

## 420 Model Commissioning Checklist

Dealer: \_\_\_\_\_

Engine Model: \_\_\_\_\_

Model: \_\_\_\_\_

Engine \_\_\_\_\_

Serial \_\_\_\_\_

Number(s): \_\_\_\_\_

HIN: \_\_\_\_\_

\_\_\_\_\_

### 1. Administrative Review

- ☐ Bill of Sale
- ☐ Registration(s): Boston Whaler, Mercury, trailer, state, federal, TDS, Sirius, WX, Raymarine
- ☐ Review owner's manuals: Boston Whaler, Mercury, trailer, components, TDS, generator, Raymarine
- ☐ Review warranties: Boston Whaler, Mercury, trailer, components, generator, Raymarine
- ☐ Review maintenance schedules: Boston Whaler, Mercury, components, generator
- Other
- ☐ Review and explain all warning/precaution placards
- ☐ Review ethanol fuel precautions
- ☐ Review California Proposition 65 Notification (California residents only)
- ☐ Introduce dealer sales, parts and service personnel

### 2. Pre-launch Review

- |                                                                       |                                                                    |
|-----------------------------------------------------------------------|--------------------------------------------------------------------|
| <input type="checkbox"/> A/C filter service                           | <input type="checkbox"/> Generator fuel system                     |
| <input type="checkbox"/> Aft curtain operation                        | <input type="checkbox"/> Generator sea water filter service        |
| <input type="checkbox"/> Batteries, switches, ACR operation           | <input type="checkbox"/> Helm Seat cover and seating operation     |
| <input type="checkbox"/> Battery(ies); Mercury's AGM/CCA requirements | <input type="checkbox"/> Interior/exterior boat inspection         |
| <input type="checkbox"/> Bed operation                                | <input type="checkbox"/> Microwave/stove/coffee maker operation    |
| <input type="checkbox"/> Bomar/port light operation                   | <input type="checkbox"/> Mid-berth operation                       |
| <input type="checkbox"/> Cabin/cockpit lights operation               | <input type="checkbox"/> NAUTIC-ON* operation/system transfer      |
| <input type="checkbox"/> Cockpit grill operation                      | <input type="checkbox"/> NAUTIC-ON* battery sensor(s)              |
| <input type="checkbox"/> Cockpit foldout bench seat operation         | <input type="checkbox"/> Navigation/anchor lights                  |
| <input type="checkbox"/> Cockpit table/storage operation              | <input type="checkbox"/> Pull transport pin on fire extinguisher   |
| <input type="checkbox"/> Drain plugs placements                       | <input type="checkbox"/> Refrigerator/freezer operation            |
| <input type="checkbox"/> TV/DVD player operation                      | <input type="checkbox"/> Safety lanyard/emergency cut-off switch   |
| <input type="checkbox"/> Engine oil level check                       | <input type="checkbox"/> Seating locations                         |
| <input type="checkbox"/> Engine flushing procedures                   | <input type="checkbox"/> Shore power/battery charger/ACR operation |
| <input type="checkbox"/> Engine fuel/water separator service          | <input type="checkbox"/> Starboard settee operation                |
| <input type="checkbox"/> Fire Extinguisher/fire suppression operation | <input type="checkbox"/> Stereo/MP3/satellite radio operation      |
| <input type="checkbox"/> Fueling procedures                           | <input type="checkbox"/> Stern seat operation                      |

### 3. Sea Trial Orientation

<input type="checkbox"/>	Air conditioning operation
<input type="checkbox"/>	Autopilot operation
<input type="checkbox"/>	Bilge pumps
<input type="checkbox"/>	Bow thruster operation
<input type="checkbox"/>	Circuit breakers
<input type="checkbox"/>	CO <sup>2</sup> monitor operation
<input type="checkbox"/>	Corrosion protection (chemical/electronic)
<input type="checkbox"/>	Engine trim and tilt operation
<input type="checkbox"/>	Fishbox pumpouts
<input type="checkbox"/>	Fishfinder/GPS/chartplotter operation
<input type="checkbox"/>	Fresh water operation
<input type="checkbox"/>	Generator operation
<input type="checkbox"/>	Gauge function and explanation
<input type="checkbox"/>	Head system operation
<input type="checkbox"/>	Water heater operation
<input type="checkbox"/>	Joystick piloting operation
<input type="checkbox"/>	Livewell operation

<input type="checkbox"/>	Main distribution panel operation
<input type="checkbox"/>	NAUTIC-ON* app operation
<input type="checkbox"/>	Onboard alarms and interpretations
<input type="checkbox"/>	Outrigger operation
<input type="checkbox"/>	Overboard discharge procedures/regulations
<input type="checkbox"/>	Radar operation
<input type="checkbox"/>	Raw water operation
<input type="checkbox"/>	Satellite weather system operation
<input type="checkbox"/>	Sea cocks
<input type="checkbox"/>	Spotlight operation
<input type="checkbox"/>	Starting procedures
<input type="checkbox"/>	Swim ladder operation
<input type="checkbox"/>	Trim tab operation
<input type="checkbox"/>	VHF operation
<input type="checkbox"/>	Windlass operation
<input type="checkbox"/>	Windshield defogger operation
<input type="checkbox"/>	Windshield washer/wiper operation

*\*If equipped.*

### 4. Boston Whaler Owner's Club

Email address:

\_\_\_\_\_

I am satisfied that the dealership's representative has fulfilled his/her responsibilities by thoroughly explaining the systems, equipment, features, and options mentioned above.

\_\_\_\_\_  
Customer Name (print)

\_\_\_\_\_  
Dealer Representative (print)

\_\_\_\_\_  
Customer Signature

\_\_\_\_\_  
Dealer Representative Signature

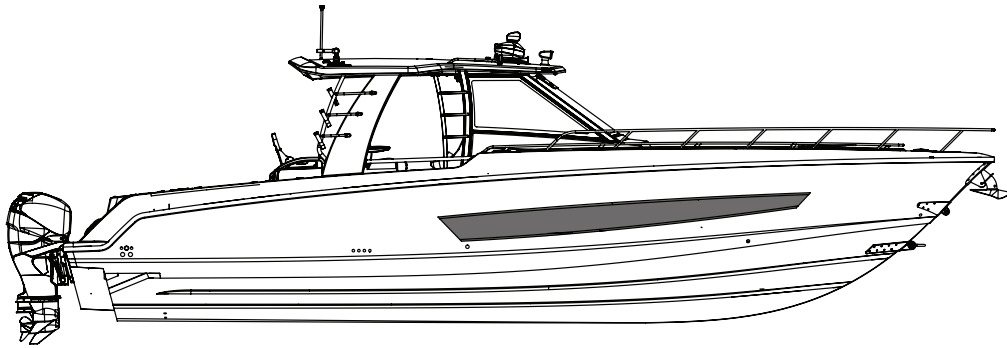
\_\_\_\_\_  
Date

\_\_\_\_\_  
Date



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# 420 Outrage



**The mission of Boston Whaler® is to provide consumers with the safest, highest quality, most durable boats in the world.**

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## WARNING

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

Welcome to the Boston Whaler family! Congratulations on your purchase of a Boston Whaler boat.

For over 50 years now, Boston Whaler has been represented by a select group of the best dealers in the boating industry. Boston Whaler depends on this extremely qualified network of dealers to provide you, our customer, with a truly exceptional boating experience.

Should you have any questions or concerns regarding your boat, please don't hesitate to contact your selling dealer. They will be more than happy to provide you with all the information and assistance that you require.

Information and assistance is also available at our corporate website, [www.bostonwhaler.com](http://www.bostonwhaler.com). On our website you will find information on our entire lineup of Unsinkable Legends, as well as a collection of customer resources including parts diagrams, maintenance tips and frequently asked questions. In addition, you can sign up to receive future issues of Boston Whaler's lifestyle magazine, *Whaler*.

Since Boston Whaler's inception in 1958, we have been committed to providing customers with the safest, highest quality, most durable boats in the world. I am confident that you, as a Whaler owner, will also appreciate the quality and pride that is built into every Boston Whaler boat.

From all of us here at Whaler, thank you for purchasing one of our boats. May it bring you many years of boating enjoyment.



*1958, The legend is born  
as company founder Dick Fisher  
demonstrates a Boston Whaler's  
total unsinkability.*

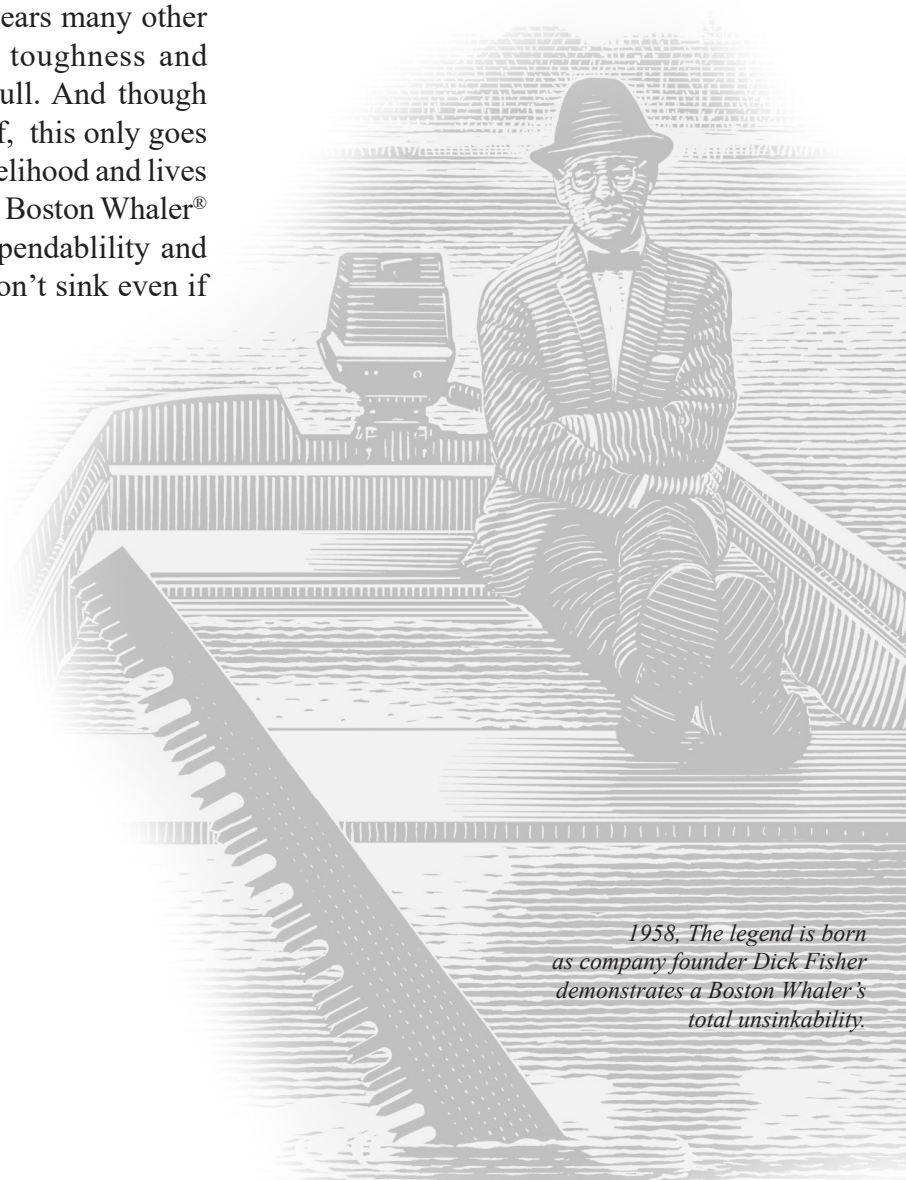
## HISTORY

In 1958, company founder Richard T. Fisher introduced the first Boston Whaler® boat in Braintree, Massachusetts. It featured two significant innovations: first, its twin sponson hull design produced superior stability and a remarkably dry ride; second, its unique foam core construction made the boat not only durable, but unsinkable as well.

Fisher took every opportunity to illustrate the unique characteristics of the Boston Whaler®. His most famous demonstration was captured in 1961, by *Life Magazine*. The series of photographs showed the boat underway, the boat being sawed in half and ultimately Fisher motoring away in the remaining half of the boat. And through the years many other demonstrations have proved the toughness and durability of the Boston Whaler hull. And though you may never cut your boat in half, this only goes to show one thing, people whose livelihood and lives depend on boats consistently choose Boston Whaler® because of their seaworthiness, dependability and the inherent safety of a hull that won't sink even if severely damaged.

Boston Whalers are built to last. For over 50 years Boston Whaler® has strived to make each model better, providing you with a safe and fun boating experience. That is the reason we offer a 10 year limited transferable warranty. It is also an excellent reason why you can trust the safety of your family and friends to a Boston Whaler®.

Richard T. Fisher was posthumously inducted into the National Marine Manufacturer's Association (NMMA) Hall of Fame on September 26, 1996 for accomplishments made in marine engineering and construction.



*1958, The legend is born  
as company founder Dick Fisher  
demonstrates a Boston Whaler's  
total unsinkability.*

PLEASE KEEP THIS OWNER'S MANUAL PACKET IN A SECURE PLACE, AND BE SURE TO HAND IT OVER TO THE NEW OWNER IF YOU SELL THE BOAT.

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## Section 3 • Systems & Components

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## Preface

This Owner's Manual has been written to provide specific information about your boat and it should be read carefully. Keep this booklet with the Manuals in the Owner's Manual Packet. The Owner's Manual Packet has been compiled to help you operate your boat with safety and pleasure. It contains details of the boat, the equipment supplied or fitted, it's systems and information on it's operation and maintenance. Please familiarize yourself with the boat and it's operation before using it. If this is your first boat, or you are changing to a type of boat you are not familiar with, for your own comfort and safety, please ensure that you obtain handling and operating experience before "assuming command" of your boat. Your Boston Whaler® dealer or local Yacht Club will be pleased to advise you of marine safety classes and safe boating classes in your area.

INFORMATION IN THIS PUBLICATION IS BASED ON THE LATEST PRODUCT SPECIFICATIONS AVAILABLE AT PRINTING. BOSTON WHALER® BOATS, INC. RESERVES THE RIGHT TO MAKE CHANGES AT ANY TIME WITHOUT NOTICE, IN THE COLORS, EQUIPMENT, SPECIFICATIONS, MATERIALS AND PRICES OF ALL MODELS, OR TO DISCONTINUE MODELS. SHOULD CHANGES OR MODIFICATIONS TO THE MODELS BE MADE BOSTON WHALER® IS NOT OBLIGATED TO MAKE SIMILAR CHANGES OR MODIFICATIONS TO MODELS SOLD PRIOR TO THE DATE OF SUCH CHANGES.

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MRP #2338538

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## 420 OUTRAGE

JULY 2019

THE FOLLOWING ARE REGISTERED TRADEMARKS OF THE BRUNSWICK CORPORATION:

OUTRAGE, BOSTON WHALER®.



Specifications and standard equipment are subject to change. Boston Whaler is not responsible for changes to parts or accessories manufactured by companies other than Boston Whaler. Active Deck Suspension System, Boston Whaler, Whaler, the Boston Whaler logo, Conquest, Dauntless, Montauk, and Outrage are registered trademarks of Boston Whaler, Incorporated. Accutrack, Unibond, The Unsinkable Legend, Ventura, and Whaleboard are trademarks of Boston Whaler, Incorporated. Mercury is a registered trademark of Mercury Marine, and SmartCraft and Verado are trademarks of Mercury Marine. Trademarks of others are the property of their respective owners. All Mercury engine information provided by Mercury Marine. Information contained within this publication is believed to be correct at the time of printing.

## **BOSTON WHALER LIMITED MANUFACTURER WARRANTY (US AND CANADA)**

Boston Whaler, Inc. ("Boston Whaler") provides the following Limited Manufacturer Warranty to the original retail owner of its 2020 model year boats, if purchased from an authorized Boston Whaler Dealer and operated under normal, non-commercial use ("Boat"), subject to the remedies, exclusions, and limitations set out below.

1. **Ten-Year Structural Hull Limited Warranty:** Any Structural Hull Defect in material or workmanship which is reported within ten (10) years from the date of sale to the original retail owner will be repaired or replaced at Boston Whaler's sole discretion. The "Hull" shall mean the single fiberglass molded shell and integral structural components. A Structural Hull Defect shall mean a substantial defect in the Boat's Hull which causes the boat to be unfit or unsafe for general use as a pleasure craft under normal operating conditions
2. **Three-Year Limited Warranty on Components Manufactured or Installed By Boston Whaler:** *(not applicable to 13 Super Sport or 16 Super Sport models):* Boston Whaler will repair or replace, at its sole discretion, any components manufactured or installed by Boston Whaler that are defective in factory materials and/or workmanship, which are reported within three (3) years from the date of sale to the original retail owner, and are not addressed in the specific warranties listed in paragraphs 1 or 4 or set out in the Exclusions paragraph below.
3. **One-Year Limited Warranty on Accessory Components for the 13 Super Sport and 16 Super Sport Models:** Boston Whaler provides the following Limited Warranty to the original retail owner of any factory-authorized accessory for the 2020 model year 13 Super Sport and 16 Super Sport, if purchased from an authorized Boston Whaler Dealer, authorized Boston Whaler website or any Boston Whaler affiliate and utilized under normal, non-commercial use ("Accessory"), subject to the remedies, exclusions, and limitations set out below. Boston Whaler will repair or replace, at its sole discretion, any Accessory that is defective in material or workmanship, which is reported within one (1) year from the date of sale to the original retail owner. Boston Whaler is not responsible for any defect and/or damage to the Accessory and/or the boat caused by improper installation, whether performed by the retail owner, dealer or any other third party.
4. **One-Year Limited Warranty on Upholstered Items, Canvas, Teak, and Powder Coating:** Boston Whaler will repair or replace, at its sole discretion, any upholstered items, canvas, teak, and powder coating manufactured or installed by Boston Whaler that are defective in factory materials and/or workmanship and are reported within one (1) year from the date of sale to the original retail owner.
5. **Transportation:** For warranty claims filed under the following provisions 1) Ten-Year Structural Hull Limited Warranty, 2) Three-Year Limited Warranty for Warranty Servicing of Vessels with Beams greater than 8.5 feet and not legally trailer-able without special permits and 3) One-Year Limited Warranty for Warranty Servicing of Vessels not offered with a standard trailer: Reasonable expenses, at Boston Whaler's sole discretion, for hauling out, transportation to and from the dealer or other service provider authorized by Boston Whaler for warranty service.
6. **Limited Engine Warranty:** Retail owners will be entitled to the limited engine warranty as provided in the warranty manual from the engine manufacturer that was delivered to the retail owner with his or her Boston Whaler Boat.

### **EXCLUSIONS**

This Limited Manufacturer Warranty does not apply to any boat which has been salvaged or declared a total loss or constructive total loss for any reason not covered in this limited warranty. This Warranty also does not apply to the following items:

1. Except where offered above, expenses for hauling out, transportation to and from the dealer or the Boston Whaler factory for warranty service.
2. Equipment or accessories which are not installed by Boston Whaler or which carry their own individual warranties, including but not limited to engines, engine components, batteries, propellers, controls, steering mechanisms, and electronics.
3. Damage, deterioration, discoloration or mold of cushions or cosmetic surface finishes, including scratches, gouges, chips, chalking, blistering, cracking, crazing, fading or oxidation of gel coat, stress lines, plated or painted metal and stainless steel finishes, plastics or acrylic materials, or anti-fouling bottom paint.
4. Windshield breakage and leakage.
5. Any Boston Whaler Boat initially sold at retail by a party other than an authorized Boston Whaler dealer.
6. Damage resulting from abuse, misuse, improper rigging and installation by an owner or any other person or entity not being an authorized dealer, accidents, overloading or powering in excess of the recommended maximum horsepower.
7. Failure of the owner to use, maintain, or store the boat as specified in the Boston Whaler owner's manual; and any other failure to provide reasonable care and maintenance. Normal wear and tear maintenance items are excluded from warranty coverage including but not limited to filters, bulbs, batteries, bungees, wiper blades, anchor rope, trailer finishes, tires, brakes, bearings and lights.

8. Any Boston Whaler Boat which has been altered or modified from Boston Whaler factory specifications, including penetration of the hull by anyone other than Boston Whaler factory personnel or Boston Whaler authorized dealer service personnel following factory specified procedures.
9. Damages resulting from use of improper trailer, improperly placed supporting bunks or slings, incorrect bunks placement and improper boat lift or sling.
10. Any Boston Whaler Boat used for commercial purposes, which includes, but is not limited to, any for-profit or other revenue-generating uses.
11. Any representation or implication relating to speed, range, fuel consumption or estimated performance characteristics.
12. Any failure or defect caused by an act of nature resulting in damage, cost, or expense;
13. Any failure or defect arising from a previous repair made by a non-authorized service provider.
14. Any item exceeding the expressed coverage limits specified in any Boston Whaler Limited Manufacturer Warranty.
15. Failure of the owner to use, maintain, or store an Accessory in reasonable fashion; and any other failure to provide reasonable care and maintenance.
16. Any Accessory which has been altered or modified from Boston Whaler factory specifications.
17. Any Accessory not purchased from an authorized Boston Whaler Dealer, authorized Boston Whaler website, or authorized Boston Whaler affiliate. For a list of Boston Whaler's affiliates, please refer to [www.brunswick.com](http://www.brunswick.com).
18. Any Accessory used for commercial purposes, which includes but is not limited to, any for-profit or other revenue generating uses.
19. Any defect or repair requiring redesign of the Boat, except pursuant to the recall provisions of the United States Federal Boat Safety Act of 1971 or the recall laws of any other foreign jurisdiction.

#### **SOLE REMEDY**

THE REMEDY OF REPAIR OR REPLACEMENT OF PARTS OR MATERIALS THAT ARE FOUND TO BE DEFECTIVE IN FACTORY MATERIALS OR WORKMANSHIP COVERED BY THIS LIMITED MANUFACTURER WARRANTY SHALL CONSTITUTE THE OWNER'S SOLE AND EXCLUSIVE REMEDY AGAINST BOSTON WHALER FOR ANY CLAIMS WHATSOEVER OF ECONOMIC LOSS RESULTING FROM PRODUCT FAILURE. In keeping with environmental policies and practices, Boston Whaler reserves the right to utilize reconditioned, refurbished, repaired or remanufactured products or parts in the warranty repair or replacement process. Such products and parts will be comparable in function and performance to an original product or part and warranted for the remainder of the original warranty period. In no event shall any repair or replacement under this Limited Manufacturer Warranty exceed the fair market value of the product as of the date of the owner's claim. Acceptance of any product returned or any refund provided by Boston Whaler shall not be deemed an admission that the product is defective. Products that are replaced become the property of Boston Whaler.

#### **OTHER LIMITATIONS**

EXCEPT AS SET FORTH HEREIN, THERE ARE NO OTHER WARRANTIES EITHER EXPRESS OR IMPLIED PROVIDED BY BOSTON WHALER ON THIS BOAT. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING IMPLIED WARRANTIES OF FITNESS AND MERCHANTABILITY, ARE EXPRESSLY EXCLUDED. BOSTON WHALER FURTHER DISCLAIMS ANY LIABILITY FOR ECONOMIC LOSS ARISING FROM CLAIMS OF PRODUCT FAILURE, NEGLIGENCE, DEFECTIVE DESIGN, MANUFACTURING DEFECT, FAILURE TO WARN AND/OR INSTRUCT, LACK OF SEAWORTHINESS, AND ANY OTHER THEORY OF LIABILITY NOT EXPRESSLY COVERED UNDER THE TERMS OF THIS LIMITED MANUFACTURER WARRANTY. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS DISCLAIMED. TO THE EXTENT THE IMPLIED WARRANTY CANNOT BE DISCLAIMED, IT IS LIMITED TO THE SHORTER OF ONE YEAR FROM THE DATE OF DELIVERY TO THE FIRST RETAIL OWNER OR THE DURATION OF THE RESPECTIVE EXPRESS LIMITED WARRANTIES STATED HEREIN. TO THE EXTENT ALLOWED BY LAW, NEITHER BOSTON WHALER, NOR THE SELLING DEALER, SHALL HAVE ANY RESPONSIBILITY FOR LOSS OF THE BOAT, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS OR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT BE APPLICABLE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT BE APPLICABLE. THIS WARRANTY GIVES THE OWNER SPECIFIC LEGAL RIGHTS, AND THE OWNER MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE OR COUNTRY TO COUNTRY.

#### **STATUTE OF LIMITATIONS**

Any action for rescission or revocation against Boston Whaler shall be barred unless it is commenced within one (1) year from the date of accrual of such cause of action. This provision does not grant any consumer a right of rescission or revocation against Boston Whaler, where such right does not otherwise exist under applicable law. Some states may not allow the applicable statute of limitations for rescission or revocation to be reduced, so this provision may not apply to each retail owner.

### OWNER'S OBLIGATIONS

To initiate a warranty claim, it is the responsibility of the owner to contact an authorized Boston Whaler dealer immediately after discovery of any defect, describe the nature of the problem, and provide a hull serial number, date of purchase, and name of selling dealer. The authorized dealer will notify Boston Whaler, who is solely responsible for determining and authorizing in writing the remedial action(s) to be performed at either an authorized Boston Whaler dealership chosen by Boston Whaler or at the Boston Whaler factory. The owner should notify Boston Whaler of any boat being repaired by an authorized Boston Whaler dealer which has been at the dealership for fifteen (15) days, or of any claimed defect which was not corrected after one repair attempt. Our privacy policies are available at [www.bostonwhaler.com](http://www.bostonwhaler.com).

### ASSIGNMENT OF COMPONENT WARRANTIES

Except as expressly set out herein, all warranties provided by the manufacturers and distributors of components, equipment, and parts on the boat (collectively "Component Manufacturers") are hereby assigned to the owner to the extent permitted by the Component Manufacturers, as the owner's sole and exclusive remedy with respect to such items.

### REGISTRATION & WARRANTY TRANSFER POLICY

The limited warranty coverage is activated by the authorized selling dealer registering the sale of a new Boat with Boston Whaler. The Ten-Year, Three-Year, and One-Year limited warranties are transferable to a subsequent owner, except the one-year Accessory warranty which is not transferrable, and this Limited Manufacturer Warranty will not transfer to any new owner of a boat which has been salvaged and resold, or resold after a declaration of a total loss or a constructive total loss, i.e., the cost of repair exceeds the value of the boat. The new owner must fill out and send in a Boston Whaler warranty transfer form, accessible from [www.bostonwhaler.com](http://www.bostonwhaler.com), and a copy of the bill of sale to Boston Whaler, 100 Whaler Way, Edgewater, Florida 32141, within 30 days of purchase.

### MODIFICATIONS & SEVERABILITY

The terms and conditions contained herein, as well as those of any documents prepared in conjunction with the sale of this vessel may not be modified, altered or waived by any action, inaction, or representations, whether oral or in writing, except upon the expressed, written authority of a management level employee of Boston Whaler. The invalidity or unenforceability of any one or more of the provisions herein shall not affect the validity and enforceability of the other provisions.

