN THRUSTER (3)

The stern 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 (4,5,6)

The engine ignition control panel starts and stops the designated engine. The "Ignition" button designates the appointed engine, either port or starboard. The "Start/Stop" button below will start or stop the designated engine.

ENGINE SHUTDOWN SWITCH (7)

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 (8)

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 (9)

The fire suppression system cable release, when pulled will activate the fire suppression tank in the engine room. 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 and in the area 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 amount of stored fuel is necessary.
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 fuel surge when the tank is empty, and 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 Guide 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. The master disconnect switches are located in the engine room aft, forward the generator. See Section 2 for location and illustration.

5. DC Control Center (Galley aft, STBD side) 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

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

- CHECK ENGINE ROOM FOR DIESEL 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 Shift/Throttle 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.

PAGE INTENTIONALLY LEFT BLANK

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* is 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 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 incur 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.

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.

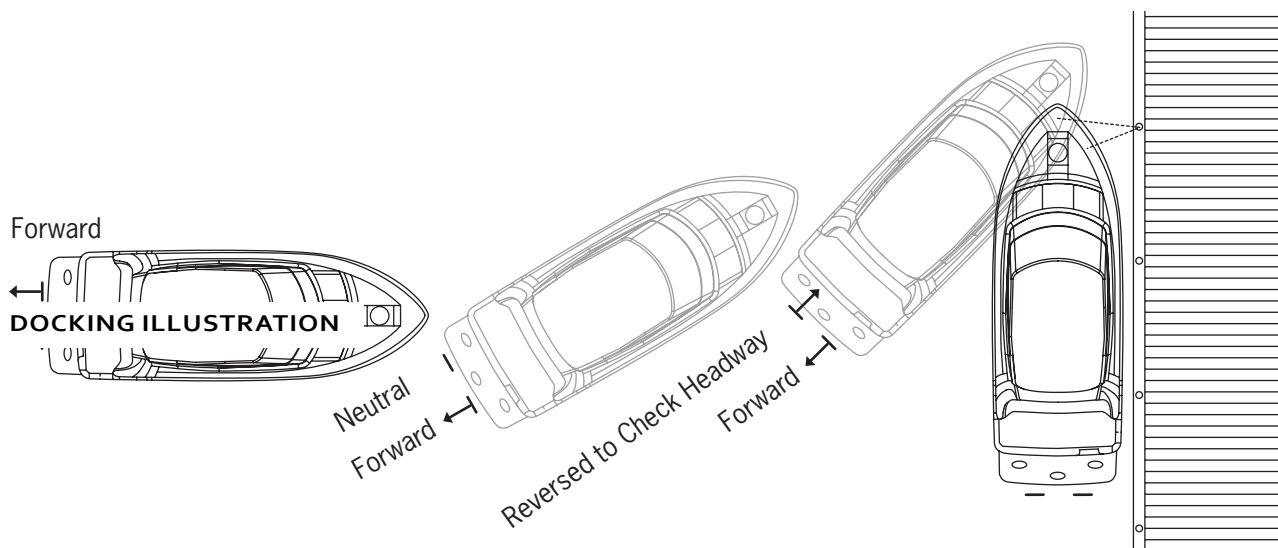
CASTING OFF AND DOCKING

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, make sure the dinghy line does not foul the propeller. Start the engines after getting onboard, and send someone forward to slacken the line. 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 slowly until the anchorage has been cleared to avoid creating a nuisance with the yacht's wake.



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.
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. Take the bow spring in and back the yacht away, once the stern is clear of yachts and other obstructions.

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.

IF A DINGHY IS USED TO REACH THE YACHT, FOLLOW THIS PROCEDURE 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 CUR-

OPERATING AND MANEUVERING



RENT):

- 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. Shift the engines into neutral when estimated 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 7A:

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

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

- 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

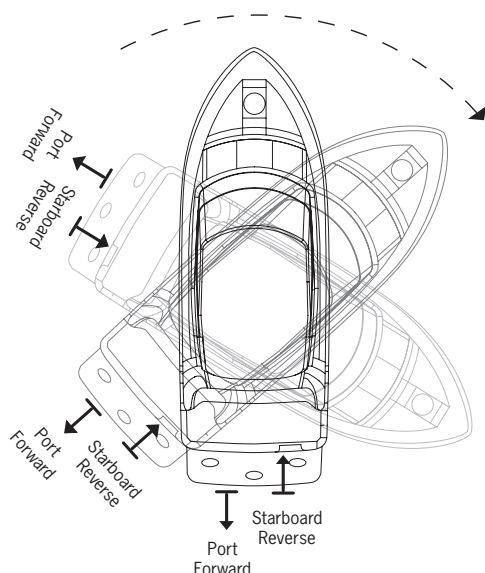
shifting the STDB engine to neutral.

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

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

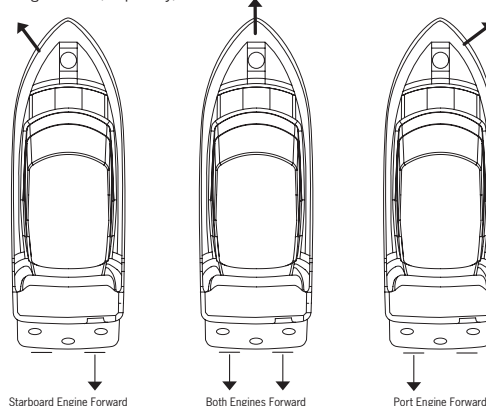
1. Approach the selected anchor site from downwind.
2. Come to a complete stop over the desired anchor drop spot. The anchor can be lowered from either the helm or from the bow with foot switches. To activate the foot switch at the bow, simply lift the cover.
3. Reverse the engines and slowly move the yacht backward to pay out more anchor line when the anchor hits bottom. The

CHECKING HEADWAY

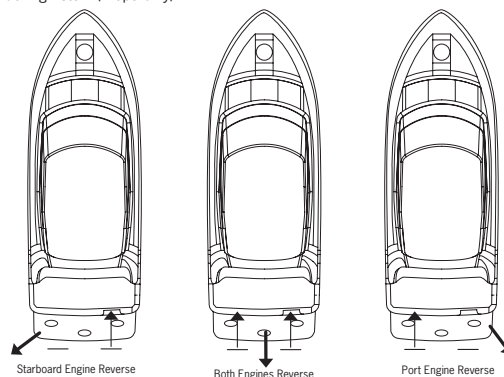
Stopping the yacht's forward motion is referred to as "checking headway". It is important learn how to confidently stop the yacht within any required distance.

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.

Tracking Forward (Props Only)



Tracking Astern (Props Only)



TRACKING ILLUSTRATION

OPERATING AND MANEUVERING



anchor flukes will dig in when the anchor is at the 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 (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 2a nor 2b methods 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 claws engage 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.

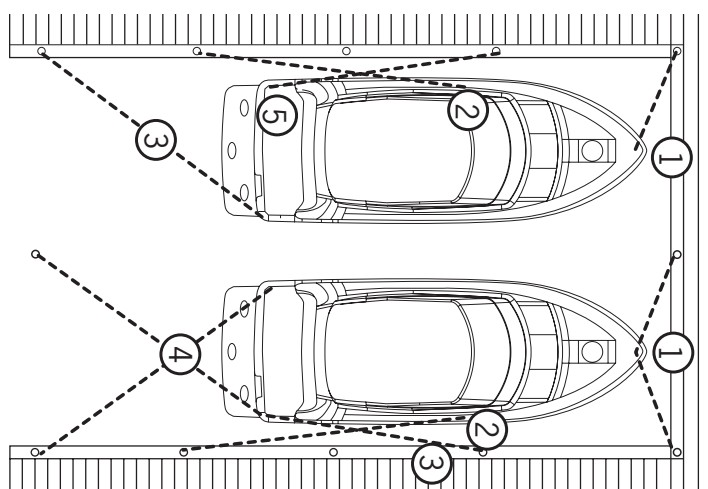
MOORING LINES

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.



MOORING ILLUSTRATION

The above mooring illustration 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 Guide 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 new-found love for the water. Be honest with appraising your level of skill.

OPERATING AND MANEUVERING



SHAKEDOWN CRUISE

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

1. Your Carver Dealer has completed 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 Guide 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. Invite the sales person who sold the yacht, or a member of your Carver Dealer's service staff along for the ride.

Carry a pad and pencil during the first outing. Write down 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 that 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 IPS Drive System.

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 next page for trim tab illustration.

USING THE TRIM TABS:

1. Provide power to the DC Distribution Panel circuit breakers.
2. Switch ON the SYSTEMS DC MAIN circuit breaker on the DC Control Panel, located in the Galley Aft Cabinet, Port side.
3. Switch ON the TRIM TABS circuit breaker, located on the DC Control Panel, located in the Galley Aft Cabinet, Port side. The

trim tabs are located the bridge helm. The controls consist of two switches located at the helm with the group of 14 switches on left side of helm. The PORT switch controls the STDB tab; the STDB switch controls the PORT tab. Each switch is labeled BOW UP and BOW DOWN. See next page 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.

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.



BRIDGE HELM

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.

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

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 zinc 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 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

MAINTENANCE



Inspect trim tab reservoir		X	X	X
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 the 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 as they 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 it 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 INCUR:

- 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.

MAINTENANCE



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 PROCESS 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 & 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 & 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:
 - 3a. Brush on color Triclad Water Base Stain 13-9810
 - 3b. 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 it 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

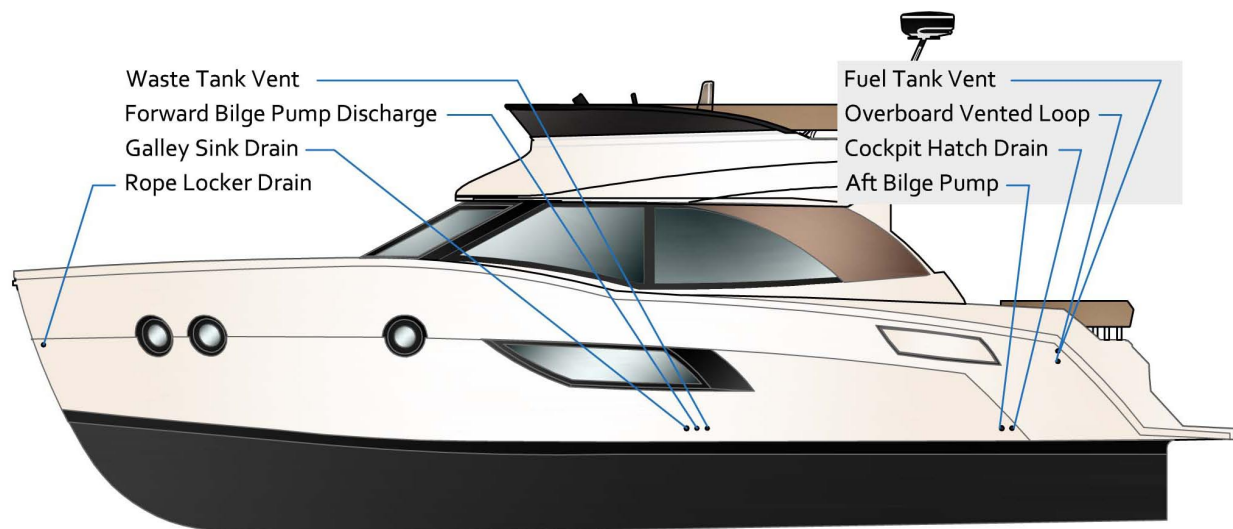
Inspect the thru-hull valves on a monthly basis. Items to inspect are as follows:

- 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. Refer to Section 9: *Thru-Hull Fittings* for the location of the thru-hull valves.

WARNING



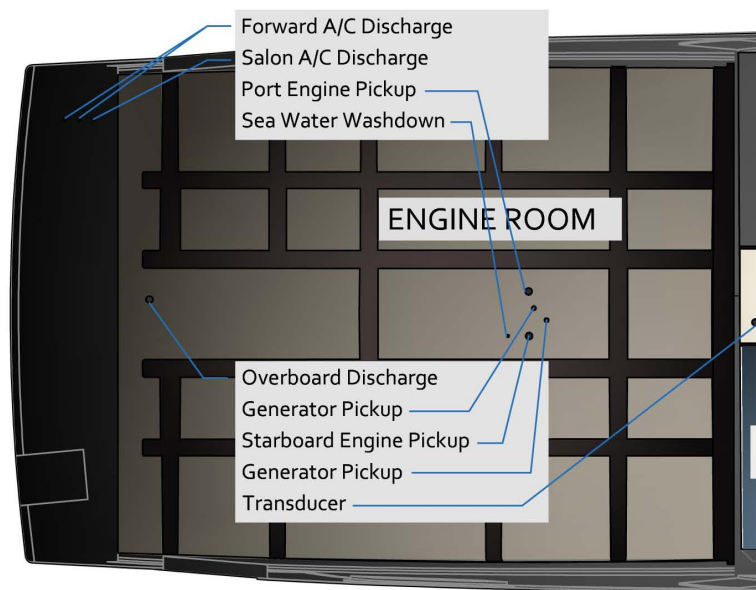
ALL THRU SEACOCKS MUST BE CLOSED WHILE NOT IN USE TO REDUCE THE RISK OF FLOODING.



PORT THRU-HULL VALVES



STARBOARD THRU-HULL VALVES



ENGINE ROOM THRU-HULL VALVES

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

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

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 schematics 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 a 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 schematics 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.

WINTERIZATION: STORAGE

The yacht must be properly “winterized” before storing for an extended period of time, 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, with 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 in 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 IPS 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 when storing the yacht 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.

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

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 Galley forward cabinet, STBD side, at the companionway. See Section 3 for illustration.

CAUTION

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

2. Locate the DC Control Panel. Panel is located in the Dinette aft, Starboard side. 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.
4. Turn ON the ACCESSORY Battery master disconnect switch, located on the DC Control Panel, in the Dinette aft, Starboard side.
5. 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.
6. Switch OFF the PRESSURE WATER PUMP circuit breakers, from STEP 2, when water is no longer draining from the sink taps, shower heads, or fresh water washdowns.
7. 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 INCUR TO THE FRESH WATER SYSTEM BY USING THE WRONG TYPE OF ANTIFREEZE. USE A NONTOXIC,

WINTERIZATION AND STORAGE



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, in the Dinette aft, Starboard cabinet.
4. If the optional grey water holding system 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 INCUR 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 Distribution Panel. Panel is in the Dinette aft, Starboard cabinet. 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 INCUR 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. 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 Standard System and the Overboard Discharge System.

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.

WINTERIZATION AND STORAGE



2. Verify that the AUTO SUMP circuit breakers are ON, located on the DC Control Panel, located in the Dinette aft, Starboard cabinet.

WARNING

DAMAGE CAN INCUR 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 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.

(See next page for Spring Recommissioning Checklist)

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.

PAGE INTENTIONALLY LEFT BLANK

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 located in the Preface of this guide. 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 OEM information. 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 Guide, and all other guides 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 can be found in the preface of this 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 Guide. 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 provided separately in the manual. Use the provided sheet as a convenient location to record the serial numbers of the yachts OEM components.

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).....	39' 10".....	12,14 m
Beam (with gunnel molding).....	13' 6".....	4,11 m
Draft (with full fuel & water)	43".....	1,09 m
Bridge Clearance (top mast head light with full fuel & water)	12' 0".....	3,66 m
Fuel System.....	350 U.S. gallons	1324 liters
Holding Tank	70 U.S. gallons.....	264 liters
Water System.....	131 U.S. gallons.....	495 liters
Weight (Dry)	20500 lbs. (Dry)	9298 kg
Cabin Headroom	6' 6".....	1,98 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.

DANGER

DO NOT EXCEED THE LOAD CAPACITIES STATED. THE INFORMATION ON THE CERTIFICATION PLATE DOES NOT RELIEVE THE OPERATOR FROM RESPONSIBILITY. USE COMMON SENSE AND SOUND JUDGEMENT WHEN PLACING EQUIPMENT AND/OR PASSENGERS IN THE YACHT.

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.

The illustrations on the following pages document the C40 AC and DC electrical system.

TERMINAL TYPE	WIRE LABEL	COLOR	GA	LENGTH	WIRE LABEL	TERMINAL TYPE
1/4" EYE	WNDLS BRKR	RED	2/0	30 FT	WNDLS RLY	5/16" EYE
3/8" EYE	WNDLS	YELLOW	2/0	28 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.

C7

Model

3957

Sheet

1 of 1

Rev. No.

P1

P1-22MAY13-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.

TOLERANCES

X.X ±0.062
X.XX ±0.031
X.XXX ±0.005
< ±30"

UNLESS OTHERWISE
SPECIFIED

Status:

PRELIM

Drawing No.

5900417

WARRANTY AND PARTS



TERMINAL TYPE	WIRE LABEL	COLOR	GA	LENGTH	WIRE LABEL	TERMINAL TYPE
3/8" EYE	S BATT	RED	4/0	7'	S SWITCH	3/8" EYE
3/8" EYE	P BATT	RED	4/0	10'	P SWITCH	3/8" EYE
3/8" EYE	S SWITCH	RED	4/0	7'	S STARTER	5/16" EYE
3/8" EYE	P SWITCH	RED	4/0	10'	P STARTER	5/16" EYE
3/8" EYE	P BATT 1	RED	2 GA	16"	P BATT 2	3/8" EYE
3/8" EYE	S BATT 1	RED	2 GA	16"	S BATT 2	3/8" EYE
3/8" EYE	P BATT 1	YELLOW	2 GA	16"	P BATT 2	3/8" EYE
3/8" EYE	S BATT 1	YELLOW	2 GA	16"	S BATT 2	3/8" EYE
3/8" EYE	P OUTSIDE	YELLOW	4/0	4'	P BATT	3/8" EYE
3/8" EYE	S OUTSIDE	YELLOW	4/0	4'	S BATT	3/8" EYE
3/8" EYE	P INSIDE	YELLOW	4/0	5'	8-STUD	3/8" EYE
3/8" EYE	S INSIDE	YELLOW	4/0	5'	8-STUD	3/8" EYE
3/8" EYE	OUTSIDE	YELLOW	4/0	11'	OUTSIDE	3/8" EYE
3/8" EYE	8-STUD	YELLOW	2/0	10'	4-STUD	3/8" EYE

NOTE: THERE IS A DIFFERENT LABEL FOR EACH END OF THE CABLE



Drawing Title

HARN:BATT CBLS CUMMONS DSL

Hull No.

C7

Model

3957

Sheet

1 of 1

Rev. No.

P

TOLERANCES

X.X ±0.062
X.XX ±0.031
X.XXX ±0.005
< ±30°
UNLESS OTHERWISE

Status:

ORIG

Drawing No.

5900418

01-12FEB13-SR

PRODUCTION 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

TERMINAL TYPE	WIRE LABEL	COLOR	GA	LENGTH	WIRE LABEL	TERMINAL TYPE
NONE	C4	YELLOW	4 GA	6FT	A 4-STUD	3/8" EYE
1/4" EYE	C4 CASE	YELLOW	6 GA	6FT	A 4-STUD	3/8" EYE
NONE	C4	RED	4 GA	8FT	C4 H BRKR	1/4" EYE
NONE	C1	RED	4 GA	8FT	C1 P BRKR	1/4" EYE
NONE	C2	RED	4 GA	8FT	C2 S BRKR	1/4" EYE
1/4" EYE	C4 H BRKR	RED	4 GA	4FT	C4 H BATT	3/8" EYE
3/8" EYE	P ISO INPUT 1	RED	4 GA	11FT	P ALT	1/4" EYE
3/8" EYE	S ISO INPUT 2	RED	4 GA	9FT	S ALT	1/4" EYE
3/8" EYE	P ISO ENG 1	RED	4 GA	9FT	P ISO BRKR	1/4" EYE
3/8" EYE	S ISO ENG 2	RED	4 GA	9FT	S ISO BRKR	1/4" EYE
3/8" EYE	H ISO 3	RED	4 GA	9FT	H ISO BRKR	1/4" EYE
#10 EYE	ISO GRD	YELLOW	14 GA	8FT	ISO GRD	#10 EYE
#10 EYE	P ISO IGN 1	PURPLE	16 GA	35FT	P IGN	NONE
#10 EYE	S ISO IGN 2	PURPLE	16 GA	35FT	S IGN	NONE

NOTE: THERE IS A DIFFERENT LABEL FOR EACH END OF THE CABLE

 CARVER YACHTS		Drawing Title			
		HARN:BATT CBLS CHRGR 3957			
		Hull No. C7	Model 3957	Sheet 1 of 1	Rev. No. P
		Status: ORIG		Drawing No. 5900420	
01-12FEB13-SR RV-DATE-EDTR		PRODUCTION RELEASE 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.					
TOLERANCES X.X ±0.062 X.XX ±0.031 X.XXX ±0.005 < ±30° UNLESS OTHERWISE SPECIFIED					

WARRANTY AND PARTS



TERMINAL TYPE	WIRE LABEL	COLOR	GA	LENGTH	WIRE LABEL	TERMINAL TYPE
3/8" EYE	GEN ISO 4	RED	4 GA	8 FT	GEN ISO BRKR	1/4" EYE
1/4" EYE	GEN SWB	RED	4 GA	8 IN	GEN SWB	3/8" EYE

NOTE: THERE IS A DIFFERENT LABEL FOR EACH END OF THE CABLE

P1-25JUL13-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.	

<u>Drawing Title</u> HARN:BATT CBL GEN CHRGR N/THRSTR			
<u>Hull No.</u> C7	<u>Model</u> 3957	<u>Sheet</u> 1 of 1	<u>Rev. No.</u> P1
<u>TOLERANCES</u> X.X ±0.062 X.XX ±0.031 X.XXX ±0.005 < ±30' UNLESS OTHERWISE SPECIFIED		<u>Status:</u> PRELIM	<u>Drawing No.</u> 5900423

TERMINAL TYPE	WIRE LABEL	COLOR	GA	LENGTH	WIRE LABEL	TERMINAL TYPE
5/16" EYE	WNDLS 1	RED	2/0	16 FT	WNDLS 1 RLY	5/16" EYE
5/16" EYE	WNDLS 2	RED	2/0	16 FT	WNDLS 2 RLY	5/16" EYE
5/16" EYE	WNDLS	YELLOW	2/0	16 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 DECK	
Hull No. C7	Model 3957
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. 5900424	

P1-22MAY13-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
5/16" EYE	GEN CHRGR	RED	4 GA	6 FT	GEN BRKR	1/4" EYE
1/4" EYE	GEN SWB	RED	4 GA	8 IN	GEN SWB	3/8" EYE

NOTE: THERE IS A DIFFERENT LABEL FOR EACH END OF THE CABLE

P1-25JUL13-SR RV-DATE-EDTR PRELIMINARY RELEASE 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 GEN CHRGR W/THRSTR			
		Hull No. C7	Model 3957	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. 5900427

SECTION 9

OPTION	BREAKER	CIRCUIT NUMBER	BREAKER SIZE 120V/250V	MINIMUM WIRE GAUGE	CABLE LENGTH	TERMINAL TYPE	WIRE P/N
STD	#1 MAIN	1	30	10	50'	NONE	8935900
GEN=Y	GENERATOR MAIN	1A	SEE NOTE 3	50'	NONE	NOTE 3	
STD	RECEPTACLES ONE	2	15	12	30'	NONE	8929900
STD	RECEPTACLES TWO	3	15	12	25'	NONE	8929900
STD	RANGE	4	25/15	10	25'	NONE	8935900
STD	WATER HEATER	5	15	10	50'	NONE	8935900
STD	ENG/ACC BATT CHARGER	7	15/10	10	55'	NONE	8935900
STD	ICE MAKER or EXT REFR	9	15	12	50'	NONE	8929900
STD	MICROWAVE	10	15	12	20'	NONE	8929900
THRU-SEA or B or JUNCTION	THRUSTER BATT CHARGER	11	15/10	10	55'	NONE	8935900
WETBAR=Y	GRILL	12	15	10	40'	NONE	8935900
COOLER=Y	WINE COOLER	13	10/NA	12	30'	NONE	8929900
STD	GROUND BUS	19		8	40'	#10 EYE	8935900
AC-NORTH or SOUTH	#2 MAIN	20	30	10	50'	NONE	8935900
AC-NORTH or SOUTH & GEN-Y	GENERATOR MAIN	20A	SEE NOTE 4	50'	NONE	NOTE 4	
AC-SOUTH	A/C WATER PUMP	21	5	14	50'	NONE	8930200
AC-NORTH or SOUTH	A/C UNIT (FWD)	22	30/15 AC-NORTH 15/10 AC-SOUTH	10	30'	NONE	8935900
AC-NORTH or SOUTH	A/C UNIT (AHD)	23	10	12	30'	NONE	8929900
AC-SOUTH & 110V=N	A/C UNIT (SALON)	24	10	12	30'	NONE	8929900

NOTES:

- 1) STRIP LEADS #1, #1A, #20 AND #20A 2½" FOR INSIDE BOX, ALL OTHER LEADS STRIP 2"
- 2) LEADS #1A, #11, #12, #13, #20, #20A, #21, #22, #23 AND #24 ARE OPTIONAL
- 3) WHEN GENERATOR=555, 568, 595, OR 597:
USE A 30 AMP BREAKER AND 10-3 ROMEY, P/N 8935900
WHEN GENERATOR=191 OR 245:
USE A 50 AMP BREAKER AND 8-3 ROMEY, P/N 8937600
WHEN GENERATOR=187 or 249:
USE A 50 AMP BREAKER AND 6-3 ROMEY, P/N 8930000
WHEN GENERATOR=555, 568, 595, OR 597:
USE A 30 AMP BREAKER AND 10-3 ROMEY, P/N 8935900
WHEN GENERATOR=191 OR 245:
USE A 30 AMP BREAKER AND DO NOT MAKE LEAD 20A
WHEN GENERATOR=187 OR 249:
USE A 30A BREAKER AND DO NOT MAKE LEAD 20A
WHEN GENERATOR=187 OR 249:
USE A 50A BREAKER AND DO NOT MAKE LEAD 20A

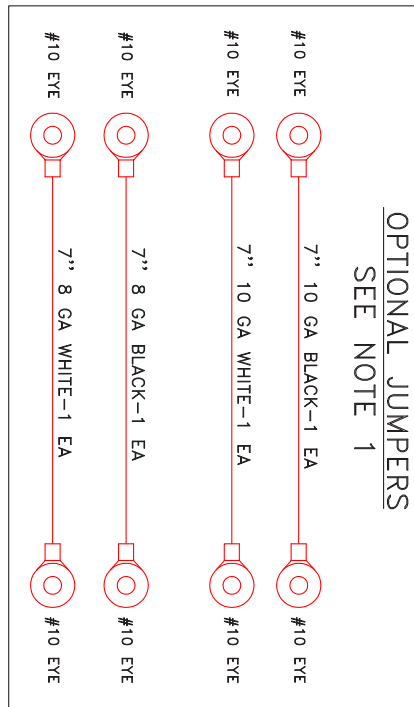
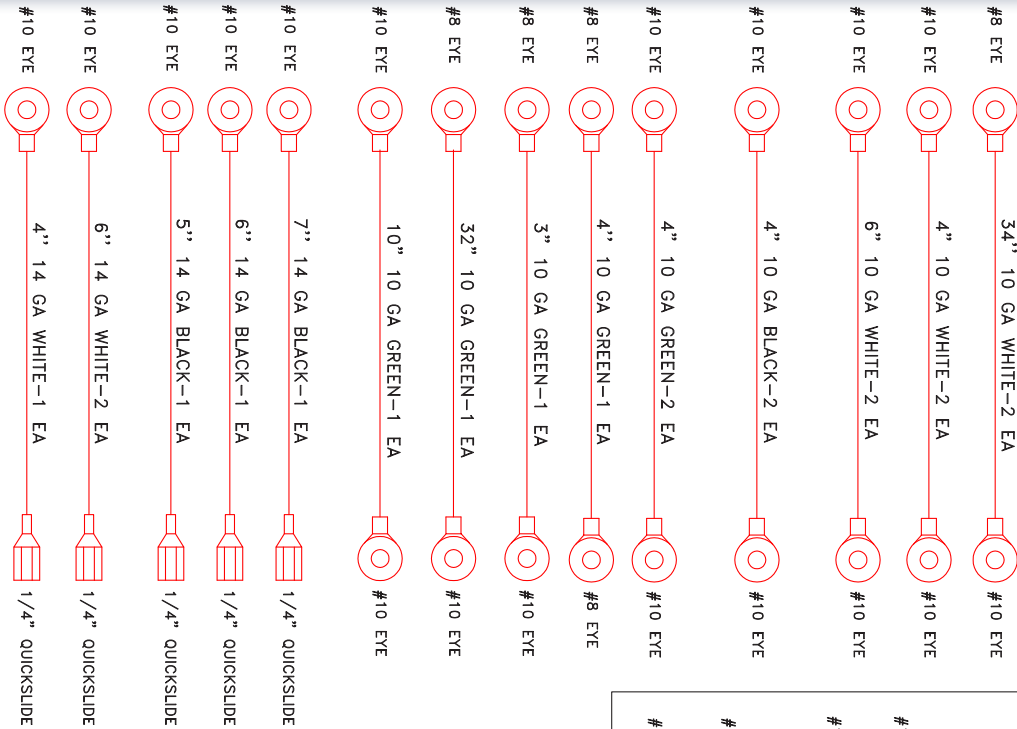
REFERENCE PRINTS	
DRAWING NUMBER	DRAWING TITLE
C7324001	SYSTEMS:AC MDP DUAL 30A

P1-03MAY13-SR		PRELIMINARY RELEASE	
RV-DATE-EDTR		DESCRIPTION	
MODELS & OPTIONS		REVISION HISTORY	
MODEL	OPTION	QTY	CMC
3957	STD	1	324
 CARVER YACHTS			
Drawing Title P/N:ASY AC MDP DUAL 30A			
Hull No. C7	Model 3957	Sheet 1 of 1	Rev. No. P1
Status: PRELIM		Drawing No. 6897750	
TOLERANCES: .XX .XX .XX .XXX .XXX .XXX .XXX .XXX .XXX UNLESS OTHERWISE SPECIFIED			

The Carver logo, featuring a stylized 'C' and 'Y' symbol above the word 'CARVER' in a bold, sans-serif font.