### GOVERNING LAW AND VENUE

This Warranty shall be interpreted and construed according to and governed by the laws of the State of Tennessee, without regard to conflict of law principles. Venue for any and all disputes arising out of or related to this Warranty, including without limitation the interpretation, performance or breach of this Warranty, shall be solely and exclusively before the United States District Court for the Eastern District of the State of Tennessee. The parties consent to the *in personam* jurisdiction of said court for the purposes of any such litigation and waive, fully and completely, any right to dismiss and/or transfer any action pursuant to 28 U.S.C. Section 1404 or 1406 (or any successor statutes) or the doctrine of *forum non conveniens*. If the United States District Court does not have subject matter jurisdiction of said matter, then such matter shall be litigated solely and exclusively before the appropriate state court of competent jurisdiction located in Knox County, Tennessee, and the parties consent to the personal jurisdiction of such court for the purpose of such litigation.

### SAFETY

It is your responsibility (as well as the responsibility of any other operator of this boat) to be familiar with and observe all local, state and federal laws, rules and regulations regarding boating, navigation and boating safety. You and any other operator of this boat should take a course in boating and boating safety before operation of this boat and should be completely familiar with all systems regarding safe operation of this boat. Personal flotation devices should be worn by each passenger in accordance with U.S. Coast Guard standards and state and federal law.

**World Headquarters, 100 Whaler Way, Edgewater, FL 32141**

**Phone (386) 428-0057**

**[www.bostonwhaler.com](http://www.bostonwhaler.com)**



## **BOSTON WHALER LIMITED MANUFACTURER WARRANTY**

### **Non U.S. or Canada**

Boston Whaler, Inc. ("Boston Whaler") provides the following Limited Manufacturer Warranty to the original retail owner of its 2020 model year boats, that if purchased from an authorized Boston Whaler dealer and operated under normal, non commercial use, the authorized dealer will repair or replace, at its sole discretion, any defect in material or workmanship in the Boston Whaler Boat that is reported within the applicable Limited Manufacturer Warranty periods and within the scope as set out below.

Mandatory warranty rights, including a consumer's mandatory statutory rights, by law are not affected by this Limited Manufacturer Warranty and in particular not limited or excluded. These mandatory legal rights exist regardless of whether a warranty claim occurs or rights are asserted under this Limited Manufacturer Warranty.

### **SCOPE**

This Limited Manufacturer Warranty applies only to Boston Whaler Boats purchased outside of the US and Canada, including the territory of the European Union and Australia, and to recreational use customers only (not commercial users). Commercial use, which voids the Limited Manufacturer Warranty, is defined as any use of the product which generates income, even if the product is only occasionally used for such purposes.

Routine maintenance outlined in the Operation and Maintenance Manual must be timely performed in order to maintain Limited Manufacturer Warranty coverage.

This Limited Manufacturer Warranty applies to the following items:

1. **Ten-Year Structural Hull Limited Warranty:** Any Structural Hull Defect in material or workmanship which is reported within ten (10) years from the date of sale to the original retail owner will be repaired or replaced at Boston Whaler's sole discretion. The "Hull" shall mean the single fiberglass molded shell and integral structural components. A Structural Hull Defect shall mean a substantial defect in the Boat's Hull which causes the boat to be unfit or unsafe for general use as a pleasure craft under normal operating conditions
2. **Three-Year Limited Warranty on Components Manufactured or Installed By Boston Whaler (not applicable to 13 Super Sport or 16 Super Sport models):** Boston Whaler will repair or replace, at its sole discretion, any components manufactured or installed by Boston Whaler that are defective in factory materials and/or workmanship, which are reported within three (3) years from the date of sale to the original retail owner, and are not addressed in the specific warranties listed in paragraphs 1 or 4 or set out in the Exclusions paragraph below.
3. **One-Year Limited Warranty on Accessory Components for the 13 Super Sport and 16 Super Sport Models:** Boston Whaler provides the following Limited Warranty to the original retail owner of any factory-authorized accessory for the 2020 model year 13 Super Sport and 16 Super Sport, if purchased from an authorized Boston Whaler Dealer, authorized Boston Whaler website or any Boston Whaler affiliate and utilized under normal, non-commercial use ("Accessory"), subject to the remedies, exclusions, and limitations set out below. Boston Whaler will repair or replace, at its sole discretion, any Accessory that is defective in material or workmanship, which is reported within one (1) year from the date of sale to the original retail owner. Boston Whaler is not responsible for any defect and/or damage to the Accessory and/or the boat caused by improper installation, whether performed by the retail consumer, dealer or any other third party.
4. **One-Year Limited Warranty on Upholstered Items, Canvas, Teak, and Powder Coating:** Boston Whaler will repair or replace, at its sole discretion, any upholstered items, canvas, teak, and powder coating manufactured or installed by Boston Whaler that are defective in factory materials and/or workmanship and are reported within one (1) year from the date of sale to the original retail owner.
5. **Transportation:** For warranty claims filed under the following provisions 1) Ten-Year Structural Hull Limited Warranty, 2) Three-Year Limited Warranty for Warranty Servicing of Vessels with Beams greater than 8.5 feet and not legally trailer-able without special permits and 3) One-Year Limited Warranty for Warranty Servicing of Vessels not offered with a standard trailer: Reasonable expenses, at Boston Whaler's sole discretion, for hauling out, transportation to and from the dealer or other service provider authorized by Boston Whaler for warranty service.
6. **Limited Engine Warranty:** Retail owners will be entitled to the limited engine warranty as provided in the warranty manual from the engine manufacturer that was delivered to the original retail owner with his or her Boston Whaler Boat.

### **ENVIRONMENTAL POLICIES**

In keeping with environmental policies and practices, Boston Whaler reserves the right to utilize reconditioned, refurbished, repaired or remanufactured products or parts in the warranty repair or replacement process. Such products and parts will be comparable in function and performance to an original product or part and warranted for the remainder of the original warranty period.

## EXCLUSIONS

This Limited Manufacturer Warranty does not apply to any boat which has been salvaged or declared a total loss or constructive total loss for any reason not covered in this limited warranty. This warranty also does not apply to the following items:

1. Except where offered above, expenses for hauling out, transportation to and from the dealer or the Boston Whaler factory for warranty service.
2. Equipment or accessories which are not installed by Boston Whaler or which carry their own individual warranties, including but not limited to engines, engine components, batteries, propellers, controls, steering mechanisms, and electronics.
3. Damage, deterioration, discoloration or mold of cushions or cosmetic surface finishes, including scratches, gouges, chips, chalking, blistering, cracking, crazing, fading or oxidation of gel coat, stress lines, plated or painted metal and stainless steel finishes, plastics or acrylic materials, or anti-fouling bottom paint.
4. Windshield breakage and leakage.
5. Any Boston Whaler Boat initially sold at retail by a party other than an authorized Boston Whaler dealer.
6. Damage resulting from abuse, misuse, improper rigging and installation by an owner or any other person or entity not being an authorized dealer, accidents, overloading or powering in excess of the recommended maximum horsepower.
7. Failure of the owner to use, maintain, or store the boat as specified in the Boston Whaler owner's manual; and any other failure to provide reasonable care and maintenance. Normal wear and tear maintenance items are excluded from warranty coverage including but not limited to filters, bulbs, batteries, bungees, wiper blades, anchor rope, trailer finishes, tires, brakes, bearings and lights.
8. Any Boston Whaler Boat which has been altered or modified from Boston Whaler factory specifications, including penetration of the hull by anyone other than Boston Whaler factory personnel or Boston Whaler authorized dealer service personnel following factory specified procedures.
9. Damage resulting from use of improper trailer, improperly placed supporting bunks or slings, incorrect bunks placement and improper boat lift or sling.
10. Any Boston Whaler Boat used for commercial purposes, which includes, but is not limited to, any for-profit or other revenue-generating uses.
11. Any representation or implication relating to speed, range, fuel consumption or estimated performance characteristics.
12. Any failure or defect caused by an act of nature resulting in damage, cost, or expense;
13. Any failure or defect arising from a previous repair made by a non-authorized service provider.
14. Any item exceeding the expressed coverage limits specified in any Boston Whaler Limited Manufacturer Warranty.
15. Failure of the owner to use, maintain, or store an Accessory in reasonable fashion; and any other failure to provide reasonable care and maintenance.
16. Any Accessory which has been altered or modified from Boston Whaler factory specifications.
17. Any Accessory not purchased from an authorized Boston Whaler Dealer, authorized Boston Whaler website, or authorized Boston Whaler affiliate. For a list of Boston Whaler's affiliates, please refer to [www.brunswick.com](http://www.brunswick.com).
18. Any Accessory used for commercial purposes, which includes but is not limited to, any for-profit or other revenue generating uses.
19. Any defect or repair requiring redesign of the Boat, except pursuant to the recall provisions of the United States Federal Boat Safety Act of 1971 or the recall laws of any other foreign jurisdiction.

## ACCESS FOR SERVICE

The owner must provide Boston Whaler with a reasonable opportunity to repair, and reasonable access to the Boston Whaler Boat for warranty service. Warranty claims shall be made by delivering the Boston Whaler Boat for inspection to a Boston Whaler dealer authorized to service the product. If the owner cannot deliver the product to such a dealer, written notice must be given to Boston Whaler. Boston Whaler will then arrange for the inspection and any covered repair and the owner shall pay for all related transportation charges and/or travel time.

## STATUTE OF LIMITATIONS

Without prejudice to your mandatory statutory rights, any action for rescission or revocation against Boston Whaler shall be barred unless it is commenced within one (1) year from the date of accrual of such cause of action, unless a longer period is prescribed by local law. This section shall not apply to Boston Whaler Boats purchased in Australia.

## ASSIGNMENT OF COMPONENT WARRANTIES

Except as expressly set out herein, all warranties provided by the manufacturers and distributors of components, equipment, and parts on the boat (collectively "Component Manufacturers") are hereby assigned to the owner to the extent permitted by the Component Manufacturers, as the owner's sole and exclusive remedy with respect to such items.

### **OWNER'S OBLIGATIONS**

To initiate a warranty claim, it is the responsibility of the owner to contact an authorized Boston Whaler dealer immediately after discovery of any defect, describe the nature of the problem, and provide a hull serial number, date of purchase, and name of selling dealer. The authorized dealer will notify Boston Whaler, who is solely responsible for determining and authorizing in writing the remedial action(s) to be performed at either an authorized Boston Whaler dealership chosen by Boston Whaler or at the Boston Whaler factory. The owner should notify Boston Whaler of any boat being repaired by an authorized Boston Whaler dealer which has been at the dealership for fifteen (15) days, or of any claimed defect which was not corrected after one repair attempt. Our privacy policies are available at [www.bostonwhaler.com](http://www.bostonwhaler.com).

### **REGISTRATION & WARRANTY TRANSFER POLICY**

The limited warranty coverage is activated by the authorized selling dealer registering the sale of a new Boat with Boston Whaler.

The Ten-year, Three-year, and One-year Limited Warranties are transferable to a subsequent owner, except the One-year Accessory Warranty which is not transferrable, and this Limited Manufacturer Warranty will not transfer to any new owner of a boat which has been salvaged and resold, or resold after a declaration of a total loss or a constructive total loss, i.e., the cost of repair exceeds the value of the boat. The new owner must fill out and send in a Boston Whaler warranty transfer form, accessible from [www.bostonwhaler.com](http://www.bostonwhaler.com), and a copy of the bill of sale to Boston Whaler, 100 Whaler Way, Edgewater, Florida 32141, within 30 days of purchase.

### **MODIFICATIONS & SEVERABILITY**

The terms and conditions contained herein, as well as those of any documents prepared in conjunction with the sale of this vessel may not be modified, altered or waived by any action, inaction, or representations, whether oral or in writing, except upon the expressed, written authority of a management level employee of Boston Whaler. The invalidity or unenforceability of any one or more of the provisions herein shall not affect the validity and enforceability of the other provisions.

### **SAFETY**

It is your responsibility (as well as the responsibility of any other operator of this boat) to be familiar with and observe all local, state and federal laws, rules and regulations regarding boating, navigation and boating safety. You and any other operator of this boat should take a course in boating and boating safety before operation of this boat and should be completely familiar with all systems regarding safe operation of this boat. Personal flotation devices should be worn by each passenger in accordance with applicable standards and state and federal law.

### **THE FOLLOWING SECTION IS APPLICABLE TO AUSTRALIAN CONSUMERS ONLY**

Boston Whaler Boats come with guarantees that cannot be excluded under the Australian Consumer Law. Retail owners are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. Retail owners are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

This Limited Manufacturer Warranty does not cover any expenses that retail owners may incur claiming the warranty.

The benefits to retail owners given by this Limited Manufacturer Warranty are in addition to other rights and remedies of the consumer under a law in relation to the goods or services to which the Limited Manufacturer Warranty relates.

**World Headquarters, 100 Whaler Way, Edgewater, FL 32141**

**Phone (386) 428-0057**

**[www.bostonwhaler.com](http://www.bostonwhaler.com)**

## **CALIFORNIA EVAPORATIVE EMISSIONS CONTROL SYSTEM WARRANTY STATEMENT**

### **YOUR WARRANTY RIGHTS AND OBLIGATIONS:**

The California Air Resources Board and Boston Whaler, Inc. ("Boston Whaler") are pleased to explain the evaporative emission control system's warranty on your 2020 MY spark-ignition marine watercraft (SIMW). In California, new spark-ignition marine watercraft must be designed, built, and equipped to meet the State's stringent anti-smog standards. Boston Whaler must warrant the evaporative emission control system on your spark ignition marine watercraft for the period listed below provided there has been no abuse, neglect or improper maintenance of your spark-ignition marine watercraft.

Your evaporative emission control system may include parts such as: carburetors, fuel tanks, fuel lines, fuel caps, valves, canisters, filters, vapor hoses, clamps, connectors, and other associated components.

### **MANUFACTURER'S WARRANTY COVERAGE:**

This evaporative emission control system is warranted for three years. If any evaporative emission-related part on your spark-ignition marine watercraft is defective, the part will be repaired or replaced by Boston Whaler.

### **OWNER'S WARRANTY RESPONSIBILITIES:**

- As the spark ignition marine watercraft owner, you are responsible for performance of the required maintenance listed in your owner's manual. Boston Whaler, Inc. recommends that you retain all receipts covering maintenance on your SIMW, but Boston Whaler cannot deny warranty solely for the lack of receipts.
- As the SIMW owner, you should however be aware that the Boston Whaler may deny you warranty coverage if your spark-ignition marine watercraft or a part has failed due to abuse, neglect, or improper maintenance or unapproved modifications.
- You are responsible for presenting your spark-ignition marine watercraft to a Boston Whaler distribution center or service center as soon as the problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. If you have a question regarding your warranty coverage, you should contact Boston Whaler at 877-294-5645.

### **SIMW EVAPORATIVE EMISSIONS WARRANTY PARTS:**

Fuel tank	Grade Valves
Fuel feed hoses	Fuel Fill Deck Plate W/Cap and Pressure Relief Valve
Fuel Line Fittings	Hose Clamps on Fuel System Components
Fuel Demand Valves	Fuel Level Vent Valve
All other parts not listed that may affect the evaporative emissions control system	



## PRIVACY STATEMENT

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Thank you for purchasing a boat or requesting information from Boston Whaler! This Privacy Statement is to inform you how we collect, use, disclose, and safeguard the personal information you provide to us through your purchases, requests for brochures, product registration cards, promotions, surveys, call centers, or other customer contacts. To see our full Privacy Policy and any updates, please visit [www.bostonwhaler.com](http://www.bostonwhaler.com) and select the Privacy Statement link.

“Personal information” may include your name, age, mailing address, residential phone number, or e-mail address. It may also include income ranges, marital status, product or lifestyle preferences, and information concerning dealer service.

**How We Collect Personal Information:** Our authorized dealer provided Boston Whaler or our company in the European Union with personal information collected at the time of your boat order/purchase with other product registration data and will continue to provide warranty and servicing information on your boat. We will send you customer satisfaction surveys which you may elect to return to provide us with information on your boat purchase and your servicing needs. Your personal information may be gathered by or shared with Boston Whaler’s marketing providers and affiliated companies, who have comparable levels of privacy protection, for the purposes described in this statement. Boston Whaler, your dealer, and our marketing providers collect personal information when your request information about our companies and from surveys, promotions, contests, correspondence, your e-mails, telephone inquiries, web forms, and other communications.

**How We Use & Disclose Personal Information:** Unless you advise us otherwise, Boston Whaler, our authorized dealers, affiliated companies, and our marketing providers may generally collect, use, disclose, hold, and file your personal information for the following purposes: (1) Providing goods, brochures, information, incentives, and/or services to you or on your behalf; (2) Fulfilling the terms of our limited warranty or other service obligation; (3) Facilitating recalls or service campaigns if necessary; (4) Reviewing goods and/or services provided to you in product, services, and marketing analyses; (5) Ensuring your satisfaction through surveys or other contacts; (6) Administration, billing, accounting, and collections; and protecting against fraud and error; and (7) Investigating a breach or a contravention of a law, complying with a subpoena, warrant, court order, or as required or otherwise permitted by law. **BOSTON WHALER WILL NOT SELL YOUR PERSONAL INFORMATION OR SUBJECT YOU TO TELEMARKETING OR UNSOLICITED E-MAIL.**

**Safeguards:** We use security safeguards appropriate to the sensitivity of personal information to protect it from loss or theft, as well as prohibiting unauthorized access, disclosure, copying, use or modification of your personal information. These safeguards include restricted access to offices and equipment, security clearances, the use of passwords and/or encryption, publishing our privacy policy to appropriate personnel with instructions to act in accordance with its principles, and contractual provisions with our marketing agents and authorized dealers to follow the principles of our privacy policy.

**Access and Correction to Your Personal Information:** Subject to the exceptions provided by applicable law, we will provide, upon written request, your specific personal information collected in a form which is generally understandable. Your Personal Information is held by us and for us by our marketing agency, AVALA, who has contractually agreed to protect your information according to our privacy policies at the following addresses: Boston Whaler Inc., 100 Whaler Way, Edgewater, FL 32141. Please direct corrections, withdrawal of consent for specific purpose, complaints or other inquiries regarding personal information to: Terry Domian, AVALA Marketing Group; 1078 Headquarters Park Drive, Fenton, MO, 63026; Phone: (636) 343-9988, Fax: (636) 326-3282, E-mail: [terryd@MarketingAgencymarketing.com](mailto:terryd@MarketingAgencymarketing.com). You can withdraw consent for us to use your personal information at any time or provide corrections upon providing to us a 30-day notice, unless withdrawing consent would impede the performance of legal obligations. We are required by law to provide you with information for product recall and other product safety related purposes. The withdrawal of your consent may also adversely affect our ability to provide products and services to you and to maintain our relationship. Please note, notifying us will not result in withdrawing consent from your dealer, who should be contacted separately.

**Obtaining Consent:** If any supplementary disclosure is required, we will obtain your consent for disclosure to other persons or organizations and for other purposes than stated herein, unless otherwise permitted by law.

Thank you again for your business. We hope you have many years of wonderful boating experiences!

### Owner's manual

The material here and in the rest of the Owner's Manual Packet:

- Gives you basic safety information;
- Describes the features of your boat;
- Describes the equipment on your boat;
- Describes the fundamentals of boat use; and
- Contains service and maintenance information.

You must learn to operate this boat as well as read, understand and use this manual.

What this manual **does not** give you is a course in boating safety, or how to navigate, anchor or dock your boat. Operating a power boat safely requires more skills, knowledge and awareness than is necessary for a car or truck.

### Your responsibilities

For your safety, the safety of your passengers, other boaters and people in the water, you must:

- Take a boating safety course.
- Get instruction in the safe and proper handling of your boat.
- Understand and follow the "rules of the road".
- Learn how to navigate.

### Source of Information

In North America, contact one of the following for boating courses:

- U.S. Coast Guard Auxiliary
- U.S. Power Squadron
- Canadian Power and Sail Squadrons
- Red Cross
- State Boating Offices
- Yacht Club

Contact the Boat/U.S. Foundation at 1-800-336-2628 or go to [www.boatus.com/foundation](http://www.boatus.com/foundation)

Outside of North America, contact your boat dealer and/or your governmental boating agency for assistance.

A comprehensive background in boating can be found in the book, *Chapman - Piloting, Seamanship and Small Boat Handling*, by Elbert S. Maloney, published by Hearst Marine.

### Warranties

In addition to the Boston Whaler® Limited Warranty for your boat, each component and/or system on your boat has its own warranty that will be found with the specific information and manual for that component. The manuals are included with your Owner's Manual Packet. Locate and read the individual warranties, then keep them together for easy future reference.

### Contact Numbers and Web Addresses

#### Boston Whaler, Inc.

877-294-5645

[www.bostonwhaler.com](http://www.bostonwhaler.com)

#### United States Coast Guard

800-368-5647

[www.uscgboating.org](http://www.uscgboating.org)

#### Boat US Foundation

800-336-2628

[www.boatus.com/foundation](http://www.boatus.com/foundation)

#### Canadian Coast Guard

800-267-6687

<http://www.ccg-gcc.gc.ca>

## Explanation of Safety Labels

The most important aspect of boating is safety. Although every effort is made to address the numerous issues regarding the safe usage of your boat, it is strongly recommended that you avail yourself of the training and knowledge available through boating safety courses, etc.

### Warning Labels

Mounted at key locations throughout your boat are warning labels which advise the owner/operator of imperative safety precautions to follow when operating and/or servicing equipment.

The examples below indicate the level of hazard by color and explanation.

#### **DANGER**

Denotes an immediate hazard exists that **WILL** result in severe personal injury or death.

#### **WARNING**

Denotes hazards or unsafe practices that **MAY** result in severe personal injury or death.

#### **CAUTION**

Denotes hazards or unsafe practices that **COULD** result in minor personal injury, product or property damage.

#### **NOTICE**

Denotes information that is important to know prior to operation and/or maintenance, but is not hazard related.

## Safety Precautions

The precautions below appear throughout this manual and must be observed when operating or servicing your boat. Learn to recognize the degree of precaution and understand the explanations of safety prior to reading this manual. These precautions are not all-inclusive. Always use common sense in the operation of your boat.

#### **DANGER**

Denotes an immediate hazard exists that **WILL** result in severe personal injury or death.

#### **WARNING**

Denotes hazards or unsafe practices that **MAY** result in severe personal injury or death.

#### **CAUTION**

Denotes hazards or unsafe practices that **COULD** result in minor personal injury, product or property damage.

#### **NOTICE**

Denotes information that is important to know prior to operation and/or maintenance, but is not hazard related.

### SAFE Boating means:

- Knowing the limitations of your boat
- Following the “RULES of the ROAD”
- Keeping a sharp lookout for people and objects in the water.
- Not boating in water or weather conditions that are beyond the boat’s and operator’s capability.
- Never operate the boat while under the influence of drugs or alcohol.
- Being aware of your passengers safety at all times.
- Reducing speed when there is limited visibility, rough water, people in the water nearby, boats or structures.

Boating in beautiful weather and calm water conditions can be a wonderful experience. Boating however requires considerably greater skills than operating a land vehicle.

### To obtain these skills:

- Take a Coast Guard, U.S. Power Squadron or equivalent boating safety course. (Call the Boat/U.S. Foundation at 1-800 336-2628 for information on available courses, or go to: “[www.boatus.com/foundation](http://www.boatus.com/foundation)” on the internet.)
- Get hands-on training on how to operate your boat properly.

### In Addition:

- Maintain your boat and its safety and other systems as recommended in this manual.
- Have the boat inspected by a qualified mechanic or dealer, at least annually.
- Ensure that the Coast Guard required safety equipment is on board and functioning.

### Safe Boating Checklist

#### Before Departure

- ☐ Update checklists when equipment is added or modified.
- ☐ Weather-forecast safe
- ☐ Required documents-on board
- ☐ Navigation charts & equipment-on board
- ☐ Safety equipment-on board
- ☐ Safety training-passengers & crew instructed on procedures, location, and use of safety equipment.
- ☐ Drain plugs-installed
- ☐ Bilge pumps-working & clean
- ☐ Blower-working
- ☐ Navigation lights-working
- ☐ Horn-working
- ☐ Fuel system-no leaks or fumes
- ☐ Fuel filter-tight & clean
- ☐ Power steering fluid-filled(if applicable)
- ☐ Steering system-working smoothly & properly
- ☐ Battery-electrolyte level within range
- ☐ Float plan-filed with friend or relative

#### Trailer (if applicable)

- ☐ Boat position-secure on trailer
- ☐ Tiedowns-tight
- ☐ Winch-locked
- ☐ Trailer hitch-connected
- ☐ Engine clearance-in trailering position
- ☐ Safety chains-attached
- ☐ Electrical-Lights, brake lights, turn signals working
- ☐ Mirrors-adjusted for trailering

#### After Return

- ☐ PFD’s & other safety gear-dry, stowed for next use
- ☐ Fuel tanks-filled (allow for expansion) to prevent condensation
- ☐ Fuel system-no leaks
- ☐ Bilge pump-operating properly
- ☐ Bilge-clean, no leaks
- ☐ Float plan-notify person with whom you filed plan

## General Considerations

- Know how your boat handles under different conditions. Recognize your limitations and the boat's limitations. Modify speed in keeping with weather, sea and traffic conditions.
- Instruct passengers on location and use of safety equipment and procedures.
- Instruct passengers on the fundamentals of operating your boat in case you are unable to do so.
- You are responsible for passenger's actions. If they place themselves or the boat in danger, immediately correct them.
- Remember the "Rule of Thirds": one third total fuel usage for the trip out; one third total fuel usage while out; one third total fuel usage for the return trip.

## Maintain Control

High performance boats require intimate knowledge of their handling characteristics for safe high speed operation.

- Learn the effects of trim, steering and throttle changes at gradually increasing levels of speed.
- Approach full throttle while adjusting trim for safe handling of the vessel.

On the water there are no marked traffic lanes, no traffic signs or lights, and boats have no turn signals. The boat operator must keep her or his attention focused not only on what's ahead but what's on the left, right and behind the boat.

The operator must always be alert to approaching boats (from the rear, right and left sides, as well as those ahead). There can be people in the water, partially submerged debris, and other navigational hazards such as rocks, sand bars or dangerous currents, to name a few.

Your passengers are relying on you to operate and maneuver the boat safely so that they are not in danger of going overboard. If you turn too quickly,

increase or decrease speed abruptly, your passengers are at risk of being thrown overboard or thrown about the boat.

When visibility becomes impaired because of weather, time of day or high bow angle you must slow down so that you have sufficient time to react if an emergency occurs. Nearby boats face similar risks in avoiding a collision with you.

## Boarding

- Board only one person at a time.
- Never jump into boat. Step or climb into cockpit.
- Load gear after you are aboard. Carrying gear while boarding can cause you to lose balance.
- Distribute weight evenly.
- Instruct passengers where to sit during on-plane operation to reduce the possibility of falling overboard during high speed maneuvers.
- If gear is not immediately needed, stow it in secure areas.
- Safety gear must be immediately accessible at all times.

## Impaired Operation

### **WARNING**

**CONTROL HAZARD-Federal laws prohibit operating a boat while under the influence of alcohol or drugs. These laws are vigorously enforced.**

The detrimental effects of alcohol and drugs are increased by wind, waves and sun, and will decrease your response time and ability to act in critical situations. Give special attention to the effects of alcohol and drugs while boating. No other single factor causes as many marine accidents and deaths. Death or serious injury and damage to personal and private property can result from being impaired while operating a boat.