NOTES:
1) STRIP LEADS #1 & #1A 2½" FOR INSIDE BOX,
ALL OTHER LEADS STRIP 2".
2) LEADS #1A, #11, #12 AND #13 ARE OPTIONAL.

3957 • C7 08/2013

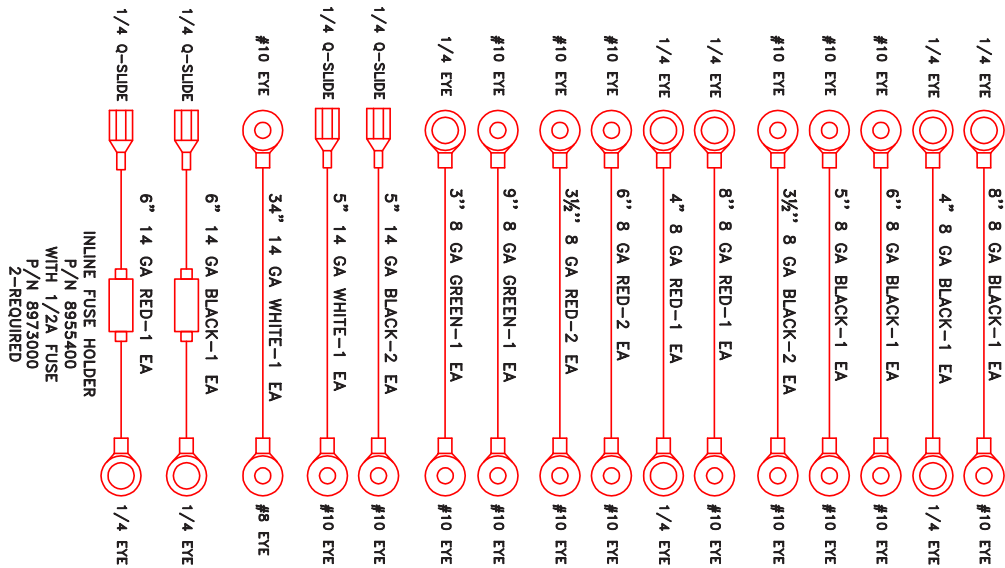


NOTES:
1) ONLY MAKE 10GA OPTIONAL JUMPERS WHEN GENERATOR=191 or 245.
ONLY MAKE 8GA OPTIONAL JUMPERS WHEN GENERATOR=187 or 249.

P1-20MAR13-SR		PRELIMINARY RELEASE	
RV-DATE-EDTR		DESCRIPTION	
MODELS & OPTIONS		REVISION HISTORY	
MODEL	OPTION	QTY	CMC
3957	AC=NORTH	1	321
3957	110V=N	1	321
Drawing Title HARN:DUAL DCKSD JMPRS C7			
Hull No.	Model	Sheet	Rev. No.
C7	3957	1 of 1	P1
TOLERANCES X.XX .0002 X.XXX .0005 UNLESS OTHERWISE SPECIFIED		Status:	Drawing No.
		PRELIM	6897753

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

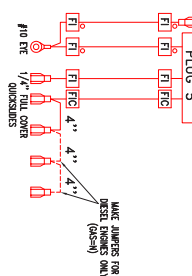


NOTES:
1) 1/4" QUICKSLIDES TO BE FULL COVER TYPE.

P1-03APR13-SR		PRELIMINARY RELEASE	
RV-DATE-EDTR		DESCRIPTION	
REVISION HISTORY			
MODELS & OPTIONS		QTY	CMC
MODEL	OPTION	1	324
3957	STD		
CARVER YACHTS HARN:SGL DCKSD JIMPRS C7 Drawing Title Hull No. C7 Model 3957 Status: PRELIM Sheet 1 of 1 Rev. No. P1			
Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be supplied by Carver Yachts and installed without expressed consent of Carver Yachts. TOLERANCES: XX .0002 XXX .0005 UNLESS OTHERWISE SPECIFIED			
Drawing No. 6897754			

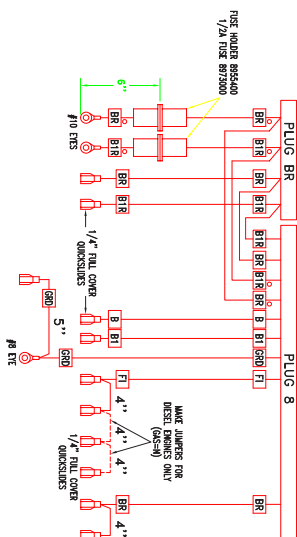
— CROCHETS: POWER LARK, MARK WITH 2ND PURL —									
RUGS 15, 16									
RUGS 15, 16		COLOR	GA.	LENGTH	PART NO.	TECHNIQUE	3-WALE SOCKETS	TECHNIQUE	END
1	1	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
2	2	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
3	3	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
4	4	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
5	5	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
6	6	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
7	7	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
8	8	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
9	9	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
RUGS 17, 18									
RUGS 17, 18		COLOR	GA.	LENGTH	PART NO.	TECHNIQUE	3-WALE SOCKETS	TECHNIQUE	END
1	1	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
2	2	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
3	3	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
4	4	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
5	5	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
6	6	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
7	7	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
8	8	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
9	9	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
RUGS 19, 20									
RUGS 19, 20		COLOR	GA.	LENGTH	PART NO.	TECHNIQUE	3-WALE SOCKETS	TECHNIQUE	END
1	1	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
2	2	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
3	3	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
4	4	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
5	5	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
6	6	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
7	7	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
8	8	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
9	9	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
RUGS 21, 22									
RUGS 21, 22		COLOR	GA.	LENGTH	PART NO.	TECHNIQUE	3-WALE SOCKETS	TECHNIQUE	END
1	1	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
2	2	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
3	3	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
4	4	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
5	5	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
6	6	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
7	7	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
8	8	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
9	9	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
RUGS 23, 24									
RUGS 23, 24		COLOR	GA.	LENGTH	PART NO.	TECHNIQUE	3-WALE SOCKETS	TECHNIQUE	END
1	1	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
2	2	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
3	3	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
4	4	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
5	5	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
6	6	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
7	7	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
8	8	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
9	9	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
RUGS 25, 26									
RUGS 25, 26		COLOR	GA.	LENGTH	PART NO.	TECHNIQUE	3-WALE SOCKETS	TECHNIQUE	END
1	1	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
2	2	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
3	3	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
4	4	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
5	5	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
6	6	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
7	7	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
8	8	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
9	9	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
RUGS 27, 28									
RUGS 27, 28		COLOR	GA.	LENGTH	PART NO.	TECHNIQUE	3-WALE SOCKETS	TECHNIQUE	END
1	1	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
2	2	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
3	3	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
4	4	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
5	5	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
6	6	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
7	7	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
8	8	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
9	9	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
RUGS 29, 30									
RUGS 29, 30		COLOR	GA.	LENGTH	PART NO.	TECHNIQUE	3-WALE SOCKETS	TECHNIQUE	END
1	1	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
2	2	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
3	3	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
4	4	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
5	5	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
6	6	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
7	7	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
8	8	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
9	9	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
RUGS 31, 32									
RUGS 31, 32		COLOR	GA.	LENGTH	PART NO.	TECHNIQUE	3-WALE SOCKETS	TECHNIQUE	END
1	1	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
2	2	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
3	3	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
4	4	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
5	5	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
6	6	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
7	7	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
8	8	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
9	9	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
RUGS 33, 34									
RUGS 33, 34		COLOR	GA.	LENGTH	PART NO.	TECHNIQUE	3-WALE SOCKETS	TECHNIQUE	END
1	1	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
2	2	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
3	3	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
4	4	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
5	5	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
6	6	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
7	7	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
8	8	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
9	9	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
RUGS 35, 36									
RUGS 35, 36		COLOR	GA.	LENGTH	PART NO.	TECHNIQUE	3-WALE SOCKETS	TECHNIQUE	END
1	1	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
2	2	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
3	3	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
4	4	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
5	5	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
6	6	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
7	7	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
8	8	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
9	9	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
RUGS 37, 38									
RUGS 37, 38		COLOR	GA.	LENGTH	PART NO.	TECHNIQUE	3-WALE SOCKETS	TECHNIQUE	END
1	1	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
2	2	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
3	3	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
4	4	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
5	5	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
6	6	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
7	7	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
8	8	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
9	9	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
RUGS 39, 40									
RUGS 39, 40		COLOR	GA.	LENGTH	PART NO.	TECHNIQUE	3-WALE SOCKETS	TECHNIQUE	END
1	1	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
2	2	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
3	3	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
4	4	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
5	5	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
6	6	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
7	7	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
8	8	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
9	9	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
RUGS 41, 42									
RUGS 41, 42		COLOR	GA.	LENGTH	PART NO.	TECHNIQUE	3-WALE SOCKETS	TECHNIQUE	END
1	1	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
2	2	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
3	3	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
4	4	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
5	5	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
6	6	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
7	7	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
8	8	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
9	9	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
RUGS 43, 44									
RUGS 43, 44		COLOR	GA.	LENGTH	PART NO.	TECHNIQUE	3-WALE SOCKETS	TECHNIQUE	END
1	1	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
2	2	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
3	3	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC
4	4	DK BLUE	14-1	59"	9918700	SOCKET	#10 ETC	SOCKET	#10 ETC

PLUG GEN		4-HOLE PIN			TERMINAL END
WIRE	HOLE	COLOR	G.A.	LENGTH	PART NO. TERMINAL PIN
GEN 3		ORANGE	14-1	3"	8917501 PIN
		ORANGE	14-1	4"	8917501 1/4" OS/DSE
GEN 6		OR/RED	16-1	3"	8910700 PIN
					1/4" OS/DSE



FLUG 8					3-SEAL	
WHITE	FACE	COLOR	GA.	LENGTH	PART NO.	INTERNAL DIA.
B	1	BROWN	10-1	37"	8832000	1/4"-3/8"
B	2	BROWN	10-1	37"	8832000	SOCKET
B	3	BROWN	14-1	6"	891000	SOCKET
B	4	BROWN	14-1	6"	891000	SOCKET
B	5	BROWN	14-1	6"	891000	SOCKET
B	6	BROWN	14-1	6"	891000	SOCKET
B	7	BROWN	14-1	6"	891000	SOCKET
B	8	YELLOW	14-1	37"	891780	SOCKET
B	9	YELLOW	14-1	57"	891780	SOCKET
B	9	YELLOW	14-1	37"	891780	SOCKET
B	9	YELLOW	14-1	37"	891780	SEE REF.

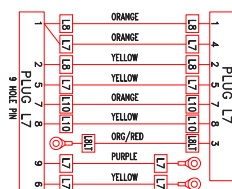
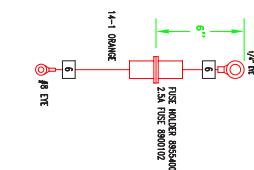
PULSE HOSE					9-HOLE SOCKET			
WIRE	SIZE	COLOR	G.A.	LENGTH	PART NO.	ITEMAL END	ITEMAL END	
BR-2	1	BROWN	14-1	39"	891R001	SOCKET	SEE DETAIL	
BR	2	BROWN	14-1	39"	891R001	SOCKET	SEE DETAIL	
BR-3	3	BROWN	14-1	39"	891R001	SOCKET	SEE DETAIL	
BR	5	BROWN	14-1	39"	891R001	SOCKET	SEE DETAIL	



FOLD 10 (OPTIONAL) MONITORING		9-1000S		10-1000S	
WIRE	MOILE	COLOR	GA.	LENGTH	PART NO.
1	3	1	ODANNE	14-1	35"
2	1	2	ODANNE	14-1	35"
3	2	YELLOW	14-1	35"	8917601
4	3	006/0632	16-1	44"	8910700
5	4	006/0632	16-1	44"	8917601
6	5	YELLOW	14-1	35"	8917601
7	6	YELLOW	14-1	35"	8917601
8	7	ODANNE	14-1	35"	8917601
9	8	YELLOW	14-1	35"	8917601
10	9	PURPLE	16-1	18"	8910401

TERMINAL END	WIRE LABEL	COLOR	GA.	LENGTH	WIRE LABEL	TERMINAL END
3/8" ETC	A	RED	6 GA.	10"	A	1/4" ETC
#10 ETC	COUNT BROW	RED	6 GA.	7"	HST SWB	3/8" ETC
OPTIONAL WINDLESS CABLES 6 GA. or 8						
3/8" ETC	WHOLE BROW	RED	6 GA.	8"	WHOLE BROW	1/4" ETC

LABET	COLOR	GL	LENGTH	PART NO.	TERMINAL	END TERMINAL
1	ORANGE	8	5"	8937000	1/0 ETC	1/4" ETC
2	ORANGE	8	9"	8937000	1/0 ETC	1/4" ETC
3	ORANGE	8	7"	8937000	1/0 ETC	1/4" ETC
4	ORANGE	8	7"	8937000	1/0 ETC	1/4" ETC
5	ORANGE	8	7"	8937000	1/0 ETC	1/4" ETC
6	ORANGE	1/4"	1/4"	8937001	3/4 ETC	1/4" ETC
7	ORANGE	1/4"	1/4"	8937001	3/4 ETC	1/4" ETC
8	ORANGE	1/4"	1/4"	8937001	3/4 ETC	1/4" ETC
9	ORANGE	1/4"	1/4"	8937001	3/4 ETC	1/4" ETC
10	ORANGE	1/4"	1/4"	8937001	3/4 ETC	1/4" ETC
11	ORANGE	1/4"	1/4"	8937001	3/4 ETC	1/4" ETC
12	ORANGE	1/4"	1/4"	8937001	3/4 ETC	1/4" ETC
13	ORANGE	1/4"	1/4"	8937001	3/4 ETC	1/4" ETC
14	ORANGE	1/4"	1/4"	8937001	3/4 ETC	1/4" ETC
15	ORANGE	1/4"	1/4"	8937001	3/4 ETC	1/4" ETC
16	BROWN/TEL	10-1	3.5"	8914500	1/0 ETC	3/8" ETC
17	BROWN/TEL	10-1	3.5"	8914500	1/0 ETC	1/4" SQUARE
18	BROWN/TEL	10-1	3.5"	8914500	1/0 ETC	1/4" SQUARE
19	BROWN/TEL	10-1	3.5"	8914500	1/0 ETC	1/4" SQUARE
20	BROWN/TEL	10-1	3.5"	8914500	1/0 ETC	1/4" SQUARE
21	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
22	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
23	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
24	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
25	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
26	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
27	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
28	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
29	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
30	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
31	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
32	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
33	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
34	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
35	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
36	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
37	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
38	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
39	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
40	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
41	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
42	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
43	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
44	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
45	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
46	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
47	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
48	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
49	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
50	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
51	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
52	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
53	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
54	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
55	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
56	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
57	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
58	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
59	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE
60	BROWN	10-1	3.5"	8932000	1/0 ETC	1/4" SQUARE



RUGBY ACADEMY: POWER RANK (100%)									
RUGBY HOUSE		OPTIONAL: POWER RANK (100%)		3-ARMED SOCIETY		4-ARMED SOCIETY		5-ARMED SOCIETY	
P/O	1	2	3	4	5	6	7	8	9
1	1	BROWN/TEAL	14-1	50"	883/8300	SOCKET	SEE NOTE 2		
2	2	BROWN/TEAL	14-1	50"	883/8300	SOCKET	SEE NOTE 2		
3	3	ORANGE	10-1	50"	883/8100	SOCKET	#10 DTC		
4	4	ORANGE	10-1	50"	883/8100	SOCKET	#10 DTC		
5	5	ORANGE	10-1	50"	883/8100	SOCKET	#10 DTC		
6	6	ORANGE	10-1	50"	883/8100	SOCKET	#10 DTC		
7	7	ORANGE	10-1	50"	883/8100	SOCKET	#10 DTC		
8	8	ORANGE	10-1	50"	883/8100	SOCKET	#10 DTC		
9	9								

NOTE 1: LEAD P/O AND ONE 1/4" CONDUIT WITH LEAD P/O FROM HOUSE
 NOTE 2: LEAD P/O AND ONE 1/4" CONDUIT WITH LEAD P/O FROM HOUSE

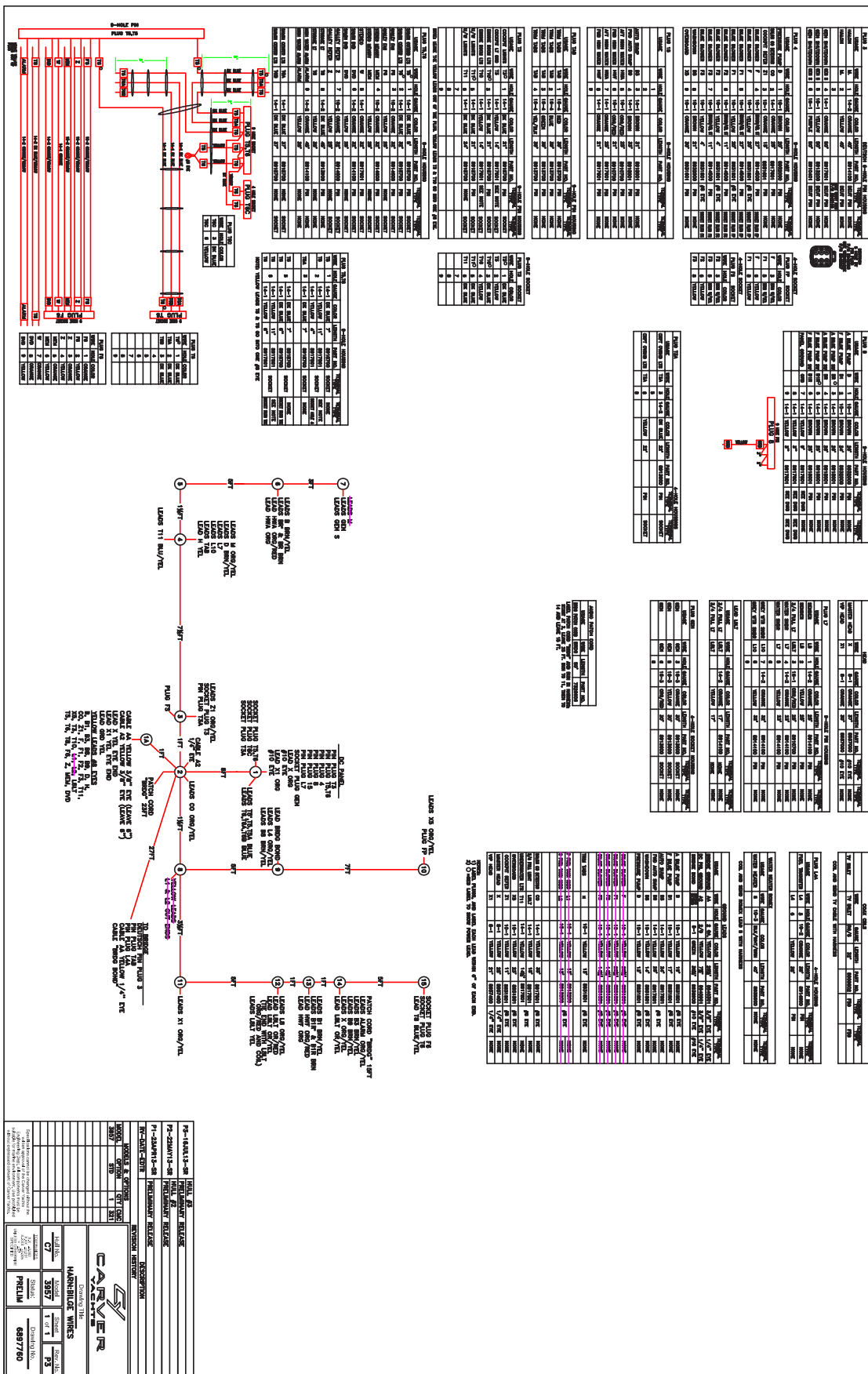
OPTIONAL LOWER HELM PLUGS (005=Y)

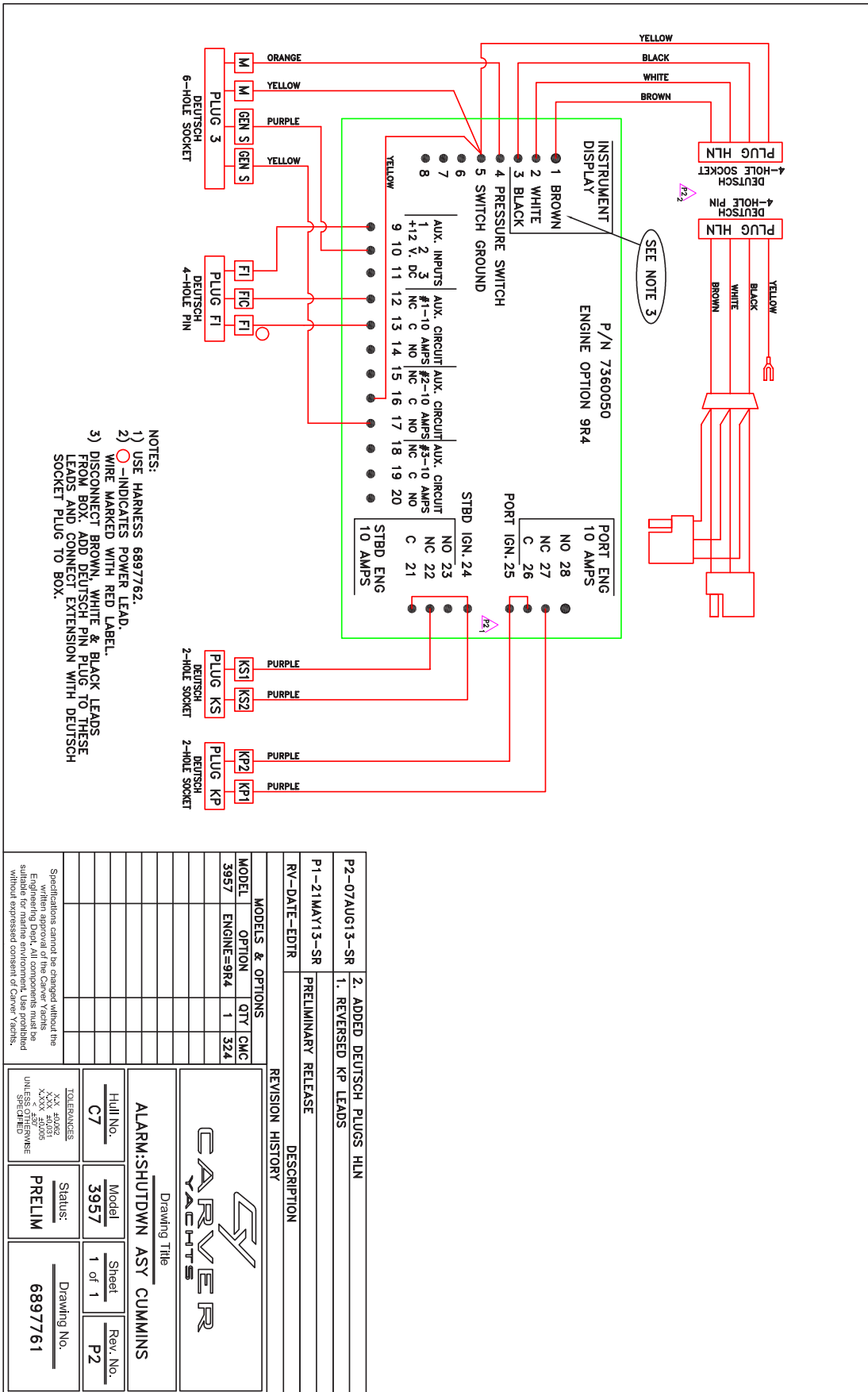
[illegible]

	TERMINAL TYPE	WIRE LABEL	LENGTH	WIRE LABEL	TERMINAL TYPE
#10 EYE	S AFT BUS	30"	ZINC PLATE	3/8" EYE	
#10 EYE	S AFT BUS	40"	S TILLER ARM	3/8" EYE	
#10 EYE	S AFT BUS	48"	S STRUT	3/8" EYE	
#10 EYE	S AFT BUS	8"	S MID STRUT	3/8" EYE	
#10 EYE	S AFT BUS	8.5"	S SHAFT LOG	3/8" EYE	
#10 EYE	S AFT BUS	13"	P FWD BUS	#10 EYE	
#10 EYE	S FWD BUS	30"	S ENG STRAINER	1/4" EYE	
#10 EYE	S FWD BUS	30"	S ENG PICKUP	#10 EYE	
#10 EYE	S FWD BUS		S 4 STUD	3/8" EYE	
3/8" EYE	S 4-STUD	30"	S FUEL TANK	#10 EYE	
3/8" EYE	S 4-STUD	30"	P FUEL TANK	#10 EYE	
#10 EYE	S FWD BUS	30"	GEN PICKUP	#10 EYE	OPT. GEN
#10 EYE	S FWD BUS	30"	GEN STRAINER	1/4" EYE	OPT. GEN
#10 EYE	S FWD BUS	30"	RAW WATER PU	#10 EYE	OPT. WASHDOWN

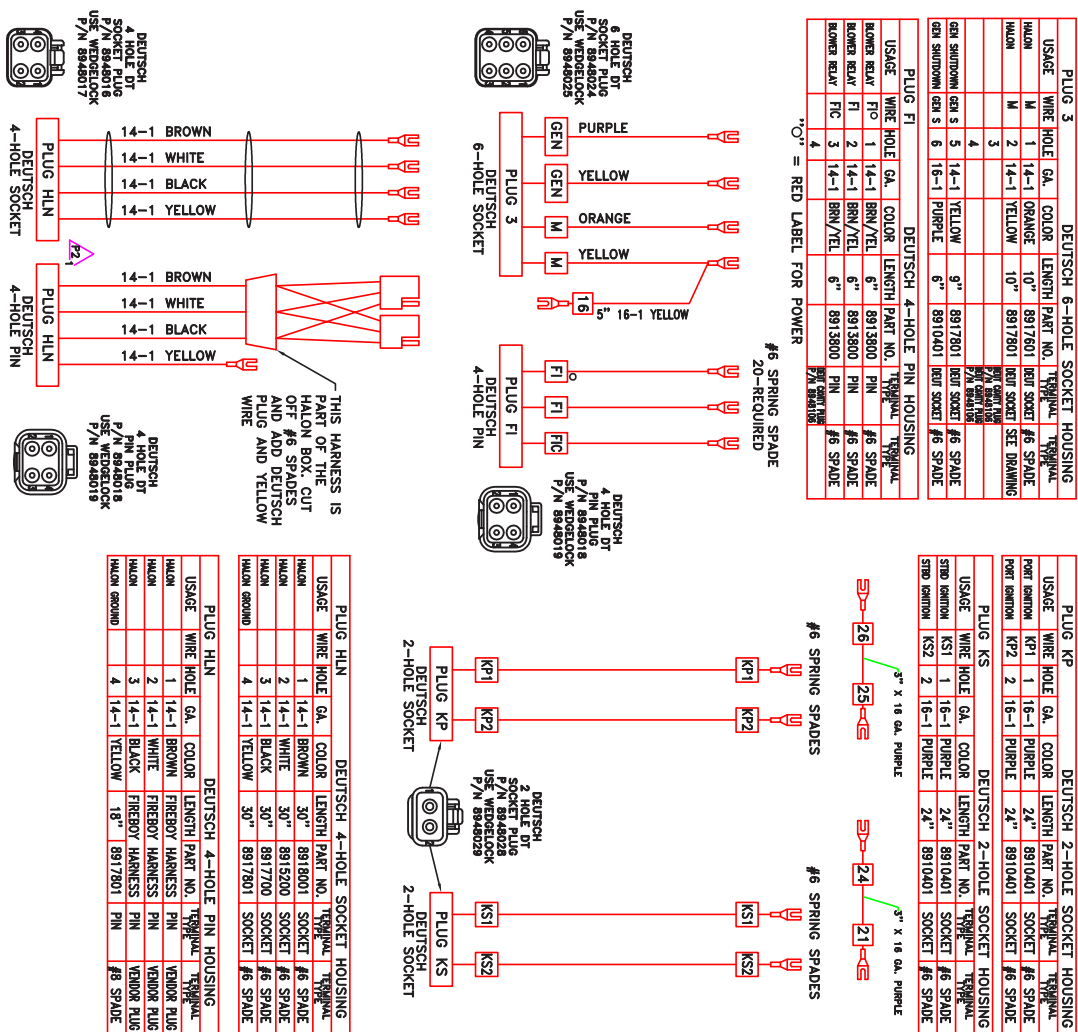
REFERENCE PRINTS	
DRAWING NUMBER	DRAWING TITLE
C7321000	SYSTEM:BONDING WIRE Y/D

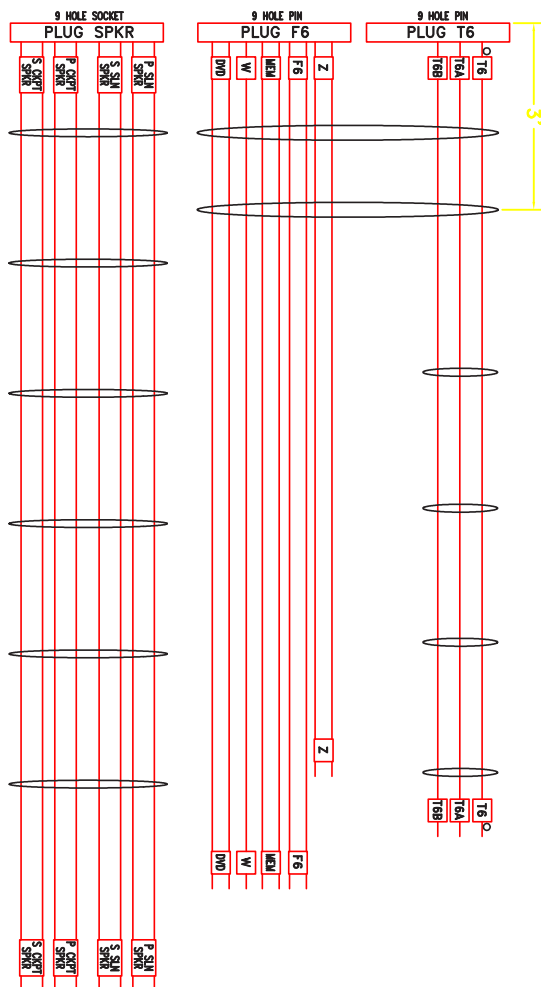
3957 • C7 08/2013





P2-07AUG13-SR		2. ADDED DEUTSCH PLUGS HLN	
P1-21MAY13-SR		1. REVERSED KP LEADS	
RV-DATE-EDTR		PRELIMINARY RELEASE	
MODELS & OPTIONS		REVISION HISTORY	
MODEL	OPTION	QTY	CMC
3957	ENGINE=9R4	1	324
Drawing Title ALARM:SHUTDWN ASY CUMMINS Hull No. C7 Model 3957 Status PRELIM Sheet 1 of 1 Rev No. P2 Drawing No. 6897761			
TOLERANCES XX .0002 XXX .0005 XXXX .0010 UNLESS OTHERWISE SPECIFIED			

[illegible]

The Carver logo, featuring a stylized 'C' and 'Y' symbol above the word 'CARVER' in a bold, sans-serif font.[illegible]

P1-03MAY13-SR		PRELIMINARY RELEASE																									
RV-DATE-EDTR		REVISION HISTORY																									
MODELS & OPTIONS <table border="1"> <thead> <tr> <th>MODEL</th> <th>OPTION</th> <th>QTY</th> <th>CNC</th> </tr> </thead> <tbody> <tr> <td>3957</td> <td>STD</td> <td>1</td> <td>321</td> </tr> </tbody> </table>		MODEL	OPTION	QTY	CNC	3957	STD	1	321	MODELS & OPTIONS <table border="1"> <thead> <tr> <th>MODEL</th> <th>OPTION</th> <th>QTY</th> <th>CNC</th> </tr> </thead> <tbody> <tr> <td>3957</td> <td>STD</td> <td>1</td> <td>321</td> </tr> </tbody> </table>		MODEL	OPTION	QTY	CNC	3957	STD	1	321								
MODEL	OPTION	QTY	CNC																								
3957	STD	1	321																								
MODEL	OPTION	QTY	CNC																								
3957	STD	1	321																								
Specifications cannot be changed without the written approval of the Carver Yacht Co. and are subject to marine environment. Use prohibited without expressed consent of Carver Yachts.																											
 CARVER YACHTS																											
Drawing Title																											
HARN:SLALON LINER PORT 3957																											
<table border="1"> <thead> <tr> <th>HULL NO.</th> <th>Model</th> <th>Sheet</th> <th>Rev. No.</th> </tr> </thead> <tbody> <tr> <td>C7</td> <td>3957</td> <td>1 of 1</td> <td>P1</td> </tr> </tbody> </table>	HULL NO.	Model	Sheet	Rev. No.	C7	3957	1 of 1	P1	<table border="1"> <thead> <tr> <th>DATE</th> <th>BY</th> <th>CHKD</th> <th>APP'D</th> </tr> </thead> <tbody> <tr> <td>10/26/2013</td> <td>J.A. BATES</td> <td>J.A. BATES</td> <td></td> </tr> <tr> <td>10/28/2013</td> <td>J.A. BATES</td> <td>J.A. BATES</td> <td></td> </tr> <tr> <td>10/28/2013</td> <td>J.A. BATES</td> <td>J.A. BATES</td> <td></td> </tr> </tbody> </table>			DATE	BY	CHKD	APP'D	10/26/2013	J.A. BATES	J.A. BATES		10/28/2013	J.A. BATES	J.A. BATES		10/28/2013	J.A. BATES	J.A. BATES	
HULL NO.	Model	Sheet	Rev. No.																								
C7	3957	1 of 1	P1																								
DATE	BY	CHKD	APP'D																								
10/26/2013	J.A. BATES	J.A. BATES																									
10/28/2013	J.A. BATES	J.A. BATES																									
10/28/2013	J.A. BATES	J.A. BATES																									
Status: PRELIM																											
Drawing No. 68897764																											

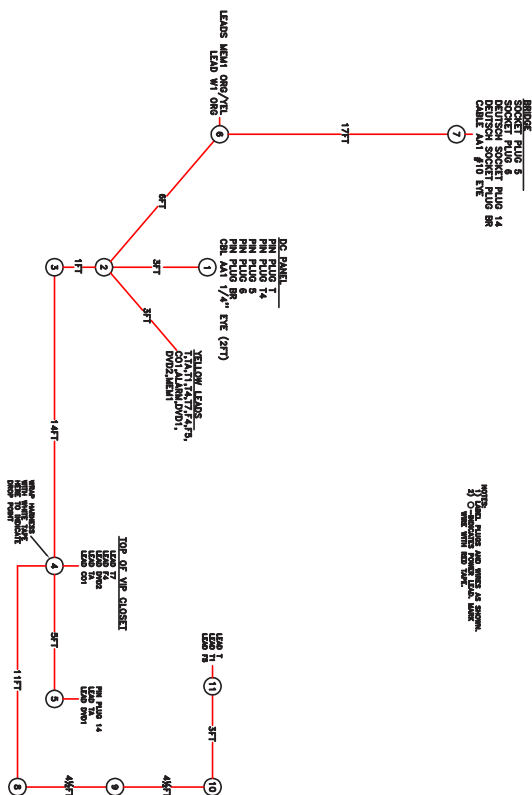
[illegible]

SEASON	TEAM	POSITION	START NO.	FINISH NO.
1980-81	BRITISH	10-1	10-1	SOCKET
1981-82	BRITISH	10-1	10-1	SOCKET
1982-83	BRITISH	10-1	10-1	SOCKET
1983-84	BRITISH	10-1	10-1	SOCKET
1984-85	BRITISH	10-1	10-1	SOCKET
1985-86	BRITISH	10-1	10-1	SOCKET
1986-87	BRITISH	10-1	10-1	SOCKET
1987-88	BRITISH	10-1	10-1	SOCKET
1988-89	BRITISH	10-1	10-1	SOCKET
1989-90	BRITISH	10-1	10-1	SOCKET
1990-91	BRITISH	10-1	10-1	SOCKET
1991-92	BRITISH	10-1	10-1	SOCKET
1992-93	BRITISH	10-1	10-1	SOCKET
1993-94	BRITISH	10-1	10-1	SOCKET
1994-95	BRITISH	10-1	10-1	SOCKET
1995-96	BRITISH	10-1	10-1	SOCKET
1996-97	BRITISH	10-1	10-1	SOCKET
1997-98	BRITISH	10-1	10-1	SOCKET
1998-99	BRITISH	10-1	10-1	SOCKET
1999-00	BRITISH	10-1	10-1	SOCKET
2000-01	BRITISH	10-1	10-1	SOCKET
2001-02	BRITISH	10-1	10-1	SOCKET
2002-03	BRITISH	10-1	10-1	SOCKET
2003-04	BRITISH	10-1	10-1	SOCKET
2004-05	BRITISH	10-1	10-1	SOCKET
2005-06	BRITISH	10-1	10-1	SOCKET
2006-07	BRITISH	10-1	10-1	SOCKET
2007-08	BRITISH	10-1	10-1	SOCKET
2008-09	BRITISH	10-1	10-1	SOCKET
2009-10	BRITISH	10-1	10-1	SOCKET
2010-11	BRITISH	10-1	10-1	SOCKET
2011-12	BRITISH	10-1	10-1	SOCKET
2012-13	BRITISH	10-1	10-1	SOCKET
2013-14	BRITISH	10-1	10-1	SOCKET
2014-15	BRITISH	10-1	10-1	SOCKET
2015-16	BRITISH	10-1	10-1	SOCKET
2016-17	BRITISH	10-1	10-1	SOCKET
2017-18	BRITISH	10-1	10-1	SOCKET
2018-19	BRITISH	10-1	10-1	SOCKET
2019-20	BRITISH	10-1	10-1	SOCKET
2020-21	BRITISH	10-1	10-1	SOCKET
2021-22	BRITISH	10-1	10-1	SOCKET
2022-23	BRITISH	10-1	10-1	SOCKET
2023-24	BRITISH	10-1	10-1	SOCKET
2024-25	BRITISH	10-1	10-1	SOCKET
2025-26	BRITISH	10-1	10-1	SOCKET
2026-27	BRITISH	10-1	10-1	SOCKET
2027-28	BRITISH	10-1	10-1	SOCKET
2028-29	BRITISH	10-1	10-1	SOCKET
2029-30	BRITISH	10-1	10-1	SOCKET
2030-31	BRITISH	10-1	10-1	SOCKET
2031-32	BRITISH	10-1	10-1	SOCKET
2032-33	BRITISH	10-1	10-1	SOCKET
2033-34	BRITISH	10-1	10-1	SOCKET
2034-35	BRITISH	10-1	10-1	SOCKET
2035-36	BRITISH	10-1	10-1	SOCKET
2036-37	BRITISH	10-1	10-1	SOCKET
2037-38	BRITISH	10-1	10-1	SOCKET
2038-39	BRITISH	10-1	10-1	SOCKET
2039-40	BRITISH	10-1	10-1	SOCKET
2040-41	BRITISH	10-1	10-1	SOCKET
2041-42	BRITISH	10-1	10-1	SOCKET
2042-43	BRITISH	10-1	10-1	SOCKET
2043-44	BRITISH	10-1	10-1	SOCKET
2044-45	BRITISH	10-1	10-1	SOCKET
2045-46	BRITISH	10-1	10-1	SOCKET
2046-47	BRITISH	10-1	10-1	SOCKET
2047-48	BRITISH	10-1	10-1	SOCKET
2048-49	BRITISH	10-1	10-1	SOCKET
2049-50	BRITISH	10-1	10-1	SOCKET
2050-51	BRITISH	10-1	10-1	SOCKET

CITY		COUNTY		CITY		COUNTY		CITY		COUNTY	
NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE
1	1-4-10	2	1-4-10	3	1-4-10	4	1-4-10	5	1-4-10	6	1-4-10
7	1-4-10	8	1-4-10	9	1-4-10	10	1-4-10	11	1-4-10	12	1-4-10
13	1-4-10	14	1-4-10	15	1-4-10	16	1-4-10	17	1-4-10	18	1-4-10
19	1-4-10	20	1-4-10	21	1-4-10	22	1-4-10	23	1-4-10	24	1-4-10
25	1-4-10	26	1-4-10	27	1-4-10	28	1-4-10	29	1-4-10	30	1-4-10
31	1-4-10	32	1-4-10	33	1-4-10	34	1-4-10	35	1-4-10	36	1-4-10
37	1-4-10	38	1-4-10	39	1-4-10	40	1-4-10	41	1-4-10	42	1-4-10
43	1-4-10	44	1-4-10	45	1-4-10	46	1-4-10	47	1-4-10	48	1-4-10
49	1-4-10	50	1-4-10	51	1-4-10	52	1-4-10	53	1-4-10	54	1-4-10
55	1-4-10	56	1-4-10	57	1-4-10	58	1-4-10	59	1-4-10	60	1-4-10
61	1-4-10	62	1-4-10	63	1-4-10	64	1-4-10	65	1-4-10	66	1-4-10
67	1-4-10	68	1-4-10	69	1-4-10	70	1-4-10	71	1-4-10	72	1-4-10
73	1-4-10	74	1-4-10	75	1-4-10	76	1-4-10	77	1-4-10	78	1-4-10
79	1-4-10	80	1-4-10	81	1-4-10	82	1-4-10	83	1-4-10	84	1-4-10
85	1-4-10	86	1-4-10	87	1-4-10	88	1-4-10	89	1-4-10	90	1-4-10
91	1-4-10	92	1-4-10	93	1-4-10	94	1-4-10	95	1-4-10	96	1-4-10
97	1-4-10	98	1-4-10	99	1-4-10	100	1-4-10	101	1-4-10	102	1-4-10
103	1-4-10	104	1-4-10	105	1-4-10	106	1-4-10	107	1-4-10	108	1-4-10
109	1-4-10	110	1-4-10	111	1-4-10	112	1-4-10	113	1-4-10	114	1-4-10
115	1-4-10	116	1-4-10	117	1-4-10	118	1-4-10	119	1-4-10	120	1-4-10
121	1-4-10	122	1-4-10	123	1-4-10	124	1-4-10	125	1-4-10	126	1-4-10
127	1-4-10	128	1-4-10	129	1-4-10	130	1-4-10	131	1-4-10	132	1-4-10
133	1-4-10	134	1-4-10	135	1-4-10	136	1-4-10	137	1-4-10	138	1-4-10
139	1-4-10	140	1-4-10	141	1-4-10	142	1-4-10	143	1-4-10	144	1-4-10
145	1-4-10	146	1-4-10	147	1-4-10	148	1-4-10	149	1-4-10	150	1-4-10
151	1-4-10	152	1-4-10	153	1-4-10	154	1-4-10	155	1-4-10	156	1-4-10
157	1-4-10	158	1-4-10	159	1-4-10	160	1-4-10	161	1-4-10	162	1-4-10
163	1-4-10	164	1-4-10	165	1-4-10	166	1-4-10	167	1-4-10	168	1-4-10
169	1-4-10	170	1-4-10	171	1-4-10	172	1-4-10	173	1-4-10	174	1-4-10
175	1-4-10	176	1-4-10	177	1-4-10	178	1-4-10	179	1-4-10	180	1-4-10
181	1-4-10	182	1-4-10	183	1-4-10	184	1-4-10	185	1-4-10	186	1-4-10
187	1-4-10	188	1-4-10	189	1-4-10	190	1-4-10	191	1-4-10	192	1-4-10
193	1-4-10	194	1-4-10	195	1-4-10	196	1-4-10	197	1-4-10	198	1-4-10
199	1-4-10	200	1-4-10	201	1-4-10	202	1-4-10	203	1-4-10	204	1-4-10
205	1-4-10	206	1-4-10	207	1-4-10	208	1-4-10	209	1-4-10	210	1-4-10
211	1-4-10	212	1-4-10	213	1-4-10	214	1-4-10	215	1-4-10	216	1-4-10
217	1-4-10	218	1-4-10	219	1-4-10	220	1-4-10	221	1-4-10	222	1-4-10
223	1-4-10	224	1-4-10	225	1-4-10	226	1-4-10	227	1-4-10	228	1-4-10
229	1-4-10	230	1-4-10	231	1-4-10	232	1-4-10	233	1-4-10	234	1-4-10
235	1-4-10	236	1-4-10	237	1-4-10	238	1-4-10	239	1-4-10	240	1-4-10
241	1-4-10	242	1-4-10	243	1-4-10	244	1-4-10	245	1-4-10	246	1-4-10
247	1-4-10	248	1-4-10	249	1-4-10	250	1-4-10	251	1-4-10	252	1-4-10
253	1-4-10	254	1-4-10	255	1-4-10	256	1-4-10	257	1-4-10	258	1-4-10
259	1-4-10	260	1-4-10	261	1-4-10	262	1-4-10	263	1-4-10	264	1-4-10
265	1-4-10	266	1-4-10	267	1-4-10	268	1-4-10	269	1-4-10	270	1-4-10
271	1-4-10	272	1-4-10	273	1-4-10	274	1-4-10	275	1-4-10	276	1-4-10
277	1-4-10	278	1-4-10	279	1-4-10	280	1-4-10	281	1-4-10	282	1-4-10
283	1-4-10	284	1-4-10	285	1-4-10	286	1-4-10	287	1-4-10	288	1-4-10
289	1-4-10	290	1-4-10	291	1-4-10	292	1-4-10	293	1-4-10	294	1-4-10
295	1-4-10	296	1-4-10	297	1-4-10	298	1-4-10	299	1-4-10	300	1-4-10
301	1-4-10	302	1-4-10	303	1-4-10	304	1-4-10	305	1-4-10	306	1-4-10
307	1-4-10	308	1-4-10	309	1-4-10	310	1-4-10	311	1-4-10	312	1-4-10
313	1-4-10	314	1-4-10	315	1-4-10	316	1-4-10	317	1-4-10	318	1-4-10
319	1-4-10	320	1-4-10	321	1-4-10	322	1-4-10	323	1-4-10	324	1-4-10
325	1-4-10	326	1-4-10	327	1-4-10	328	1-4-10	329	1-4-10	330	1-4-10
331	1-4-10	332	1-4-10	333	1-4-10	334	1-4-10	335	1-4-10	336	1-4-10
337	1-4-10	338	1-4-10	339	1-4-10	340	1-4-10	341	1-4-10	342	1-4-10
343	1-4-10	344	1-4-10	345	1-4-10	346	1-4-10	347	1-4-10	348	1-4-10
349	1-4-10	350	1-4-10	351	1-4-10	352	1-4-10	353	1-4-10	354	1-4-10
355	1-4-10	356	1-4-10	357	1-4-10	358	1-4-10	359	1-4-10	360	1-4-10
361	1-4-10	362	1-4-10	363	1-4-10	364	1-4-10	365	1-4-10	366	1-4-10
367	1-4-10	368	1-4-10	369	1-4-10	370	1-4-10	371	1-4-10	372	1-4-10
373	1-4-10	374	1-4-10	375	1-4-10	376	1-4-10	377	1-4-10	378	1-4-10
379	1-4-10	380	1-4-10	381	1-4-10	382	1-4-10	383	1-4-10	384	1-4-10
385	1-4-10	386	1-4-10	387	1-4-10	388	1-4-10	389	1-4-10	390	1-4-10
391	1-4-10	392	1-4-10	393	1-4-10	394	1-4-10	395	1-4-10	396	1-4-10
397	1-4-10	398	1-4-10	399	1-4-10	400	1-4-10	401	1-4-10	402	1-4-10
403	1-4-10	404	1-4-10	405	1-4-10	406	1-4-10	407	1-4-10	408	1-4-10
409	1-4-10	410	1-4-10	411	1-4-10	412	1-4-10	413	1-4-10	414	1-4-10
415	1-4-10	416	1-4-10	417	1-4-10	418	1-4-10	419	1-4-10	420	1-4-10
421	1-4-10	422	1-4-10	423	1-4-10	424	1-4-10	425	1-4-10	426	1-4-10
427	1-4-10	428	1-4-10	429	1-4-10	430	1-4-10	431	1-4-10	432	1-4-10
433	1-4-10	434	1-4-10	435	1-4-10	436	1-4-10	437	1-4-10	438	1-4-10
439	1-4-10	440	1-4-10	441	1-4-10	442	1-4-10	443	1-4-10	444	1-4-10
445	1-4-10	446	1-4-10	447	1-4-10	448	1-4-10	449	1-4-10	450	1-4-10
451	1-4-10	452	1-4-10	453	1-4-10	454	1-4-10	455	1-4-10	456	1-4-10
457	1-4-10	458	1-4-10	459	1-4-10	460	1-4-10	461	1-4-10	462	1-4-10
463	1-4-10	464	1-4-10	465	1-4-10	466	1-4-10	467	1-4-10	468	1-4-10
469	1-4-10	470	1-4-10	471	1-4-10	472	1-4-10	473	1-4-10	474	1-4-10
475	1-4-10	476	1-4-10	477	1-4-10	478	1-4-10	479	1-4-10	480	1-4-10
481	1-4-10	482	1-4-10	483	1-4-10	484	1-4-10	485	1-4-10	486	1-4-10
487	1-4-10	488	1-4-10	489	1-4-10	490	1-4-10	491	1-4-10	492	1-4-10
493	1-4-10	494	1-4-10	495	1-4-10	496	1-4-10	497	1-4-10	498	1-4-10
499	1-4-10	500	1-4-10	501	1-4-10	502	1-4-10	503	1-4-10	504	1-4-10
505	1-4-10	506	1-4-10	507	1-4-10	508	1-4-10	509	1-4-10	510	1-4-10
511	1-4-10	512	1-4-10	513	1-4-10	514	1-4-10	515	1-4-10	516	1-4-10
517	1-4-10	518	1-4-10	519	1-4-10	520	1-4-10	521	1-4-10	522	1-4-10
523	1-4-10	524	1-4-10	525	1-4-10	526	1-4-10	527	1-4-10	528	1-4-10
529	1-4-10	530	1-4-10	531	1-4-10	532	1-4-10	533	1-4-10	534	1-4-10
535	1-4-10	536	1-4-10	537	1-4-10	538	1-4-10	539	1-4-10	540	1-4-10
541	1-4-10	542	1-4-10	543	1-4-10	544	1-4-10	545	1-4-10	546	1-4-10
547	1-4-10	548	1-4-10	549	1-4-10	550	1-4-10	551	1-4-10	552	1-4-10
553	1-4-10	554	1-4-10	555	1-4-10	556	1-4-10	557	1-4-10	558	1-4-10
559	1-4-10	560	1-4-10	561	1-4-10	562	1-4-10	563	1-4-10	564	1-4-10
565	1-4-10	566	1-4-10	567	1-4-10	568	1-4-10	569	1-4-10	570	1-4-10
571	1-4-10	572	1-4-10	573	1-4-10	574	1-4-10	575	1-4-10	576	1-4-10
577	1-4-10	578	1-4-10	579	1-4-10	580	1-4-10	581	1-4-10	582	1-4-10
583	1-4-10	584	1-4-10	585	1-4-10	586	1-4-10	587	1-4-10	588	1-4-10
589	1-4-10	590	1-4-10	591	1-4-10	592	1-4-10	593	1-4-10	594	1-4-10
595	1-4-10	596	1-4-10	597	1-4-10	598	1-4-10	599	1-4-10	600	1-4-10
601	1-4-10	602	1-4-10	603	1-4-10	604	1-4-10	605	1-4-10	606	1-4-10
607	1-4-10	608	1-4-10	609	1-4-10	610	1-4-10	611	1-4-10	612	1-4-10
613	1-4-10	614	1-4-10	615	1-4-10	616	1-4-10	617	1-4-10	618	1-4-10
619	1-4-10	620	1-4-10	621	1-4-10	622	1-4-10	623	1-4-10	624	1-4-10
625	1-4-10	626	1-4-10	627	1-4-10	628	1-4-10				