## **WARNING**

Death or serious injury can result if you fail to observe these safety rules:

- Anyone who controls the boat should have taken a boating safety course and have trained in the proper operation of the boat.
- Always operate the boat at speeds that will not put people or property in danger.
- Be constantly aware of conditions in all directions when underway and before turning.
- Reduce speed, use a lookout to identify possible hazards or difficulties, and turn on navigation lights when:
  - visibility is impaired;
  - in rough water; and
  - in congested waterways.
- Watch your wake. It can capsize a small boat or damage moored boats or other property. You are responsible for damage caused by your wake.

## **WARNING**

**NEVER** operate a boat at a speed at which you do not feel in control.

## **WARNING**

A qualified operator must be in control of the boat at all times. Do not operate the boat while under the influence of alcohol or drugs. never operate your boat at speeds which exceed the operator's ability to react if an emergency develops. At night, turn on the appropriate navigation lights and cruise at a reduced speed that will allow you plenty of time to avoid dangerous situations.

## **WARNING**

### **STABILITY HAZARD**

- Load boat properly. The manufacturer's load rating is the maximum allowed under normal conditions. Adjust downward if weather, water or other conditions are adverse.
- Allow passengers to ride only in areas that do not pose a hazard to themselves or the boat.

**DO NOT** allow passengers to ride on the bow of a closed bow boat.

**DO NOT** allow several passengers to ride in the bow of a small open-bow boat, causing the boat to "plow" into the water.

**DO NOT** allow passengers to ride on the stern cushion or gunwales.

**DO NOT** overload the stern.

- Observe manufacturer's recommended on-plane seating locations.
- Passengers should remain seated while boat is moving.

**PERSONAL INJURY HAZARD**-Stay alert. Use of drugs, alcohol, or other substances which impair judgement poses a serious threat to yourself and others. The boat operator is responsible for the behavior of passengers.

**DROWNING HAZARD**-Boats must carry one wearable personal flotation device (PFD) for every passenger on board. Boats must have at least one throwable life preserver.

**SLIPPING HAZARD**-Wet decks are slippery. Wear proper footwear and use extreme caution on wet surfaces.



## Legally Mandated Equipment (Minimum Required)

Consult your National Boating Law Enforcement Agency. The following equipment is the minimum required by the U.S. Coast Guard for a boat which is more than 26 ft. (7.9M) in length but less than 40 ft. (12.2M) in length.

### Personal Flotation Devices (PFD's)

One (1) Coast Guard approved Type I, II, III is mandatory for each person aboard.

One (1) throwable Type IV device is also required to be onboard.

A Type V device is acceptable (See page 1.6) if worn for approved use.

**ALWAYS WEAR A PFD WHEN BOATING.**

### WARNING

**There is rarely time to reach stowed life jackets in time of emergency. Boaters should always wear a properly fitting, approved life jacket when on the water.**

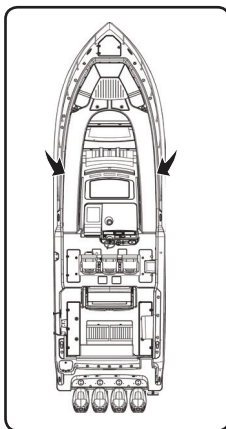
**Children and non-swimmers MUST wear PFDs at all times when aboard.**

### NOTICE

**Depending on the state or country of operation, the operator of a vessel may be fined for failure to comply with local or national rules regarding PFD usage.**

## Fire Extinguishers (Portable)

In addition to the fixed fire extinguishing system installed in the bilge, there are storage cabinets located midship on the port and starboard gunnell with attachments for type B-1 portable fire extinguishers.



## Whistle, Horn

You must have on board, some means of making a loud sound signal. Navigation rules require that a sound made by any audible device be capable of a four (4) second blast, and be audible for 1/2 mi. (.80 Km).

## Visual distress Signals

If you operate your boat in coastal waters or on the Great Lakes, you must have a visual distress signals for day and night use on board. At least three (3) U.S.C.G. approved pyrotechnic devices marked with date showing service life must be carried, be readily accessible, in servicable condition and not be expired.

**Store all pyrotechnic signals in a well marked, waterproof container.**

## Additional Recommended equipment for safe operation

In addition to the legally mandated equipment, the following items are necessary for safe boating, especially if your boat is out of sight of land.

- First Aid kit
- Charts/Maps
- Visual distress signals (for day or night use)
- Marine VHF radio
- Moisture repellent
- Mooring Lines
- Fenders
- Waterproof flashlights
- High power spotlight
- Spare propeller
- Tool kit:
  - Screwdrivers, (phillips & flat)
  - Pliers, (regular, vise-grip, tongue & groove)
  - Wrenches, (box, open end, allen & adjustable)
  - Socket set, (metric or U.S.)
  - Electrical tape & duct tape
  - Hammer
  - Spare parts kit, (spark plugs, fuses, etc.)
- Compass
- Manual bilge pump
- GPS or LORAN
- Spare keys
- EPIRB-Emergency positioning-indicating radio beacon
- Boat hook
- Extra batteries
- Instruction manuals
- Lubricating oil
- Spare anchor

### Carbon Monoxide (CO)

#### **DANGER**

- **Fumes from the engine(s), Generator(s) and other equipment and appliances that burn fuel contain Carbon Monoxide. Carbon Monoxide can kill you. Open all doors, hatches, curtains and windows to allow fresh air to circulate and dissipate the amounts of Carbon Monoxide present in enclosed spaces, especially when the boat is moored or anchored.**
- **Proper ventilation must be maintained, even during inclement weather to prevent dangerous levels of Carbon Monoxide build-up.**
- **Sleeping aboard a boat will require a working Carbon monoxide detection system, preferably in each sleeping quarter.**

Carbon Monoxide is an odorless, colorless, and tasteless, extremely toxic gas produced by engines, heaters, stoves or generators. When inhaled it combines with hemoglobin in the blood, preventing absorption of oxygen and is unlikely to be noticed until the person is overcome.

Prolonged exposure to low concentration or very short exposure to high concentrations can result in asphyxiation and death.

Symptoms of Carbon Monoxide poisoning include:

- Dizziness
- Headaches
- Ringing in the ears
- Nausea
- Unconsciousness

#### **GET MEDICAL ATTENTION AS SOON AS POSSIBLE.**

Symptoms of CO poisoning are often confused with seasickness or intoxication, so those affected may not receive the medical attention they need.

The poisoning victim's skin often turns cherry red. If CO poisoning is suspected, have the victim breathe fresh air deeply. If breathing stops, resuscitate. A victim often revives, then relapses because organs are damaged by lack of oxygen.

Carbon Monoxide can accumulate in dangerous concentrations anywhere in or around your boat including on back decks, swim platforms, or in water around generator exhausts. CO can remain in or around your boat at dangerous levels even if your engine is no longer running.

#### **Remember:**

- If you can smell engine exhaust, you are inhaling CO.
- Changing course and speed to place boat heading into the wind can improve ventilation.

To minimize the danger of Carbon Monoxide accumulation when the Engine is running (or by use of fuel burning equipment.):

- Do not idle the engine without moving the boat for more than 15 minutes at a time.
- Inspect the exhaust system regularly.
- Operate all fuel burning appliances, such as charcoal, propane, LPG, CNG or alcohol cooking devices in areas where fresh air can circulate.

#### **Carbon Monoxide Detector**

The Carbon Monoxide Detector (See Fig. 1.7.1) located in the starboard cabin will sound an alarm when dangerous levels of CO are detected. The detector is very sensitive and will notify you before dangerous amounts of Carbon Monoxide can accumulate which will allow you to take measures to dissipate the gas from the affected areas. Read and understand the warnings and recommendations presented in this section to help keep yourself and your passengers safe from carbon monoxide.

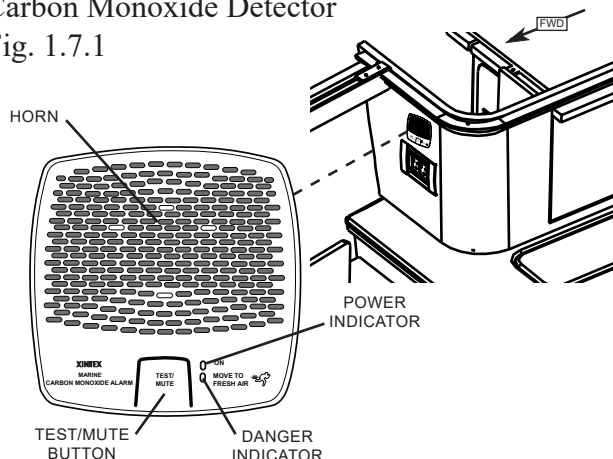
Periodically depress the "Test/Silence" button to determine if the detector is working properly. A shrill sound will be emitted indicating proper working order.

#### **DANGER**

**Even in rainy cold weather, ventilation must be maintained to avoid Carbon Monoxide poisoning. You will get wet and/or cold.**



Carbon Monoxide Detector  
Fig. 1.7.1



## End Of Life signal (EOL)

Your CO detector is equipped with an End Of Life (EOL) signal indicating the sensor used in the unit has reached the end of its service life and must be replaced. The detector contains an electro-chemical sensor that will last approximately 7 years. Refer to your unit's operation manual for EOL signal indication and further information and instructions.

The EOL signal can be deactivated so that it does not alarm. **DEACTIVATING THE CO ALARM IS PERMANENT. REACTIVATING IS NOT POSSIBLE. DO NOT DEACTIVATE UNLESS YOU HAVE A REPLACEMENT ALARM AVAILABLE TO INSTALL!**

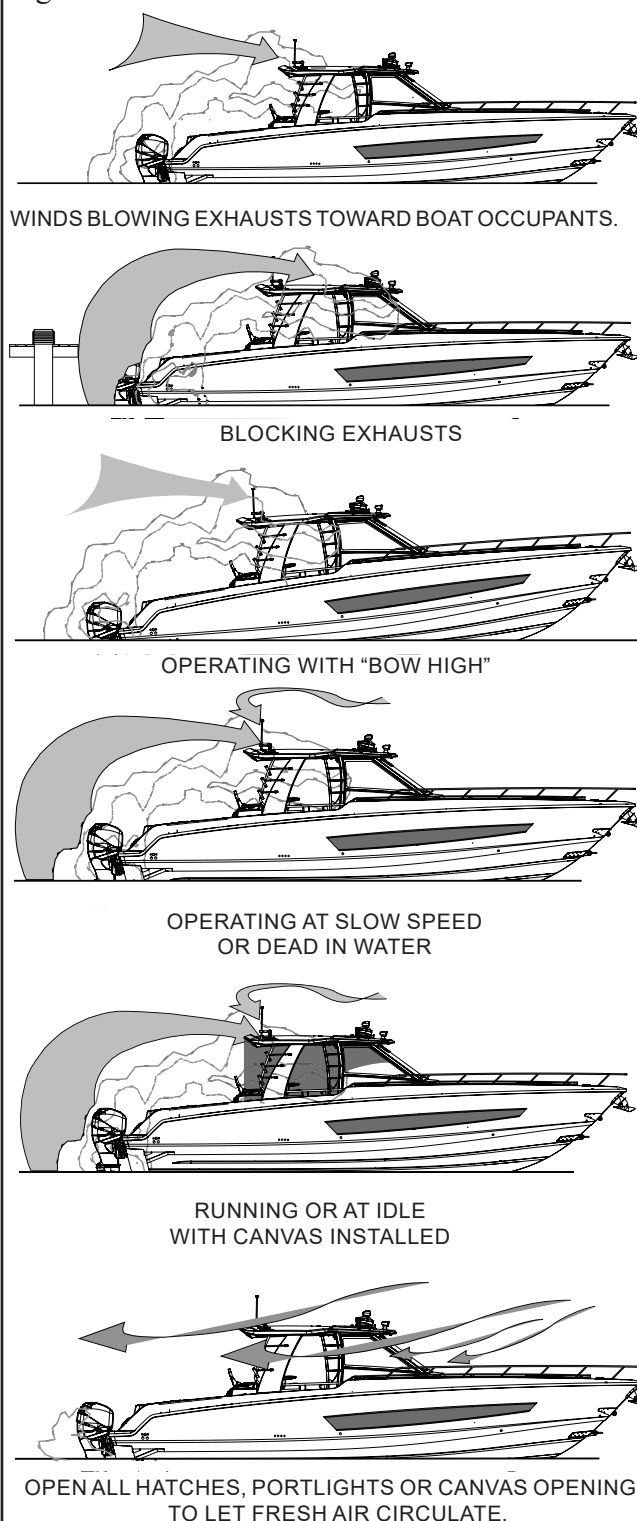
## In the event the CO alarm activates:

- Evacuate enclosed areas immediately.
- Shut OFF any fuel burning equipment or appliances.
- Open hatches, doors, portlights, etc. to improve ventilation.
- If making way, head boat into the wind.

**⚠ DANGER**

**Never ignore an alarm.**

Examples of accumulation of Carbon Monoxide  
Fig. 1.6.1



REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

### Lifesaving Equipment

Even strong swimmers can tire quickly in the water and drown due to exhaustion, hypothermia, or both. The bouyancy provided by a personal flotation device (PFD) will allow the person who has fallen overboard to remain afloat with far less effort and body heat loss, extending survival time necessary to find and retrieve them.

#### PFD Requirement

One (1) Coast Guard approved PFD, Type I, II or III for each person aboard or being towed on water skis, tubes, etc.

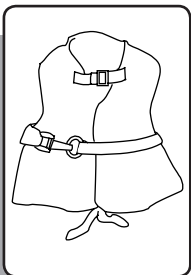
The law requires that PFD's must be readily accessible, if not worn. "Readily Accessible" means removed from storage bags and unbuckled. **Children and non-swimmers must wear PFD's at all times when aboard.**

### NOTICE

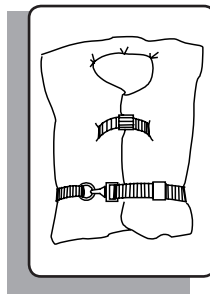
**Children and non-swimmers must wear a PFD at all times when aboard.** All passengers and crew should wear them since an unworn PFD is often useless. The law requires that PFDs, if not worn must be readily accesible, that is, removed from storage bags and unbuckled. Throwable devices must be readily available, that is, right at hand.

#### PFD Classifications

Listed below are the several different types of PFD's, each life jacket has different purposes, choose one that will suit your purpose.



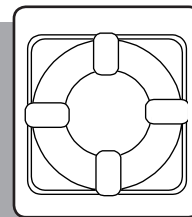
**Type I**, Off-shore Life Jacket is considered the most bouyant, it is designed to turn an unconscious person face up. Use in all types of waters where rescue may be slow, particularly in cold or rough water conditions.



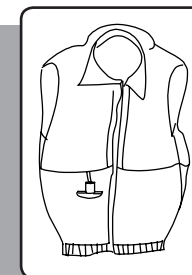
**Type II**, Near-shore Life Vest, "keyhole" vest with flotation filled head and neck support is also designed to turn a person face up, but the turning action is not as pronounced. Use in calm inland waters or where quick rescue is likely.



**Type III**, Flotation-aid Life vest is designed so that conscious wearers can turn face-up. Designed for comfort while engaged in water skiing or other forms of water activities.



**Type IV**, Throwable Devices, horseshoe bouys, ring bouys and bouyant cushions are designed to be grasped, not worn.



**Type V**, Special-Use devices, sailboat harnesses, white water vests, float coats, and hybrid vests which have minimum inherent bouyancy and an inflatable chamber.

Before purchasing PFD's, ensure that there is an attached tag indicating they are approved by the U.S.Coast Guard or by your National Boating Law Enforcement Agency.

The operator is responsible for instructing everyone onboard on the location and use of the PFD. **The best precaution is to wear the PFD at all times while on the boat.**

## General Considerations

- Know how your boat handles under different conditions. Recognize your limitations and the boat's limitations. Modify speed in keeping with weather, sea and traffic conditions.
- Instruct passengers on location and use of safety equipment and procedures.
- Instruct passengers on the fundamentals of operating your boat in case you are unable to do so.
- You are responsible for passenger's actions. If they place themselves or the boat in danger, immediately correct them.



## WARNING

**Death or serious injury can result if you fail to observe these safety rules:**

- **Anyone who controls the boat must have taken a boating safety course and have trained in the proper operation of the boat.**
- **Always operate the boat at speeds that will not put people or property in danger.**
- **Be constantly aware of conditions in all directions when underway and before turning.**
- **Reduce speed, use a lookout to identify possible hazards or difficulties, and turn on navigation lights when:**
  - visibility is impaired;
  - in rough water; and
  - in congested waterways.
- **Watch your wake. It can capsize a small boat or damage moored boats or other property. You are responsible for damage caused by your wake.**



## WARNING

### STABILITY HAZARD

- **Load boat properly. The manufacturer's load rating is the maximum allowed under normal conditions. Adjust downward if weather, water or other conditions are adverse.**
- **Allow passengers to ride only in areas that do not pose a hazard to themselves or the boat.**

**DO NOT allow passengers to ride on the bow of a closed bow boat at speeds over 5 mph (See warning, pg. 1-17).**

**DO NOT allow several passengers to ride in the bow of a small open-bow boat, causing the boat to "plow" into the water.**

**DO NOT allow passengers to ride on the stern cushion or gunwales.**

**DO NOT overload the stern.**

- **Passengers should remain seated while boat is moving.**

**PERSONAL INJURY HAZARD-Stay alert. Use of drugs, alcohol, or other substances which impair judgement poses a serious threat to yourself and others. The boat operator is responsible for the behavior of passengers.**

**DROWNING HAZARD-Boats must carry one wearable personal flotation device (PFD) for every passenger on board. Boats must have at least one throwable life preserver.**

**SLIPPING HAZARD-Wet decks are slippery. Wear proper footwear and use extreme caution on wet surfaces.**



## WARNING

**A qualified operator must be in control of the boat at all times. Do not operate the boat while under the influence of alcohol or drugs. Never operate your boat at speeds which exceed the operator's ability to react if an emergency develops. At night, turn on the appropriate navigation lights and cruise at a reduced speed that will allow you plenty of time to avoid dangerous situations.**

### Emergency Situations

#### NOTICE

**The law requires the owner/operator to assist any person or boat in distress as long as rendering assistance does not endanger the owner/operator, the passengers or the boat.**

Prevention is the safest approach. We hope that you are never involved in an emergency situation, but if you are it is imperative that you react.

#### Medical Emergency

You may be far from professional medical help when you are boating. At least two (2) persons on board your boat should be CPR certified, and should have taken a first aid course. Your boat should have a well stocked first aid kit on board. In many situations your radio will be your only link to reaching medical assistance. Keep the radio in working order and understand which channels are used for emergencies, these channels are constantly monitored and will be useful when situations arise. Cell phones are becoming more common and can help in some areas, but they are limited and unreliable and should not be used in the place of a good VHF radio.

#### Water Rescue

In most situations a person that has fallen overboard will succumb to hypothermia if not rescued immediately. Life expectancy decreases as rescue time increases in water temperatures below 70° (21.1°C).

There are three (3) steps that must be taken when a person has fallen overboard:

##### Returning to the victim:

- Immediately make everyone onboard aware that someone is overboard and keep victim in sight.
- Slow the boat and keep pointing toward the person overboard. At night or in low light, point the best available light source at the person.
- Throw a life ring/preserver to the victim, even if they are wearing one it will serve as another marker.

#### Making contact

- Stop or slow the boat and circle toward the person overboard.
- Try to approach heading into the wind or into the waves.
- Keep person overboard constantly in sight.
- When almost alongside, stop the engine in gear to prevent propeller “windmilling”.

#### Getting back aboard

- Try to reach the person overboard with a pole, or by throwing a life preserver. NEVER swim to them except as a last resort.
- Assist the person in boarding. Boarding should be done at the stern of the boat.
- If the person is injured or incapable of boarding by themselves, a rescuer should don a life preserver with a safety line and enter the water to assist the person onto the boat.
- Handle the person carefully, spinal injuries might have occurred and could be worsened by rough handling.
- Check for other injuries, render medical assistance immediately.

#### Unassisted Reboarding

The transom ladder (See figure 3.38.1) can be deployed to accommodate a person reboarding the boat without assistance.

#### Fire

Fire is a serious boating hazard. Boats will burn quickly. Do not remain onboard and fight a fire for more than a few minutes. If the fire is out of control and cannot be put out with the fire suppression equipment onboard, abandon ship immediately.

The fumes released during a fire are toxic and should be avoided. Even after the fire has been extinguished, proper ventilation of the area is required to minimize exposure to harmful fumes.

## ⚠ DANGER

- **Fires can spread quickly. Your reaction to the fire is important. Have the proper fire fighting equipment close at hand, and in good working order to respond quickly.**
- **Small fire extinguishers have small discharge times. Aim at the base of the fire with a sweeping motion to maximize the use of the fire extinguisher contents.**

### To lessen the danger of fire

- Extinguish all smoking materials, shut off blowers, stoves, engine(s) and generator(s).
- Keep bilge area clean, oil and fuel spills should be cleaned immediately.
- If possible throw burning materials overboard.
- If fire is accessible, release the contents of the fire extinguisher(s) into the base of the fire.
- If the fire is in an enclosed compartment, and you have an automatic extinguisher for the compartment, wait 15 min. before opening the compartment. Have an extinguisher handy in case of a flare up.
- If possible, signal for help. Radio, visual, and audible signal should be used as needed. You must render assistance to any boater requesting help.
- If fire is out of control, grab all necessary survival gear, distress signals, don your PFD's and prepare to abandon ship.
- If you do abandon ship, make sure the passengers have PFD's. Take a head count before entering the water and take another head count when in the water. **STAY TOGETHER.**

### Flooding, Swamping and Capsizing

In the event of Flooding, Swamping or Capsizing:

#### Flooding

- Always wear your PFD, or have it within reach.

- If the bilge pump(s) have not automatically turned ON, switch them ON immediately.
- Find the source of the flooding and determine the best fix.
- Keep the bilge pumps running until the flooding is under control.
- Call for assistance if the source of the flooding cannot be controlled.
- Head back to port if possible.

#### Swamping

- Always wear your PFD or have it within reach.
- Swamping is usually a result of wave action, immediately get control of the helm and turn the boat into the waves.
- Swamping can be caused by an overloaded boat.
- If the bilge pump(s) have not automatically turned ON, switch them ON immediately.
- The deck scuppers on your boat are designed to drain the deck of water.
- Keep the bilge pumps running until the flooding is under control.
- Take a head count of all passengers.

#### Capsizing

- “Capsized” is when a boat is on its side or completely upside-down (usually as a result of wave action, improper loading or load shifting).
- Always wear your PFD or have it within reach.
- If the boat will not right itself, get out of the water and climb onto the exposed hull.
- Do a head count for all passengers
- **STAY TOGETHER**
- Usually a capsizing will happen quickly and without warning.
- Use whatever is at hand to signal for help.



The chances of flooding, swamping or capsizing can be reduced by being aware of:

- Weather
- Water Conditions
- Proper boat handling techniques
- Proper loading of the boat

### Collision

In the event of collision:

- Cut the engine(s)
- Always wear your PFD, or have it within reach.
- Check on passengers
- If the bilge pump(s) have not automatically turned ON, switch them ON immediately.
- Determine the amount of damage to your boats structure.
- Call for assistance
- In the event of collision you are required to file an accident report. Contact a state enforcement agency or the nearest U.S. Coast Guard office. If you are boating outside U.S. waters, consult the nation you are visiting for accident reporting requirements.

### Propulsion, Control or Steering failure

If there is a propulsion, control or steering failure:

- Stop the engine, (shut off at Ignition or pull on the Emergency Engine Shut-Off Switch.)
- Drop anchor to prevent drifting.
- Determine if the problem can be fixed or will assistance be needed.
- Call for assistance if needed.

When loss of propulsion or steering is noticed, your quick reaction is required to prevent further damage to your boat or injuries to your passengers.

Outboard engines require propulsion to control the direction the boat will take. Without propulsion, the

steering is virtually useless. If you are in a congested waterway you will need to react quickly to warn others that you have lost power, propulsion or steering control and that assistance will be needed.

### Grounding

Running aground may be avoided by paying attention to marker bouys or indicated by waves as they form into breakers when passing over a sand bar.

If you do run aground, the course of action depends on how hard the boat hits bottom and whether the boat remains stranded. If it is a simple touch, you may need only to inspect the lower drive of the engine and the hull of the boat. If possible do a thorough inspection before trying to get loose, throwing the boat into reverse before this is done may do more damage.

### Distress Signals

#### Visual Distress Signals, (VDS)

- U.S. Coast Guard regulations require boats in coastal waters and the Great Lakes to carry a Visual Distress Signal (VDS) for day and night use, as well as appropriate for the time of operation. Exempt from the day signals requirement, but not night signals, are boats less than 4.8 meters (16 feet), open sailboats less than 7.9 meters (26 feet), boats participating in organized events and manually propelled boats.
- If you are required to have visual distress signals, at least three safety approved pyrotechnic devices in serviceable condition must be readily accessible. They must be marked with a date showing the service life which must not be expired.
- Carry three signals for day use and three for night use. Some pyrotechnic devices such as red flares, meet both day and night use requirements.
- Store pyrotechnic signals in a cool, dry location. An orange or red watertight container prominently marked "DISTRESS SIGNALS" is recommended.

Other recognized visual distress signals include:

- Flames in a bucket
- Code flags November & Charlie
- Black square & ball on orange background flag
- Orange flag (certified)
- Electric distress light (certified)-for night use
- Dye marker (any color)
- Person waving arms (slowly)
- U.S. ensign flown upside down

## Audible Distress Signals, (ADS)

U.S. Coast Guard regulations require one hand, mouth or power operated whistle or horn, audible for at least 1/2 mile.

Other recognized audible distress signals include:

- Radio communication (see **Radio Communication** below)
- Radio-telegraph alarm
- Position indicating radio beacon
- Morse Code S-O-S (3 short 3 long 3 short) sounded by any means.
- Fog horn sounded continuously.

## Radio Communication

A radio is the boat operator's main method of receiving safety information and summoning aid. VHF-FM radio is the primary means of short range communication. Single sideband radio (SSB) is used for longer range communication.

VHF-FM channel 16 and SSB 2182 kHz are designated for emergency use. Such situations can be categorized as:

- **EMERGENCY-**  
“MAYDAY, MAYDAY, MAYDAY,”- used when life or vessel is in imminent danger.

## • URGENCY-

“PAN-PAN, PAN-PAN, PAN-PAN” (pronounced PAHN-PAHN)-used when a person or vessel is in some jeopardy less than indicated by a “MAYDAY” call.

## • SAFETY-

“SECURITY, SECURITY, SECURITY” (pronounced SAY-CURE-IT-AY)-used for navigational safety or weather warning.

An emergency situation will be hectic and there will not be time to learn proper radio procedure. **LEARN WHAT TO DO BEFORE YOU NEED TO DO IT.**

If you hear a distress call, stop all radio transmissions. If you can directly assist, respond on the emergency frequency. If you cannot assist, do not transmit on that frequency. However, continue to monitor until it is obvious that help is being provided.



## WARNING

**NEVER operate a boat at a speed at which you do not feel in control.**

## Weather



## DANGER

**DO NOT attempt to boat in severe weather conditions. Death or serious injury can occur. Get to shore before the weather turns bad.**

Getting caught in severe weather is hazardous. Bad weather and/or rough sea or water conditions can cause an unsafe situation. Consult local weather services for up-to-date forecasts on weather and sea conditions. Television, Radio, and the Internet can give you access to NOAA weather reports that will help you make a determination on where and when to get underway.

Following are some weather related rules:

- Understand the design limitations of your boat.
- Check the weather forecast and water conditions before leaving and while underway.
- Wear a Personal Flotation Device (PFD)



### WARNING

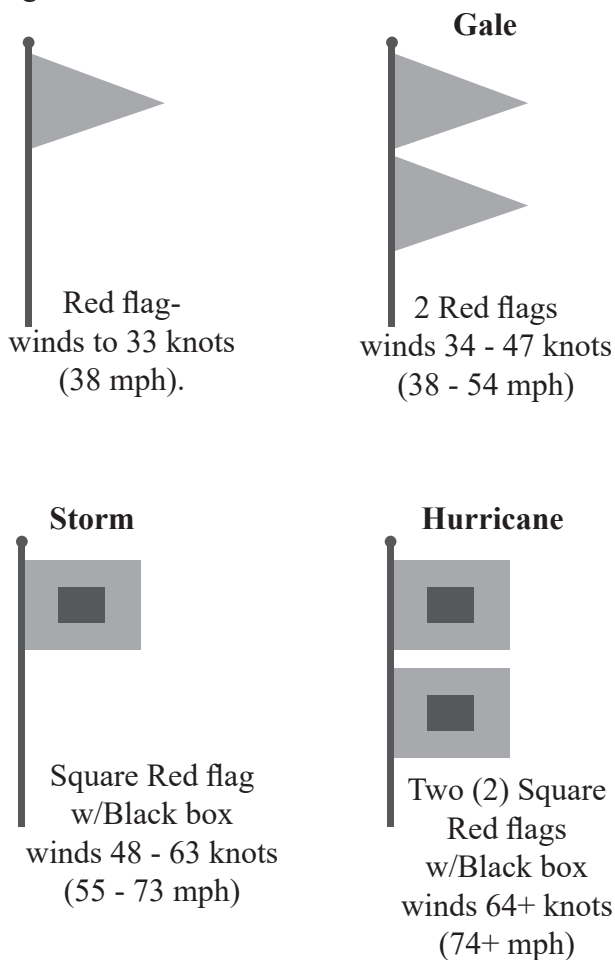
**A sudden change in wind direction or speed or an increase in wave height indicates deteriorating weather.**

### NOTICE

**Check the weather forecast and water conditions before leaving and while underway**

#### Weather Warning Penants

Fig. 1.14.1



- If a storm approaches, immediately seek a safe harbor.
- If a storm hits have everyone sit in the cabin or cockpit deck in the boat. Head the bow into the wind with enough power to maintain slow headway.

- If you encounter fog, determine your position, set a safe course, slow down and alert other boats of your presence with a sound signal.
- If a lightning storm approaches, the safest action is to dock and disembark. If you cannot return to shore, have passengers go inside the cabin and remain there until the storm passes.
- Stay out of the water during a lightning storm. If caught swimming during a storm, get back into the boat and remain there until the storm passes. (remember that lightning can strike several miles away from the storm itself. Be aware of the storms location relative to your location and the direction the storm is moving).

### Swimming, Diving & Water Skiing

#### Swimming

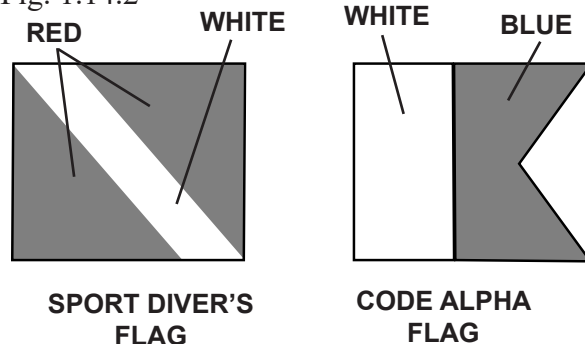
- Do not swim from a moving boat.
- Many areas prohibit swimming from a boat except in designated areas.
- Turn off engine in gear (to prevent propeller “windmilling”) before picking up swimmer.

#### Diving

Recognize and respect diving flags. Keep at least 30 meters (100 ft.) away.

#### Diver's Flags

Fig. 1.14.2



**SPORT DIVERS FLAG**-Red flag with diagonal white stripe marks a diver in the water.

**CODE ALPHA FLAG**-Blue and white penant designates boat being used in dive operations.



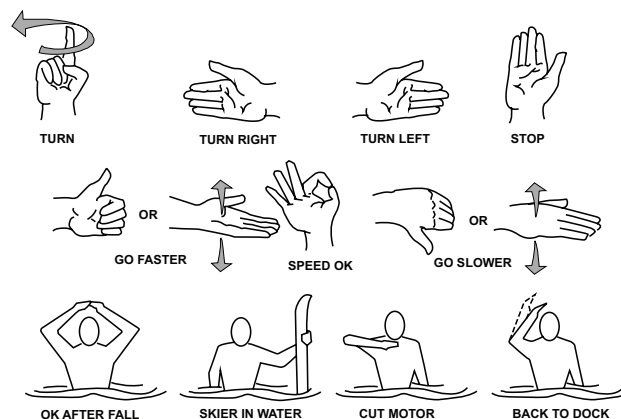
## Water Skiing

- Always have two persons in the boat, one at the controls and one who can easily and continuously look at the skier.
- Insist that anyone who water skis must know how to swim.
- Insist that skiers wear approved Personal Flotation Devices (PFD's)
- Ski only in daylight when visibility is good.
- Never drive the boat directly behind a water skier. At 22 knots (25 m.p.h.), it takes only 5 seconds to overtake a fallen skier who was 60 meters (200 feet) in front.
- Ski only in areas where skiing is permitted.
- Observe local restrictions on length of tow line.
- Learn the signals to communicate with a skier. The skier is to control the boat through hand signals (Figure 1.15.1).
- Your boat will handle differently while towing a skier. Experiment carefully to learn the difference.
- Skiers may start from the shore or dock, if boat traffic allows. When returning, pick up skiers from water. Do not ski back to shore or dock.
- Give immediate attention to fallen skiers.
- Keep a downed skier in sight and on the operator's side of the boat when approaching the skier. **Never back up to anyone in the water.**
- Turn off engine in gear (to prevent propeller "windmilling") before picking up skier.
- If the skier suddenly releases the tow rope, it can backlash into cockpit. Spotters who are watching the skier must be aware of this fact and be prepared to take appropriate action to avoid injury.

## Water Skiing Signals

### Skiing Signals

Fig. 1.15.1



**Turn** – Arm raised, circle with index finger extended.

**Turn Right** – Extend arm out from body to the right.

**Turn Left** – Extend arm out from body to the left.

**Stop** – Raise arm with palm vertical and facing forward.

**Faster** – Thumb pointed up or palm up, move hand up and down.

**Speed OK** – Raise arm and form a circle with thumb and index finger.

**Slow Down** – Thumb pointed down or palm down, move hand up and down.

**OK After a Fall** – Clasp hands together overhead.

**Skier in Water** – Extend one ski vertically out of water.

**Cut Motor** – Draw finger across throat.

**Back to Dock** – Pat top of head.



### WARNING

#### SWIMMING/DIVING HAZARD

- Keep clear of areas designated only for swimmers and skin divers. Recognize markers used for such areas.
- Never swim when there is lightning in the area.

#### SKIING HAZARDS

- Skiers must use a safety approved Personal Flotation Device (PFD).
- Ski only during daylight and in good visibility.
- Avoid shallow water, other boats, navigational aids and other obstructions.
- Keep at least 30 meters (100 ft.) from other objects.
- Never drive directly behind a water skier.
- A competent observer must watch the skier at all times. A competent observer is a person that has the ability to assess when a skier is in trouble, knows or understands water skiing hand signals and is capable of helping a skier.
- Keep a downed skier in constant sight.
- Turn off engine in gear before you get close to person in the water.
- Never back up to anyone in the water.
- Use caution in boat when skier is being towed. Sudden release of tow rope can cause it to backlash into the cockpit.

#### PERSONAL INJURY HAZARD

Use transom tow ring only to pull water skiers. Unless specified by the manufacturer, any other use, such as parasailing, kite flying, towing other boats, etc. may create too much stress on the tow ring, resulting in personal injury and/or equipment damage.



### DANGER

#### PROPELLER SAFETY

- Before starting your boat, walk to the stern and look in the water to assure there is no one near your propeller.

People near propeller may not be visible from helm.

- NEVER allow passengers to board or exit your boat from the water when engines are on.
- Educate passengers about the dangers of propellers
- Be especially alert when operating in congested areas. NEVER enter swimming zones.
- Take extra precautions near boats that are towing skiers or tubers.
- NEVER permit passengers to ride on the bow, gunwale, transom, seatbacks, or other locations where they may fall overboard.
- STOP! if someone falls overboard. Slowly turn the boat around, and keep the person in sight as you approach. Turn your engine off FIRST and then bring the person aboard.
- NEVER reverse your boat to pick someone up out of the water.

## Ignition Shut Down Safety Switch

### **WARNING**

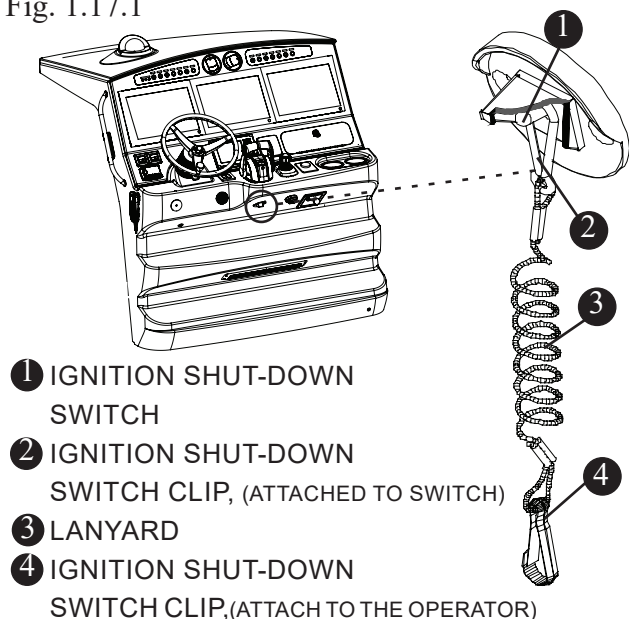
**Wear the lanyard at all times when operating the boat. Use it to stop only in an emergency. DO NOT use it to shut off the engine during normal operation**

Your boat is equipped with an engine stop switch. The switch is located on the console, below the shift/throttle control. The ignition shut down safety switch incorporates a shut-off switch, switch clip, lanyard and lanyard clip, which is clipped to the operator when running.

If an emergency arises and the engine must be shut down, a pull on the cord to release the clip from the shut-off will shut off the engine.

This switch is designed to shut the engine off when the operator of the boat leaves the control station, either accidentally by falling into the boat, or by being ejected overboard. This would most likely occur as a result of poor operating practices.

Engine Stop Switch  
Fig. 1.17.1



### **NOTICE**

**This switch only works when used properly. The decision of whether to use an ignition safety switch or not rests with you, the operator.**

The lanyard should be long enough to prevent inadvertent activation. Do not let the lanyard become entangled.

Accidental loss of power can be hazardous, particularly while docking or in heavy seas, strong current or high winds. Passengers and crew may lose balance and the boat may lose steering control.

Should the operator fall out of the boat at planing speed, it may take several seconds for the engine and propeller to stop turning. The boat may continue to coast for several hundred feet, causing injury to anyone in its path.

## Joystick Piloting (Option)

### **WARNING**

**When joystick piloting is activated the propellers spin. This can injure swimmers.**

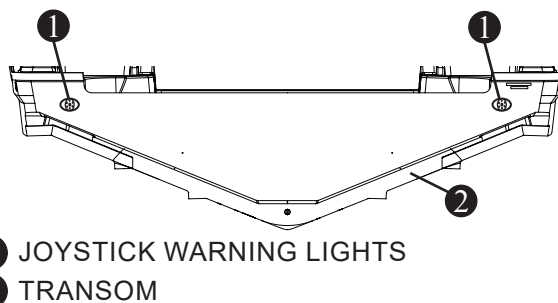
- **Check that no one is in the water.**
- **Inform passengers not to enter the water**

Joystick Piloting adds special lighting to the transom of the boat. When Joystick Piloting is engaged the lights will flash when the propellers are spinning.

A special feature of Joystick Piloting is Skyhook®. Skyhook is a digital anchor. Skyhook® pinpoints the boat's position using a GPS satellite antenna and the engines and drives moving independently to maintain the boat's position and heading.

The lights on the transom will flash continuously while Skyhook is engaged.

Joystick Piloting Transom Warning Lights  
Fig. 1.17.2



### **WARNING**

**Hitting an object in or under the water or boating in dangerous currents can cause serious injury or death to occupants in the boat.**

**You must know where the hazards are and avoid them. In uncharted waters, boat very slowly and post a lookout.**

**If an object is struck or if you run aground:**

- **Shut the engine OFF**
- **Check the hull for damage**
- **Check propeller for damage**
- **If aground, consider the bottom grade before moving off, (damage to the hull and propellers could be worsened).**
- **Determine the tides and whether it will help or hinder you from the grounding.**
- **Do not have anyone other than a trained and competent service tow your boat.**

### **Float Plan**

Float plans are important to you should you encounter problems on the water. A float plan should describe where you will be boating, departure time and return, number and names of passengers and destination.

The float plan should be given to a friend or relative, so they can give the information to a national boating agency like the U.S. Coast Guard, in the event you do not return at the time specified on the float plan.

If there are any changes to the float plan they should be conveyed to the person holding the float plan. Once you return you should contact the person holding the float plan to let them know you are back.

### **Chart Your Course**

To avoid boating in unsafe areas where there are underwater obstructions, shallow water, unnavigable

conditions such as dangerous currents, and others, you must chart a course. This means having and using National Oceanic and Atmospheric Administration (NOAA) charts for coastal waters, observing and understanding all navigational aids, using the knowledge and guidance of experienced boaters, and being aware of the tides and times where appropriate. If you are boating in an area you are unfamiliar with, proceed with caution and post a lookout to watch for hazards.

### **Environmental Considerations**

#### **Fuel & Oil Spillage**

Regulations prohibit discharging fuel or oily waste in navigable waters. Discharge is defined as any action which causes a film, sheen or discoloration on the water surface, or causes a sludge or emulsion beneath the water surface. A common violation is bilge discharge. Use rags or sponges to soak up fuel or oily waste, then dispose of it properly ashore. If there is much fuel or oil in the bilge, contact a knowledgeable marine service to remove it. Never pump contaminated bilge overboard. Help protect your waters.

#### **Excessive Noise**

Many areas regulate noise limits. Even if there are no laws, courtesy demands that boats operate quietly.

#### **Wake / Wash**

Power boat wakes can endanger people and vessels. Each power boat operator is responsible for injury or damage caused by the boat's wake. Be especially careful in confined areas such as channels or marinas. Observe "no wake" warnings.

### **WARNING**

**SPEED HAZARD - Watch your wake. It might capsize a smaller craft. You are responsible for damage caused by your wake.**

### **CAUTION**

**Reduce speed in congested waterway. Be alert for No Wake markers.**

### Homeland Security Restrictions

Recreational boaters have a role in keeping our waterways safe and secure. Violators of the restrictions below can expect a quick and severe response.

- **DO NOT** approach within 100 yards, and slow to minimum speed within 500 yards of any U.S. Naval vessel. If you need to pass within 100 yards of a U.S. Naval vessel for safe passage, you must contact the U.S. Naval vessel or the Coast Guard escort vessel on VHF-FM channel 16.

#### **DANGER**

**DO NOT approach within 100 yards of any U.S. Naval vessel without first contacting the vessel on VHF-FM channel 16. To do so will result in a quick and severe response.**

- Observe and avoid all security zones. Avoid commercial port areas, especially those that involve military, cruise line or petroleum facilities. Observe and avoid other restricted areas near dams, power plants, etc.
- **DO NOT** stop or anchor beneath bridges or in channels.

### America's Waterway Watch

In March, 2005, the U.S. Coast Guard officially launched *America's Waterway Watch* to encourage the boating public to report suspicious activities in our nation's ports and waterways. *America's Waterway Watch* simply asks anyone who works, lives, or recreates on the water to keep an eye out for suspicious activities. Anyone who spots such activity is asked to call the National Response Center's 24-hour hotline, 800-424-8802 or 877-24WATCH (877-249-2824).

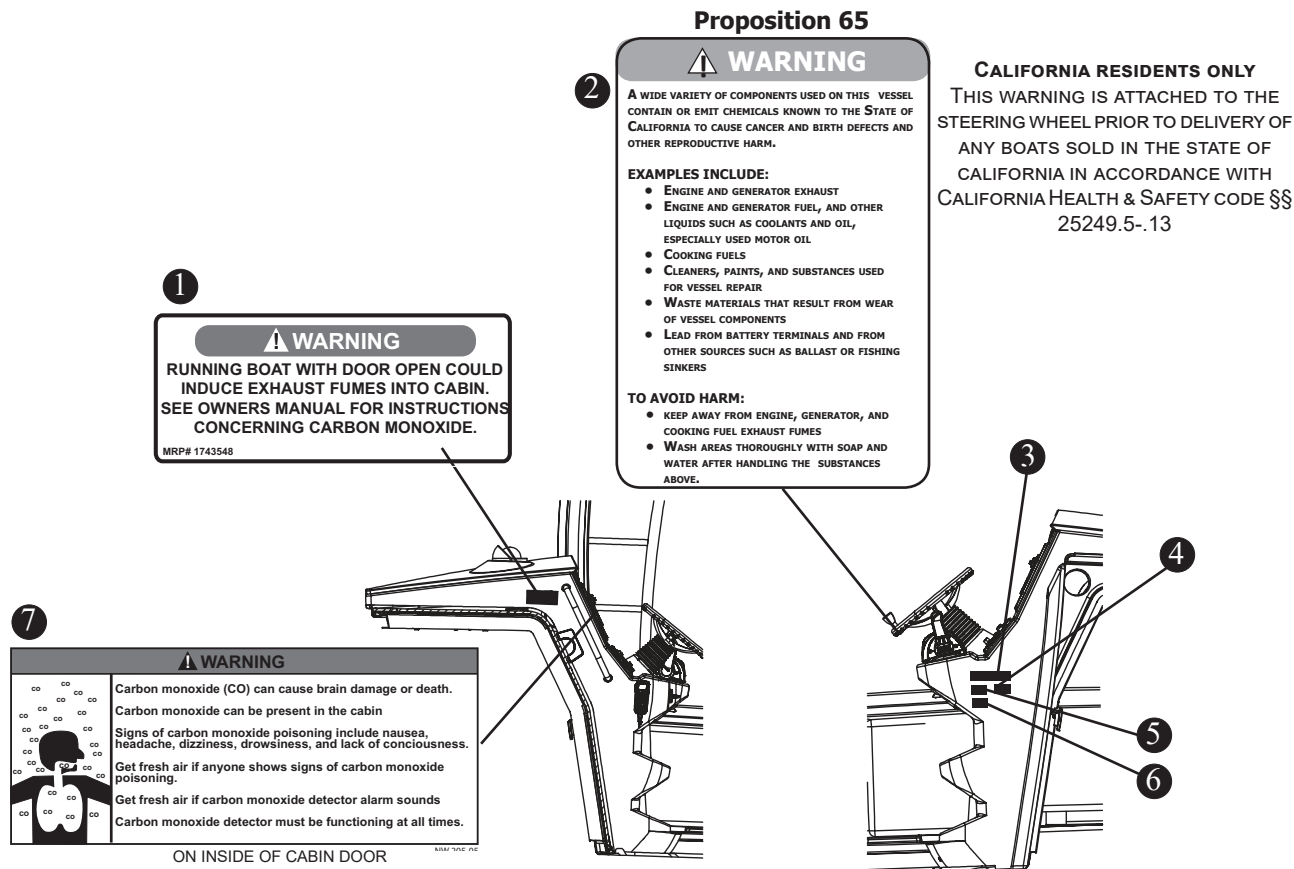
### Warning Label Locations

Mounted at key locations throughout the boat (See pages 1-20 thru 1-26), warning labels advise the owner/operator of imperative safety precautions to follow when operating and/or servicing equipment. **DO NOT REMOVE OR OBSTRUCT ANY WARNING LABEL.** Replace any label which becomes illegible.

## Warning Label Locations

### Warning Label Locations

Fig.1.20.1



## NOTICE

It is important to replace any damaged or unreadable label. Call your Boston Whaler dealer for replacement labels.

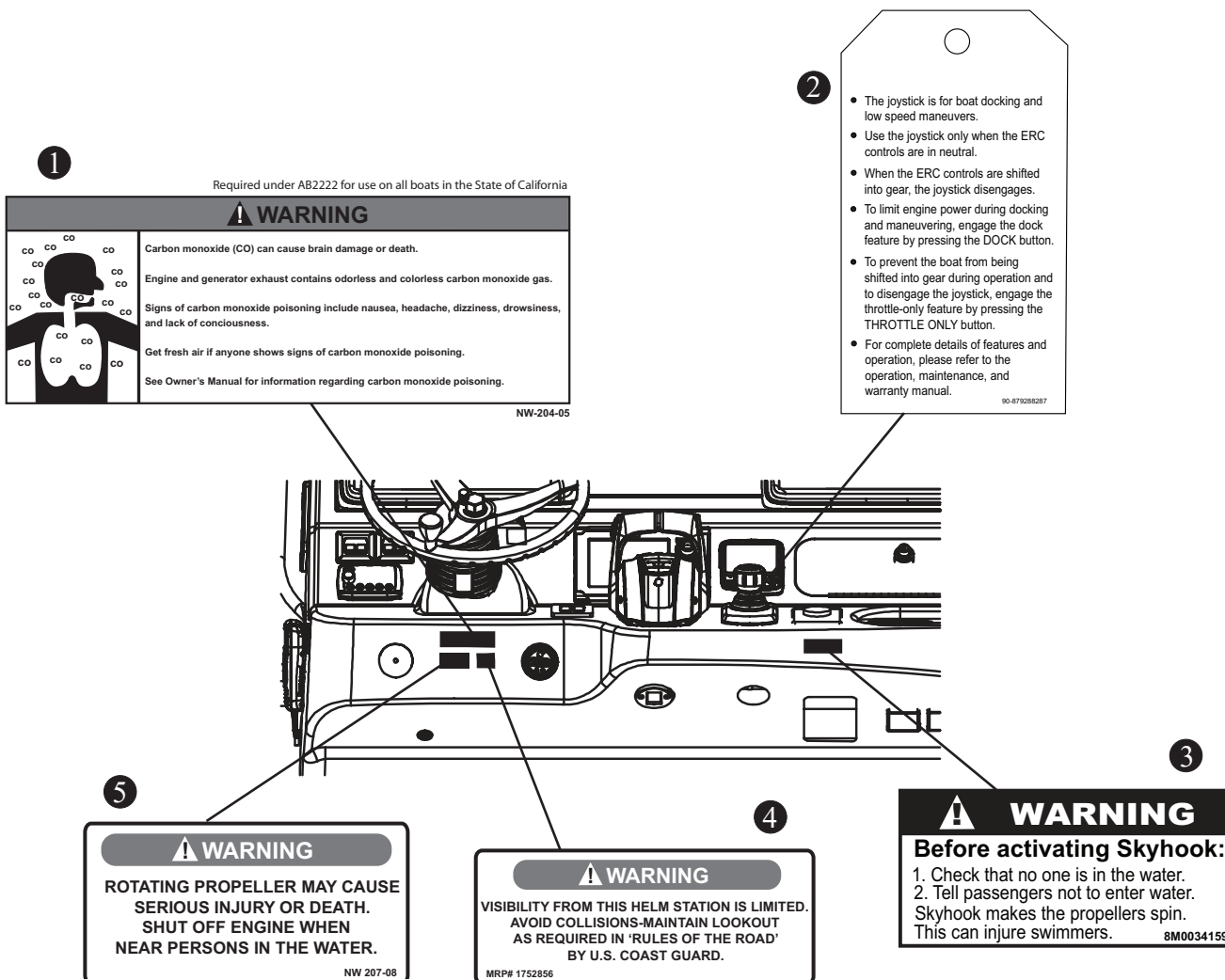
### Replacement Part No.

1	WARNING, RUNNING BOAT W/DOOR OPEN.....	2028922
2	PROP 65 HANG TAG.....	1795087
3	LABEL, PATENT HAWSE PIPE/DRINKHLDR.....	2063995
4	LABEL, PATENT CONFIG HULL PLANING SURF ....	2175365
5	LABEL, PATENT BOW THRUSTER.....	2063996
6	LABEL, PATENT HEADER.....	2088481
7	DANGER, CO CABIN .....	1812911



## Warning Label Locations (Con't)

Fig.1.21.1



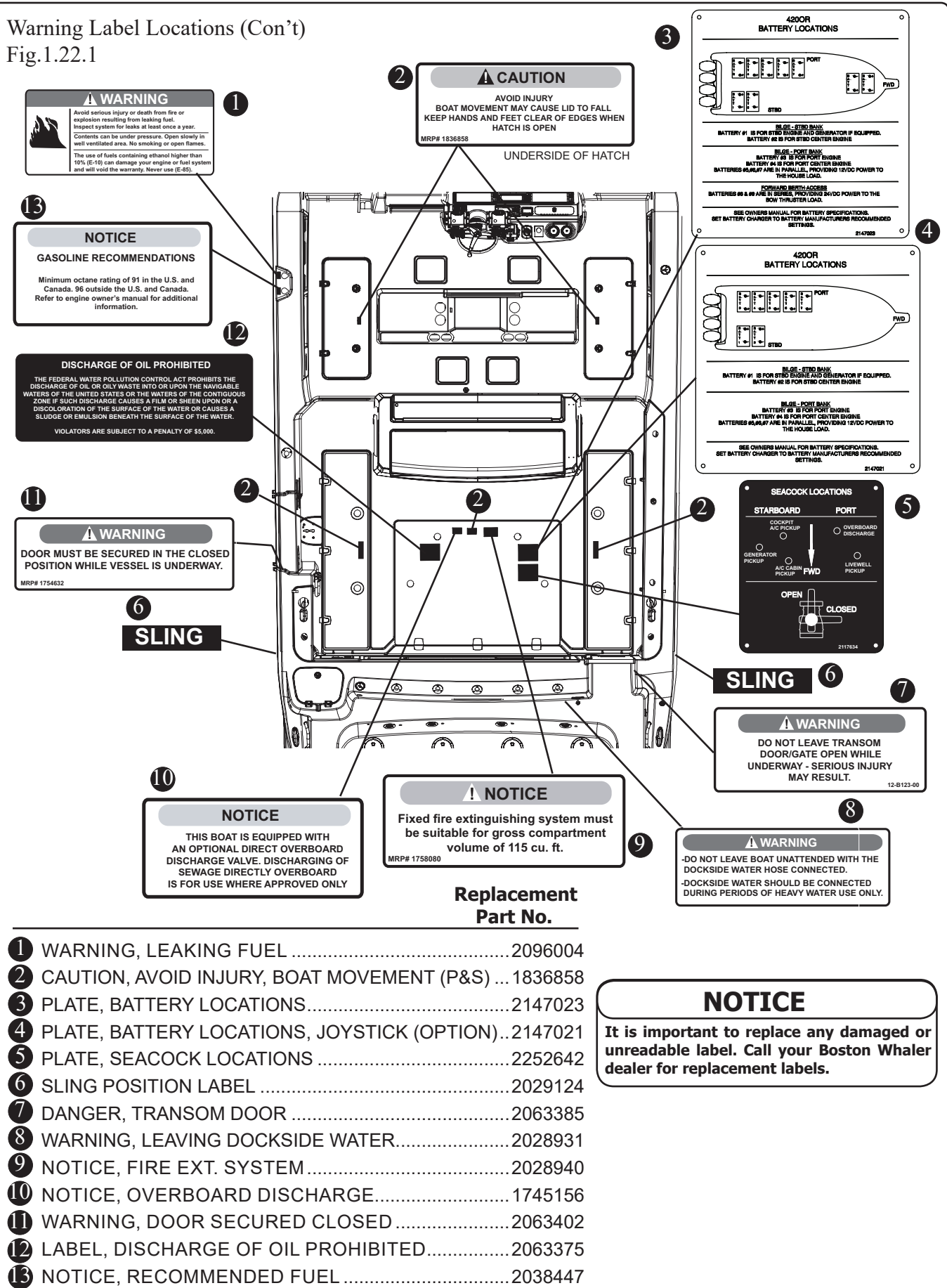
## NOTICE

It is important to replace any damaged or unreadable label. Call your Boston Whaler dealer for replacement labels.