DATA 15	DATA 16	DATA 17	DATA 18	DATA 19	DATA 20	DATA 21	DATA 22	DATA 23	DATA 24	DATA 25	DATA 26	DATA 27	DATA 28	DATA 29	DATA 30	DATA 31	DATA 32	DATA 33	DATA 34	DATA 35	DATA 36	DATA 37	DATA 38	DATA 39	DATA 40	DATA 41	DATA 42	DATA 43	DATA 44	DATA 45	DATA 46	DATA 47	DATA 48	DATA 49	DATA 50	DATA 51	DATA 52	DATA 53	DATA 54	DATA 55	DATA 56	DATA 57	DATA 58	DATA 59	DATA 60	DATA 61	DATA 62	DATA 63	DATA 64	DATA 65	DATA 66	DATA 67	DATA 68	DATA 69	DATA 70	DATA 71	DATA 72	DATA 73	DATA 74	DATA 75	DATA 76	DATA 77	DATA 78	DATA 79	DATA 80	DATA 81	DATA 82	DATA 83	DATA 84	DATA 85	DATA 86	DATA 87	DATA 88	DATA 89	DATA 90	DATA 91	DATA 92	DATA 93	DATA 94	DATA 95	DATA 96	DATA 97	DATA 98	DATA 99	DATA 100	DATA 101	DATA 102	DATA 103	DATA 104	DATA 105	DATA 106	DATA 107	DATA 108	DATA 109	DATA 110	DATA 111	DATA 112	DATA 113	DATA 114	DATA 115	DATA 116	DATA 117	DATA 118	DATA 119	DATA 120	DATA 121	DATA 122	DATA 123	DATA 124	DATA 125	DATA 126	DATA 127	DATA 128	DATA 129	DATA 130	DATA 131	DATA 132	DATA 133	DATA 134	DATA 135	DATA 136	DATA 137	DATA 138	DATA 139	DATA 140	DATA 141	DATA 142	DATA 143	DATA 144	DATA 145	DATA 146	DATA 147	DATA 148	DATA 149	DATA 150	DATA 151	DATA 152	DATA 153	DATA 154	DATA 155	DATA 156	DATA 157	DATA 158	DATA 159	DATA 160	DATA 161	DATA 162	DATA 163	DATA 164	DATA 165	DATA 166	DATA 167	DATA 168	DATA 169	DATA 170	DATA 171	DATA 172	DATA 173	DATA 174	DATA 175	DATA 176	DATA 177	DATA 178	DATA 179	DATA 180	DATA 181	DATA 182	DATA 183	DATA 184	DATA 185	DATA 186	DATA 187	DATA 188	DATA 189	DATA 190	DATA 191	DATA 192	DATA 193	DATA 194	DATA 195	DATA 196	DATA 197	DATA 198	DATA 199	DATA 200	DATA 201	DATA 202	DATA 203	DATA 204	DATA 205	DATA 206	DATA 207	DATA 208	DATA 209	DATA 210	DATA 211	DATA 212	DATA 213	DATA 214	DATA 215	DATA 216	DATA 217	DATA 218	DATA 219	DATA 220	DATA 221	DATA 222	DATA 223	DATA 224	DATA 225	DATA 226	DATA 227	DATA 228	DATA 229	DATA 230	DATA 231	DATA 232	DATA 233	DATA 234	DATA 235	DATA 236	DATA 237	DATA 238	DATA 239	DATA 240	DATA 241	DATA 242	DATA 243	DATA 244	DATA 245	DATA 246	DATA 247	DATA 248	DATA 249	DATA 250	DATA 251	DATA 252	DATA 253	DATA 254	DATA 255	DATA 256	DATA 257	DATA 258	DATA 259	DATA 260	DATA 261	DATA 262	DATA 263	DATA 264	DATA 265	DATA 266	DATA 267	DATA 268	DATA 269	DATA 270	DATA 271	DATA 272	DATA 273	DATA 274	DATA 275	DATA 276	DATA 277	DATA 278	DATA 279	DATA 280	DATA 281	DATA 282	DATA 283	DATA 284	DATA 285	DATA 286	DATA 287	DATA 288	DATA 289	DATA 290	DATA 291	DATA 292	DATA 293	DATA 294	DATA 295	DATA 296	DATA 297	DATA 298	DATA 299	DATA 300	DATA 301	DATA 302	DATA 303	DATA 304	DATA 305	DATA 306	DATA 307	DATA 308	DATA 309	DATA 310	DATA 311	DATA 312	DATA 313	DATA 314	DATA 315	DATA 316	DATA 317	DATA 318	DATA 319	DATA 320	DATA 321	DATA 322	DATA 323	DATA 324	DATA 325	DATA 326	DATA 327	DATA 328	DATA 329	DATA 330	DATA 331	DATA 332	DATA 333	DATA 334	DATA 335	DATA 336	DATA 337	DATA 338	DATA 339	DATA 340	DATA 341	DATA 342	DATA 343	DATA 344	DATA 345	DATA 346	DATA 347	DATA 348	DATA 349	DATA 350	DATA 351	DATA 352	DATA 353	DATA 354	DATA 355	DATA 356	DATA 357	DATA 358	DATA 359	DATA 360	DATA 361	DATA 362	DATA 363	DATA 364	DATA 365	DATA 366	DATA 367	DATA 368	DATA 369	DATA 370	DATA 371	DATA 372	DATA 373	DATA 374	DATA 375	DATA 376	DATA 377	DATA 378	DATA 379	DATA 380	DATA 381	DATA 382	DATA 383	DATA 384	DATA 385	DATA 386	DATA 387	DATA 388	DATA 389	DATA 390	DATA 391	DATA 392	DATA 393	DATA 394	DATA 395	DATA 396	DATA 397	DATA 398	DATA 399	DATA 400	DATA 401	DATA 402	DATA 403	DATA 404	DATA 405	DATA 406	DATA 407	DATA 408	DATA 409	DATA 410	DATA 411	DATA 412	DATA 413	DATA 414	DATA 415	DATA 416	DATA 417	DATA 418	DATA 419	DATA 420	DATA 421	DATA 422	DATA 423	DATA 424	DATA 425	DATA 426	DATA 427	DATA 428	DATA 429	DATA 430	DATA 431	DATA 432	DATA 433	DATA 434	DATA 435	DATA 436	DATA 437	DATA 438	DATA 439	DATA 440	DATA 441	DATA 442	DATA 443	DATA 444	DATA 445	DATA 446	DATA 447	DATA 448	DATA 449	DATA 450	DATA 451	DATA 452	DATA 453	DATA 454	DATA 455	DATA 456	DATA 457	DATA 458	DATA 459	DATA 460	DATA 461	DATA 462	DATA 463	DATA 464	DATA 465	DATA 466	DATA 467	DATA 468	DATA 469	DATA 470	DATA 471	DATA 472	DATA 473	DATA 474	DATA 475	DATA 476	DATA 477	DATA 478	DATA 479	DATA 480	DATA 481	DATA 482	DATA 483	DATA 484	DATA 485	DATA 486	DATA 487	DATA 488	DATA 489	DATA 490	DATA 491	DATA 492	DATA 493	DATA 494	DATA 495	DATA 496	DATA 497	DATA 498	DATA 499	DATA 500	DATA 501	DATA 502	DATA 503	DATA 504	DATA 505	DATA 506	DATA 507	DATA 508	DATA 509	DATA 510	DATA 511	DATA 512	DATA 513	DATA 514	DATA 515	DATA 516	DATA 517	DATA 518	DATA 519	DATA 520	DATA 521	DATA 522	DATA 523	DATA 524	DATA 525	DATA 526	DATA 527	DATA 528	DATA 529	DATA 530	DATA 531	DATA 532	DATA 533	DATA 534	DATA 535	DATA 536	DATA 537	DATA 538	DATA 539	DATA 540	DATA 541	DATA 542	DATA 543	DATA 544	DATA 545	DATA 546	DATA 547	DATA 548	DATA 549	DATA 550	DATA 551	DATA 552	DATA 553	DATA 554	DATA 555	DATA 556	DATA 557	DATA 558	DATA 559	DATA 560	DATA 561	DATA 562	DATA 563	DATA 564	DATA 565	DATA 566	DATA 567	DATA 568	DATA 569	DATA 570	DATA 571	DATA 572	DATA 573	DATA 574	DATA 575	DATA 576	DATA 577	DATA 578	DATA 579	DATA 580	DATA 581	DATA 582	DATA 583	DATA 584	DATA 585	DATA 586	DATA 587	DATA 588	DATA 589	DATA 590	DATA 591	DATA 592	DATA 593	DATA 594	DATA 595	DATA 596	DATA 597	DATA 598	DATA 599	DATA 600	DATA 601	DATA 602	DATA 603	DATA 604	DATA 605	DATA 606	DATA 607	DATA 608	DATA 609	DATA 610	DATA 611	DATA 612	DATA 613	DATA 614	DATA 615	DATA 616	DATA 617	DATA 618	DATA 619	DATA 620	DATA 621	DATA 622	DATA 623	DATA 624	DATA 625	DATA 626	DATA 627	DATA 628	DATA 629	DATA 630	DATA 631	DATA 632	DATA 633	DATA 634	DATA 635	DATA 636	DATA 637	DATA 638	DATA 639	DATA 640	DATA 641	DATA 642	DATA 643	DATA 644	DATA 645	DATA 646	DATA 647	DATA 648	DATA 649	DATA 650	DATA 651	DATA 652	DATA 653	DATA 654	DATA 655	DATA 656	DATA 657	DATA 658	DATA 659	DATA 660	DATA 661	DATA 662	DATA 663	DATA 664	DATA 665	DATA 666	DATA 667	DATA 668	DATA 669	DATA 670	DATA 671	DATA 672	DATA 673	DATA 674	DATA 675	DATA 676	DATA 677	DATA 678	DATA 679	DATA 680	DATA 681	DATA 682	DATA 683	DATA 684	DATA 685	DATA 686	DATA 687	DATA 688	DATA 689	DATA 690	DATA 691	DATA 692	DATA 693	DATA 694	DATA 695	DATA 696	DATA 697	DATA 698	DATA 699	DATA 700	DATA 701	DATA 702	DATA 703	DATA 704	DATA 705	DATA 706	DATA 707	DATA 708	DATA 709	DATA 710	DATA 711	DATA 712	DATA 713	DATA 714	DATA 715	DATA 716	DATA 717	DATA 718	DATA 719	DATA 720	DATA 721	DATA 722	DATA 723	DATA 724	DATA 725	DATA 726	DATA 727	DATA 728	DATA 729	DATA 730	DATA 731	DATA 732	DATA 733	DATA 734	DATA 735	DATA 736	DATA 737	DATA 738	DATA 739	DATA 740	DATA 741	DATA 742	DATA 743	DATA 744	DATA 745	DATA 746	DATA 747	DATA 748	DATA 749	DATA 750	DATA 751	DATA 752	DATA 753	DATA 754	DATA 755	DATA 756	DATA 757	DATA 758	DATA 759	DATA 760	DATA 761	DATA 762	DATA 763	DATA 764	DATA 765	DATA 766	DATA 767	DATA 768	DATA 769	DATA 770	DATA 771	DATA 772	DATA 773	DATA 774	DATA 775	DATA 776	DATA 777	DATA 778	DATA 779	DATA 780	DATA 781	DATA 782	DATA 783	DATA 784	DATA 785	DATA 786	DATA 787	DATA 788	DATA 789	DATA 790	DATA 791	DATA 792	DATA 793	DATA 794	DATA 795	DATA 796	DATA 797	DATA 798	DATA 799	DATA 800	DATA 801	DATA 802	DATA 803	DATA 804	DATA 805	DATA 806	DATA 807	DATA 808	DATA 809	DATA 810	DATA 811	DATA 812	DATA 813	DATA 814	DATA 815	DATA 816	DATA 817	DATA 818	DATA 819	DATA 820	DATA 821	DATA 822	DATA 823	DATA 824	DATA 825	DATA 826	DATA 827	DATA 828	DATA 829	DATA 830	DATA 831	DATA 832	DATA 833	DATA 834	DATA 835	DATA 836	DATA 837	DATA 838	DATA 839	DATA 840	DATA 841	DATA 842	DATA 843	DATA 844	DATA 845	DATA 846	DATA 847	DATA 848	DATA 849	DATA 850	DATA 851	DATA 852	DATA 853	DATA 854	DATA 855	DATA 856	DATA 857	DATA 858	DATA 859	DATA 860	DATA 861	DATA 862	DATA 863	DATA 864	DATA 865	DATA 866	DATA 867	DATA 868	DATA 869	DATA 870	DATA 871	DATA 872	DATA 873	DATA 874	DATA 875	DATA 876	DATA 877	DATA 878	DATA 879	DATA 880	DATA 881	DATA 882	DATA 883	DATA 884	DATA 885	DATA 886	DATA 887	DATA 888	DATA 889	DATA 890	DATA 891	DATA 892	DATA 893	DATA 894	DATA 895	DATA 896	DATA 897	DATA 898	DATA 899	DATA 900	DATA 901	DATA 902	DATA 903	DATA 904	DATA 905	DATA 906	DATA 907	DATA 908	DATA 909	DATA 910	DATA 911	DATA 912	DATA 913	DATA 914	DATA 915	DATA 916	DATA 917	DATA 918	DATA 919	DATA 920	DATA 921	DATA 922	DATA 923	DATA 924	DATA 925	DATA 926	DATA 927	DATA 928	DATA 929	DATA 930	DATA 931	DATA 932	DATA 933	DATA 934	DATA 935	DATA 936	DATA 937	DATA 938	DATA 939	DATA 940	DATA 941	DATA 942	DATA 943	DATA 944	DATA 945	DATA 946	DATA 947	DATA 948	DATA 949	DATA 950	DATA 951	DATA 952	DATA 953	DATA 954	DATA 955	DATA 956	DATA 957	DATA 958	DATA 959	DATA 960	DATA 961	DATA 962	DATA 963	DATA 964	DATA 965	DATA 966	DATA 967	DATA 968	DATA 969	DATA 970	DATA 971	DATA 972	DATA 973	DATA 974	DATA 975	DATA 976	DATA 977	DATA 978	DATA 979	DATA 980	DATA 981	DATA 982	DATA 983	DATA 984	DATA 985	DATA 986	DATA 987	DATA 988	DATA 989	DATA 990	DATA 991	DATA 992	DATA 993	DATA 994	DATA 995	DATA 996	DATA 997	DATA 998	DATA 999	DATA 1000
DATA 15	DATA 16	DATA 17	DATA 18	DATA 19	DATA 20	DATA 21	DATA 22	DATA 23	DATA 24	DATA 25	DATA 26	DATA 27	DATA 28	DATA 29	DATA 30	DATA 31	DATA 32	DATA 33	DATA 34	DATA 35	DATA 36	DATA 37	DATA 38	DATA 39	DATA 40	DATA 41	DATA 42	DATA 43	DATA 44	DATA 45	DATA 46	DATA 47	DATA 48	DATA 49	DATA 50	DATA 51	DATA 52	DATA 53	DATA 54	DATA 55	DATA 56	DATA 57	DATA 58	DATA 59	DATA 60	DATA 61	DATA 62	DATA 63	DATA 64	DATA 65	DATA 66	DATA 67	DATA 68	DATA 69	DATA 70	DATA 71	DATA 72	DATA 73	DATA 74	DATA 75	DATA 76	DATA 77	DATA 78	DATA 79	DATA 80	DATA 81	DATA 82	DATA 83	DATA 84	DATA 85	DATA 86	DATA 87	DATA 88	DATA 89	DATA 90	DATA 91	DATA 92	DATA 93	DATA 94	DATA 95	DATA 96	DATA 97	DATA 98	DATA 99	DATA 100	DATA 101	DATA 102	DATA 103	DATA 104	DATA 105	DATA 106	DATA 107	DATA 108	DATA 109	DATA 110	DATA 111	DATA 112	DATA 113	DATA 114	DATA 115	DATA 116	DATA 117	DATA 118	DATA 119	DATA 120	DATA 121	DATA 122	DATA 123	DATA 124	DATA 125	DATA 126	DATA 127	DATA 128	DATA 129	DATA 130	DATA 131	DATA 132	DATA 133	DATA 134	DATA 135	DATA 136	DATA 137	DATA 138	DATA 139	DATA 140	DATA 141	DATA 142	DATA 143	DATA 144	DATA 145	DATA 146	DATA 147	DATA 148	DATA 149	DATA 150	DATA 151	DATA 152	DATA 153	DATA 154	DATA 155	DATA 156	DATA 157	DATA 158	DATA 159	DATA 160	DATA 161	DATA 162	DATA 163	DATA 164	DATA 165	DATA 166	DATA 167	DATA 168	DATA 169	DATA 170	DATA 171	DATA 172	DATA 173	DATA 174	DATA 175	DATA 176	DATA 177	DATA 178	DATA 179	DATA 180	DATA 181	DATA 182	DATA 183	DATA 184	DATA 185	DATA 186	DATA 187	DATA 188	DATA 189	DATA 190	DATA 191	DATA 192	DATA 193	DATA 194	DATA 195	DATA 196	DATA 197	DATA 198	DATA 199	DATA 200	DATA 201	DATA 202	DATA 203	DATA 204	DATA 205	DATA 206	DATA 207	DATA 208	DATA 209	DATA 210	DATA 211	DATA 212	DATA 213	DATA 214	DATA 215	DATA 216	DATA 217	DATA 218	DATA 219	DATA 220	DATA 221	DATA 222	DATA 223	DATA 224	DATA 225	DATA 226	DATA 227	DATA 228	DATA 229	DATA 230	DATA 231	DATA 232	DATA 233	DATA 234	DATA 235	DATA 236	DATA 237	DATA 238	DATA 239	DATA 240	DATA 241	DATA 242	DATA 243	DATA 244	DATA 245	DATA 246	DATA 247	DATA 248	DATA 249	DATA 250	DATA 251	DATA 252	DATA 253	DATA 254	DATA 255	DATA 256	DATA 257	DATA 258	DATA 259	DATA 260	DATA 261	DATA 262	DATA 263	DATA 264	DATA 265	DATA 266	DATA 267	DATA 268	DATA 269	DATA 270	DATA 271	DATA 272	DATA 273	DATA 274	DATA 275	DATA 276	DATA 277	DATA 278	DATA 279	DATA 280	DATA 281	DATA 282	DATA 2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

8-HOLE P/N	
PLUG T4	
T7	T7
14-16 mm/0.550 in	14-16 mm/0.550 in
T8	T8
14-16 mm/0.550 in	14-16 mm/0.550 in
T9	T9
14-16 mm/0.550 in	14-16 mm/0.550 in
T10	T10
14-16 mm/0.550 in	14-16 mm/0.550 in



5-HOLE PIN / ENDS/8 & HOLE 30000						
PLUG NO.	WATER	TEMP.	DEPTH	COLLAR	LENGTH	PIN NO. / ENDS/8
A	BLAKE RELAY	1	1-1	BLK0000	20"	0910001 PWS
B	BLAKE RELAY	2	1-1	BLK0000	20"	0910001 PWS
C	BLAKE RELAY	3	1-1	BLK0000	20"	0910001 PWS
D	BLAKE RELAY	4	1-1	BLK0000	20"	0910001 PWS
E	BLAKE RELAY	5	1-1	BLK0000	20"	0910001 PWS
F	BLAKE RELAY	6	1-1	BLK0000	20"	0910001 PWS
G		7				
H		8				
I		9				

PLUG 14		4-HOLE PIN / BUSHING & NUT SOCKET			
GRADE	WIRE	WIRE GAUGE	COLOR	PART NO.	THICKNESS
WIRELESS HALL SW	UP	14-1	ORANGE	PM	SELF SOCKET
WIRELESS HALL SW	COM	14-1	ORANGE	PM	SELF SOCKET
WIRELESS HALL SW	BNM	14-1	ORANGE	PM	SELF SOCKET
				00177001	PM
					00177001
					00177001

BASIC ACCESSORY CABLE						
WIRE	WIRE GAUGE	COLOR	LENGTH	PART NO.	TERMINAL	TERMINAL
US&S	NO. 14	RED	28"	8840000	1/4 EYE	Ø10 EYE
SMOKE ACT'Y	AA1	4 GA.	RED			

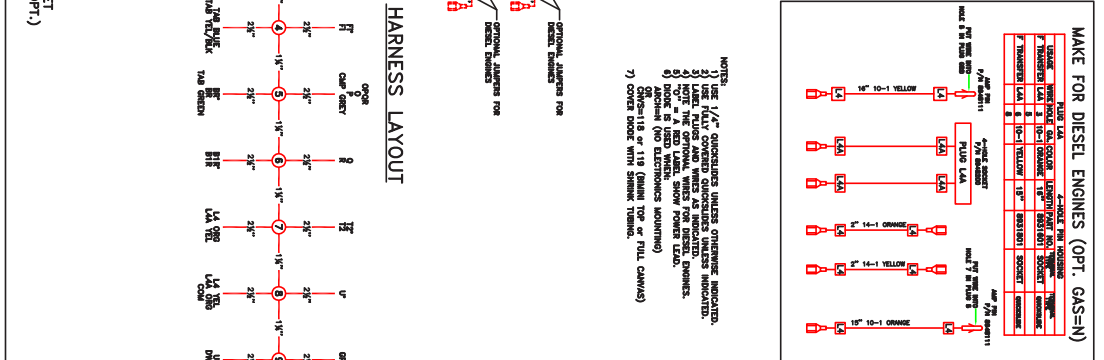
GRADE	WING	HOLE NUMBER	COLOR	DEPTH	POINT NO.	TYPE	TYPE
SHALE							
3/4" RUL. (HMT)	LMT	14-3	ORANGE	10'	8911100	NONE	NONE
3/4" RUL. (HMT)	LMT		YELLOW	10'		NONE	NONE

NOTE: COIL AND SERVO LOGS LMT WITH HARRIS.

[illegible]

CARVER

Figure 1: Pinout diagrams for the 16-pin D-subminiature connector. The diagrams show the internal wiring for Plugs 1 through 16, including the 16-pin shield and the 16-pin shield. The diagrams are organized into four columns, each representing a different plug configuration. The top row shows the 16-pin shield and the 16-pin shield. The bottom row shows the 16-pin shield and the 16-pin shield. The diagrams are labeled with 'PLUG 1' through 'PLUG 16' and 'SHIELD'.

[illegible]

USAGE	CIRCUIT NUMBER	MINIMUM WIRE GA.	CABLE LENGTH	TERMINAL TYPE	TERMINAL TYPE	WIRE PART NUMBER
GLLY REFER TO PORT V/B	2B	12-3	25'	NONE	NONE	8929900
PORT V/B TO STBD V/B	2C	12-3	23'	NONE	NONE	8929900
STBD V/B TO V/B TV	2D	12-3	8'	NONE	NONE	8929900
V/B TV TO F DINETTE	2E	12-3	20'	NONE	NONE	8929900
SALON TV TO P HEAD	3B	12-3	22'	NONE	NONE	8929900
P HEAD TO S HEAD	3C	12-3	30'	NONE	NONE	8929900
S HEAD TO VIP REC	3D	12-3	15'	NONE	NONE	8929900
VIP REC TO VIP TV	3E	12-3	6'	NONE	NONE	8929900

NOTE:

1) LABEL WIRES AS INDICATED.



Drawing Title

HARN:FWD LINER AC JUMPERS

Hull No.

C7

Model

3957

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.

6897769

P1-06MAY13-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
F GLLY REC TO REFER	2A	12-3	10'	NONE	NONE	8929900
F DINETTE TO A DINETTE	2F	12-3	15'	NONE	NONE	8929900
A GLLY REC TO TV	3A	12-3	15'	NONE	NONE	8929900

NOTE:
1) LABEL WIRES AS INDICATED.



Drawing Title
HARN:SALON LINER AC JUMPERS

Hull No.
C7

Model
3957

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.
6897770

P1-23MAY13-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.

USAGE	CIRCUIT NUMBER	MINIMUM WIRE GA.	CABLE LENGTH	TERMINAL TYPE	TERMINAL TYPE	WIRE PART NUMBER
F A/C JUNC TO A/C UNIT	23	10-3	35'	NONE	NONE	8930600
A/C RELAY TO F A/C UNIT	23A	14-3	35'	NONE	NONE	8930400

NOTES:

- 1) LABEL WIRES AS INDICATED.
- 2) USE BLACK/RED/GREEN ROMEX.



Drawing Title

HARN:FWD A/C JUMPERS 60HZ

Hull No.

C7

Model

3957

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.

6897771

P1-08MAY13-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
F A/C JUNC TO A/C UNIT	23	10-3	35'	NONE	NONE	8935900
A/C RELAY TO F A/C UNIT	23A	14-3	35'	NONE	NONE	8930200

NOTES:
1) LABEL WIRES AS INDICATED.



Drawing Title

HARN:FWD A/C JUMPERS 50HZ

Hull No.

C7

Model

3957

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.

6897772

P1-08MAY13-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.

USAGE	CIRCUIT NUMBER	MINIMUM WIRE GA.	CABLE LENGTH	TERMINAL TYPE	TERMINAL TYPE	WIRE PART NUMBER
A/C PUMP JUMPER	21A	14-3	45'	NONE	NONE	8930400

NOTES:

- 1) LABEL WIRES AS INDICATED.
- 2) USE BLACK/RED/GREEN ROMEX.



Drawing Title

HARN:A/C PUMP JUMPER 60HZ

Hull No.

C7

Model

3957

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.

6897773

P1-09MAY13-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
A/C PUMP JUMPER	21A	14-3	45'	NONE	NONE	8930200

NOTES:

- 1) LABEL WIRES AS INDICATED.
- 2) USE BLACK/WHITE/GREEN ROMEX.



Drawing Title

HARN:A/C PUMP JUMPER 50HZ

Hull No.

C7

Model

3957

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.

6897774

P1-09MAY13-SR

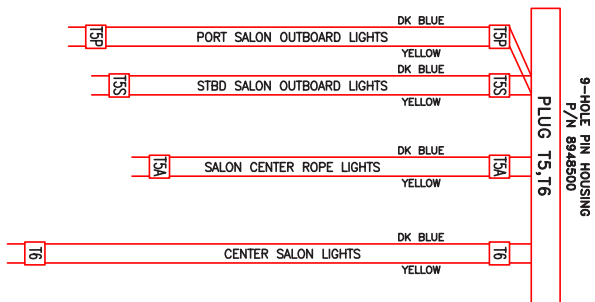
PRELIMINARY RELEASE

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.



USAGE		PUG-15,16		9-HOLE PART NO.		HOUSING	TERMINAL
WIRE	HOLE	GA.	COLOR	LENGTH	PIN	TYPE	TYPE
P SUN 00RD LITS 15P	1	14-2	DK BLUE	44"	8913300	PIN	NONE
S SUN 00RD LITS 15S		14-2	DK BLUE	32"	8913900		NONE
P SUN 00RD LITS 15P	2		YELLOW	44"		PIN	NONE
S SUN 00RD LITS 15S			YELLOW	32"			NONE
SALON ROPE LITS 15A	3	14-2	DK BLUE	28"	8913900	PIN	NONE
SALON ROPE LITS 15A	4		YELLOW	28"			NONE
SUN CENTER LITS 16	5	14-2	DK BLUE	57"	8913900	PIN	NONE
SUN CENTER LITS 16	6		YELLOW	57"		PIN	NONE

NOTES:
1) LABEL PLUGS AND WIRES AS SHOWN.

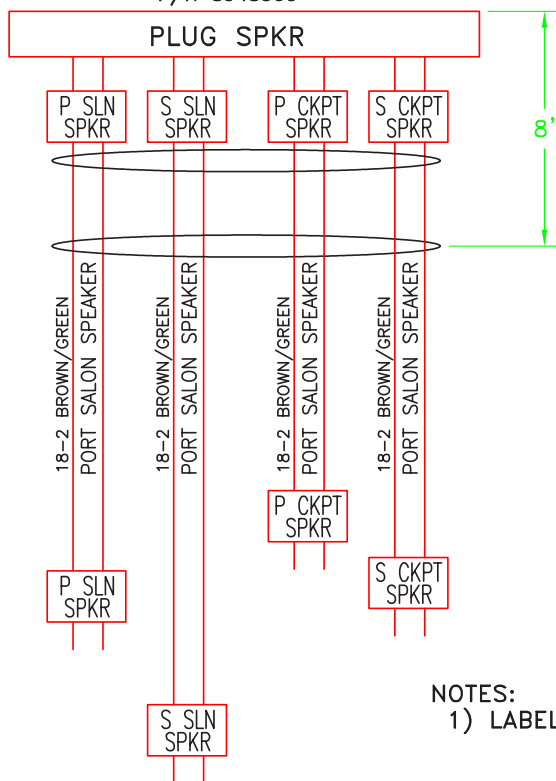
[illegible]

WARRANTY AND PARTS



PLUG SPKR				9-HOLE PIN HOUSING				
USAGE	WIRE	HOLE	GA.	COLOR	LENGTH	PART NO.	TERMINAL TYPE	TERMINAL TYPE
P SALON SPKR	P SLN SPKR	1	18-2	BROWN	23'	8909900	PIN	NONE
P SALON SPKR	P SLN SPKR	2		GREEN	23'		PIN	NONE
S SALON SPKR	S SLN SPKR	3	18-2	BROWN	32'	8909900	PIN	NONE
S SALON SPKR	S SLN SPKR	4		GREEN	32'		PIN	NONE
		5						
P COCKPIT SPKR	P CKPT SPKR	6	18-2	BROWN	17'	8909900	PIN	NONE
P COCKPIT SPKR	P CKPT SPKR	7		GREEN	17'		PIN	NONE
S COCKPIT SPKR	S CKPT SPKR	8	18-2	BROWN	21'	8909900	PIN	NONE
S COCKPIT SPKR	S CKPT SPKR	9		GREEN	21'		PIN	NONE

9-HOLE PIN HOUSING
P/N 8948500



NOTES:

- 1) LABEL PLUGS AND WIRES AS SHOWN.



Drawing Title

HARN:SALON & CKPT SPKR

Hull No.

C7

Model

3957

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.

6897776

P1-23MAY13-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	3	14-2	DK BLUE	34'	8913900	PIN	NONE
		5						
CKPT OVRHD LTS	T3A	6		YELLOW	34'		PIN	NONE
		8						

4-HOLE PIN HOUSING
P/N 8948300

PLUG T3A



NOTE:

- 1) LABEL PLUG AND WIRES AS SHOWN.



Drawing Title

HARN:CKPT OVRHD LTS

Hull No.

C7

Model

3957

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.

6897777

P1-23MAY13-SR

PRELIMINARY RELEASE

RV-DATE-EDTR

DESCRIPTION

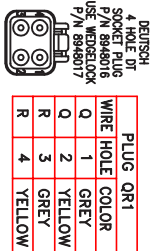
REVISION HISTORY

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.

CARVER



DEUTSCH
4 HOLE DT
PIN PLUG
P/N 8948018



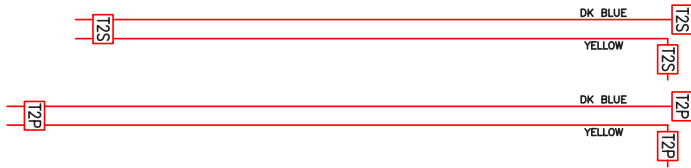
PLUG QR2		
WIRE	HOLE	COLOR
Q	1	GREY
Q	2	YELLOW
R	3	GREY
R	4	YELLOW

[illegible]

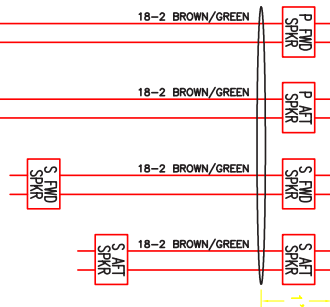
WIRE HOLE	GA. COLOR	LENGTH	PART NO.	TERMINAL TYPE
T2S	14-2 DK BLUE	16"	8913900	NONE
T2P	14-2 DK BLUE	18"	8913900	PIN
T2S	YELLOW	16"		NONE
T2P	YELLOW	18"		NONE

4-HOLE PIN HOUSING
P/N 8948300

PLUG T2



WIRE	GA. COLOR	LENGTH	PART NO.	TERMINAL TYPE
P FWD SPKR	18-2 BROWN	18"	8909900	NONE
P FWD SPKR	18-2 BROWN	18"		NONE
P AFT SPKR	18-2 BROWN	22"	8909900	NONE
P AFT SPKR	GREEN	22"		NONE
S FWD SPKR	18-2 BROWN	8"	8909900	NONE
S FWD SPKR	GREEN	8"		NONE
S AFT SPKR	18-2 BROWN	4"	8909900	NONE
S AFT SPKR	GREEN	4"		NONE



NOTES:
1) LABEL PLUGS AND WIRES AS SHOWN.

P1-23MAY13-SR		PRELIMINARY RELEASE	
RV-DATE-EDTR		DESCRIPTION	
REVISION HISTORY			
MODEL	OPTION	QTY	CMC
3957	STD	1	321
CARYER YACHTS			
Drawing Title HARN:BRDG CRTSY LTS 3957			
Hull No. C7	Model 3957	Sheet 1 of 1	Rev. No. P1
Status: PRELIM		Drawing No. 6897779	
TOLERANCES: XX .0002 XXX .0005 UNLESS OTHERWISE SPECIFIED			

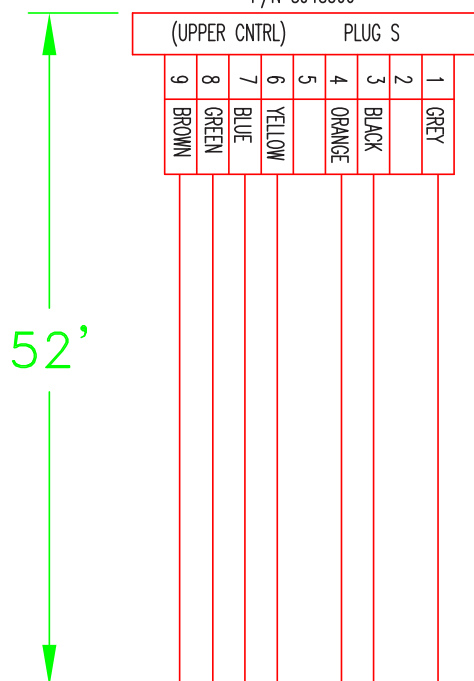
Specifications cannot be changed without the written approval of the Carrier Yachts Engineering Dept. All components must be supplied by the manufacturer as specified without expressed consent of Carrier Yachts.

WARRANTY AND PARTS



PLUG S					
WIRE	HOLE	COLOR	GA.	LENGTH	PART NO.
	1	GREY	14	52'	8909600
	2				
	3	BLACK	14	52'	8909600
	4	ORANGE	14	52'	8909600
	5				
	6	YELLOW	14	52'	8909600
	7	BLUE	14	52'	8909600
	8	GREEN	14	52'	8909600
	9	BROWN	14	52'	8909600

9-HOLE PIN HOUSING
P/N 8948500



NOTES:

- 1) LABEL PLUGS AND WIRES AS SHOWN
- 2) P/N 8909600 IS A 7 WIRE CONDUCTOR
- 3) THIS WIRE IS USED FOR THE JABSCO SPOTLIGHT



Drawing Title
HARN:SPTLT EXT TO BRDG

Hull No.

C7

Model

3957

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.

6897782

P1-22MAY13-SR

PELIMINARY RELEASE

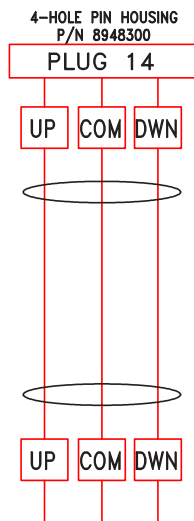
RV-DATE-EDTR

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 14						4-HOLE HOUSING		
USAGE	WIRE	HOLE	GA.	COLOR	LENGTH	PART NO.	TERMINAL TYPE	TERMINAL TYPE
WINDLASS	UP	3	14-1	ORANGE	17'	8917601	PIN	NONE
WINDLASS	COM	5	14-1	ORANGE	17'	8917601	PIN	NONE
WINDLASS	DWN	6	14-1	ORANGE	17'	8917601	PIN	NONE
		8						



NOTES:

- 1) LABEL PLUGS AND WIRES AS SHOWN.



Drawing Title

HARN:WNDLS CNTRL DECK C7

Hull No.

C7

Model

3957

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.

6897783

P1-22MAY13-SR

PELIMINARY RELEASE

RV-DATE-EDTR

DESCRIPTION

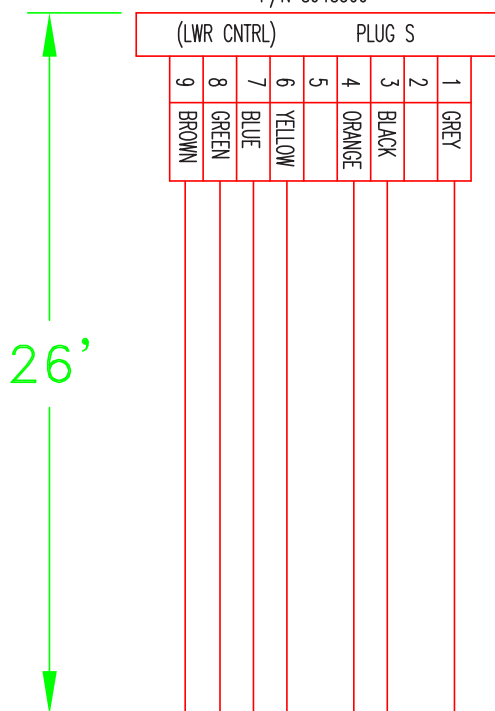
REVISION HISTORY

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.