## Replacement Part No.

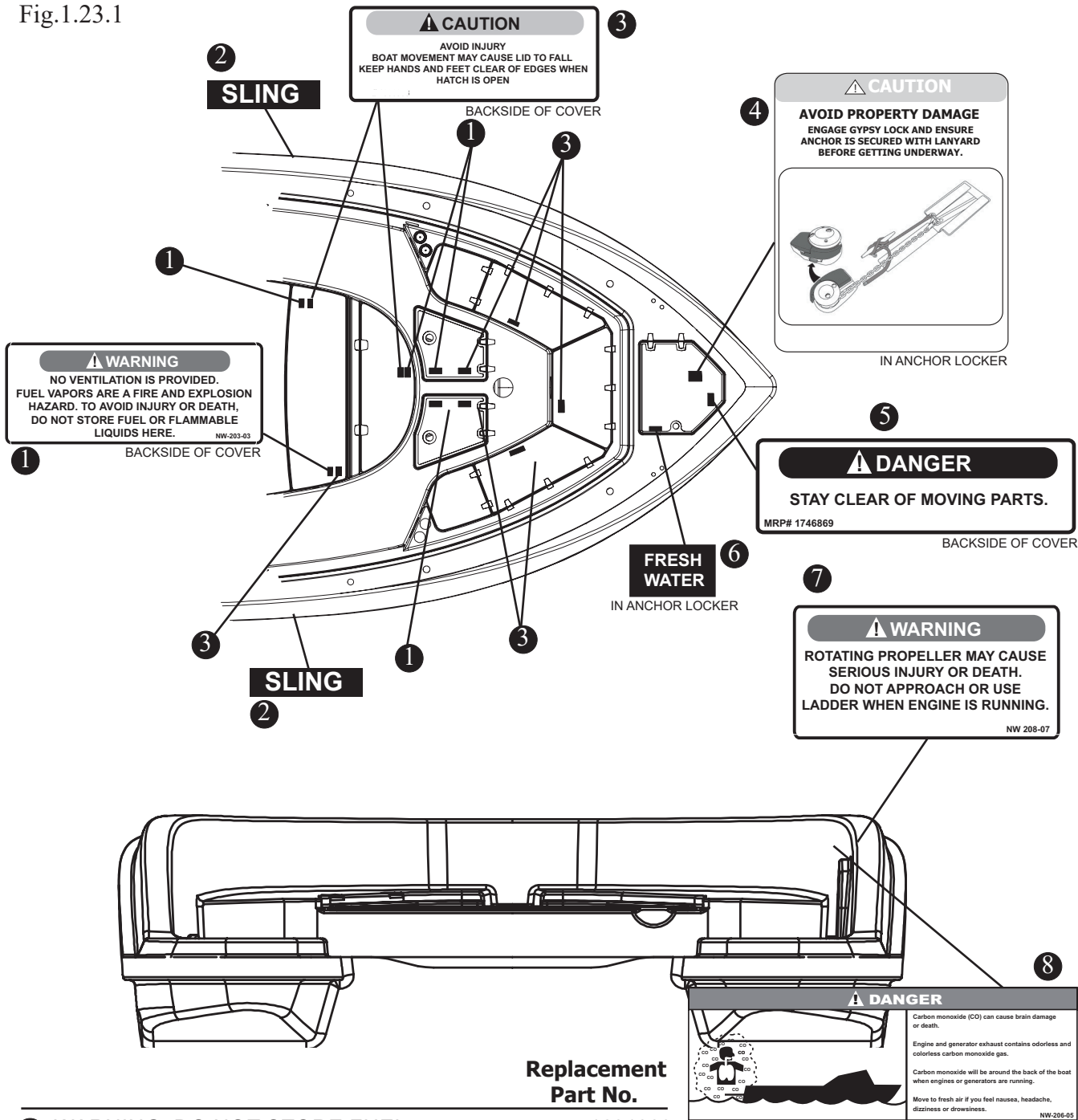
- |          |                                              |         |
|----------|----------------------------------------------|---------|
| <b>1</b> | DANGER, CO HELM .....                        | 1811368 |
| <b>2</b> | HANG TAG W/JOYSTICK LABEL KIT (OPTION) ..... | 2121785 |
| <b>3</b> | WARNING W/JOYSTICK LABEL KIT (OPTION) .....  | 2121785 |
| <b>4</b> | WARNING, LTD VISIBILTY FROM HELM STN.....    | 1752856 |
| <b>5</b> | WARNING, PROP DANGER.....                    | 1950698 |

Warning Label Locations (Con't)  
Fig.1.22.1



## Warning Label Locations (Con't)

Fig.1.23.1



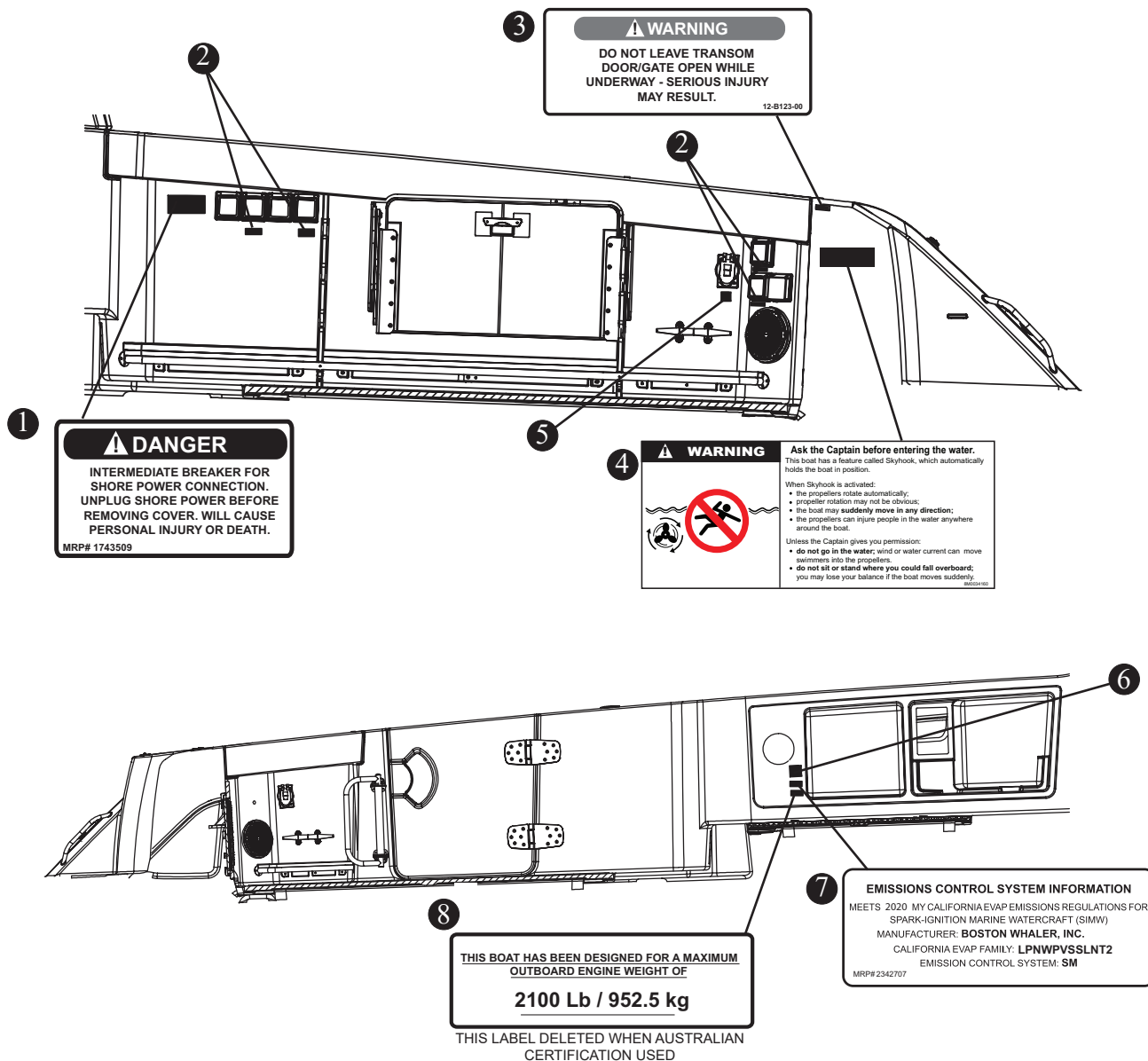
### Replacement Part No.

- |          |                                            |         |
|----------|--------------------------------------------|---------|
| <b>1</b> | WARNING, DO NOT STORE FUEL .....           | 1691003 |
| <b>2</b> | SLING POSITION LABEL .....                 | 2029124 |
| <b>3</b> | CAUTION, AVOID INJURY, BOAT MOVEMENT ..... | 1836858 |
| <b>4</b> | WARNING, ANCHOR, LANYARD.....              | 2147835 |
| <b>5</b> | DANGER, STAY CLEAR OF MOVING PARTS.....    | 2028932 |
| <b>6</b> | LABEL, FRESH WATER.....                    | 2063265 |
| <b>7</b> | WARNING, ROTATING PROP DANGER.....         | 1903624 |
| <b>8</b> | DANGER, CO TRANSOM.....                    | 1811367 |

### NOTICE

**It is important to replace any damaged or unreadable label. Call your Boston Whaler dealer for replacement labels.**

Warning Label Locations (Con't)  
Fig.1.24.1



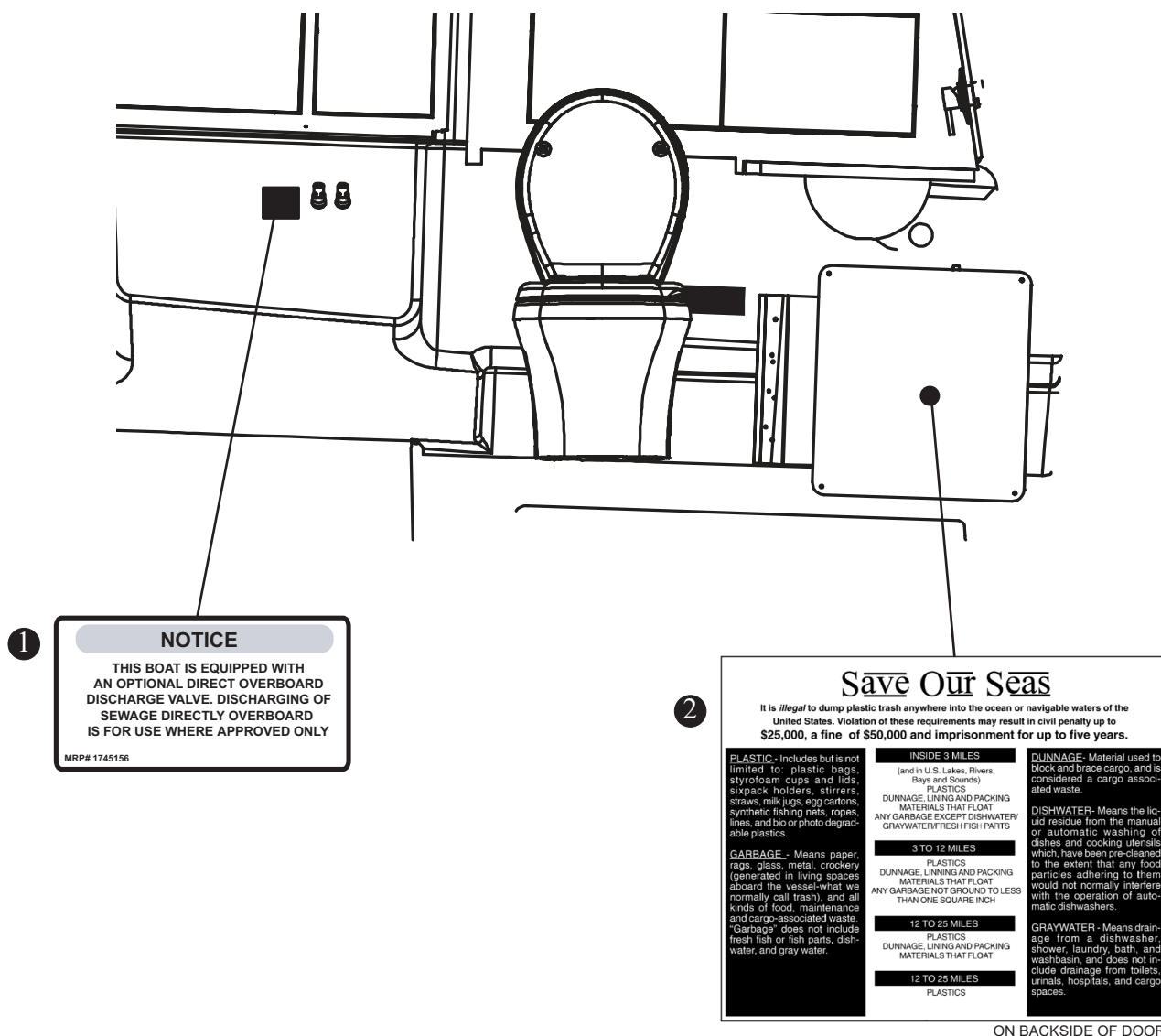
## Replacement Part No.

1	WARNING, INTERMEDIATE BREAKER .....	2029122
2	LABEL, "SHORE" .....	2063393
3	DANGER, TRANSOM DOOR .....	2063385
4	WARNING, W/JOYSTICK LABEL KIT (OPTION) .....	2121785
5	LABEL, SHORE POWER ISO SYMBOL .....	2067983
6	VESSEL CERTIFICATION PLATE .....	SEE FIGURE 2.2.1
7	LABEL, CALIFORNIA ARB COMPLIANCE .....	2342707
8	MAXIMUM ENGINE WEIGHT 3400 LBS/1542 KG .....	2149116

## NOTICE

It is important to replace any damaged or unreadable label. Call your Boston Whaler dealer for replacement labels.

Warning Label Locations (Con't)  
Fig.1.25.1



**NOTICE**

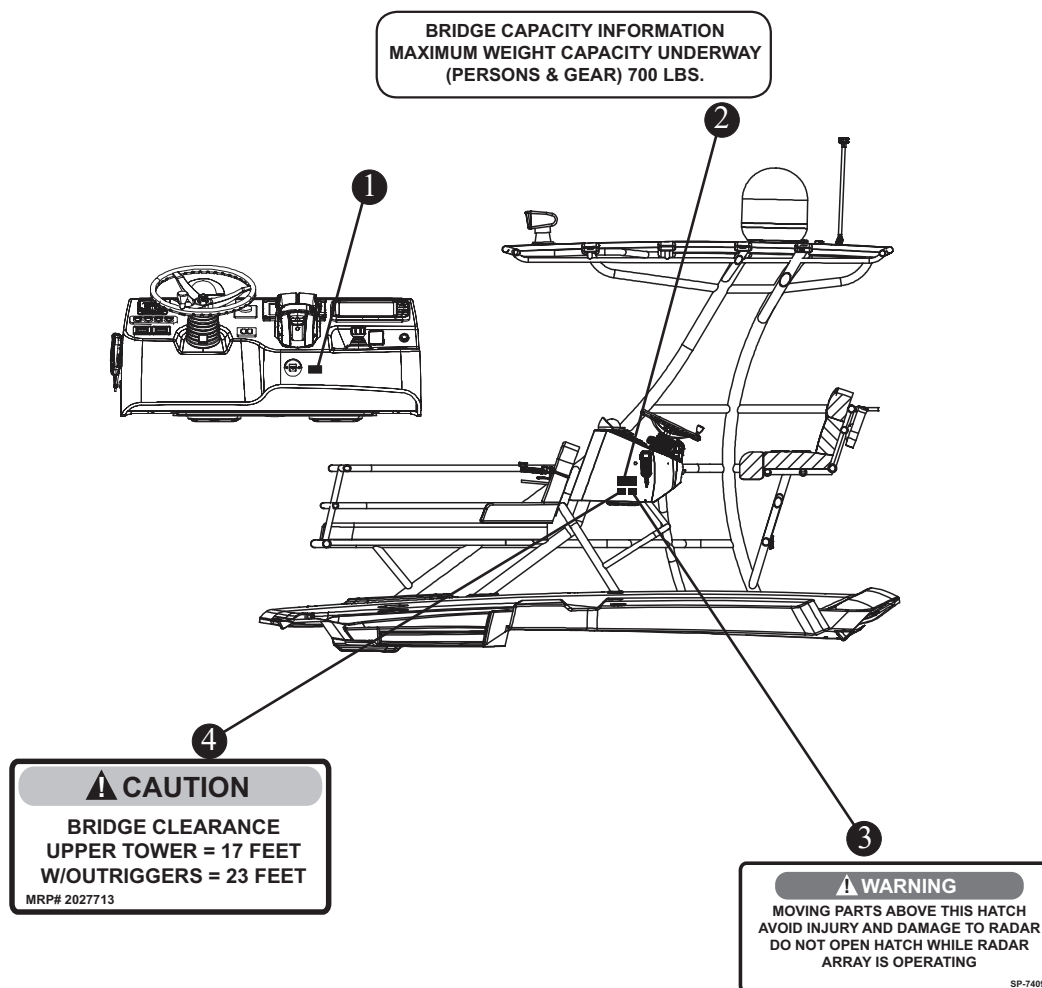
It is important to replace any damaged or unreadable label. Call your Boston Whaler dealer for replacement labels.

**Replacement Part No.**

- ① NOTICE, OVERBOARD DISCHARGE.....1745156
- ② SAVE-OUR-SEAS (DISPOSAL OF GARBAGE) .....2029125

## Warning Label Locations (Con't)

Fig.1.26.1



### NOTICE

It is important to replace any damaged or unreadable label. Call your Boston Whaler dealer for replacement labels.

### Replacement Part No.

- |   |                                              |         |
|---|----------------------------------------------|---------|
| ① | DECAL WEAR YOUR LANYARD .....                | 2156485 |
| ② | LABEL, BRIDGE CAPACITY 700 LB / 317 KG ..... | 2174750 |
| ③ | WARNING, RADAR ARRAY .....                   | 1888985 |
| ④ | CAUTION, BRIDGE CLEARANCE .....              | 2174752 |



## Key to Symbols on Controls

Although not used in this manual, some of these symbols may be found on the controls, gauges, and hardware on your boat. This page is to help you understand what the symbols mean.

					
PROPULSION SYSTEM TRIM	TRIM TAB TRIMMING OPERATION	ENGINE START	WARNING ELECTRICAL HAZARD	FIRE RISK	NO OPEN FLAME NO SMOKING
					
FUEL GENERAL	FUEL LEVEL	LEADED FUEL	ENGINE STOP	BATTERY	OIL
					
FUEL GENERAL	FUEL LEVEL	LEADED FUEL	GRAY WATER	SEAWATER	SEWAGE
					
OUTBOARD DRIVE	OUTBOARD DRIVE TILT	PROPELLER			
			BILGE PUMP	PUMP	LIFT POINT / SLING LOCATION
					
ANCHOR	ANCHOR LIGHT	INTERIOR LIGHT	LIFT POINT	RUNNING LIGHTS UNDER POWER	ROTARY CONTROL (WIDTH OF SYMBOL INDICATES INCREASE)
					
HORN	WINDSHIELD WIPER AND WASHER	MAGNETIC COMPASS			

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### Construction Standards

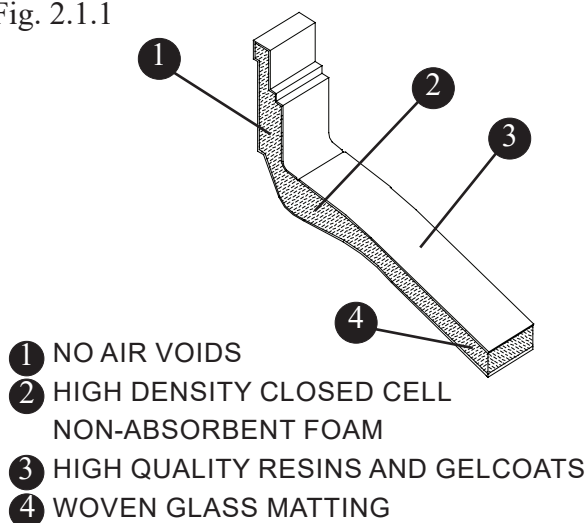
Boston Whaler is dedicated to creating a superior product which will provide comfort, performance, safety and dependability. All of our boats comply with the safety standards set by the United States Coast Guard and are designed, engineered and manufactured in accordance with applicable recommendations and guidelines of the American Boat and Yacht Council (ABYC) and certified by the National Marine Manufacturers Association (NMMA).

### Our Hull

Boston Whaler® hulls are constructed with our patented Unibond™ construction process. This involves foam injection into a closed mold system where the foam expands to fill all voids in the hull. When the finished product is pulled from the mold, the hull and deck are chemically bonded to form a solid, inseparable unit.

#### Hull Construction

Fig. 2.1.1



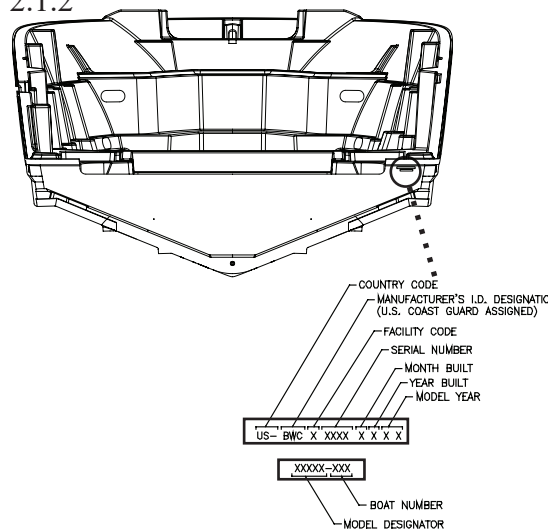
### Hull Identification Number

The “Hull Identification Number” is located on the starboard side of the transom.

This is the most important identifying factor and must be included in all correspondence related to your vessel. Also of vital importance are the engine serial numbers, part numbers, etc. when writing about or ordering parts for your engine.

#### Hull Identification Number (HIN)

Fig. 2.1.2



Record your HIN here:

### Servicing Your Boston Whaler

When your Whaler requires service or maintenance work, it should be taken to an authorized Boston Whaler® dealer.

To find a Boston Whaler® dealer in your area call:  
**1-800-942-5379** (Domestic/International).

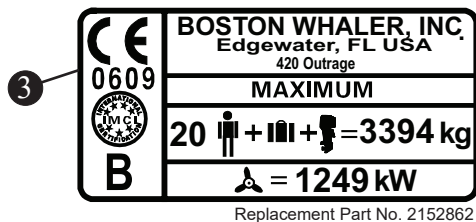
In the unlikely event that a problem is not handled to your satisfaction, discuss any warranty related problems directly with the service manager of the dealership or your sales person. Give the dealership an opportunity to help the service department resolve the matter for you.

### Manufacturer's Certification

All boats must comply with federal regulations regarding maximum capacities. The certification plate (See figure 2.2.1) located on the port gunwhale opposite the operator's console indicates certification by the National Marine Manufacturer's Association and in the case of international certification the sticker or plate indicates the maximum weight, number of persons, and horsepower your boat is rated to handle.

### Certification Plates

Fig. 2.2.1



- 1** NMMA CERTIFICATE
- 2** CANADA CONFORMITY STICKER
- 3** CE MARK (INT'L) BUILDER'S PLATE
- 4** AUSTRALIAN BUILDER'S PLATE

### DANGER

**NEVER** carry more weight or passengers than indicated on the certification plate, regardless of the weather or water conditions.

The number of persons on board must be reduced if you go out in poor weather and rough water.

The information present on the certification plate does not relieve the operator from responsibility. Use common sense and sound judgement when placing equipment and/or passengers in your boat.

- Do not load to capacity in poor weather or rough water.
- The number of seats does not indicate how many people a boat can carry, especially in poor weather and rough water.
- Above idle speed, all passengers must be seated on the seats provided.

An **NMMA Certification** means that your Boston Whaler® has been judged by the National Marine Manufacturers Association to be in compliance with applicable federal regulations and American Boat and Yacht Council standards.

A **Canada Conformity Sticker** means that your Boston Whaler® has been certified to comply with construction standards for small vessels by Transport Canada.

A **CE mark** means that your Boston Whaler® has been certified with applicable International Organization for Standardization directives.

An **Australian Builder's Plate** means that your Boston Whaler® has been certified with safety standards set by the National Marine Safety Committee.

### Certification Design Category

**A:** A recreational craft given design category A is considered to be designed for winds that may exceed wind force 8 (Beaufort scale) and significant wave heights of 4 meters and above but excluding abnormal conditions, such as storm, violent storm, hurricane, tornado and extreme sea conditions or rogue waves.

**B:** A recreational craft given design category B is considered to be designed for a wind force up to, and including, 8 and significant wave heights up to, and including 4 m.

**C:** A watercraft given design category C is considered to be designed a wind force up to, and including 6 and significant wave heights up to, and including, 2 m.

**D:** A watercraft given design category D is considered to be designed for a wind force up to, and including 4 and significant wave heights up to, and including, 0,3 m, with occasional waves of 0,5 m maximum height.

The significant wave height is considered to be the primary factor for determining design category. Other parameters (e.g. meteorological) are descriptions of when these wave heights may be expected to occur. Refer to page 1-11 for weather information.

### NOTICE

**The 420 OUTRAGE is category B**

### Power Capacity

The certification plate, as well as “Specifications & Dimensions” on the following page has the maximum rated power listed for your boat. **DO NOT EXCEED THIS RATING.** The various engine types offered today are more powerful and require constant maintenance to stay at optimal performance. It is required of the owner/operator to read all information regarding safety features, warning notices and maintenance schedules for continued safe operation of the engine.