CARVER

PLUG S					
WIRE	HOLE	COLOR	GA.	LENGTH	PART NO.
	1	GREY	14	26'	8909600
	2				
	3	BLACK	14	26'	8909600
	4	ORANGE	14	26'	8909600
	5				
	6	YELLOW	14	26'	8909600
	7	BLUE	14	26'	8909600
	8	GREEN	14	26'	8909600
	9	BROWN	14	26'	8909600

9-HOLE PIN HOUSING
P/N 8948500



NOTES:

- 1) LABEL PLUGS AND WIRES AS SHOWN
- 2) P/N 8909600 IS A 7 WIRE CONDUCTOR
- 3) THIS WIRE IS USED FOR THE JABSCO SPOTLIGHT



Drawing Title

HARN:SPTLT EXT TO LWR HELM C7

Hull No.
C7

Model
3957

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.
6897785

P1-22MAY13-SR

PRELIMINARY RELEASE

RV-DATE-EDTR

DESCRIPTION

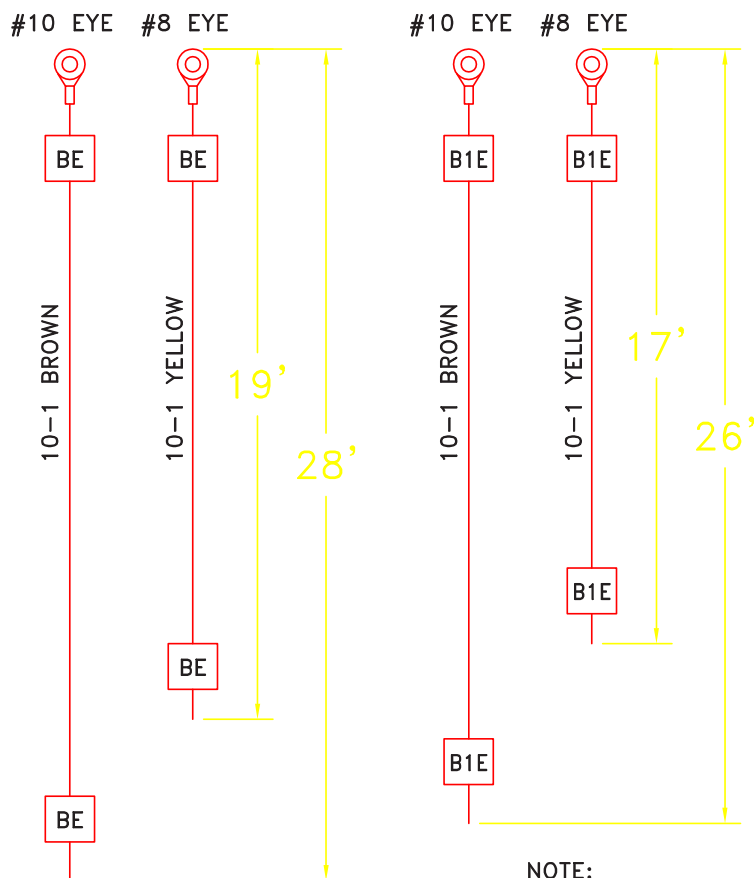
REVISION HISTORY

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



EMERGENCY BILGE PUMP LEADS							
USAGE	WIRE	GA.	COLOR	LENGTH	PART NO.	TERMINAL TYPE	TERMINAL TYPE
AFT EMER PUMP	BE	10-1	BROWN	28'	8932000	#10 EYE	NONE
AFT EMER PUMP	BE	10-1	YELLOW	19'	8931801	#8 EYE	NONE
FWD EMER PUMP	B1E	10-1	BROWN	26'	8932000	#10 EYE	NONE
FWD EMER PUMP	B1E	10-1	YELLOW	17'	8931801	#8 EYE	NONE



NOTE:
1) LABEL WIRES AS SHOWN



Drawing Title
HARN:EMERGENCY BILGE PUMP

Hull No.
C7

Model
3957

Sheet
1 of 1

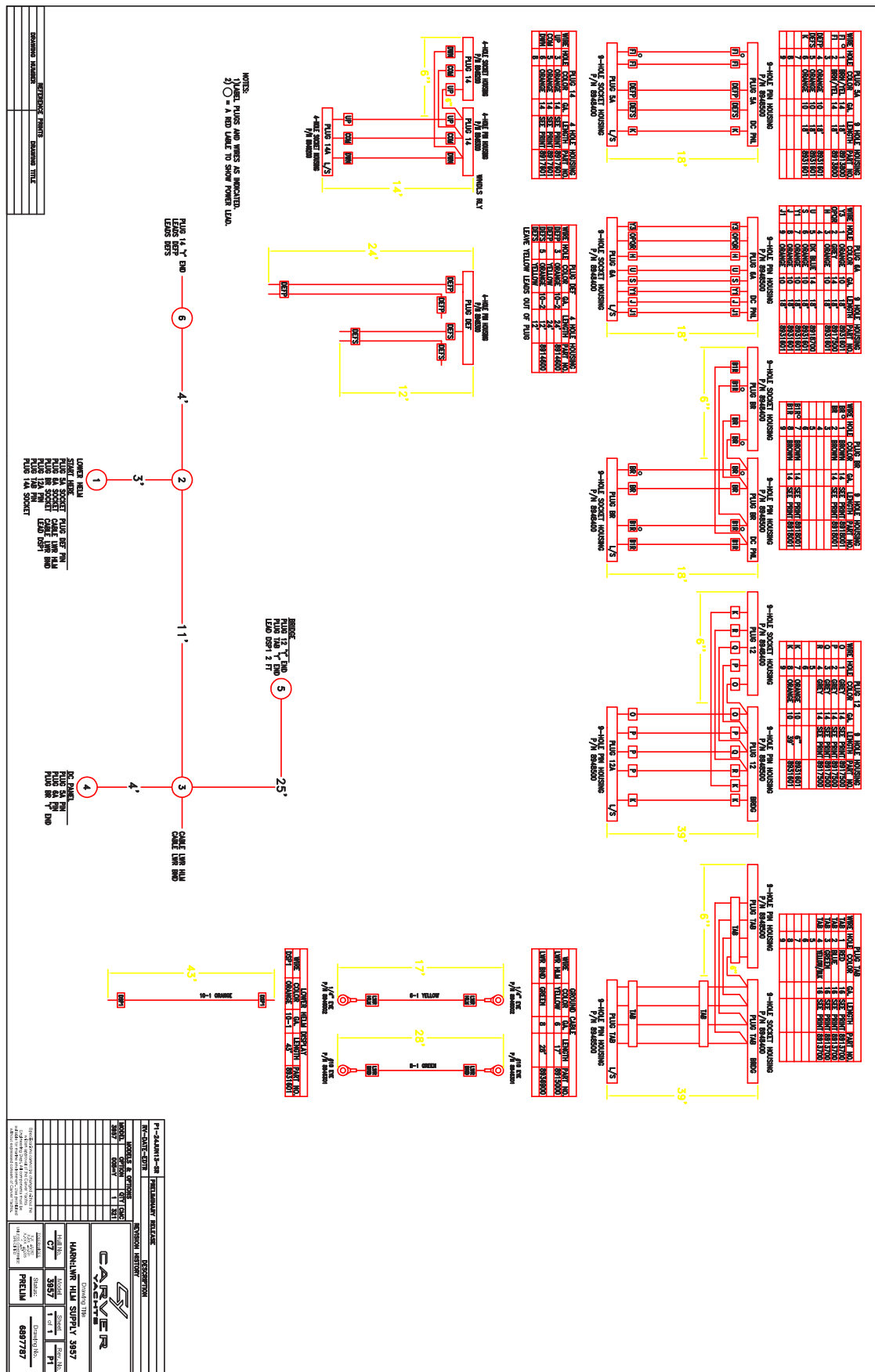
Rev. No.
P1

TOLERANCES
X.X ±0.062
X.XX ±0.031
X.XXX ±0.005
< ±30'
UNLESS OTHERWISE
SPECIFIED

Status:
PRELIM

Drawing No.
6897786

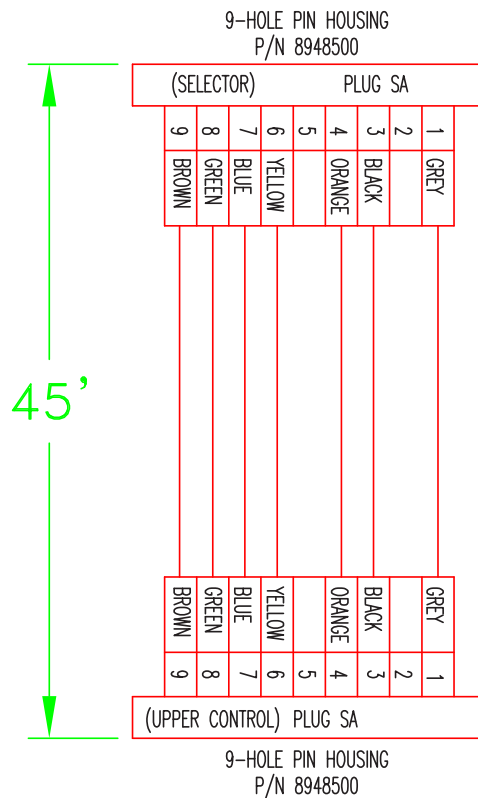
P1-23MAY13-SR
PRELIMINARY RELEASE
RV-DATE-EDTR
REVISION HISTORY
Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.



WARRANTY AND PARTS



PLUG SA					
WIRE	HOLE	COLOR	GA.	LENGTH	PART NO.
	1	GREY	14	45'	8909600
	2				
	3	BLACK	14	45'	8909600
	4	ORANGE	14	45'	8909600
	5				
	6	YELLOW	14	45'	8909600
	7	BLUE	14	45'	8909600
	8	GREEN	14	45'	8909600
	9	BROWN	14	45'	8909600



NOTES:

- 1) LABEL PLUGS AND WIRES AS SHOWN
- 2) P/N 8909600 IS A 7 WIRE CONDUCTOR
- 3) THIS WIRE IS USED FOR THE JABSCO SPOTLIGHT



Drawing Title

HARN:SPTLT LWR HELM EXT C7

Hull No.

C7

Model

3957

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.

6897788

P1-28MAY13-SR

PRELIMINARY RELEASE

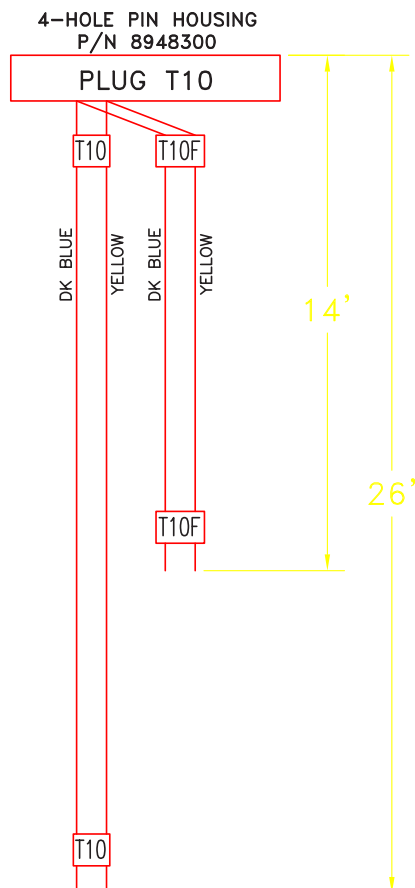
RV-DATE-EDTR

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 T10				4-HOLE PIN HOUSING				
USAGE	WIRE	HOLE	GA.	COLOR	LENGTH	PART NO.	TERMINAL TYPE	TERMINAL TYPE
ENG RM LTS	T10	3	14-2	DK BLUE	26'	8913900	PIN	NONE
FWD ENG RM LT	T10F		14-2	DK BLUE	14'	8913900		NONE
ENG RM LTS	T10	6		YELLOW	26'		PIN	NONE
FWD ENG RM LT	T10F			YELLOW	14'			NONE



NOTES:

1) LABEL PLUGS AND WIRES AS SHOWN.



Drawing Title

HARN:ENG RM LTS 3957

Hull No.

C7

Model

3957

Sheet

1 of 1

Rev. No.

P2

TOLERANCES

X.X ±0.062

X.XX ±0.031

X.XXX ±0.005

< ±30'

UNLESS OTHERWISE SPECIFIED

Status:

PRELIM

Drawing No.

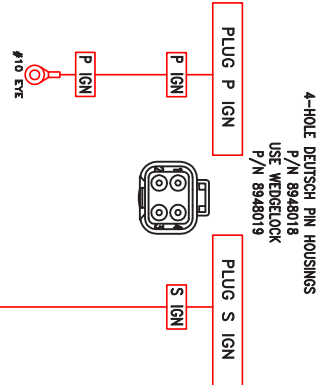
6897789

P2-10JUL13-SR	PRELIMINARY RELEASE
P1-31MAY13-SR	PRELIMINARY RELEASE
RV-DATE-EDTR	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.	

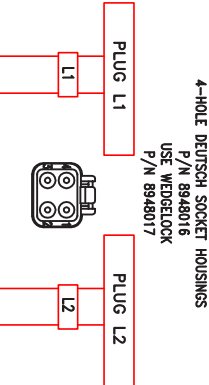
WARRANTY AND PARTS



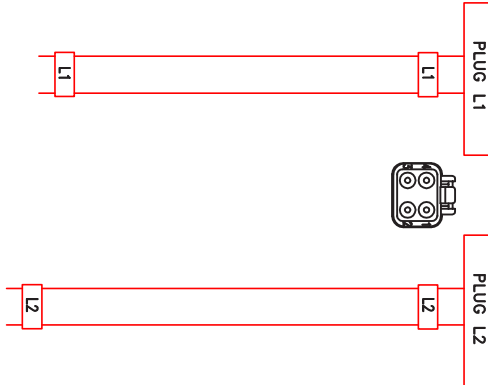
4-HOLE DEUTSCH PIN HOUSINGS			
PLUG P IGN	GA.	COLOR	LENGTH PART NO. TERMINAL TYPE
1	16-1	PURPLE	2' 8910401 DEUTSCH #10 EYE
2	16-1	PURPLE	2' 8910401 DEUTSCH #10 EYE
3			DEUTSCH DEUTSCH PLUG
4			DEUTSCH DEUTSCH PLUG



4-HOLE DEUTSCH SOCKET HOUSING			
PLUG L1	GA.	COLOR	LENGTH PART NO. TERMINAL TYPE
1	14-2	ORANGE	14' 8914100 DEUTSCH NONE
2	14-2	ORANGE	14' 8914100 DEUTSCH NONE
3			DEUTSCH DEUTSCH PLUG
4			DEUTSCH DEUTSCH PLUG



4-HOLE DEUTSCH SOCKET HOUSING			
PLUG L2	GA.	COLOR	LENGTH PART NO. TERMINAL TYPE
1	14-2	ORANGE	16' 8914100 DEUTSCH NONE
2	14-2	ORANGE	16' 8914100 DEUTSCH NONE
3			DEUTSCH DEUTSCH PLUG
4			DEUTSCH DEUTSCH PLUG



P1-10UUN13-SR		PRELIMINARY RELEASE									
RV-DATE-EDTR		DESCRIPTION									
<table border="1"> <thead> <tr> <th>MODEL</th> <th>OPTION</th> <th>QTY</th> <th>CMC</th> </tr> </thead> <tbody> <tr> <td>3957</td> <td>ENG=9R4</td> <td>1</td> <td>321</td> </tr> </tbody> </table>				MODEL	OPTION	QTY	CMC	3957	ENG=9R4	1	321
MODEL	OPTION	QTY	CMC								
3957	ENG=9R4	1	321								
<table border="1"> <tr> <td colspan="2">Hull No. C7</td> <td>Model 3957</td> <td>Sheet 1 of 1</td> <td>Rev. No. P1</td> </tr> </table>				Hull No. C7		Model 3957	Sheet 1 of 1	Rev. No. P1			
Hull No. C7		Model 3957	Sheet 1 of 1	Rev. No. P1							
<table border="1"> <tr> <td colspan="2">TOLERANCES: XX .0002 XXX .0005 UNLESS OTHERWISE SPECIFIED</td> <td>Status: PRELIM</td> <td>Drawing No. 6897790</td> </tr> </table>				TOLERANCES: XX .0002 XXX .0005 UNLESS OTHERWISE SPECIFIED		Status: PRELIM	Drawing No. 6897790				
TOLERANCES: XX .0002 XXX .0005 UNLESS OTHERWISE SPECIFIED		Status: PRELIM	Drawing No. 6897790								

[illegible][illegible]

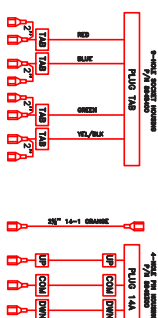
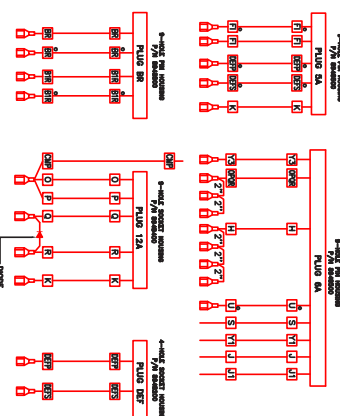
Usage	Model	Color	Weight	Material	Price
1. Metal	Model A	Gold	15.5g	18K Gold	\$1200
2. Metal	Model B	18K	16.1g	Brown	\$8910001
3. Metal	Model C	18K	15.5g	Brown	\$8910001
4. Metal	Model D	18K	15.5g	Brown	\$8910001
5. Metal	Model E	18K	15.5g	Brown	\$8910001
6. Metal	Model F	18K	15.5g	Brown	\$8910001
7. Metal	Model G	18K	15.5g	Brown	\$8910001
8. Metal	Model H	18K	15.5g	Brown	\$8910001
9. Metal	Model I	18K	15.5g	Brown	\$8910001
10. Metal	Model J	18K	15.5g	Brown	\$8910001

[illegible]

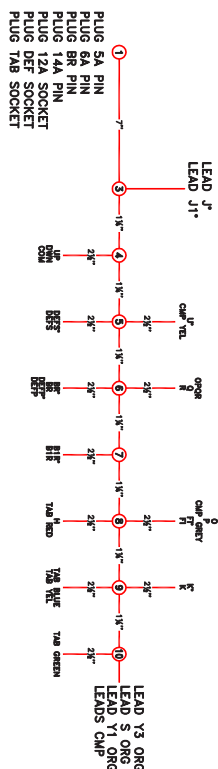
FLUG DEF		4-HOLE SOCKET HOUSING			
USAGE	WIRE GAUGE	LENGTH PART NO.	TYPE		
P DEF0008R	10-1	ORANGE	13.5 8931001 SOCKET	STANDARD	
S DEF0008R	8	10-1	ORANGE	12" 8931001 SOCKET	STANDARD
	6				

USAGE	WIRE PROFILE	CL. COLOR	LENGTH PART NO.	TYPE
THIN TAPE	1/4"	RED	16" 8013700	SOCKET
THIN TAPE	1/4"	RED	17" 8013700	SOCKET
THIN TAPE	1/4"	GREEN	17" 8013700	SOCKET
THIN TAPE	1/4"	TEFL/BLACK	18.5" 8013700	SOCKET
	6			

ITEMS	QTY	UNIT PRICE	TOTAL
WHOLLS	UP 3	ORANGE 11"	8917801 PM
WHOLLS	COM 5	ORANGE 11"	8917801 PM
WHOLLS	DWN 6	ORANGE 11"	8917801 PM
	5		



HARNNESS LAYOUT



REFERENCE POINTS	
DRAWING NUMBER	DRAWING TITLE
8807101	PULASKY LANE HILLS SW 20057

[illegible]

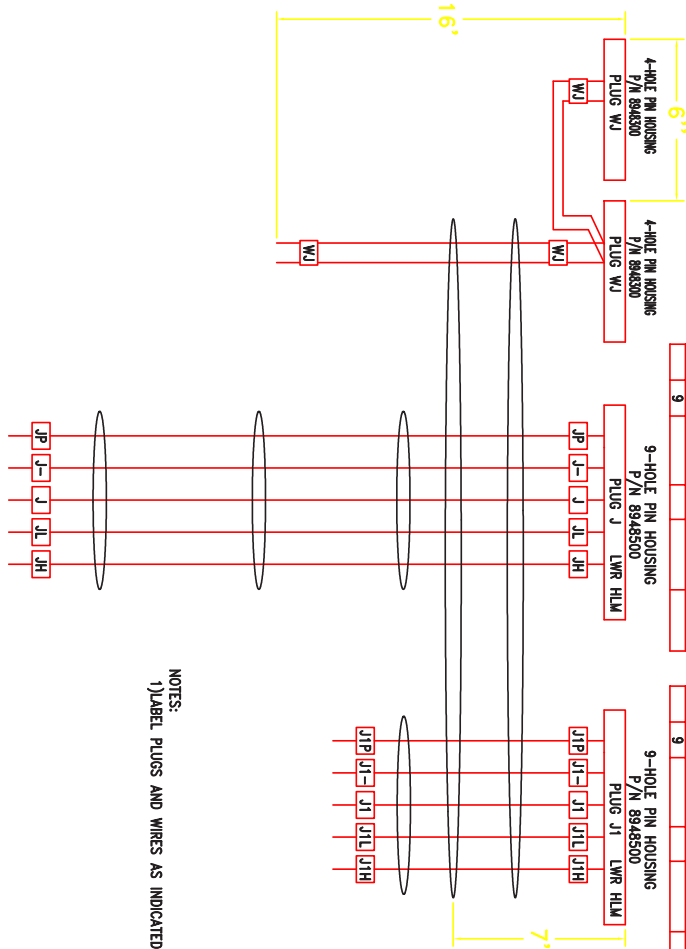
WARRANTY AND PARTS



WIRE	HOLE	COLOR	GA.	LENGTH	PART NO.
WJ	3	ORANGE	14-2	SEE PRINT	8914100
WJ	5	YELLOW			
WJ	6	YELLOW			
WJ	8				

WIRE	HOLE	COLOR	GA.	LENGTH	PART NO.
JP	1	ORANGE	14	26"	8917601
JP	2	YELLOW	14	26"	8917801
JP	3	LT BLUE	16	26"	8911501
JP	4	GREY	16	26"	8910501
JP	5	PURPLE	16	26"	8910401
JP	6				
JP	7				
JP	8				
JP	9				

WIRE	HOLE	COLOR	GA.	LENGTH	PART NO.
JP	1	ORANGE	14	14"	8917601
JP	2	YELLOW	14	14"	8917801
JP	3	LT BLUE	16	14"	8911501
JP	4	GREY	16	14"	8910501
JP	5	PURPLE	16	14"	8910401
JP	6				
JP	7				
JP	8				
JP	9				



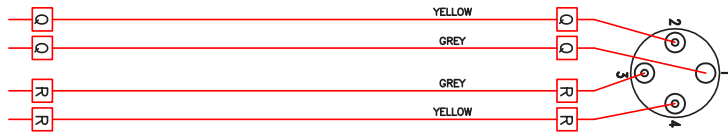
NOTES:
1) LABEL PLUGS AND WIRES AS INDICATED.

P1-09JUL13-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>3957</td> <td>005=Y</td> <td>1</td> <td>321</td> </tr> </tbody> </table>				MODEL	OPTION	QTY	CMC	3957	005=Y	1	321								
MODEL	OPTION	QTY	CMC																
3957	005=Y	1	321																
<table border="1"> <tr> <td colspan="2">Hull No.</td> <td colspan="2">Model</td> </tr> <tr> <td colspan="2">C7</td> <td colspan="2">3957</td> </tr> <tr> <td colspan="2">Sheet</td> <td colspan="2">Rev No.</td> </tr> <tr> <td colspan="2">1 of 1</td> <td colspan="2">P1</td> </tr> </table>				Hull No.		Model		C7		3957		Sheet		Rev No.		1 of 1		P1	
Hull No.		Model																	
C7		3957																	
Sheet		Rev No.																	
1 of 1		P1																	
<table border="1"> <tr> <td colspan="2">Status:</td> <td colspan="2">Drawing No.</td> </tr> <tr> <td colspan="2">PRELIM</td> <td colspan="2">6897795</td> </tr> </table>				Status:		Drawing No.		PRELIM		6897795									
Status:		Drawing No.																	
PRELIM		6897795																	

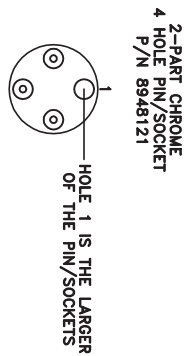
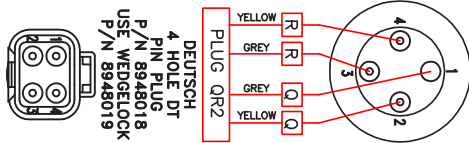
Specifications cannot be changed without the written approval of the Carver Yachts Engineering Department. Reproduction or use for other than intended purpose without expressed consent of Carver Yachts.

TOLERANCES:
XXX .0001
XXX .0005
XXX .0010
UNLESS OTHERWISE SPECIFIED

CHROME PIN PLUG						
USAGE	WIRE HOLE	GA.	COLOR	LENGTH	PART NO.	TYPE
WAST LIGHT	Q	1	16-1	GREY	15"	8910501
WAST LIGHT	Q	2	16-1	YELLOW	15"	8913200
ANCHOR LT	R	3	16-1	GREY	15"	8910501
ANCHOR LT	R	4	16-1	YELLOW	15"	8913200
						NONE

BACK VIEW OF
PIN PLUG

CHROME SOCKET PLUG / 4 HOLE DEUTSCH PIN HOUSING						
USAGE	WIRE HOLE	GA.	COLOR	LENGTH	PART NO.	TYPE
WAST LIGHT	Q	1	16-1	GREY	6"	8910501
WAST LIGHT	Q	2	16-1	YELLOW	6"	8913200
ANCHOR LT	R	3	16-1	GREY	6"	8910501
ANCHOR LT	R	4	16-1	YELLOW	6"	8913200
						NONE

BACK VIEW OF
SOCKET PLUG2-PART CHROME
4 HOLE PIN/SOCKET
P/N 8948121HOLE 1 IS THE LARGER
OF THE PIN/SOCKETSDEUTSCH
4 HOLE DT
PIN PLUG
P/N 8948018
USE WEDGELock
P/N 8948019NOTES:
1) LABEL PLUGS AND WIRES AS SHOWN.

P1-10JUL13-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>3957</td> <td>CNVS=118 or 119</td> <td>1</td> <td>321</td> </tr> </tbody> </table>				MODEL	OPTION	QTY	CMC	3957	CNVS=118 or 119	1	321				
MODEL	OPTION	QTY	CMC												
3957	CNVS=118 or 119	1	321												
<table border="1"> <tr> <td colspan="2">HARN:NAV LT W/BIMINI 3957</td> </tr> <tr> <td>Drawing Title</td> <td></td> </tr> </table>				HARN:NAV LT W/BIMINI 3957		Drawing Title									
HARN:NAV LT W/BIMINI 3957															
Drawing Title															
<table border="1"> <tr> <td>Hull No.</td> <td>C7</td> </tr> <tr> <td>Model</td> <td>3957</td> </tr> <tr> <td>Sheet</td> <td>1 of 1</td> </tr> <tr> <td>Rev. No.</td> <td>P1</td> </tr> </table>		Hull No.	C7	Model	3957	Sheet	1 of 1	Rev. No.	P1	<table border="1"> <tr> <td>Status:</td> <td>PRELIM</td> </tr> <tr> <td>Drawing No.</td> <td>6897796</td> </tr> </table>		Status:	PRELIM	Drawing No.	6897796
Hull No.	C7														
Model	3957														
Sheet	1 of 1														
Rev. No.	P1														
Status:	PRELIM														
Drawing No.	6897796														

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.

TOLERANCES:
XXX .0002
XXX .0005
XXX .0010
UNLESS SPECIFIED

WARRANTY AND PARTS



PLUG QR1				DEUTSCH 4 HOLE PIN HOUSING				
USAGE	WIRE	HOLE	GA.	COLOR	LENGTH	PART NO.	TERMINAL TYPE	TERMINAL TYPE
MAST LIGHT	Q	1	16-1	GREY	17'	8910501	PIN	NONE
MAST LIGHT	Q	2	16-1	YELLOW	17'	8913200	PIN	NONE
ANCHOR LT	R	3	16-1	GREY	17'	8910501	PIN	NONE
ANCHOR LT	R	4	16-1	YELLOW	17'	8913200	PIN	NONE

4-HOLE DEUTSCH PIN HOUSING
P/N 8948018

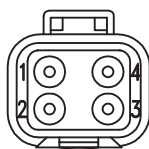
PLUG QR1

Q Q R R

GREY
YELLOW
GREY
YELLOW

Q Q R R

DEUTSCH
4 HOLE DT
PIN PLUG
P/N 8948018
USE WEDGELOCK
P/N 8948019



NOTES:

1) LABEL PLUGS AND WIRES AS SHOWN.



Drawing Title

HARN:NAV LT W/HDTP 3957

Hull No.

C7

Model

3957

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.

6897797

P1-10JUL13-SR

PRELIMINARY RELEASE

RV-DATE-EDTR

DESCRIPTION

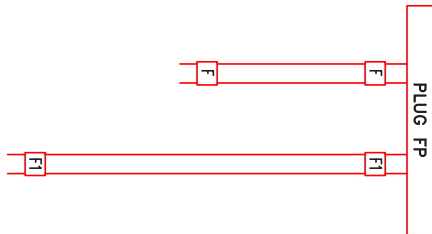
REVISION HISTORY

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.

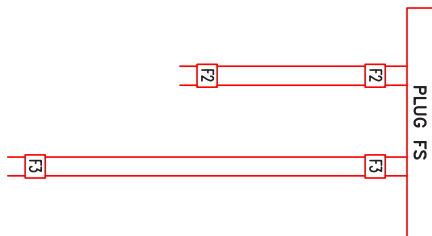
PLUG FP				4-HOLE PIN HOUSING			
USAGE	WIRE HOLE	GA.	COLOR	LENGTH	PART NO.	TERMINAL	TERMINAL
PORT BLOWER 1	F1	3	10-2 BRN W/YEL	4"	8914700	PN	NONE
PORT BLOWER 3	F1	5	10-2 BRN W/YEL	7 1/4"	8914700	PN	NONE
PORT BLOWER 1	F1	6	YELLOW	4"		PN	NONE
PORT BLOWER 3	F1	8	YELLOW	7 1/2"		PN	NONE

PLUG FP				4-HOLE PIN HOUSING			
USAGE	WIRE HOLE	GA.	COLOR	LENGTH	PART NO.	TERMINAL	TERMINAL
PORT BLOWER 2	F2	3	10-2 BRN W/YEL	4"	8914700	PN	NONE
PORT BLOWER 4	F2	5	10-2 BRN W/YEL	7 1/4"	8914700	PN	NONE
PORT BLOWER 2	F2	6	YELLOW	4"		PN	NONE
PORT BLOWER 4	F2	8	YELLOW	7 1/2"		PN	NONE

4-HOLE PIN HOUSING
P/N 8946300



4-HOLE PIN HOUSING
P/N 8946300



NOTES:
1) LABEL PLUGS AND WIRES AS SHOWN.

P1-16JUL13-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>3957</td> <td>GAS=N</td> <td>1</td> <td>321</td> </tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				MODEL	OPTION	QTY	CMC	3957	GAS=N	1	321																																				
MODEL	OPTION	QTY	CMC																																												
3957	GAS=N	1	321																																												
<table border="1"> <tr> <td colspan="2">Hull No.</td> <td colspan="2">Model</td> <td colspan="2">Sheet</td> <td colspan="2">Rev. No.</td> </tr> <tr> <td colspan="2">C7</td> <td colspan="2">3957</td> <td colspan="2">1 of 1</td> <td colspan="2">P1</td> </tr> </table>				Hull No.		Model		Sheet		Rev. No.		C7		3957		1 of 1		P1																													
Hull No.		Model		Sheet		Rev. No.																																									
C7		3957		1 of 1		P1																																									
<table border="1"> <tr> <td colspan="2"> CARVER YACHTS </td> <td colspan="2"> Drawing Title HARN:BLOWER DSL DECK 3957 </td> </tr> </table>				CARVER YACHTS		Drawing Title HARN:BLOWER DSL DECK 3957																																									
CARVER YACHTS		Drawing Title HARN:BLOWER DSL DECK 3957																																													
<table border="1"> <tr> <td> TOLERANCES X.X .XXXX X.XX .XX X.X .X UNLESS OTHERWISE SPECIFIED </td> <td> Status: PRELIM </td> <td colspan="2"> Drawing No. 6897800 </td> </tr> </table>				TOLERANCES X.X .XXXX X.XX .XX X.X .X UNLESS OTHERWISE SPECIFIED	Status: PRELIM	Drawing No. 6897800																																									
TOLERANCES X.X .XXXX X.XX .XX X.X .X UNLESS OTHERWISE SPECIFIED	Status: PRELIM	Drawing No. 6897800																																													

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.

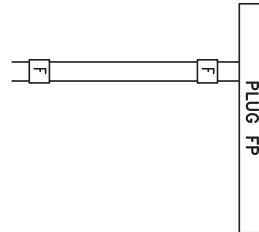
WARRANTY AND PARTS



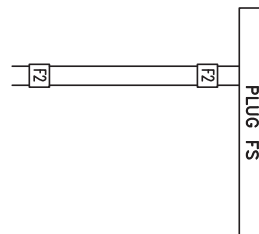
PLUG FP				4-HOLE PIN HOUSING			
USAGE	WIRE HOLE	GA.	COLOR	LENGTH/PART NO.	TYPE	TERMINAL	
PORT BLOWER 1	F	3	10-2 BRN W/TEL	5	8914700	PM	NONE
PORT BLOWER 1	F	5	YELLOW	5"		PM	NONE
		8					

PLUG FP				4-HOLE PIN HOUSING			
USAGE	WIRE HOLE	GA.	COLOR	LENGTH/PART NO.	TYPE	TERMINAL	
PORT BLOWER 2	F2	3	10-2 BRN W/TEL	5	8914700	PM	NONE
PORT BLOWER 2	F2	6	YELLOW	5"		PM	NONE
		8					

4-HOLE PIN HOUSING
P/N 8948300



4-HOLE PIN HOUSING
P/N 8948300



NOTES:
1) LABEL PLUGS AND WIRES AS SHOWN.

P1-16JUL13-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>3957</td> <td>GAS=Y</td> <td>1</td> <td>321</td> </tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				MODEL	OPTION	QTY	CMC	3957	GAS=Y	1	321																																				
MODEL	OPTION	QTY	CMC																																												
3957	GAS=Y	1	321																																												
<table border="1"> <tr> <td colspan="2">Hull No.</td> <td colspan="2">Model</td> <td colspan="2">Sheet</td> <td colspan="2">Rev No.</td> </tr> <tr> <td colspan="2">C7</td> <td colspan="2">3957</td> <td colspan="2">1 of 1</td> <td colspan="2">P1</td> </tr> </table>				Hull No.		Model		Sheet		Rev No.		C7		3957		1 of 1		P1																													
Hull No.		Model		Sheet		Rev No.																																									
C7		3957		1 of 1		P1																																									
<table border="1"> <tr> <td colspan="2">Status:</td> <td colspan="2">Drawing No.</td> </tr> <tr> <td colspan="2">PRELIM</td> <td colspan="2">6897801</td> </tr> </table>				Status:		Drawing No.		PRELIM		6897801																																					
Status:		Drawing No.																																													
PRELIM		6897801																																													
Specifications cannot be changed without the written approval of the Carver Yachts Engineering Department. Any changes made without approval will void the warranty. This drawing is intended for marine environment. Use prohibited unless otherwise specified.																																															

USAGE	CIRCUIT NUMBER	MINIMUM WIRE GA.	CABLE LENGTH	TERMINAL TYPE	TERMINAL TYPE	WIRE PART NUMBER
SALON A/C RELAY JUMPER	22A	14-3	15'	NONE	NONE	8930400
SALON A/C RELAY JUMPER	24A	14-3	15'	NONE	NONE	8930400

NOTES:

- 1) LABEL WIRES AS INDICATED.
- 2) USE BLACK/RED/GREEN ROMEX.



Drawing Title

HARN:A/C RELAY JMPRS 60HZ

Hull No.

C7

Model

3957

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.

6897805

P1-14AUG13-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
SALON A/C RELAY JUMPER	22A	14-3	15'	NONE	NONE	8930200
SALON A/C RELAY JUMPER	24A	14-3	15'	NONE	NONE	8930200

NOTES:

- 1) LABEL WIRES AS INDICATED.
- 2) USE BLACK/WHITE/GREEN ROMEX.



Drawing Title

HARN:A/C RELAY JMPRS 50HZ

Hull No.

C7

Model

3957

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.

6897806

P1-14AUG13-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.

USAGE	WIRE P/N	LENGTH	LABEL	TERMINAL TYPE	TERMINAL TYPE
SALON TV SPLITTER/ V-BERTH TV	RG/6 8909802	42 FT	TV V/B	F59	F59
SALON TV SPLITTER/ VIP TV	RG/6 8909802	55 FT	TV VIP	F59	F59



Drawing Title

HARN:FWD LINER ANT CBLS

Hull No.

C7

Model

3957

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.

6960745

P1-09MAY13-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	WIRE P/N	LENGTH	LABEL	TERMINAL TYPE	TERMINAL TYPE
BRIDGE TV ANTENNA	RG/6 8909802	22 FT	TV ANT	F59	F59



Drawing Title
HARN:BRDG TV ANT

Hull No.
C7

Model
3957

Sheet
1 of 1

Rev. No.
P1

P1-23MAY13-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.

TOLERANCES

X.X ±0.062
X.XX ±0.031
X.XXX ±0.005
< ±30'
UNLESS OTHERWISE
SPECIFIED

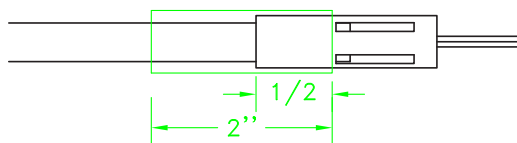
Status:
PRELIM

Drawing No.
6960746

COAX CABLES						
USAGE	WIRE P/N	LENGTH	LABEL	LABEL	TERMINAL TYPE	TERMINAL TYPE
SALON TV SPLITTER	RG/6 8909802	4 FT	SLN TV	SLN TV	F59	F59
A/B SWITCH TO SALON SPLITTER	RG/6 8909802	4 FT	AB SW	AB SW	F59	F59
BOOSTER/A-B SWITCH	RG/6 8909802	6 FT	BOOSTER	BOOSTER	F59	F59
SALON STEREO TO SALON ANTENNA	RG/59 8909800	15 FT	SLN STEREO	SLN STEREO	M-PLUG STEREO	SOCKET STEREO

8949000 8949100

NOTE: USE SHRINK TUBE 8955501 W/ADHESIVE, CUT 2" LONG AND OVERLAP THE ANTENNA MALE PLUG BY 1/2" FROM THE END.



Drawing Title

HARN:SLN TV SPLTTR/STEREO 3957

Hull No.

C7

Model

3957

Sheet

1 of 1

Rev. No.

P

TOLERANCES

X.X ±0.062

X.XX ±0.031

X.XXX ±0.005

< ±30'

UNLESS OTHERWISE SPECIFIED

Status:

ORIG

Drawing No.

6960754

07-19JULY13-JA

PROTO

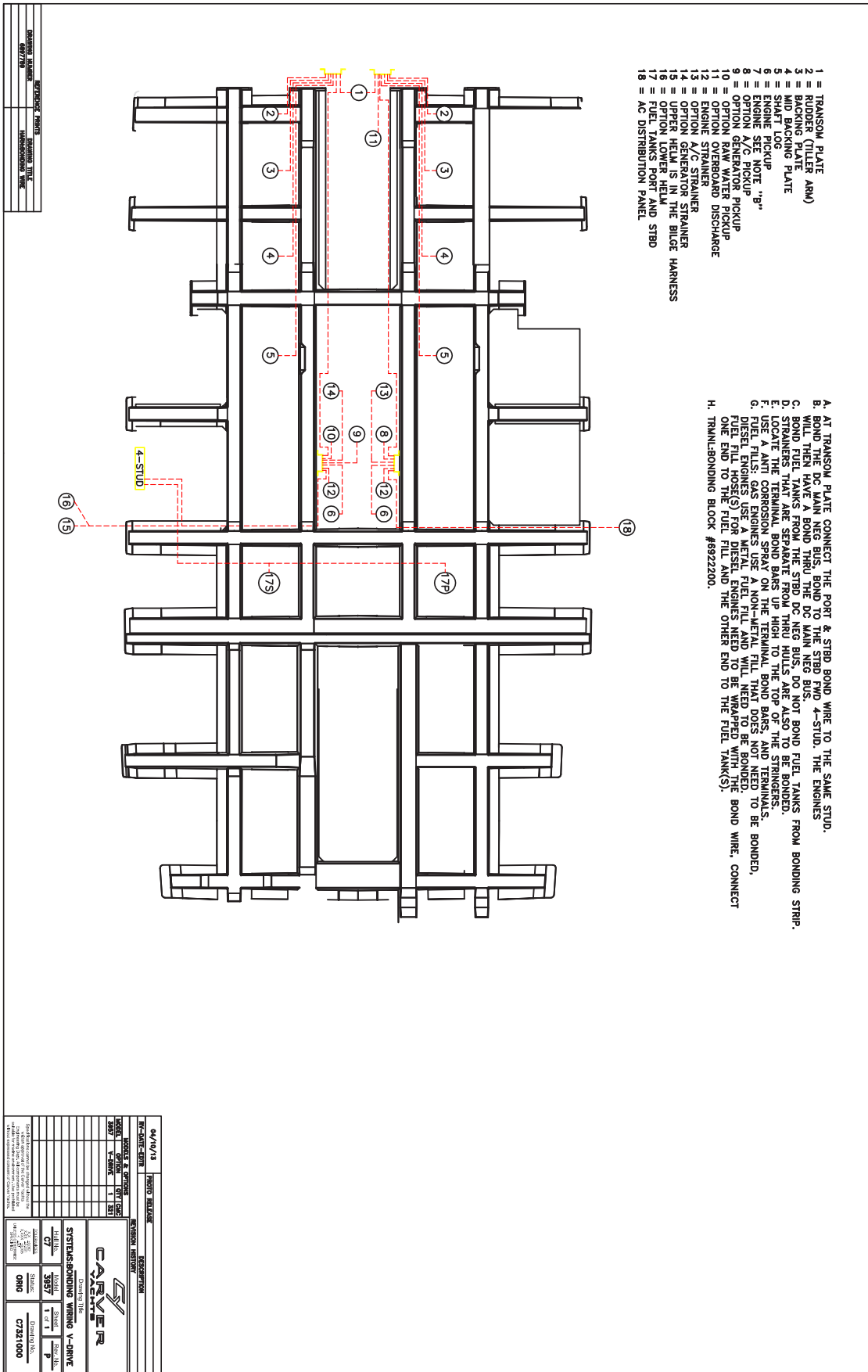
RV-DATE-EDTR

DESCRIPTION

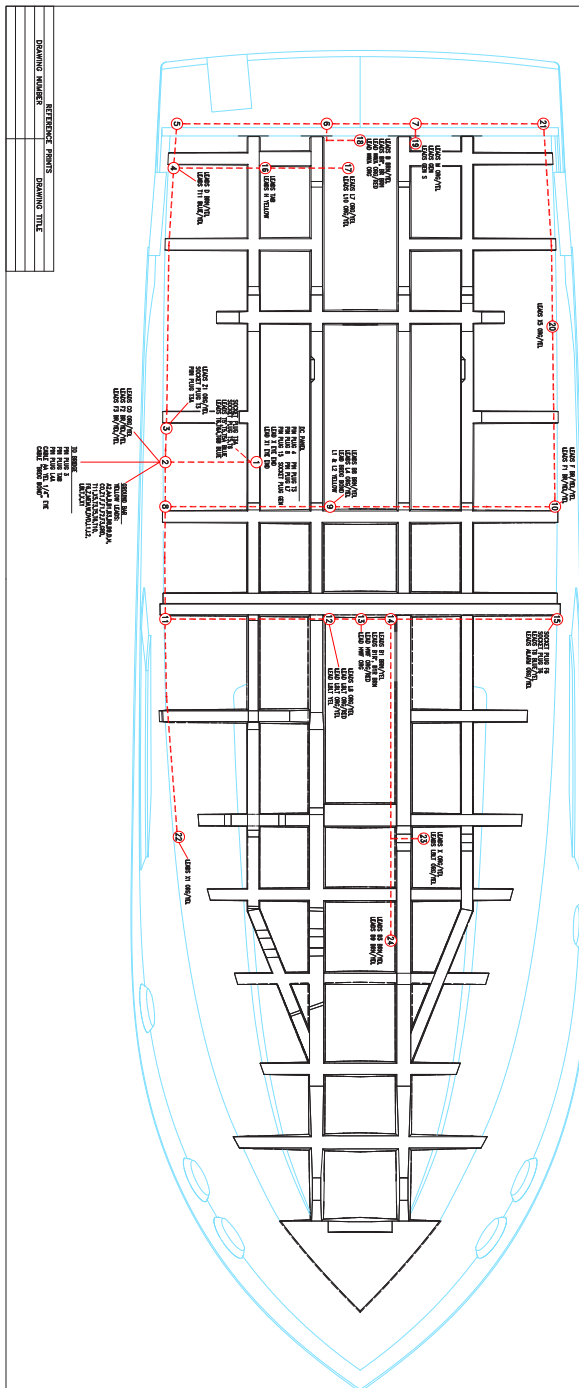
REVISION HISTORY

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



04/10/13		FORD BILGE	
RE-DATE CERT		REVISION	
MODEL & OPTION		SYSTEMS	
MODEL	OPTION	SYSTEMS	OPTION
3857	1000	SYSTEMS	OPTION
SYSTEMS-BONDING WIRING V-DRIVE		OPTION	
C7		OPTION	
3857		OPTION	
C7321000		OPTION	

[illegible][illegible][illegible]



5812725, 5448430, L1NER
START PIN PLUGS 7 AND 14 AT THE TOP OF THE VIP CLOSET AT 1, LEAVE 18FT.
(WARRSSES) BEING MARKED IN WHITE TAPE AT 1 TO INDICATE STARTING POINT.
LEAVE LEADS 17 AND 14 FROM THE 1ST L1NER TO THE 2ND (PANEL).
L1NER LEADS 17 AND 14 AT 1.
PIN LEADS CO1 TO 4 AND CO DETECTOR AT 5, THEN RUN FWD TO THE STD
V/B CLOSET AT 4 AND LEAVE FOR V/B CO DETECTOR.
PIN LEADS DND1 AND 2 TO THE TOP OF THE STD V/B CLOSET AT 3 AND LEAVE.
L1NER LEADS 17 AND 14 DOWN TO THE 1ST L1NER.
PIN LEADS 17 AND 14 DOWN TO 5, THEN PIN ON DIVISOR OF L1NER TO 8,
THEN OVER TO 10, THEN AFT TO 13, THEN INBOARD TO 14.

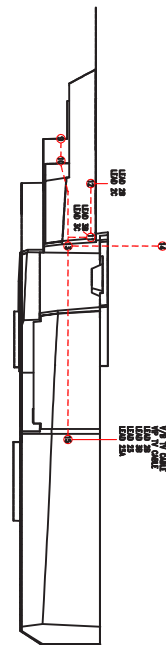
5827-70, HARBOR LIGHT, 10071. THEN RUN PND TO 11, THEN TO THE PORT V-BERTH RECEIPT# AT 12. THEN RUN PND TO 10, THEN RUN PND TO 11, THEN START LEAD 2C AT THE PORT V-BERTH RECEIPT# AT 12 WITH LEAD 2B THEN RUN PND TO 13, THEN PND TO 10, THEN OVER TO 8 THEN TO THE STBD V-BERTH RECEIPT# AT 12. THEN RUN PND TO 10, THEN RUN PND TO 11, THEN START LEAD 2D AT THE STBD V-BERTH RECEIPT# AT 7 WITH LEAD 2C. THEN RUN PND THEN UP TO THE V-BERTH V RECEIPT# AT 3. THEN RUN PND TO 10, THEN START LEAD 2E AT THE V-BERTH V RECEIPT# AT 3 WITH LEAD 2D. THEN RUN AFT TO 20 OF THE WY CASE# AT 1 AND LEAVE.

START LEAD 38 AT 15, LEAVE BRT, THEN RUN FWD TO 11, THEN TO THE PORT HEAD RECEPTACLE AT 10, THEN RUN FWD TO 16, THEN RUN FWD TO 10, THEN OPEN B, THEN RUN UP TO 5, THEN LEFT TO THE STEAD HEAD RECEPTACLE AT 2, START LEAD 30 AT THE STEAD HEAD RECEPTACLE WITH LEAD 30, THEN RUN AT TO THE VP RECEPTACLE AT 5, START LEAD 38 AT THE VP RECEPTACLE AT 5 WITH LEAD 30, THEN RUN TO THE START LEAD 38 AT THE VP RECEPTACLE AT 5 WITH LEAD 30, THEN RUN TO THE VP RECEPTACLE.

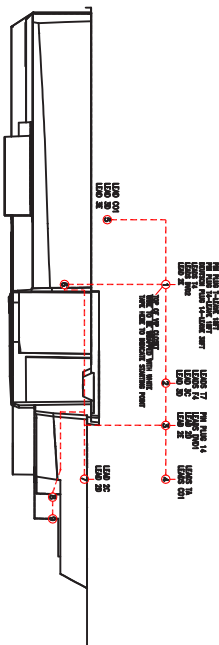
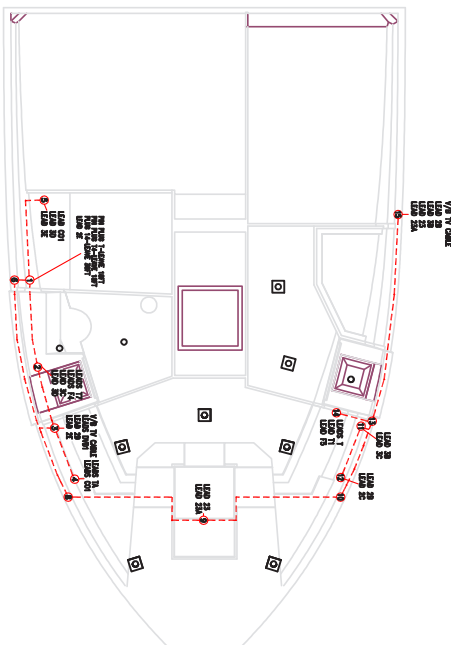
6897771 (110V) / 6897772 (220V or 110V) HARN:PVD AIR CONDITIONING JUMPEES
START LEADS 23 AND 23A AT 9, LEAVE AFT. THEN RUN OVER TO 10, THEN AFT TO 11

6980745 HARNETFD LINER TV ANT CABLES
START V/B TWANTENNA CABLE AT 15, LEAVE 5FT. RUN FWD TO 10.
THEN OVER TO 8, THEN RUN UP TO V/B TV AT 3 AND LEAVE V/B TV CABLE.

NOTES:
1. KEEP ANTENNA CABLE SEPARATE FROM AC WIRES.



PORT SIDE



STBD SIDE

[illegible]

CARVER

5287764 HARRISALON LNER FORT
START PIN PLUGS F6 AND T6 AT 9. THEN RUN:
LEADS 2 FWD TO 11.
LEADS F6 TO THE GALLEY FAN SWITCH,
LEADS MECH. W, AND DVD FWD TO 12, THEN INBOARD TO 13.
LEADS T6, T6A, AND T6B FWD TO 12, THEN INBOARD TO 13.
START SOCKET PLUG SPEAK AT 8, THEN RUN SPEAKER LEADS FWD
THEN INBOARD TO 13.

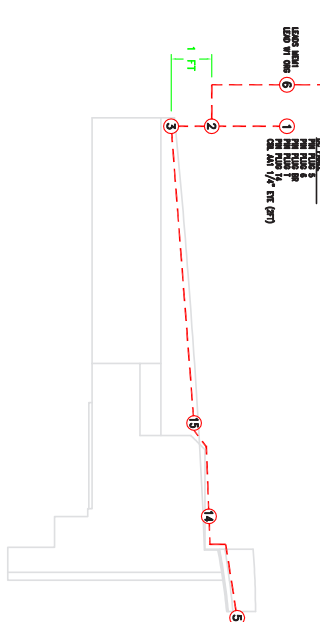
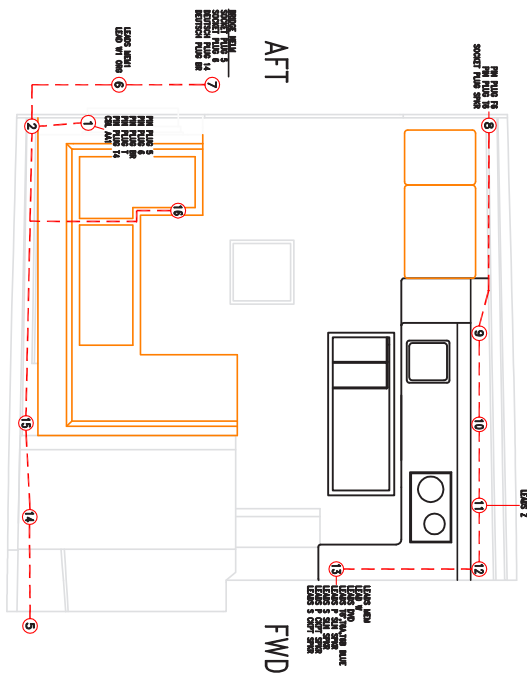
588776-000/0807751, PULSTAK AT MAIN DISTRIBUTION POINT.
#11-SHORE 1 MAIN-OUTBOARD TO 12, THEN AT 5, THRU BOTTOM OF LINER.
#12-GENERATOR 1 MAIN-OUTBOARD TO 12, THEN AT 5, THRU BOTTOM OF LINER.
#2-RECEPFACTS 1 -OUTBOARD TO 12, THEN AT 7,
#3-RECEPFACTS 2 -OUTBOARD TO 12, THEN AT 7,
#4-RECEPFACTS 3 -OUTBOARD TO 12, THEN AT 7, AND LEAVE.
#5-WATER HEATER-OUTBOARD TO 12, THEN AT 5, THRU BOTTOM OF LINER.
#6-ENGINE/ACCESSORY BATTERY CHARGER-OUTBOARD TO 12, THEN AT 5, THRU
#7-BATTERY-OUTBOARD TO 12, THEN AT 5, THRU BOTTOM OF LINER.
#10-MICROWAVE-OUTBOARD TO 12, THEN AT 10.
#11-THRUSTER BATTERY CHARGER (THRUSTER 5 or 8 or JOYSTICK=7)-OUTBOARD TO 12,
#12-HEATER-OUTBOARD TO 12, THEN AT 5, THRU BOTTOM OF LINER.
#13-ONE COOLER (COOLER 7)-OUTBOARD TO 12, THEN THRU BOTTOM OF LINER.
#18-DRINKS BUS-OUTBOARD TO 12, THEN AT 7, THRU BOTTOM OF LINER.
#20-SHORE 2 MAIN-OUTBOARD TO 12, THEN AT 5, THRU BOTTOM OF LINER.
#21-4/C WATER PUMP (4-C-SOUND)-DOWN THRU BOTTOM OF LINER.
#22-4/C WATER PUMP (4-C-MOCHER) or SOUND-DOWN THRU BOTTOM OF LINER.
#23-SLOW A/C UNIT (4-C-SOUND)-DOWN THRU BOTTOM OF LINER.
#24-SLOW A/C UNIT (4-C-SOUND)-DOWN THRU BOTTOM OF LINER.

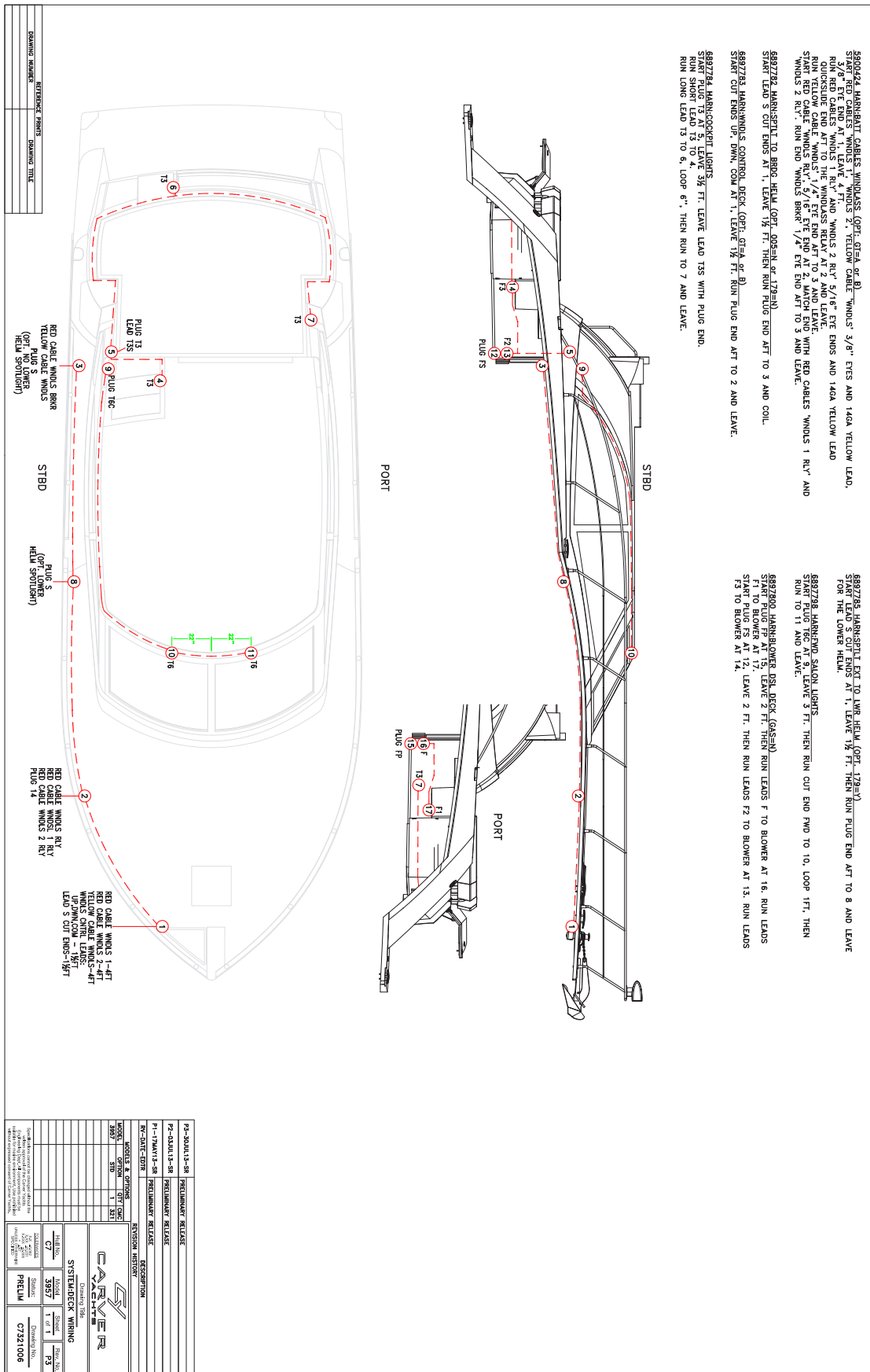
58987720, HARBANSON, LINDA AC, JUMPERS
#2A-FWD GALLEY REC TO REFRIGERATOR REC-START AT FWD GALLEY RECEPTACLE AT 10.
THEN RUN TO THE REFRIGERATOR RECEPTACLE AT 11.
#2F-FWD DINETTE REC TO AFT DINETTE REC-START AT FWD DINETTE RECEPTACLE AT 15.
THEN RUN TO THE AFT DINETTE RECEPTACLE AT 16.
#3A-AFT GALLEY REC TO TV REC-START AT AFT GALLEY RECEPTACLE AT 9, THEN RUN
FWD TO 12, THEN TO THE TV RECEPTACLE.