The engine on the 420 Outrage has been tested and proven to be best suited for general use under normal conditions and load.

If you are re-powering your Boston Whaler®, you should pay particular attention to the maximum/minimum horsepower and maximum safe engine weight load for which your boat is rated.

### NOTICE

**The 420 Outrage is designed for a maximum outboard engine weight of 3400 LBS (1542 kg).**

### NOTICE

**Always adjust the speed and direction of the craft to the varying sea conditions.**

### WARNING

**DO NOT Exceed the maximum engine power rating for your boat.**

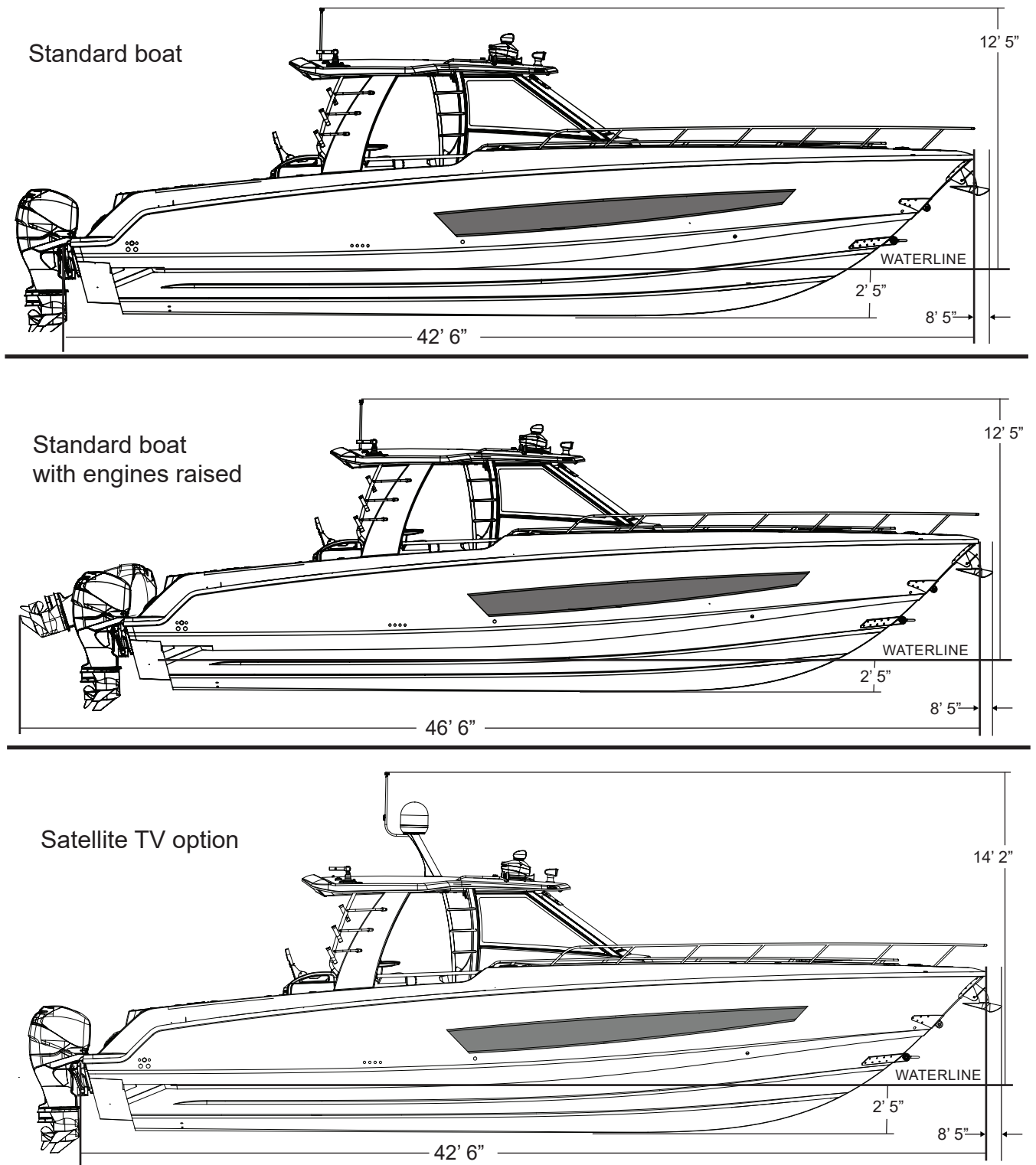
**Use caution while accelerating. Make sure passengers are safely seated in designated areas of the boat and all gear is stowed securely.**



## Section 2 • General Information

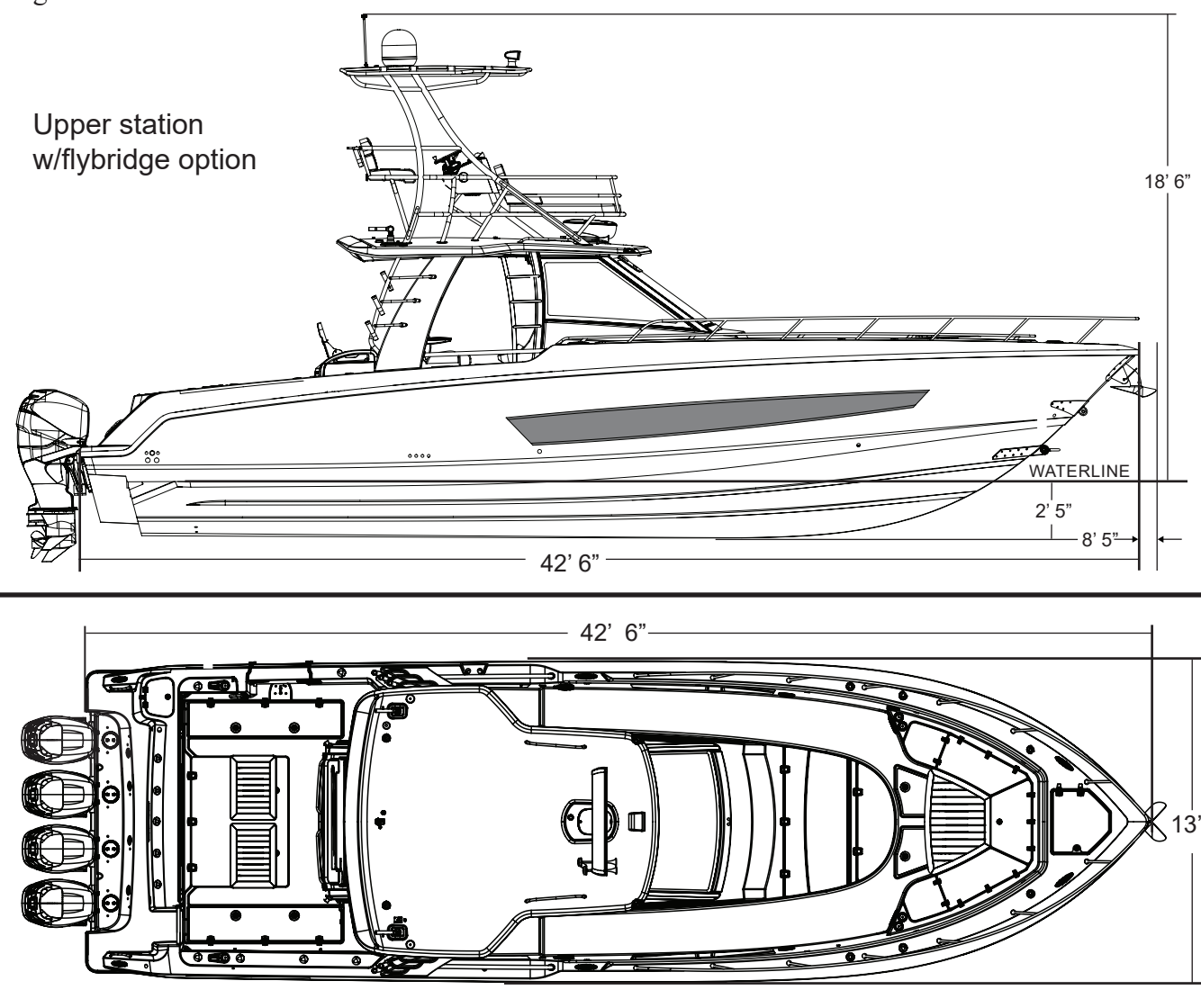
### Dimensions & Clearances

Fig. 2.4.1



### Dimensions & Clearances (Cont'd)

Fig. 2.5.1



### Specifications & Dimensions

(Specified measurements are approximations and are subject to variance.)

Overall Length	42' 6"	13.0 m	Swamped Capacity	4,000 lbs	1814 kg
Bridge Clearance			Maximum Engine Weight	3,400 lbs.	1542 kg
- with hardtop	12' 5"	3.81 m	Maximum Weight,	7,482 lbs	3394 kg
- with optional satellite TV	14' 2"	4.32 m	(passengers, engine(s), gear <sup>2</sup> )		
- with optional upper station	18' 6"	5.64 m	Persons	20	
Beam	13'	3.96 m	Maximum Horsepower	1,675 HP	1246 kw
Draft (Boat only <sup>1</sup> )	1' 7"	.79 m	Minimum Horsepower	1,200 HP	895 kw
Weight (dry, no engine)	22,000 lbs.	9979 kg	Fuel Capacity:	600 gal.	2271 L
Weight (w/ engines, fuel and water)	29,500 lbs.	13381 kg	Waste Capacity	20 gal.	76 L
			Water Capacity	60 gal.	227 L


<sup>1</sup> Optional equipment and loading of the boat will affect the draft measurements. Follow the recommendations regarding the maximum amount of weight your boat can safely carry.


<sup>2</sup> Exceeding this weight will affect the boat's performance. **DO NOT** Exceed the weight listed.


### Passenger Areas

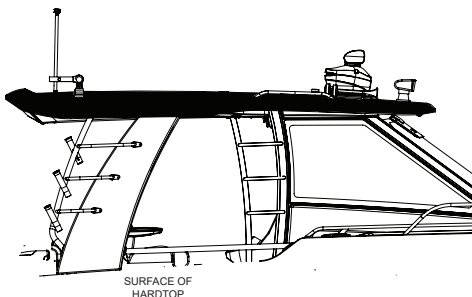
#### Deck Occupancy

Fig. 2.6.1

 This area is intended for occupation **ONLY** while mooring, anchoring, loading/unloading or when the boat is at rest. **NEVER** operate the engine while loading or unloading swimmers/divers from the swim platform/ladder.

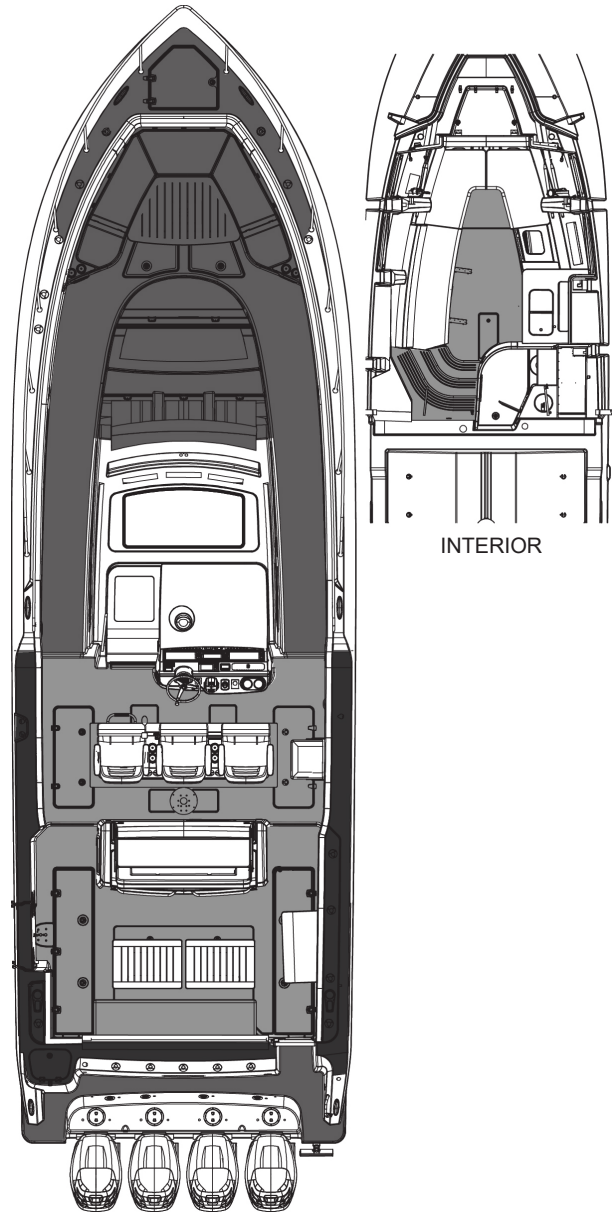
 This area of the boat is inside the cockpit & cabin and includes helm seating. Movement in this area should be done with extreme caution while the boat is underway. A sudden shift in boat direction can cause a loss of balance and lead to injury or death.

 Do Not stand or walk on this area while underway. Serious injury could result. If necessary, stand or walk only where non-skid is applied.



#### **WARNING**

- Gelcoat surfaces are slippery when wet. Use extreme caution when walking on wet surfaces.
- Never occupy the working decks while the boat is underway.
- Use care when waxing to ensure that walkways are not made dangerously slippery.



#### **DANGER**

To avoid risk of injury or death, shut off engines when near swimmers or prior to using swim ladder.

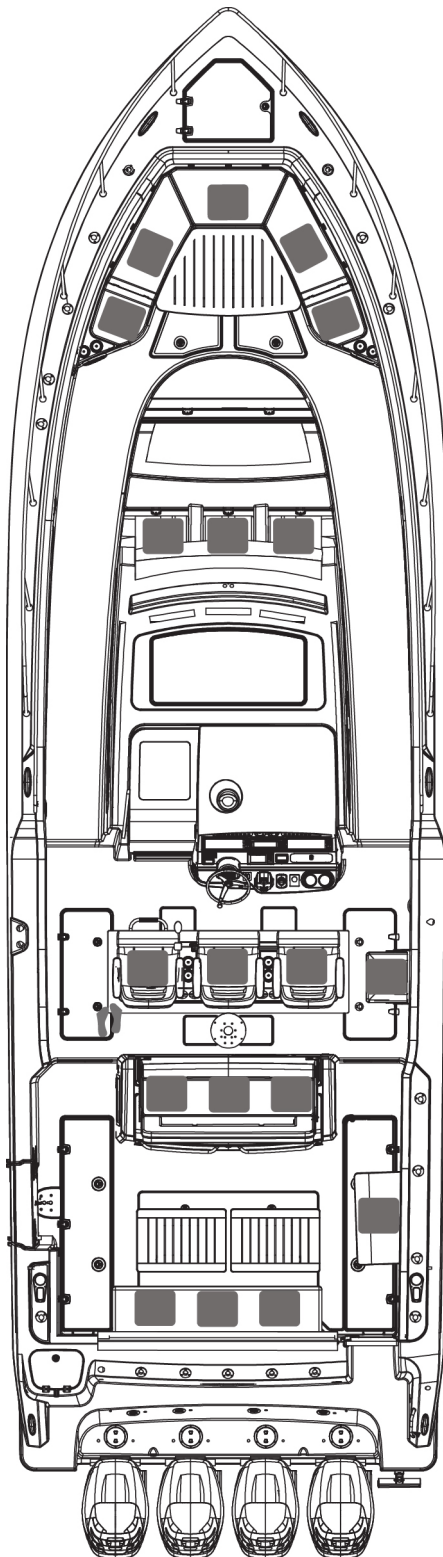
#### **DANGER**

Be aware of your footing while the boat is underway, slipping or falling could result in serious injury or death, especially if the boat is in motion or in rough seas. Keep the accommodation deck clean, so if movement is necessary it will be free of obstruction.

## Recommended Passenger Locations

### Recommended Seating

Fig. 2.7.1



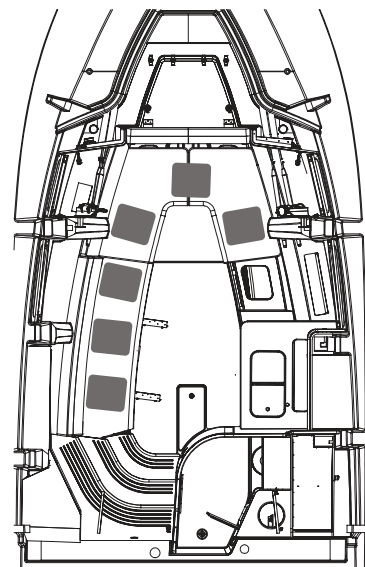
NOTE: Hardtop removed for clarity

### **! WARNING**

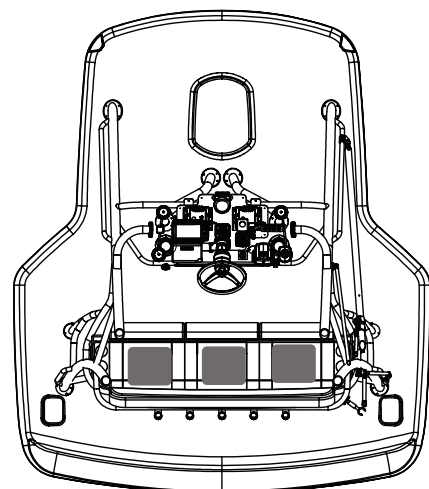
**NEVER** allow passengers to ride in an area (i.e. bow, gunwales, transom, etc.) that will pose a hazard to themselves or the boat.

### **NOTICE**

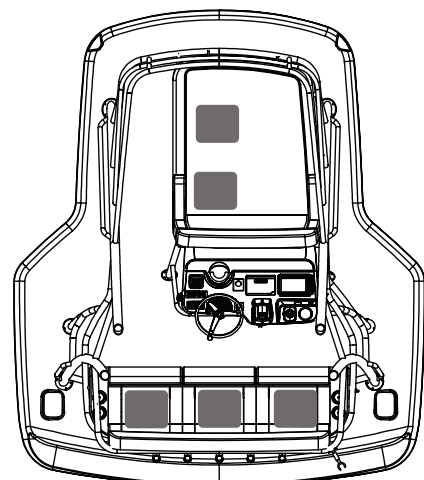
Your boat is rated for 20 persons **ONLY**. The interior, upper station and flybridge illustrate optional seating, **NOT** additional seating.



INTERIOR (OPTIONAL SEATING)



UPPER STATION (OPTIONAL SEATING)



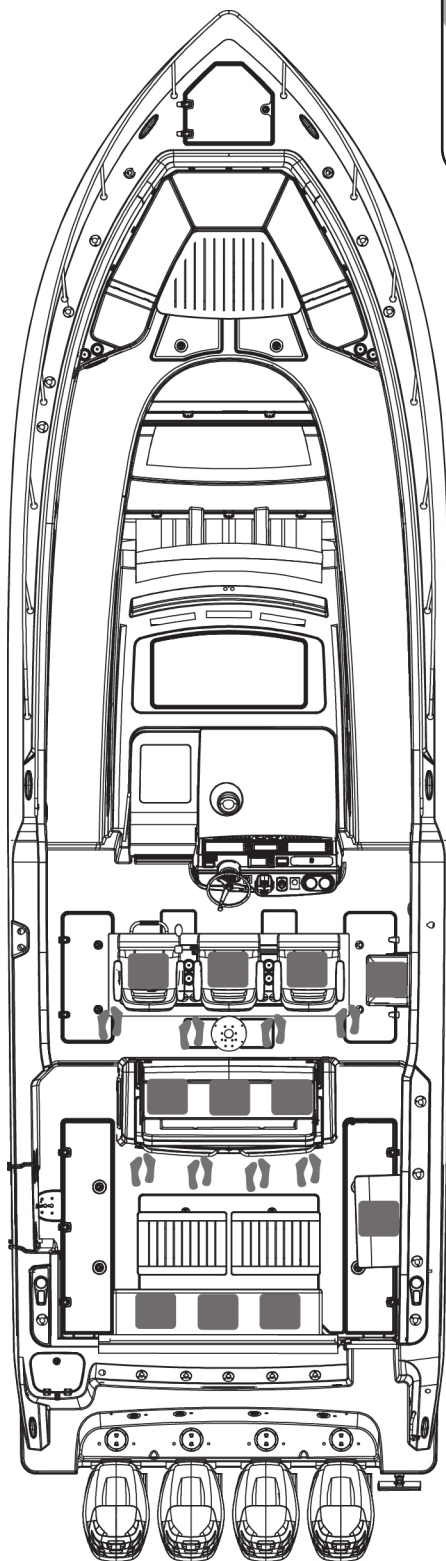
FLYBRIDGE (OPTIONAL SEATING)

Seating while moored, at idle or at speed under 5 mph

### Recommended Passenger Locations (Cont'd)

Recommended On-Plane Locations

Fig. 2.8.1



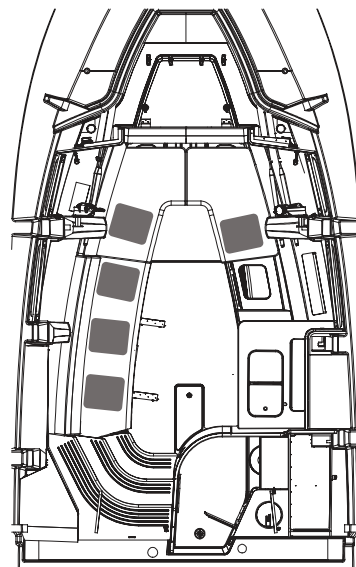
NOTE: Hardtop removed for clarity

#### **WARNING**

**NEVER** allow passengers to ride in an area (i.e. bow, gunwales, transom, etc.) that will pose a hazard to themselves or the boat.

#### **NOTICE**

Your boat is rated for 20 persons **ONLY**. The interior illustrates optional seating, **NOT** additional seating.

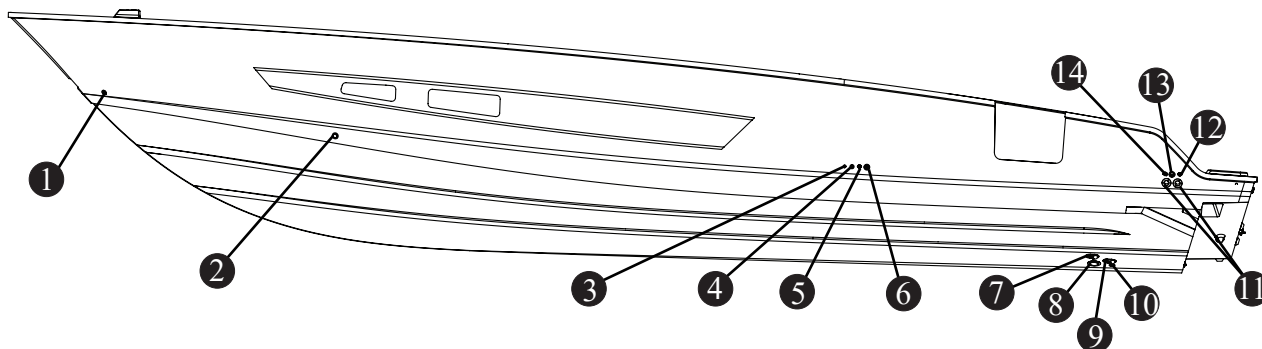


INTERIOR (OPTIONAL SEATING)



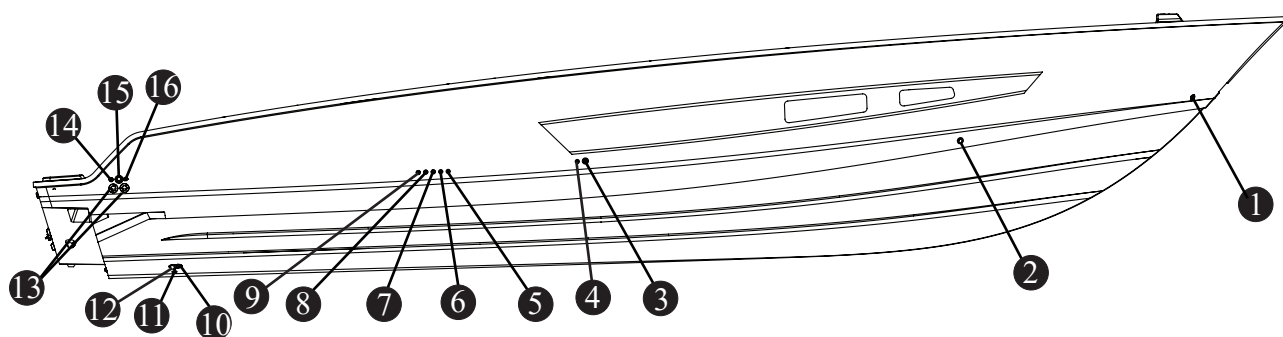
### Location of Thru-Hull Fittings

Thru-Hull Fittings, Port  
Fig. 2.9.1



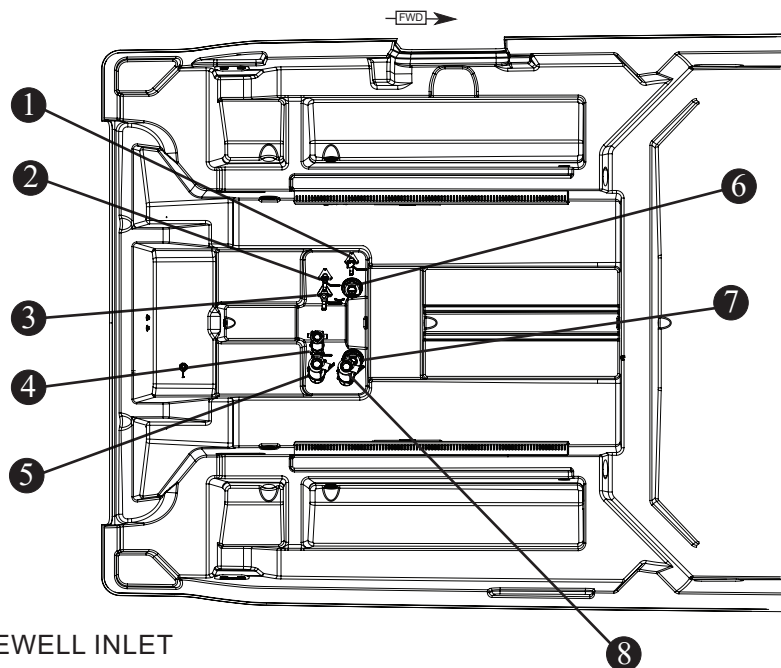
- |                                 |                                |
|---------------------------------|--------------------------------|
| ① PORT ANCHOR LOCKER DRAIN      | ⑧ ELECTRONIC TRANSDUCER        |
| ② FORWARD PORT STORAGE DRAIN    | ⑨ WASTE SYSTEM DISCHARGE       |
| ③ CABIN A/C DRAIN               | ⑩ LEANING POST LIVEWELL INTAKE |
| ④ COCKPIT A/C DRAIN             | ⑪ PORT DECK DRAINS             |
| ⑤ MID DECK PORT TUB DRAIN       | ⑫ PORT BILGE PUMP OUTLET       |
| ⑥ LEANING POST LIVEWELL DRAIN   | ⑬ AFT LIVEWELL DRAIN           |
| ⑦ RAW WATER/AFT LIVEWELL INTAKE | ⑭ PORT FISHBOX PUMPOUT         |

Thru-Hull Fittings, Starboard  
Fig. 2.9.2



- |                                                                        |                                        |
|------------------------------------------------------------------------|----------------------------------------|
| ① STARBOARD ANCHOR LOCKER DRAIN                                        | ⑧ MID DECK STARBOARD TUB DRAIN         |
| ② FORWARD STARBOARD STORAGE DRAIN                                      | ⑨ LEANING POST SINK DRAIN              |
| ③ SUMP BOX, FORWARD BILGE AND FREEZER PLATES DRAIN                     | ⑩ GYROSCOPE STABILIZER INTAKE (OPTION) |
| ④ FREEZER PLATES CONDENSATION DRAIN                                    | ⑪ GENERATOR INLET                      |
| ⑤ COCKPIT A/C CONDENSATION DRAIN (OPTION)                              | ⑫ A/C SYSTEM AND FREEZER PLATES INTAKE |
| ⑥ COCKPIT A/C CONDENSATION DRAIN / GYROSCOPE STABILIZER DRAIN (OPTION) | ⑬ STARBOARD DECK DRAINS                |
| ⑦ WATER HEATER PRESSURE RELIEF VALVE                                   | ⑭ STARBOARD BILGE PUMP OUTLET          |
|                                                                        | ⑮ GENERATOR EXHAUST                    |
|                                                                        | ⑯ STARBOARD FISHBOX PUMPOUT            |

Thru-Hull Fittings, Bilge  
Fig. 2.10.1



- ① RAW WATER INTAKE/AFT LIVEWELL INLET
- ② LEANING POST LIVEWELL INTAKE
- ③ WASTE SYSTEM DISCHARGE
- ④ GENERATOR INTAKE
- ⑤ A/C SYSTEM AND FREEZER PLATE INTAKE
- ⑥ ELECTRONIC TRANSDUCER (OPTION)
- ⑦ ELECTRONIC TRANSDUCER
- ⑧ GYROSCOPE STABILIZER INTAKE (OPTION)

### NOTICE

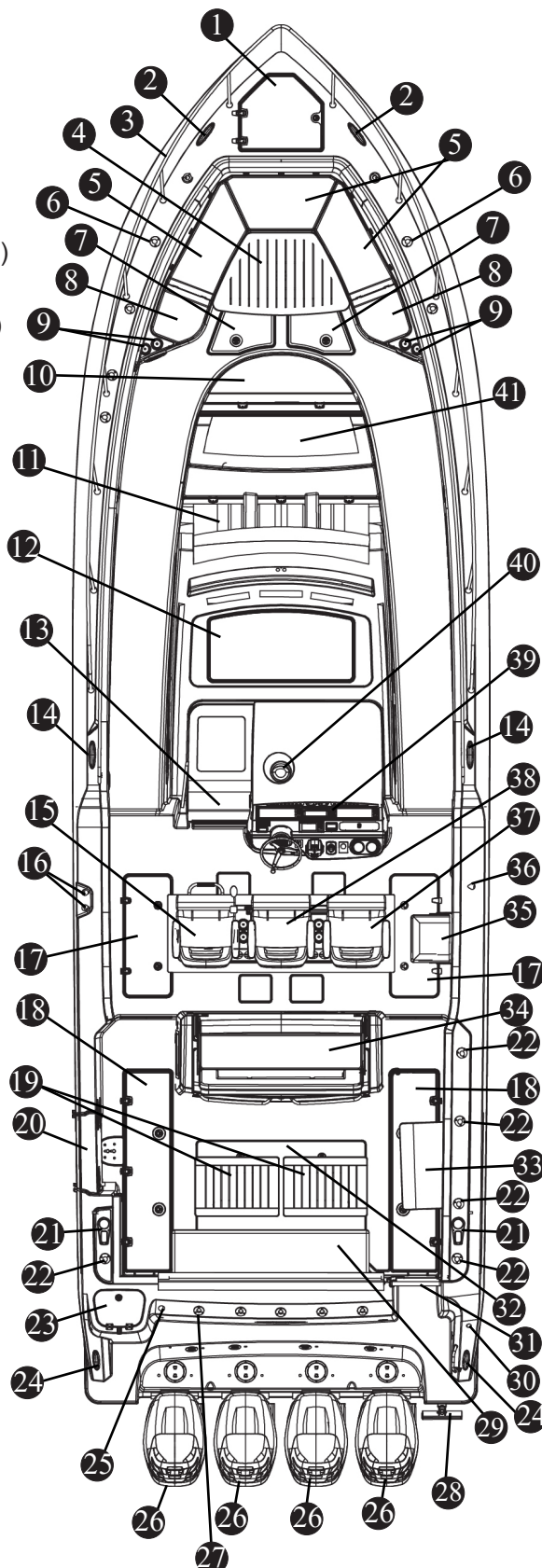
- The deck drain provides self-bailing capabilities while the boat is static in the water and no passengers on board. This feature prevents the accumulation of water in the cockpit. The drain plug must be in place when underway.
- Depending on the type of boat you have, you may have underwater fittings that need drain plugs. Garboard drain plugs and fishbox drain plugs need to be in place before the boat goes into the water. Any fitting that will be underwater needs to be plugged or the seacock needs to be closed.
- Through hull fittings and deck drain scupper flaps should be checked for proper seal annually. When the boat is in the water the underwater fittings can be checked for dripping. It is recommended that the underwater fittings be removed, cleaned and resealed every other year.
- If the through hull fittings need to be replaced, it is recommended that an authorized Boston Whaler® dealer perform this type of repair. Through hull fittings that are improperly installed can cause premature hull failure and may void the Boston Whaler® limited warranty.
- A standard 1" "Snap-Tite" plug can be used to replace the garboard drain plug in your boat. It is recommended that you carry spare plugs to be used in the event that the garboard drain plug becomes lost or damaged.

## General Layout

General Layout, Exterior (Hardtop removed for clarity)

Fig. 2.11.1

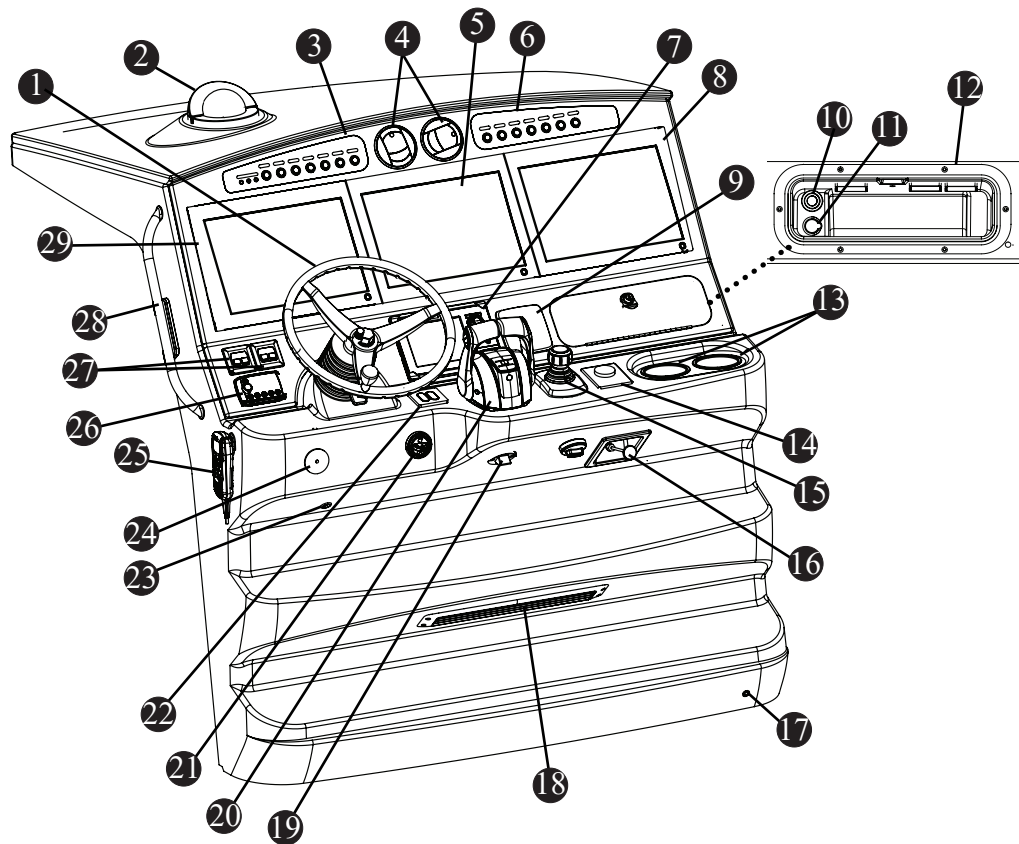
- 1 ANCHOR LOCKER
- 2 BOW CLEATS (P&S)
- 3 BOW RAIL
- 4 BOW TABLE
- 5 FORWARD STORAGE (P&S)
- 6 FORWARD GUNWALE MOUNTED ROD HLDERS (P&S)
- 7 FORWARD IN-DECK STORAGE
- 8 FORWARD SEATING W/FOLDING BACKREST ( P&S)
- 9 FORWARD CUPHOLDERS (P&S)
- 10 FORWARD LOUNGE STORAGE
- 11 FORWARD LOUNGE
- 12 SKYLIGHT W/INTEGRATED SHADE
- 13 CABIN ENTRY DOOR
- 14 MID SHIP CLEAT (P&S)
- 15 PORT HELM COMPANION SEAT
- 16 FUEL FILL DECK PLATES
- 17 MID IN-DECK STORAGE
- 18 IN-DECK FISHBOX WITH PUMPOUT (P&S)
- 19 STOWABLE COCKPIT TABLES
- 20 DIVE/BOARDING DOOR W/REMOVABLE LADDER
- 21 HAWSE PIPE WITH CUPHOLDER (P&S)
- 22 COCKPIT GUNWALE MOUNTED ROD HLDERS (P&S)
- 23 24 GAL. (90.85 L) LIVELWELL
- 24 STERN CLEATS (P&S)
- 25 WASTE PUMPOUT DECK PLATE
- 26 MERCURY FOUR-STROKE ENGINE W/ POWER STEERING
- 27 TRANSOM MOUNTED ROD HOLDERS (5)
- 28 EXPANDABLE BOARDING LADDER
- 29 FOLDAWAY STERN BENCH SEAT
- 30 TRANSOM SHOWER W/HOT AND COLD WATER
- 31 TRANSOM ACCESS DOOR
- 32 MECHANICAL ACCESS HATCH
- 33 FOLDAWAY STARBOARD BENCH SEAT (OPTION)
- 34 DELUXE LEANING POST/BAIT PREP STATION
- 35 FOLDAWAY TROLLING SEAT (OPTION)
- 36 FRESH WATER FILL DECK PLATE
- 37 STARBOARD HELM COMPANION SEAT
- 38 ELECTRICALLY ACTUATED CAPTAINS CHAIR
- 39 CONSOLE
- 40 MAGNETIC COMPASS
- 41 FLIP-UP BACKREST



### General Layout (Cont'd)

General Layout, Control Station

Fig. 2.12.1



- |                                                           |                                                                           |
|-----------------------------------------------------------|---------------------------------------------------------------------------|
| 1 STAINLESS STEEL STEERING WHEEL                          | 18 VENT                                                                   |
| 2 MAGNETIC COMPASS                                        | 19 ENGINE SHUT DOWN SWITCH                                                |
| 3 PORT HELM SWITCH PANEL                                  | 20 GEAR SHIFT/THROTTLE CONTROL                                            |
| 4 AIR CONDITIONING VENTS                                  | 21 THEFT DETERRENCE SWITCH (OPTION)                                       |
| 5 RAYMARINE gS165, 15.4" SCREEN (OPTION)*                 | 22 TRIM TAB CONTROL PAD                                                   |
| 6 STARBOARD HELM SWITCH PANEL                             | 23 AMBIENT TEMPERATURE SENSOR                                             |
| 7 SMARTCRAFT™ VESSELVIEW 7                                | 24 FIRE SUPPRESSION INDICATOR LIGHT                                       |
| 8 RAYMARINE gS165, 15.4" SCREEN (OPTIONAL DUAL DISPLAY)** | 25 RAYMARINE VHF RADIO                                                    |
| 9 RAYMARINE SMARTPILOT AUTOPILOT (OPTION)***              | 26 FUSION 7001 STEREO REMOTE                                              |
| 10 12V ACCESSORY RECEPTACLE                               | 27 START/STOP SWITCH                                                      |
| 11 USB CHARGING PORT                                      | 28 GRAB RAIL                                                              |
| 12 LOCKABLE GLOVE BOX                                     | 29 RAYMARINE gS165, 15.4" SCREEN (GPS/CHARTPLOTTER/FISHFINDER) (OPTION)** |
| 13 CUPHOLDERS                                             |                                                                           |
| 14 SPOTLIGHT REMOTE (OPTION)                              |                                                                           |
| 15 JOYSTICK PILOTING (OPTION)                             |                                                                           |
| 16 WINDSHIELD DEFOG VENTS RELEASE                         |                                                                           |
| 17 CONSOLE DRAIN                                          |                                                                           |

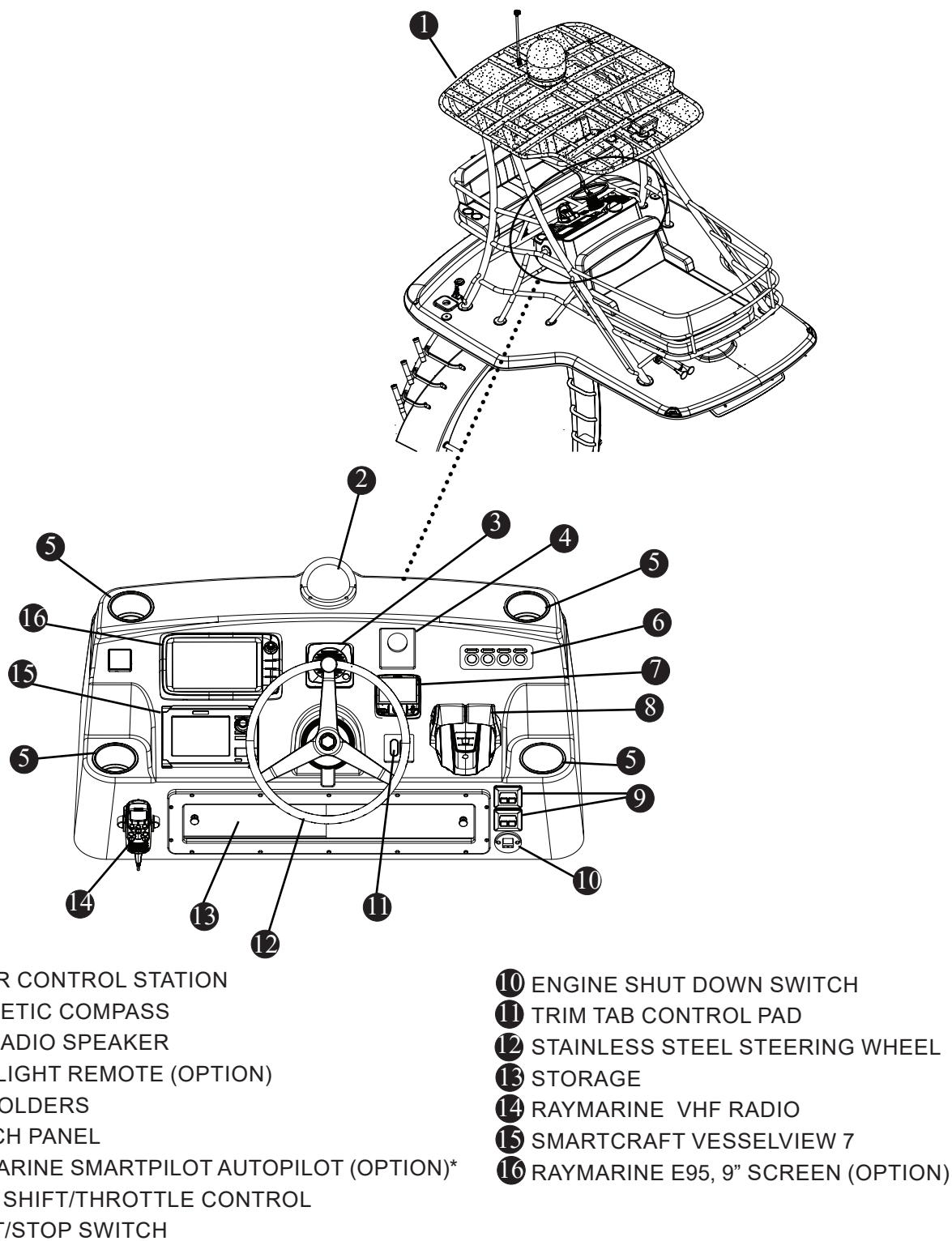
\*Must select gS165 Dual Navigation package.

\*\*Raymarine E165, 15.4" screen available.

\*\*\* Autopilot control w/Skyhook available

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY ON THE ELECTRONIC EQUIPMENT INSTALLED ON YOUR BOAT.

General Layout, Upper Control Station (Option)  
Fig. 2.13.1



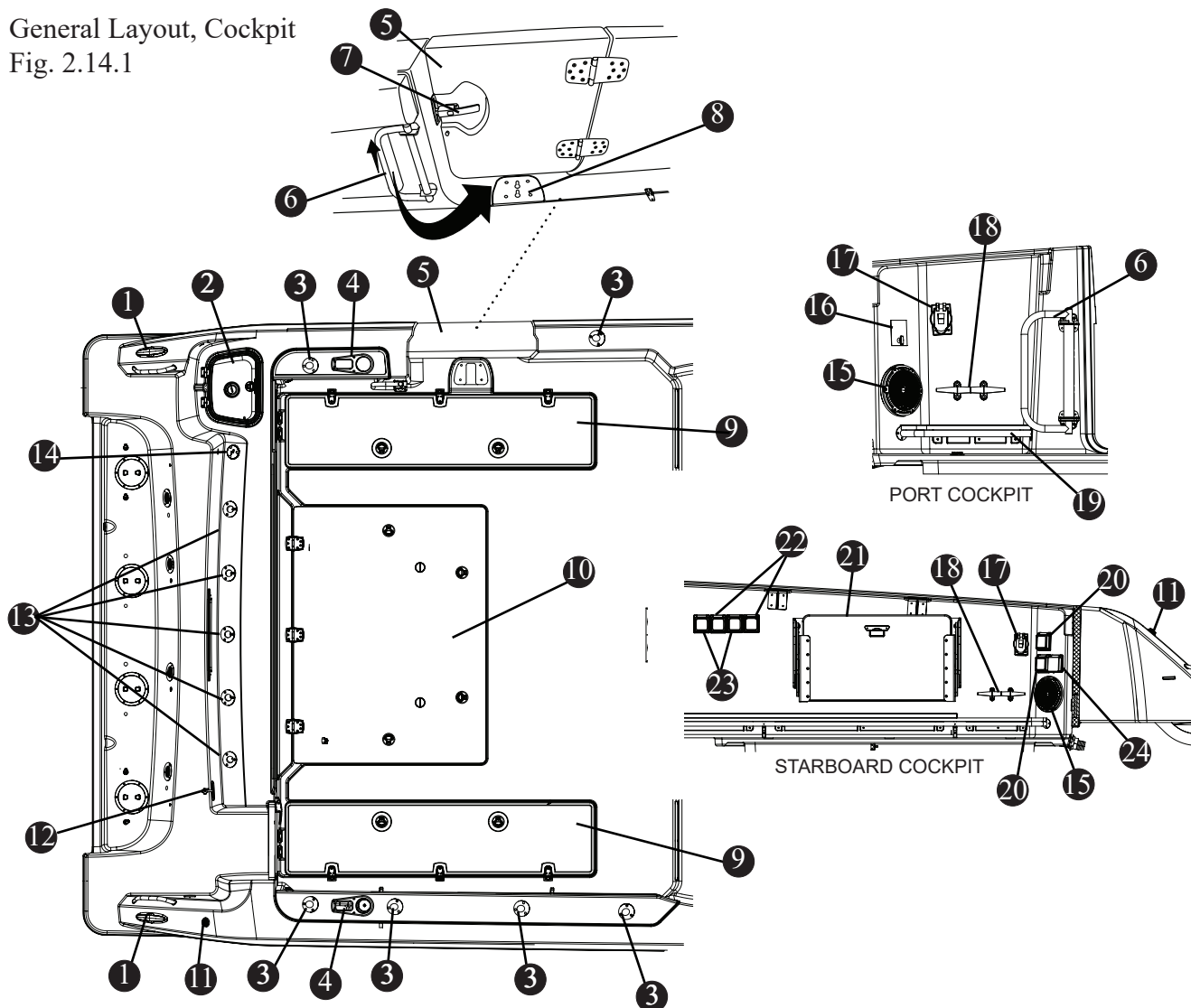
\* Autopilot control w/Skyhook available

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY ON THE ELECTRONIC EQUIPMENT INSTALLED ON YOUR BOAT.



## General Layout (Cont'd)

General Layout, Cockpit  
Fig. 2.14.1

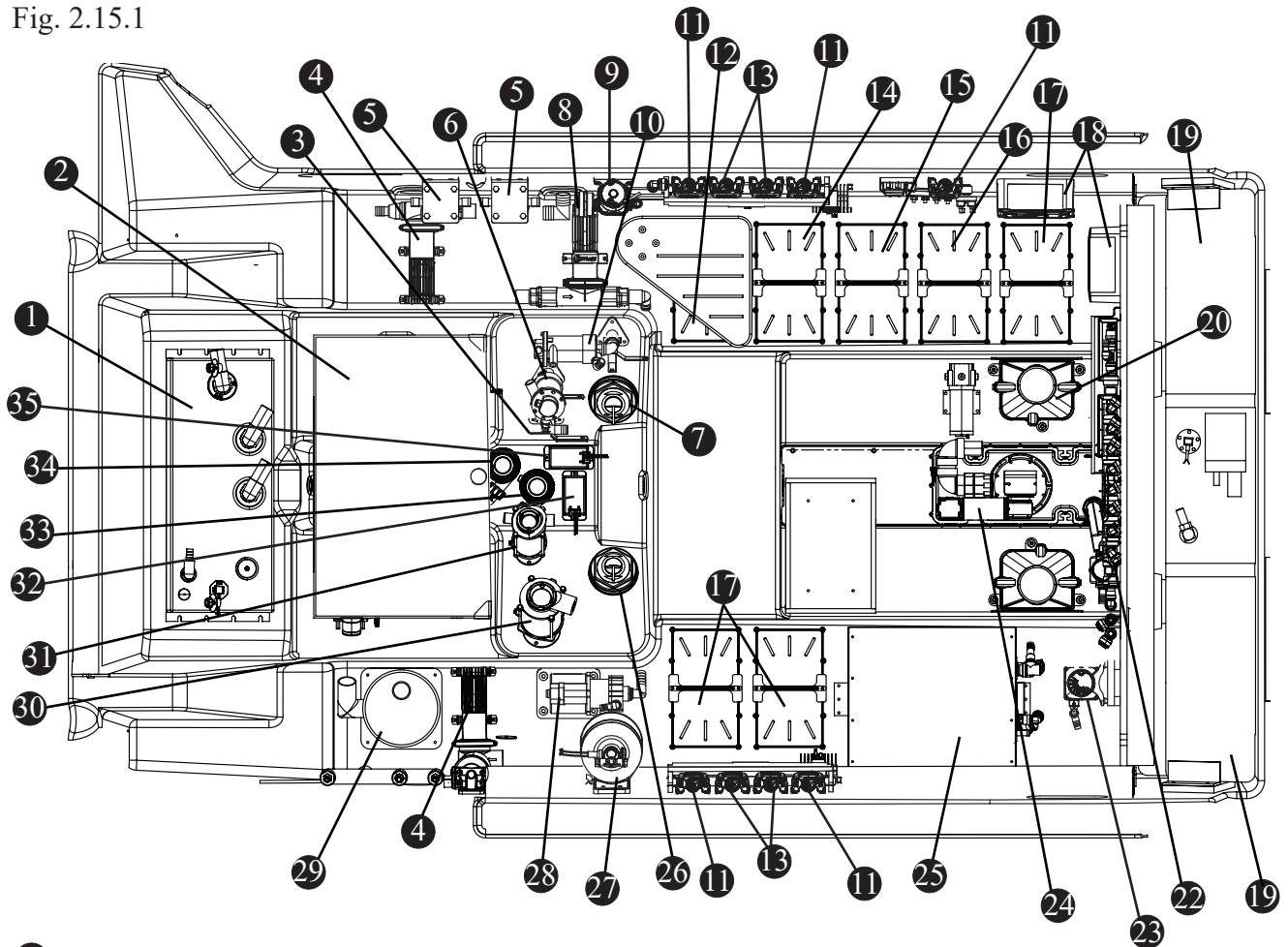


- |                                          |                                                                                         |
|------------------------------------------|-----------------------------------------------------------------------------------------|
| ① STERN CLEAT (P&S)                      | ①⑥ AUTOMATIC FIRE SYSTEM MANUAL OVERRIDE                                                |
| ② 24 GAL. (90.85 L) PRESSURIZED LIVEWELL | ①⑦ 125V/30AMP SHORE POWER REC'PT.* FOR ELECTRIC REELS AND/OR DOWNRIGGERS (P&S) (OPTION) |
| ③ GUNWALE MOUNTED RODHOLDERS (P&S)       | ①⑧ AFT COCKPIT CLEAT (P&S)                                                              |
| ④ HAWSE PIPE W/CUPHOLDER (P&S)           | ①⑨ DOWNRIGGER WEIGHT CRADLE (P&S)                                                       |
| ⑤ DIVE/BOARDING DOOR                     | ②① 125V/30AMP SHORE POWER*                                                              |
| ⑥ DEPLOYABLE GRAB RAIL FOR DIVE DOOR     | ②② COCKPIT FOLDOUT SIDE TROLLING SEAT (OPTION)                                          |
| ⑦ STAINLESS STEEL LATCH                  | ②③ ELCI (EQUIPMENT LEAKAGE CIRCUIT INTERRUPTER)                                         |
| ⑧ DIVE LADDER BRACKET                    | ②④ SHORE POWER MAIN BREAKERS                                                            |
| ⑨ INSULATED FISHBOX WITH PUMPOUT (P&S)   | ②⑤ DOCKSIDE TV INLET                                                                    |
| ⑩ MECHANICAL HATCH                       |                                                                                         |
| ⑪ TRANSOM FRESHWATER SHOWER              |                                                                                         |
| ⑫ DOCKSIDE FRESHWATER HOSE CONNECTION    |                                                                                         |
| ⑬ TRANSOM RODHOLDERS (5)                 |                                                                                         |
| ⑭ WASTE PUMPOUT DECK PLATE               |                                                                                         |
| ⑮ STEREO SPEAKER                         |                                                                                         |