5800417 HANDBUILT CBR. WINDMILL POWER (OUT. 07-5-95) B)
STAIR AND CABLE WINDMILL BRIDGE END AT 1. LEAVE 2/3 FT. RUN "WINDMILL RLY" END
OUTBOARD TO 5. THEN FWD TO 5 AND LEAVE.
STAIR YELLOW CABLE "WINDMILL" 3/8" EYE END AT 5. LEAVE 2/3 FT THRU BOTTOM OF
LINER. RUN OTHER END FWD TO 5 AND LEAVE.

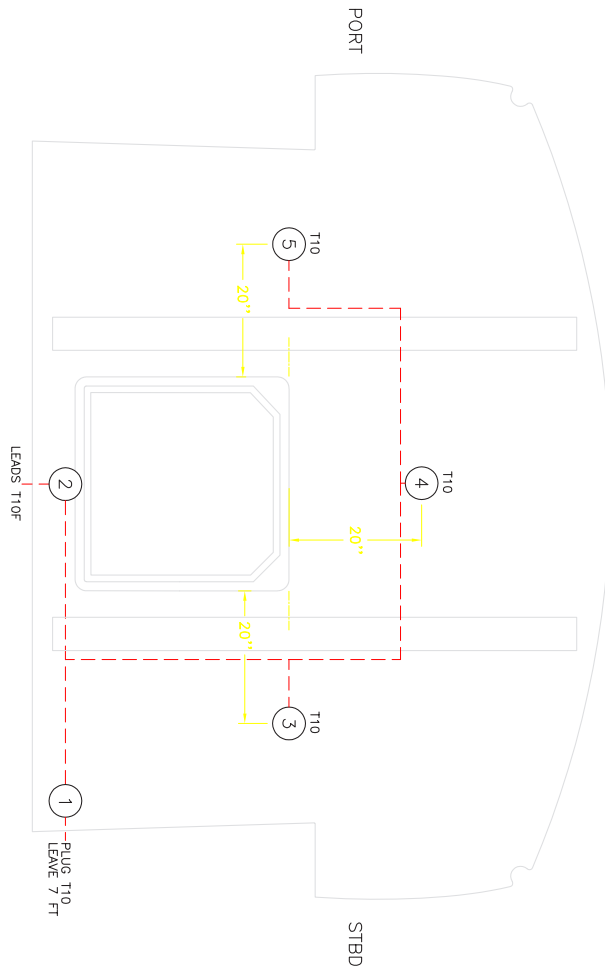
5887262 HARN:LYR HLM SUPPLY 3852 (DPT_008=7)
START SOCKET PLUGS 5A, 6A, BR, 14A, PIN PLUGS 12A, TAB, DEF, AND
CABLE LYR HLM AND LYR BND AT 14, LEAVE 3 FT. THEN RUN:
PIN PLUGS 5A, 6A AND BR "Y" END AFT TO 3, THEN UP TO 1.
"Y" ENDS OF PLUGS 12 AND TAB AFT TO 3, FROM 3 THEY WILL RUN UP TO BRIDGE.
CABLES LYR HLM AND LYR BND AFT TO 3, THEN THROUGH LINEN TO 4.
"Y" END OF PLUG 14 AND LEADS DEF FND TO 5.

HARN1WR HELM VLY AUX BRKR (OPT. ENGINE=914 or 9R1)
START PIN PLUG E-STOP AT 7, MATCH PLUG WITH PLUGS 5 & 6. RUN CUT ENDS
AUX P AND AUX S TO 2, THEN FWD TO LOWER HELM AT 15.

[illegible]



VIEW IS OF THE UNDERSIDE OF CKPT FLOOR
AFT



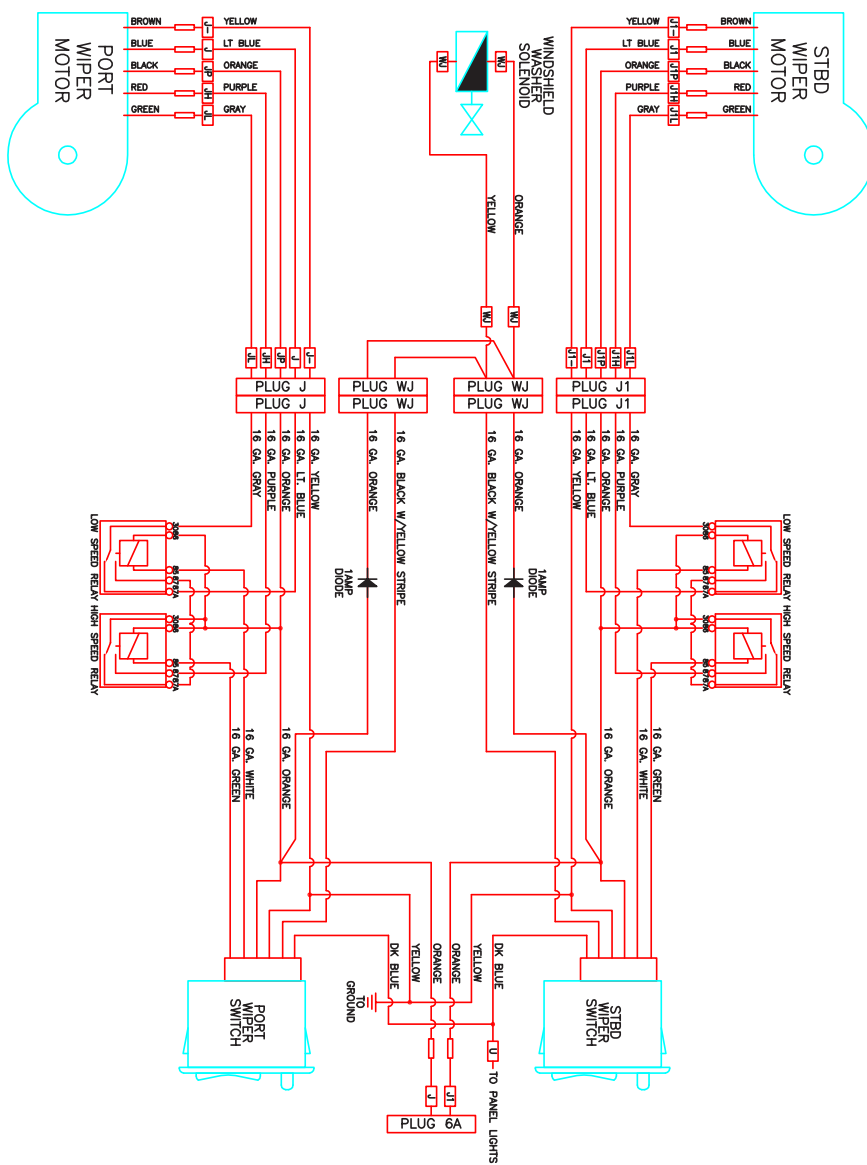
6897789, ENGINE ROOM LIGHTS

START PLUG, T10 AT 1, LEAVE 7 FT. THEN RUN LEAD T10F INBOARD TO 2 AND LEAVE.
RUN LEAD T10 AFT TO 3, LOOP 6", THEN TO 4, LOOP 6", THEN TO 5 AND LEAVE.

NOTES:

- 1) THE AFT ENGINE ROOM LIGHT IS LOCATED ON THE CENTER LINE, AFT OF THE SMALL HATCH.
- 2) WRAP THE WIRE IN WHITE WIRE LOOM AND USE THE PLASTIC "P" CLIPS TO SECURE THE WIRE TO THE CKPT FLOOR HATCH.

P2-10JUL13-SR		PRELIMINARY RELEASE																																													
P1-03JUL13-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>3957</td> <td>STD</td> <td>1</td> <td>321</td> </tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				MODEL	OPTION	QTY	CMC	3957	STD	1	321																																				
MODEL	OPTION	QTY	CMC																																												
3957	STD	1	321																																												
<table border="1"> <tr> <td colspan="2"> Carver Yachts Drawing Title SYSTEM:ENGINE ROOM LIGHT WIRING </td> <td> Hull No. C7 </td> <td> Model 3957 </td> <td> Sheet 1 of 1 </td> <td> Rev. No. P2 </td> </tr> <tr> <td colspan="2"> Carver Yachts </td> <td> Status: PRELIM </td> <td colspan="3"> Drawing No. C7321007 </td> </tr> </table>				Carver Yachts Drawing Title SYSTEM:ENGINE ROOM LIGHT WIRING		Hull No. C7	Model 3957	Sheet 1 of 1	Rev. No. P2	Carver Yachts		Status: PRELIM	Drawing No. C7321007																																		
Carver Yachts Drawing Title SYSTEM:ENGINE ROOM LIGHT WIRING		Hull No. C7	Model 3957	Sheet 1 of 1	Rev. No. P2																																										
Carver Yachts		Status: PRELIM	Drawing No. C7321007																																												
Specifications cannot be changed without the approval of Carver Yachts. All components must be suitable for marine environment. Use prohibited without expressed consent of Carver Yachts.																																															

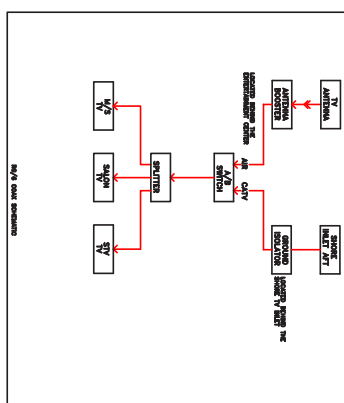
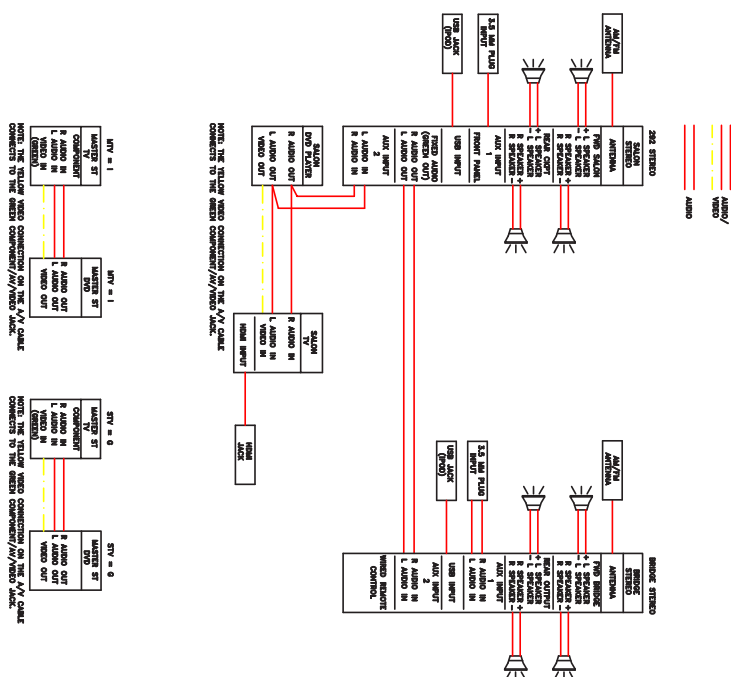


PARTS LIST		PART DESCRIPTION
ITEM	QTY	PART NUMBER
1	2	7345631
		WIPE-MOTOR 12V IMTRA W38
2	1	7345642
		WIPE-SOLENOID VALVE
3	1	6887795
		HARN-WIPER/WASHER DECK C7
4	2	8960401
		SW-DELAY-WIPER-WASH
5	2	8960402
		HARN-DELAY-WIPER-WASH SW

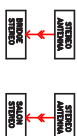
01-00JUL13-SR		FIRST ISSUE	
REV.-DATE-EDIR			
MODELS & OPTIONS			
MODEL	OPTION	QTY	CNC
3457	005-Y	1	533
Specifications cannot be changed without the written approval of the owner. Vehicle is suitable for marine environment. Use prohibited without enclosed consent of Carver Yachts.			
 CARVER YACHTS			
REVISION HISTORY			
Drawing Title SYSTEM:WIPER WIRING 3957			
HULL No. C7		Model 3957	
Issues: ORIG		Sheet 1 of 1	
Drawing No. C7321008		Rev. No. 1	
10/24/2013 XXX, XXXXX XXX, XXXXX USE 3957 OF 3958			

CARVER

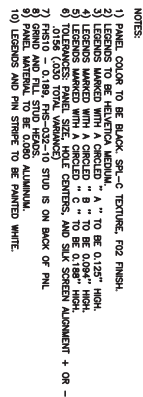


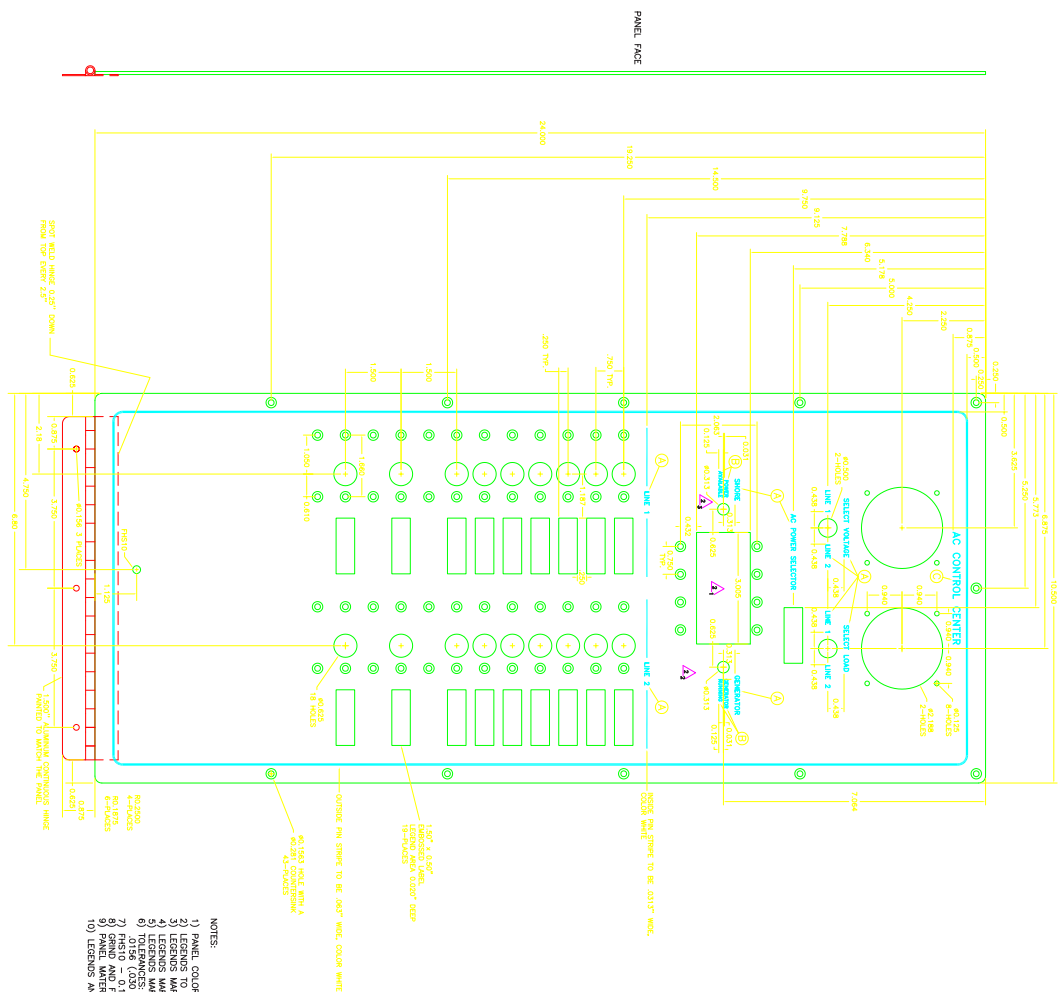


NOTE: EACH STEREO USES IT'S OWN WIRE ANTENNA. #6882425

[illegible]

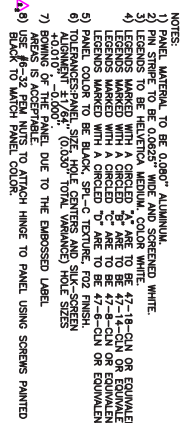
CY
CARVER

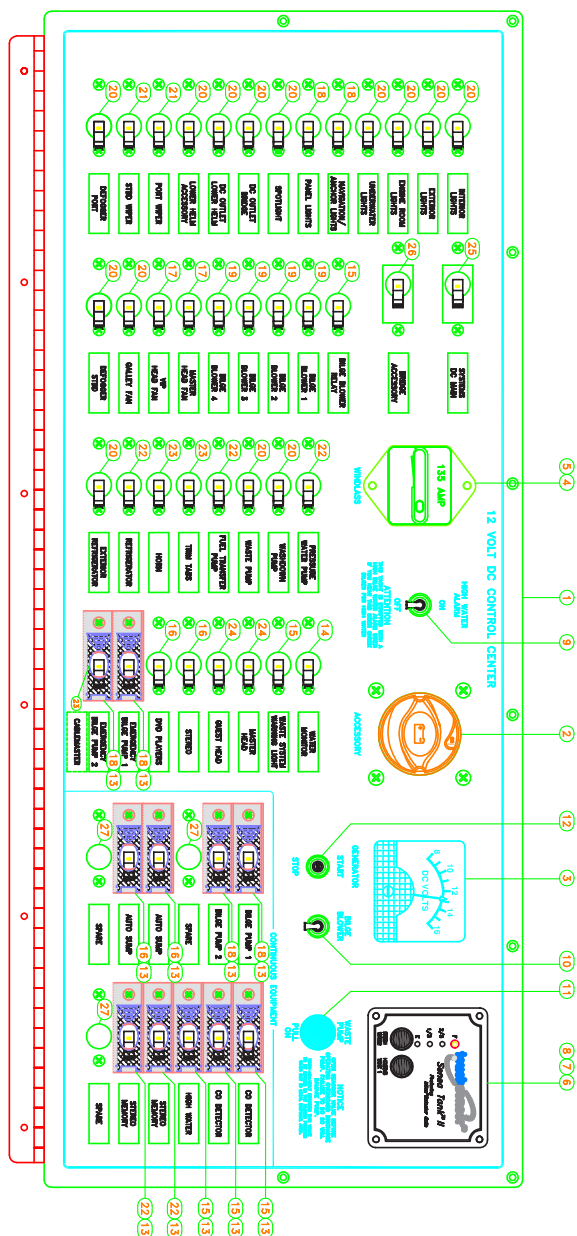
[illegible]



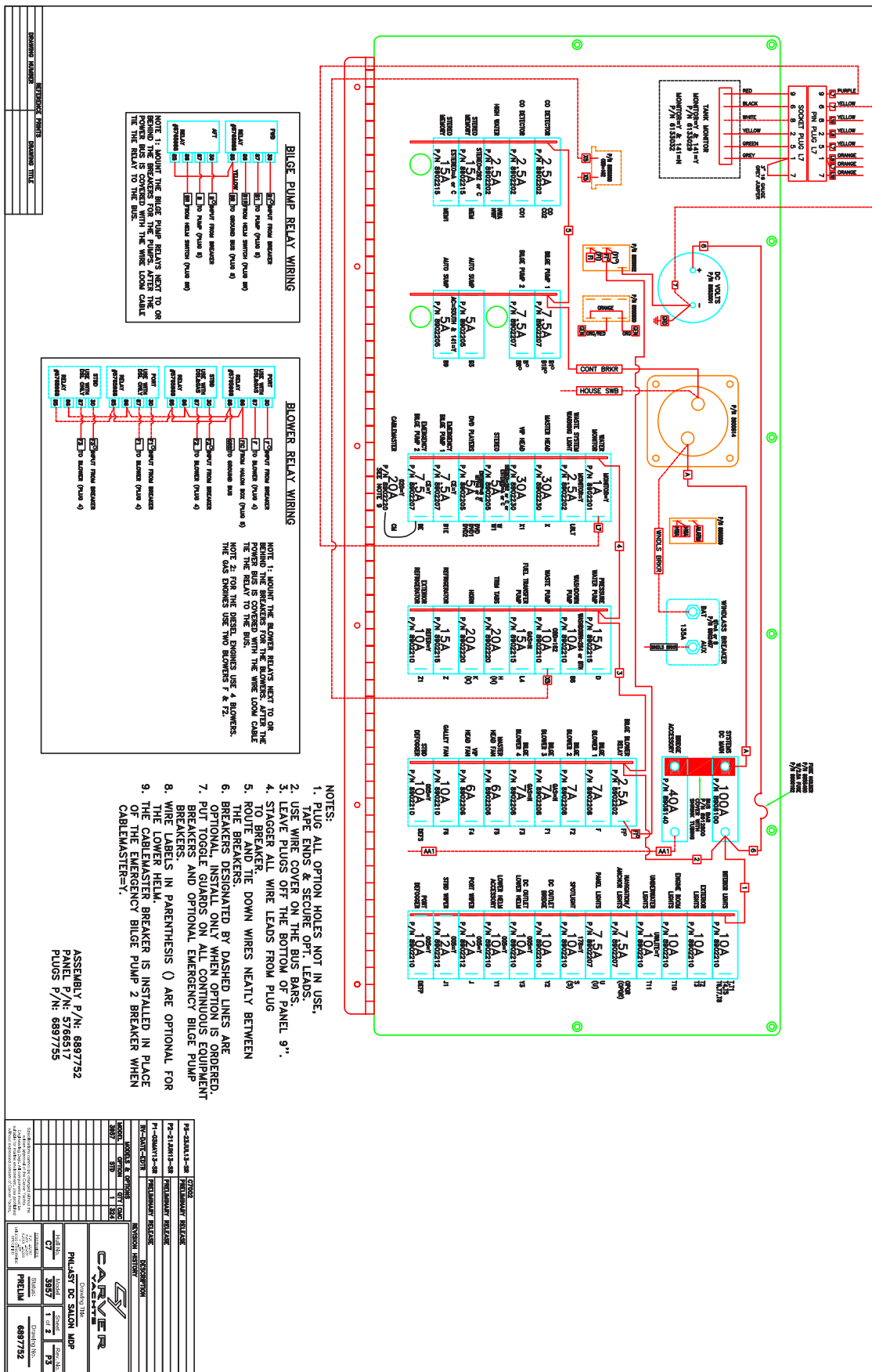
- 1) PANEL COLOR TO BE BLACK, SR-C TEXTURE, 702 FINISH.
- 2) LEADING TO BE HELVETICA MEDIUM.
- 3) LEADING MARKED WITH A CHECKED "A" TO BE 0.125" HIGH.
- 4) LEADING MARKED WITH A CHECKED "C" TO BE 0.1875" HIGH.
- 5) LEADING MARKED WITH A CHECKED "X" TO BE 0.1875" HIGH.
- 6) TOLERANCES: PANEL SIZE, HOLE CENTERS, AND SILK SCREEN SCREENING.
- 7) PARTS 6, 9, 10, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818

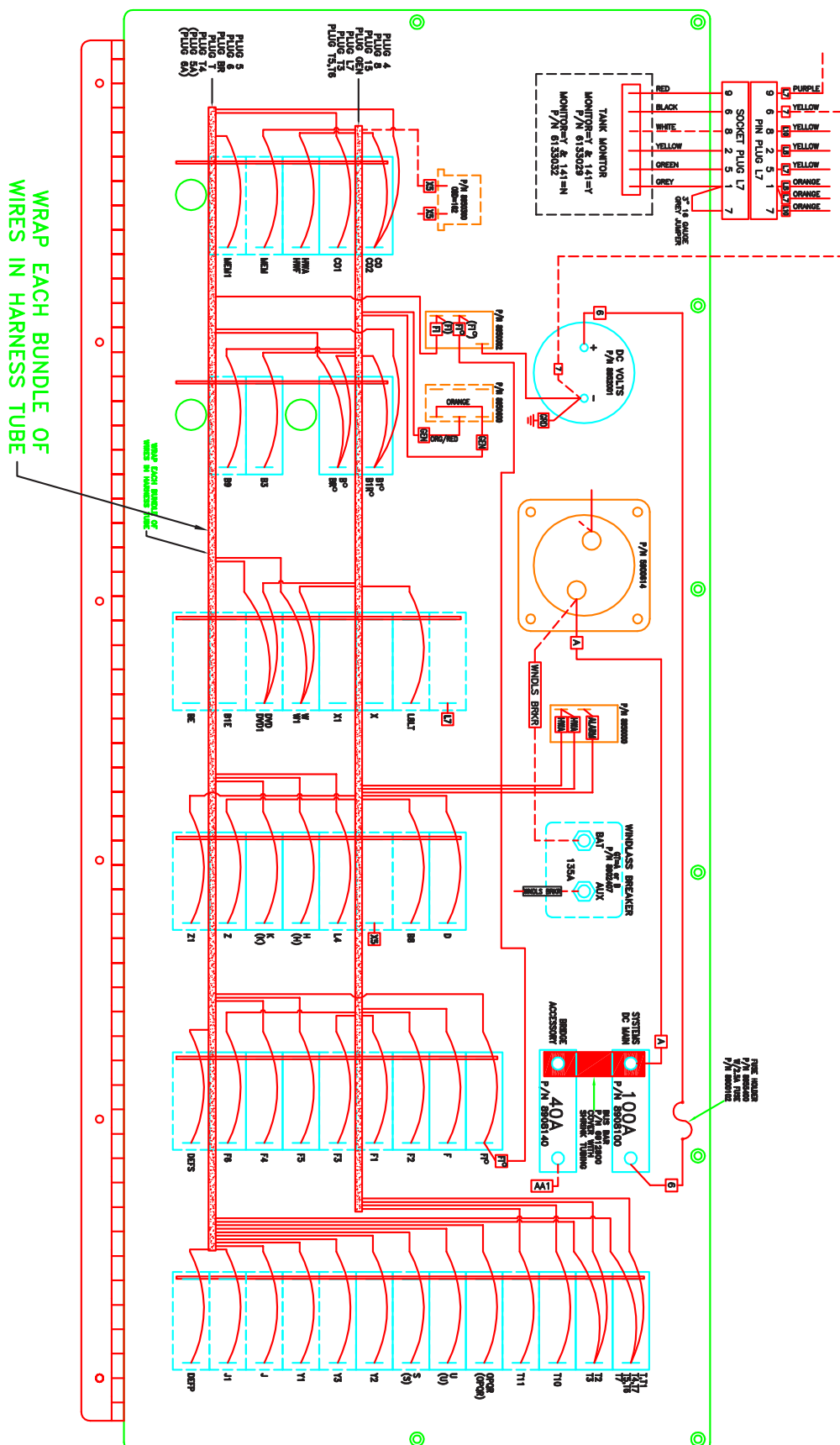
[illegible]

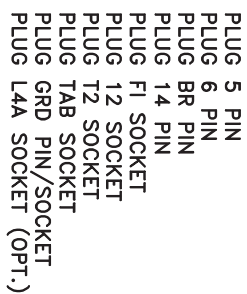
[illegible]



ITEM	OFF PART NUMBER	PART DESCRIPTION	STD	OPTIONS
1	000000	ASSEMBLY KIT FOR 000000	STD	
2	000001	VALVE-16 STD	STD	
3	000001	VALVE-16 STD	STD	
4	000001	VALVE-16 STD	STD	
5	000001	VALVE-16 STD	STD	
6	000001	VALVE-16 STD	STD	
7	000001	VALVE-16 STD	STD	
8	000001	VALVE-16 STD	STD	
9	000001	VALVE-16 STD	STD	
10	000001	VALVE-16 STD	STD	
11	000001	VALVE-16 STD	STD	
12	000001	VALVE-16 STD	STD	
13	000001	VALVE-16 STD	STD	
14	000001	VALVE-16 STD	STD	
15	000001	VALVE-16 STD	STD	
16	000001	VALVE-16 STD	STD	
17	000001	VALVE-16 STD	STD	
18	000001	VALVE-16 STD	STD	
19	000001	VALVE-16 STD	STD	
20	000001	VALVE-16 STD	STD	
21	000001	VALVE-16 STD	STD	
22	000001	VALVE-16 STD	STD	
23	000001	VALVE-16 STD	STD	
24	000001	VALVE-16 STD	STD	
25	000001	VALVE-16 STD	STD	
26	000001	VALVE-16 STD	STD	
27	000001	VALVE-16 STD	STD	
28	000001	VALVE-16 STD	STD	
29	000001	VALVE-16 STD	STD	
30	000001	VALVE-16 STD	STD	
31	000001	VALVE-16 STD	STD	
32	000001	VALVE-16 STD	STD	
33	000001	VALVE-16 STD	STD	
34	000001	VALVE-16 STD	STD	
35	000001	VALVE-16 STD	STD	
36	000001	VALVE-16 STD	STD	
37	000001	VALVE-16 STD	STD	
38	000001	VALVE-16 STD	STD	
39	000001	VALVE-16 STD	STD	
40	000001	VALVE-16 STD	STD	
41	000001	VALVE-16 STD	STD	
42	000001	VALVE-16 STD	STD	
43	000001	VALVE-16 STD	STD	
44	000001	VALVE-16 STD	STD	
45	000001	VALVE-16 STD	STD	
46	000001	VALVE-16 STD	STD	
47	000001	VALVE-16 STD	STD	
48	000001	VALVE-16 STD	STD	
49	000001	VALVE-16 STD	STD	
50	000001	VALVE-16 STD	STD	
51	000001	VALVE-16 STD	STD	
52	000001	VALVE-16 STD	STD	
53	000001	VALVE-16 STD	STD	
54	000001	VALVE-16 STD	STD	
55	000001	VALVE-16 STD	STD	
56	000001	VALVE-16 STD	STD	
57	000001	VALVE-16 STD	STD	
58	000001	VALVE-16 STD	STD	
59	000001	VALVE-16 STD	STD	
60	000001	VALVE-16 STD	STD	
61	000001	VALVE-16 STD	STD	
62	000001	VALVE-16 STD	STD	
63	000001	VALVE-16 STD	STD	
64	000001	VALVE-16 STD	STD	
65	000001	VALVE-16 STD	STD	
66	000001	VALVE-16 STD	STD	
67	000001	VALVE-16 STD	STD	
68	000001	VALVE-16 STD	STD	
69	000001	VALVE-16 STD	STD	
70	000001	VALVE-16 STD	STD	
71	000001	VALVE-16 STD	STD	
72	000001	VALVE-16 STD	STD	
73	000001	VALVE-16 STD	STD	
74	000001	VALVE-16 STD	STD	
75	000001	VALVE-16 STD	STD	
76	000001	VALVE-16 STD	STD	
77	000001	VALVE-16 STD	STD	
78	000001	VALVE-16 STD	STD	
79	000001	VALVE-16 STD	STD	
80	000001	VALVE-16 STD	STD	
81	000001	VALVE-16 STD	STD	
82	000001	VALVE-16 STD	STD	
83	000001	VALVE-16 STD	STD	
84	000001	VALVE-16 STD	STD	
85	000001	VALVE-16 STD	STD	
86	000001	VALVE-16 STD	STD	
87	000001	VALVE-16 STD	STD	
88	000001	VALVE-16 STD	STD	
89	000001	VALVE-16 STD	STD	
90	000001	VALVE-16 STD	STD	



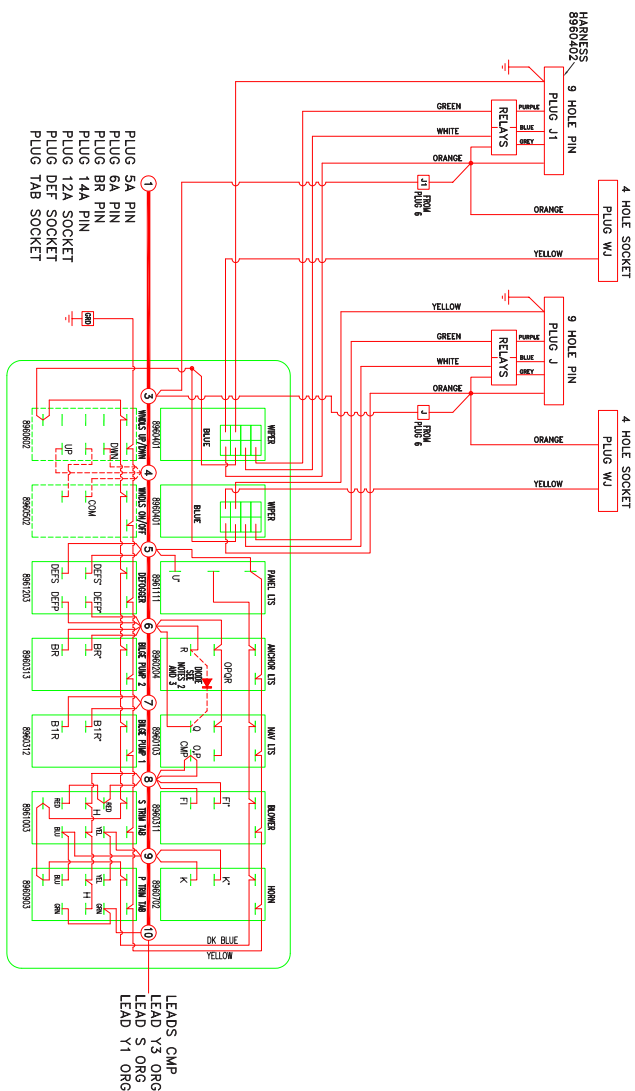


The Carver logo, featuring a stylized 'C' and 'Y' symbol above the word 'CARVER' in a bold, sans-serif font.

- NOTES:
- 1) DASHED LINES INDICATE OPTIONAL PARTS. INSTALL ONLY WHEN OPTION IS ORDERED.
 - 2) DIODE IS USED WHEN:
ARCH=N (NO ELECTRONICS MOUNTING)
OR
CNS=N118 or 119 (BMMI TOP or FULL CANVAS)
3) USE DIODE P/N 8971701 AND COVER WITH HEAT SHRINK TUBING.

PANEL ASSEMBLY P/N: 6897766
PANEL P/N: 5766506
HARNES P/N: 6897767

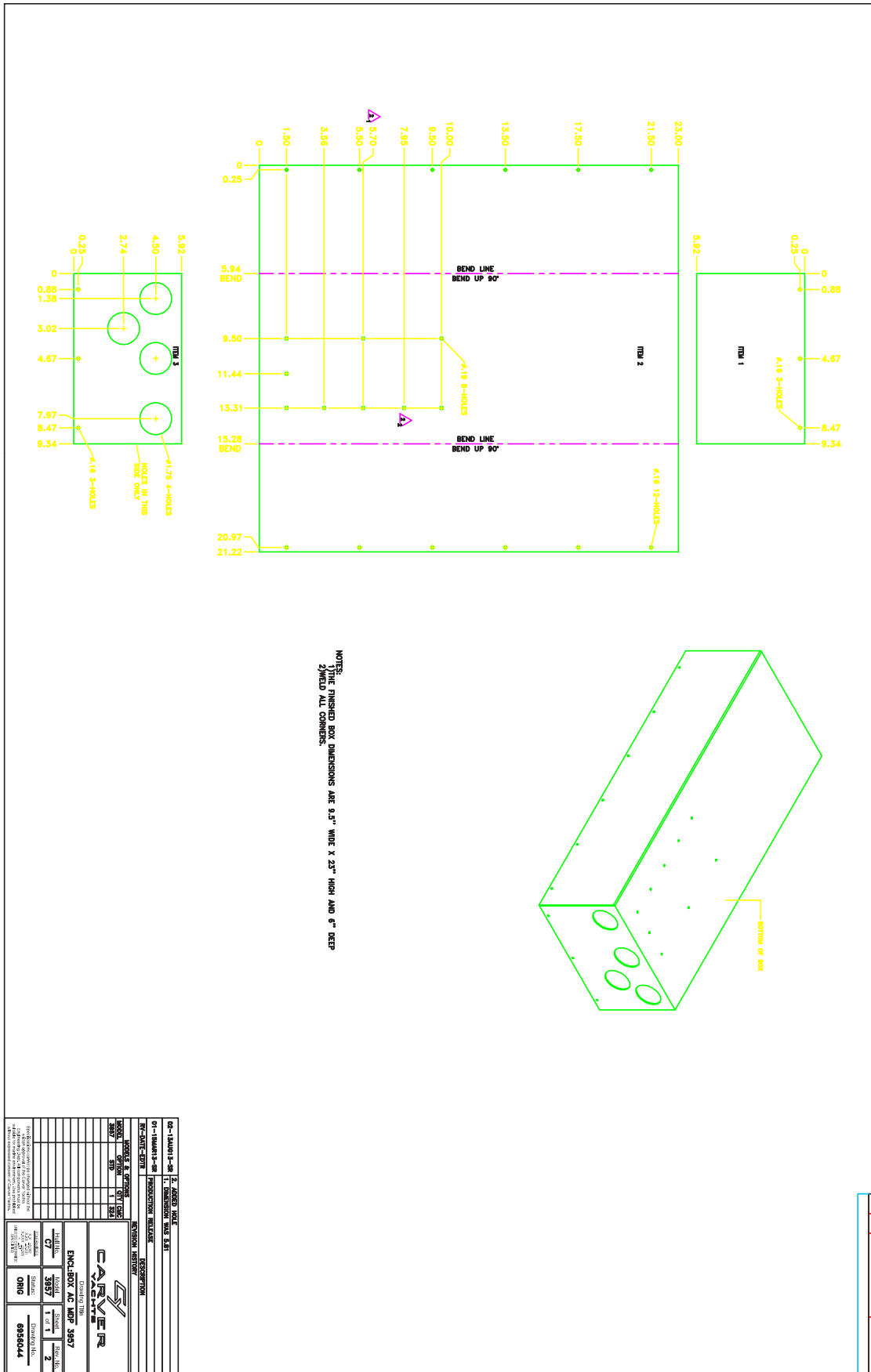
187187

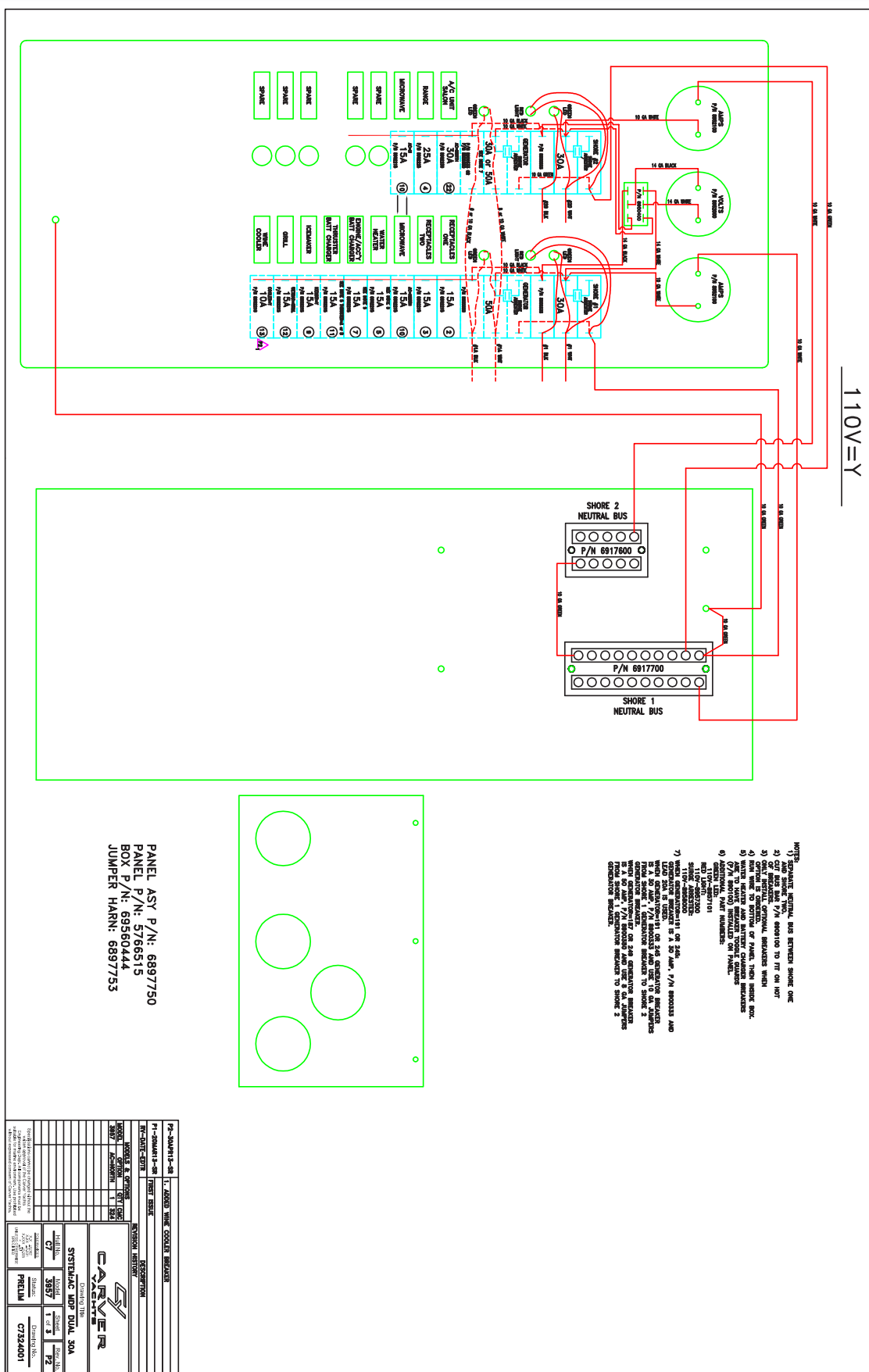


- NOTES:
- 1) DASHED LINES INDICATE OPTIONAL PARTS. INSTALL ONLY WHEN OPTION IS ORDERED.
 - 2) DIODE IS USED WHEN:
OR CH=N (NO ELECTRONICS MOUNTING)
OR C/N=S+118 or 119 (BMINI TOP or FULL CANVAS)
OR 11=Y (HARDTOP=Y)
 - 3) USE DIODE P/N 8971701 AND COVER WITH HEAT SHRINK TUBING.

PANEL ASSEMBLY P/N: 6897791
PANEL P/N: 5766511
HARNES P/N: 6897792

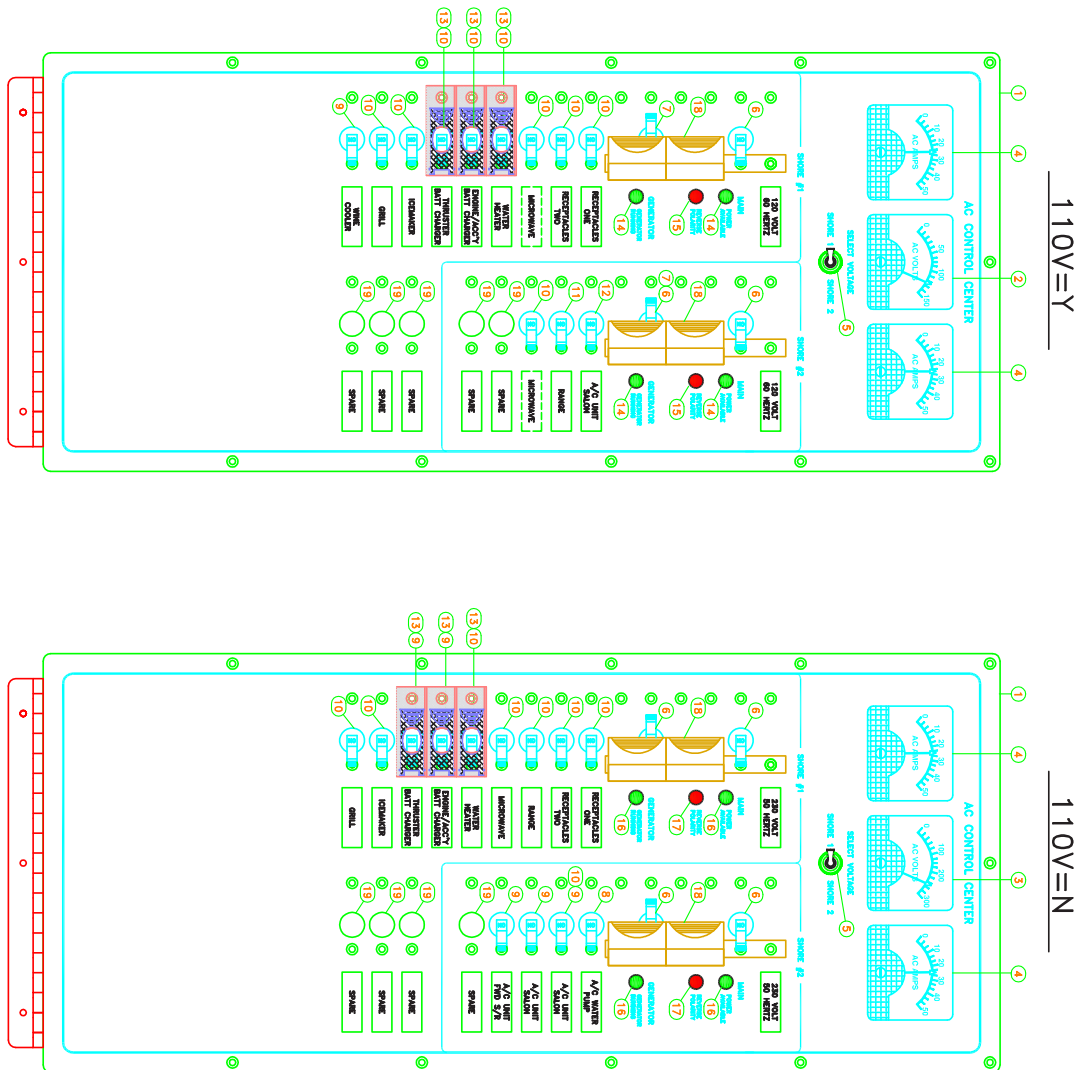
[illegible]

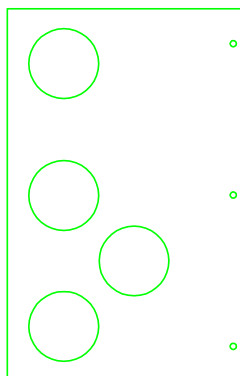




CARVER

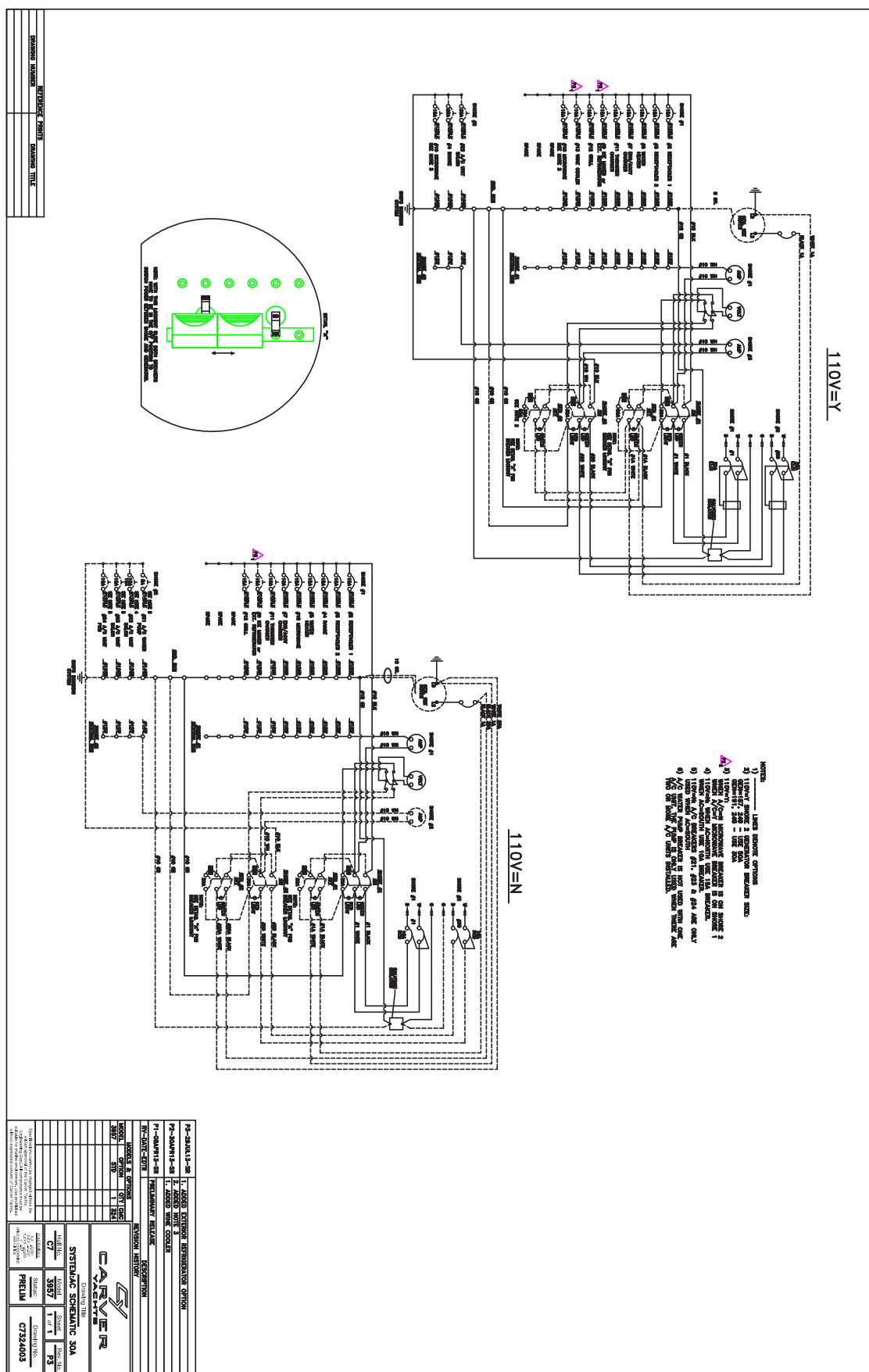


[illegible]

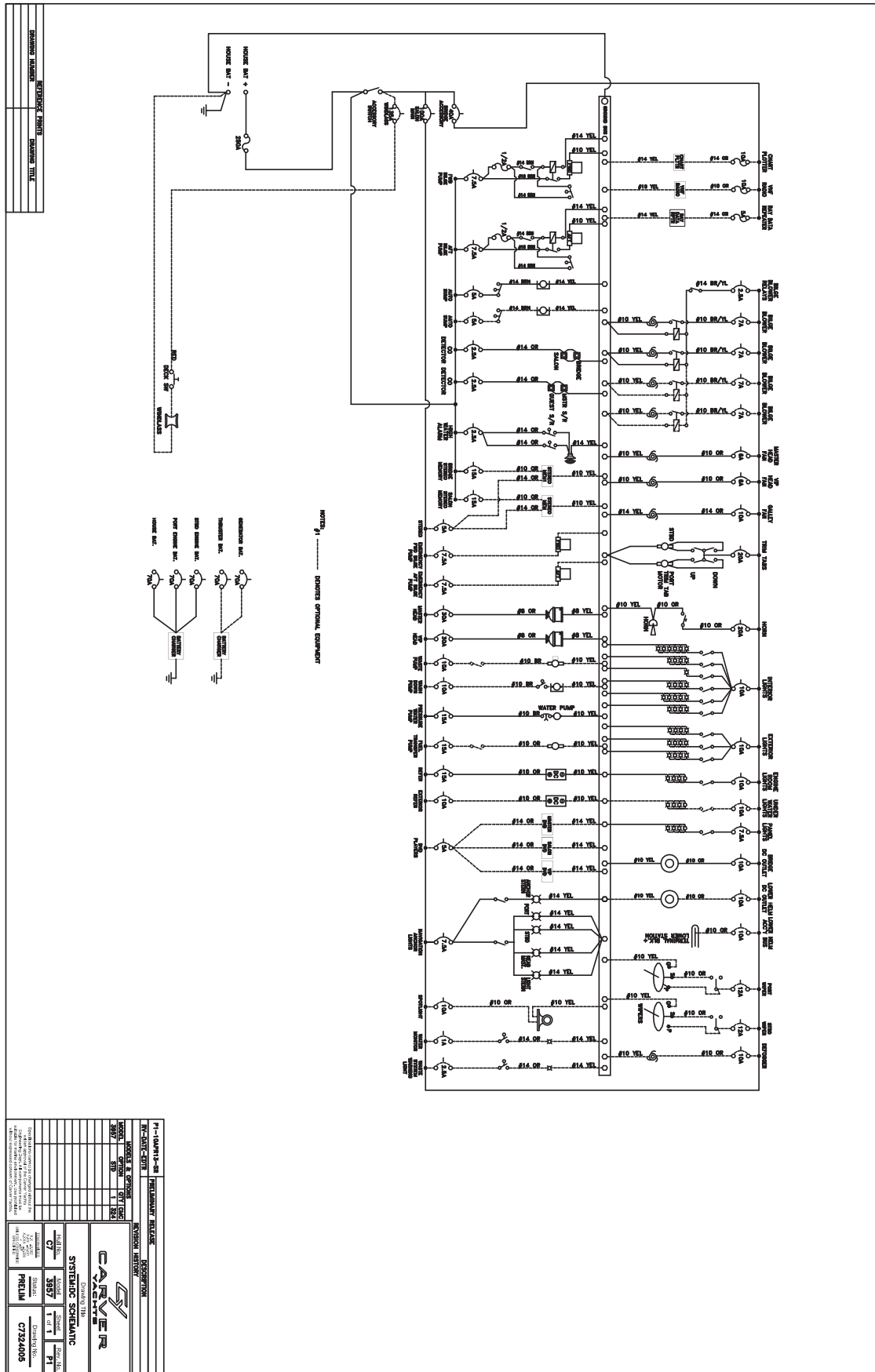


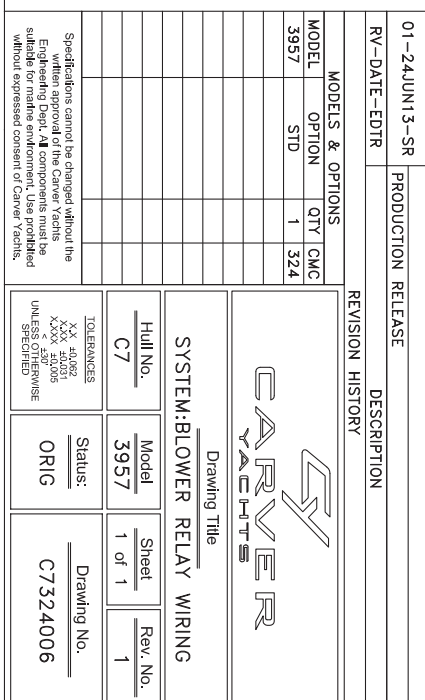
PANEL ASY P/N: 6897751
PANEL P/N: 5766516
BOX P/N: 6956044
JUMPER HARN: 6897754

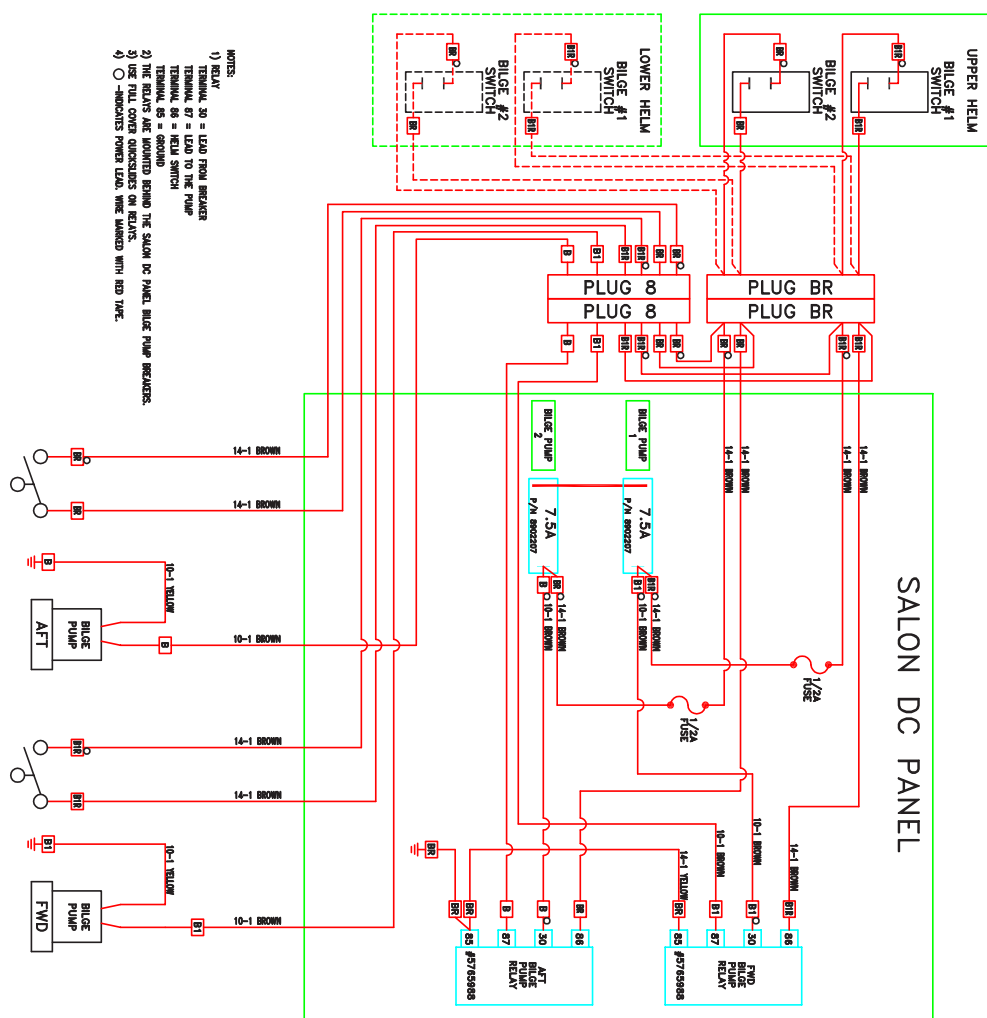
[illegible]



The Carver logo, featuring a stylized 'C' and 'Y' symbol above the word 'CARVER' in a bold, sans-serif font.3957 • C7 08/2013







01-24JUN13-SR		PRODUCTION RELEASE	
RV-DATE-EDTR		DESCRIPTION	
REVISION HISTORY			
 CARVER YACHTS			
<u>Drawing Title</u> SYSTEM:BILGE PUMP RELAY WIRING <u>Hull No.</u> C7 <u>Model</u> 3957 <u>Sheet</u> 1 of 1 <u>Rev. No.</u> 1			
<u>Status:</u> ORIG <u>Drawing No.</u> C7324007			
TOLERANCES X.X .4002 X.XX .030 X.XXX .015 UNLESS OTHERWISE SPECIFIED			
Specifications cannot be changed without the written approval of the Carver Yachts Engineering Dept. All components must be suitable for marine application. Use prohibited without expressed consent of Carver Yachts.			