\*220/50H 16AMP available

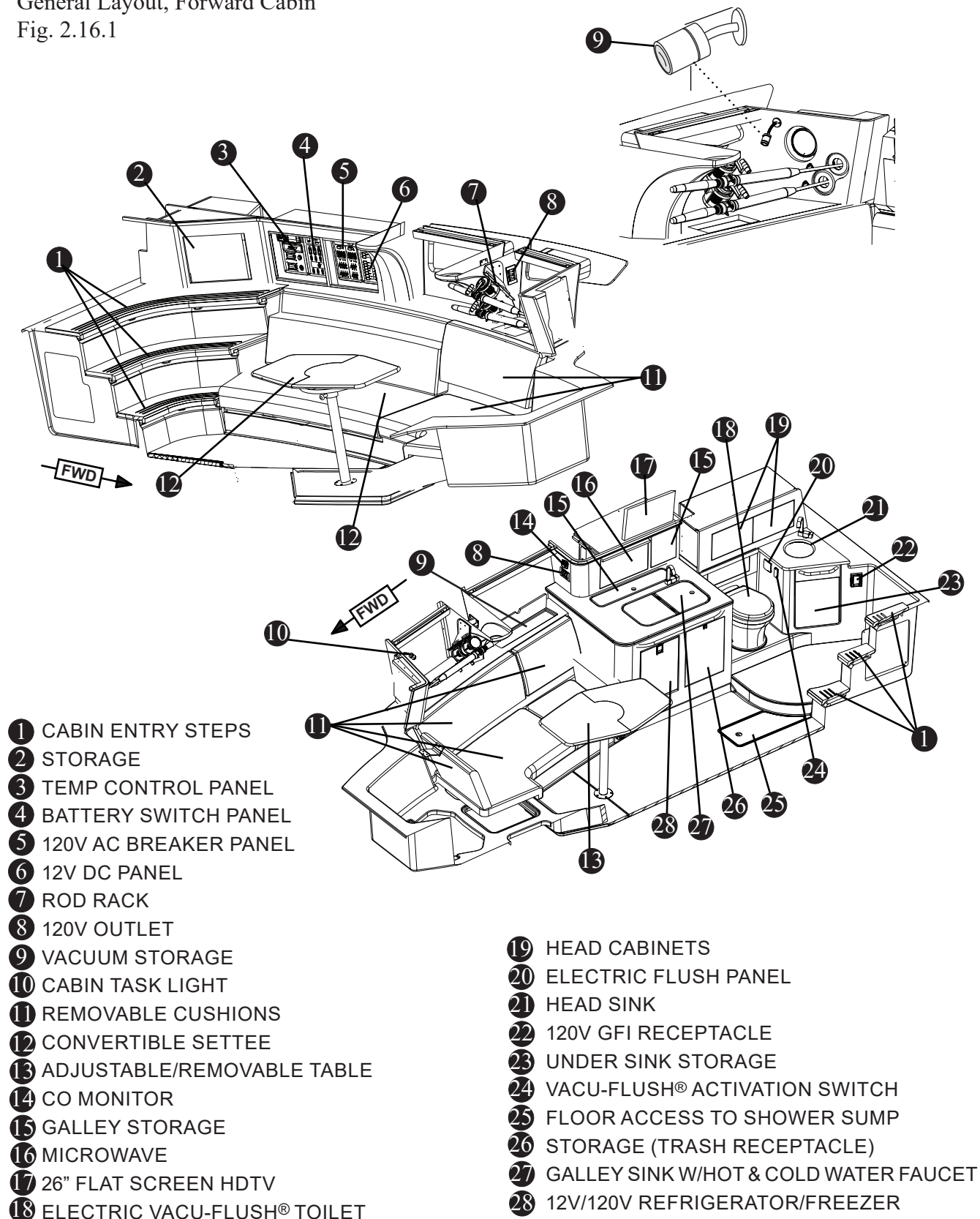
## General Layout (Cont'd)

General Layout, Bilge  
Fig. 2.15.1

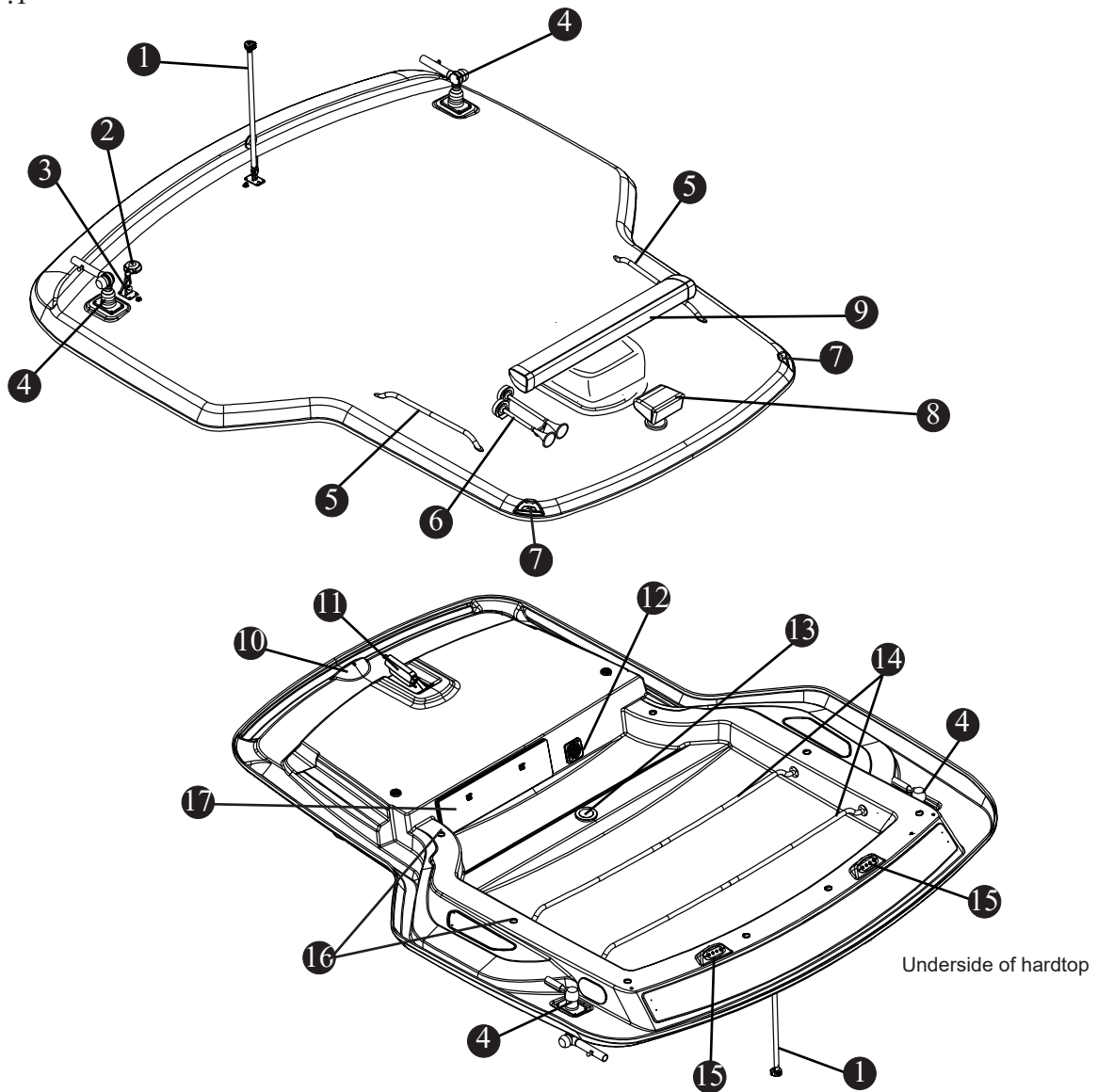


- |                                             |                                                                               |
|---------------------------------------------|-------------------------------------------------------------------------------|
| 1 WASTE HOLDING TANK                        | 20 POWER STEERING PUMP (JOYSTICK OPTION)                                      |
| 2 10KW GENERATOR                            | 21 POWER STEERING PUMP (STANDARD)                                             |
| 3 OVERBOARD DISCHARGE SEACOCK               | 22 FRESH WATER MANIFOLD                                                       |
| 4 FISHBOX PUMP OUT PUMP                     | 23 FRESH WATER PUMPS (2 STACKED)                                              |
| 5 FUEL /WATER SEPARATORS (OPTION)           | 24 VACUUM GENERATOR                                                           |
| 6 PREP STATION LIVEWELL INTAKE              | 25 WATER HEATER                                                               |
| 7 ELECTRONIC TRANSDUCER (OPTION)            | 26 ELECTRONIC TRANSDUCER                                                      |
| 8 OVERBOARD DISCHARGE WASTE PUMP            | 27 FIXED FIRE EXTINGUISHER                                                    |
| 9 RAW WATER PUMP                            | 28 A/C PUMP                                                                   |
| 10 RAW WATER INTAKE (AFT LIVEWELL/WASHDOWN) | 29 GENERATOR MUFFLER                                                          |
| 11 BATTERY SWITCH                           | 30 A/C SYSTEM AND FREEZER PLATE INTAKE / GYROSCOPE STABILIZER INTAKE (OPTION) |
| 12 STARBOARD ENGINE/GENERATOR BATTERY       | 31 GENERATOR INTAKE                                                           |
| 13 AUTOMATIC CHARGING RELAYS (ACR)          | 32 EMERGENCY HIGH WATER FLOAT SWITCH                                          |
| 14 STARBOARD CENTER ENGINE BATTERY          | 33 HIGH WATER (2000 GPH) BILGE PUMP                                           |
| 15 PORT ENGINE BATTERY                      | 34 BILGE PUMP (2000 GPH)                                                      |
| 16 PORT CENTER ENGINE BATTERY               | 35 FLOAT SWITCH                                                               |
| 17 HOUSE BATTERIES                          |                                                                               |
| 18 AFT BATTERY CHARGERS                     |                                                                               |
| 19 FUEL TANK                                |                                                                               |

General Layout, Forward Cabin  
Fig. 2.16.1



General Layout, Hardtop  
Fig. 2.17.1



- |                                            |                              |
|--------------------------------------------|------------------------------|
| ① ANCHOR LIGHT                             | ⑩ BOW FLOOD LIGHT            |
| ② SIRIUS® SATELLITE RADIO ANTENNA (OPTION) | ⑪ WINDSHIELD VENT ACTUATOR   |
| ③ VHF RADIO ANTENNA (OPTION)               | ⑫ VHF RADIO SPEAKER (OPTION) |
| ④ RADIAL OUTRIGGERS (OPTION)               | ⑬ DOME LIGHTS                |
| ⑤ SAFETY GRAB RAIL                         | ⑭ CANVAS STORAGE RACKS       |
| ⑥ DUAL TRUMPET HORNS                       | ⑮ COCKPIT FLOOD LIGHTS       |
| ⑦ NAVIGATION LIGHTS                        | ⑯ ACCENT LIGHTS (10 P&S)     |
| ⑧ SPOTLIGHT WITH REMOTE (OPTION)           | ⑰ HARDTOP STORAGE            |
| ⑨ RAYMARINE 4KW OPEN ARRAY RADAR (OPTION)  |                              |

## ⚠ CAUTION

Hardtop accent lights are not to be used when navigational lights are in use as this may interfere with the effectiveness of the navigational lights.

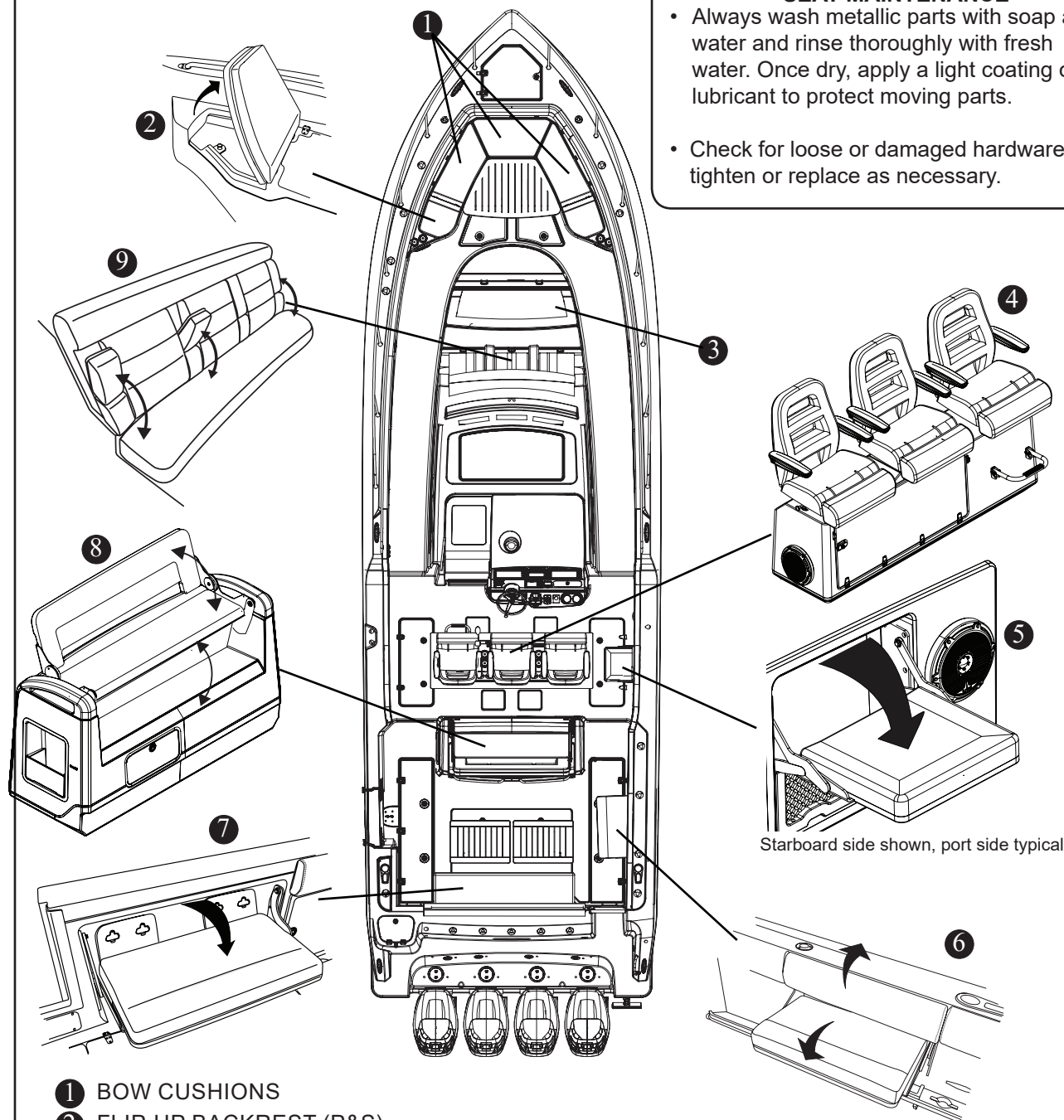
## Seating

Seating  
Fig. 2.18.1

### NOTICE

#### SEAT MAINTENANCE

- Always wash metallic parts with soap and water and rinse thoroughly with fresh water. Once dry, apply a light coating of lubricant to protect moving parts.
- Check for loose or damaged hardware and tighten or replace as necessary.



Starboard side shown, port side typical

- 1 BOW CUSHIONS
- 2 FLIP-UP BACKREST (P&S)
- 3 FLIP-UP LOUNGE BENCH BACKREST
- 4 HELM SEATING
- 5 FOLDAWAY TROLLING SEAT (P&S) (OPTION)
- 6 STARBOARD FOLDAWAY COCKPIT BENCH SEAT (OPTION)\*
- 7 STERN FOLDAWAY BENCH SEAT
- 8 LEANING POST W/CONVERTIBLE 3-PERSON SEATING (SEE PG. 2-38)
- 9 FORWARD LOUNGE 3-PERSON SEATING

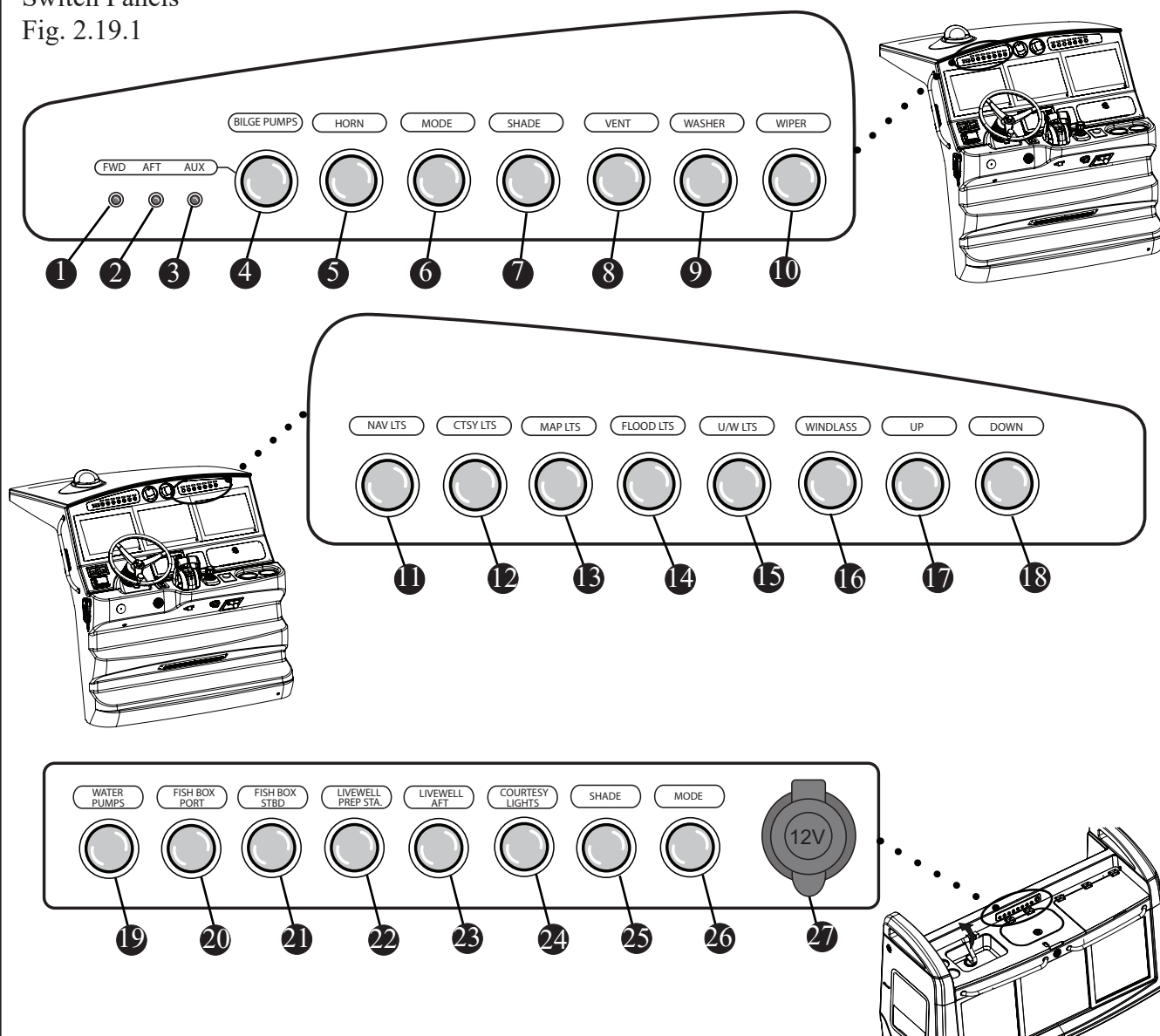
\* Deletes under gunwale rod rack



## Control Station Switch Panels

### Switch Panels

Fig. 2.19.1



- 1 FORWARD BILGE PUMP INDICATOR
- 2 AFT BILGE PUMP INDICATOR
- 3 AUX BILGE PUMP INDICATOR
- 4 BILG PUMPS
- 5 HORN
- 6 MODE 1 (PROGRAMMABLE)
- 7 TELESCOPING COCKPIT SUNSHADE
- 8 WINDSHIELD VENT
- 9 WINDSHIELD WASHER
- 10 WINDSHIELD WIPER
- 11 NAVIGATION LTS
- 12 COURTESY LIGHTS
- 13 MAP LIGHTS
- 14 FLOOD LIGHTS

- 15 UNDERWATER LIGHTS (OPTION)
- 16 WINDLASS ON/OFF
- 17 WINDLASS UP
- 18 WINDLASS DOWN
- 19 WATER PUMPS
- 20 PORT FISHBOX PUMPOUT
- 21 STARBOARD FISHBOX PUMPOUT
- 22 PREP STATION LIVEWELL (OPTION)
- 23 PORT AFT LIVEWELL
- 24 COURTESY LIGHTS
- 25 TELESCOPING COCKPIT SUNSHADE
- 26 MODE (PROGRAMMABLE)
- 27 12V ACCESSORY RECEPTACLE

### Gear Shift & Throttle Control

#### ! CAUTION

Shift controls into **NEUTRAL** before starting engine. Shift only when engine is at idle. Reversing at high speeds can cause flooding/swamping due to water being pushed over the transom.

#### NOTICE

Wind and sea currents can change how your boat responds while in motion. Understanding your boat and its reactions at speed will make your boating safer and more enjoyable.

### Digital Throttle/Shift (DTS®)

Your boat features a state of the art digital “drive-by-wire” gear shift and throttle control system. The Digital Throttle/Shift (DTS)® is the latest technology in recreational boating.

The DTS® system is monitored through the Smartcraft® VesselView display which will give you a visual readout of all functions regarding your boats engine as well as direction, and applicable fluid capacities.

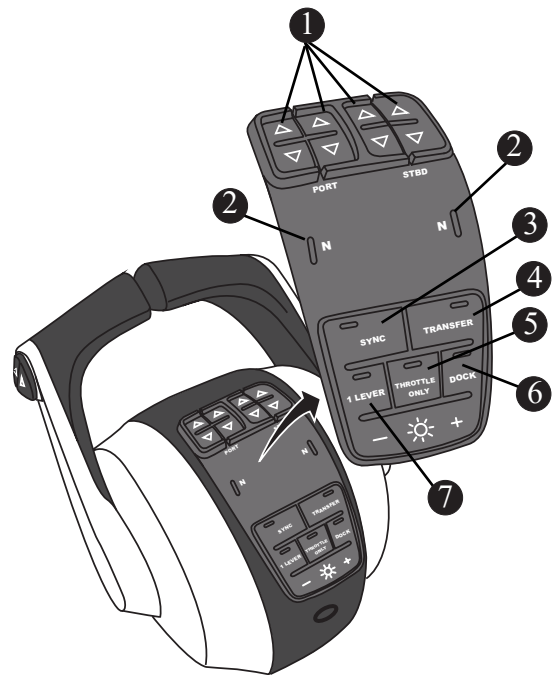
The throttle control regulates the RPM of the engine. Regulating the RPM of the engine will control the speed of the boat. Moving the lever forward engages the forward gear. Continuing to move the lever forward will increase the forward speed of the boat.

Likewise, to reverse power, bring the control lever back to engage the reverse gear and increase the reverse thrust by continuing to pull back on the throttle control..

The control must be in the neutral (“N”) position to start your engine(s). Neutral is in the center position of the unit and acts as an idle. While in this position, the propeller is not rotating. By moving the control arms back and forth you can feel a detent in the center position and will hear a click when neutral is engaged.

### Digital Throttle/Shift (DTS®)

Fig. 2.20.1



- ① TRIM/TILT CONTROL SWITCH
- ② NEUTRAL INDICATOR LIGHT
- ③ SYNC
- ④ TRANSFER SWITCH
- ⑤ THROTTLE ONLY
- ⑥ DOCK MODE
- ⑦ 1 LEVER MODE

### DTS Control Pad

**DOCK-** Pressing the “DOCK” button initiates docking mode. Docking mode reduces throttle capacity to approximately 50% of normal throttle. To turn off docking mode, shift the engine into neutral and press the “DOCK” button.

**THROTTLE ONLY-** Allows the operator to increase engine RPM for warm-up without engaging the propeller. To engage throttle only, move the control handle to neutral, press the “throttle only” button and move the throttle(s) ahead to the forward detent. The horn will sound once and the neutral lights will flash. The horn will sound twice when throttle only is engaged. Advance the throttle(s) to increase engine

RPM. To disengage, return control handle to neutral and press the “throttle only” button.

**1 LEVER-** Pressing the “1 LEVER” button initiates single lever mode. Single lever mode enables the throttle and shift functions of all engines to be controlled by the port control handle. To turn off single lever mode, shift into neutral and press the “1 LEVER” button.

REFERTO THE ENGINE MANUFACTURER’S MANUAL  
IN YOUR OWNER’S MANUAL PACKET FOR COMPLETE  
INSTRUCTIONS, INFORMATION AND WARRANTY.

### Shadow Mode Technology

The DTS® system incorporates Shadow Mode Technology which enables the inboard engines to “shadow” or follow the outboard engines when the outboard engines are in the same gear.

When the outboard engines are in opposite gears, as they would be for docking maneuverability, the center engine automatically defaults to neutral. This gives the operator greater control when docking.

### Auto Sync®

The unique Auto Sync® feature has been designed to synchronize ALL engines, automatically, when the port and starboard control levers are within 10 degrees of each other and the engines are running above 1500 rpm and below 95 percent throttle. This feature eliminates the need for the levers to be perfectly aligned in order to synchronize the three engines.

REFERTO THE ENGINE MANUFACTURER’S MANUAL  
IN YOUR OWNER’S MANUAL PACKET FOR COMPLETE  
INSTRUCTIONS, INFORMATION AND WARRANTY.

### Power Trim Operation

The power trim & tilt system allows you to raise and lower the engine(s) for optimum performance in the water and for trailering, launching and beaching.

The switches are a momentary type switch; which means that constant pressure must be applied to the switch during the raising and lowering cycle.

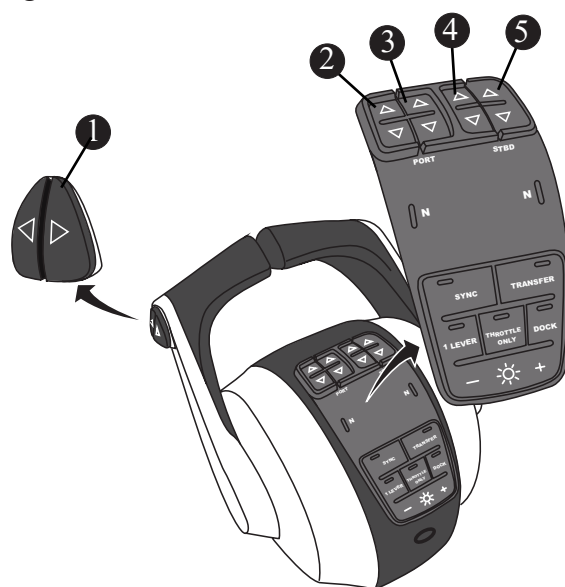
## NOTICE

**Motor trim, hull trim plane and speed are factors that affect a boat’s trim angle such that visibility can be obscured.**

Use the trim switch to obtain an ideal boat angle (in relation to the water surface) for a given load and water condition. In most cases, best all around performance is obtained with the engine adjusted so that the boat will run at a 3° to 5° angle to the water.

The trim switches are located on gear shift/throttle at the center of the control console. The engines can be individually trimmed by pressing the appropriate coordinating switch. All engines can be trimmed at the same time by pressing the the trim switch located on the port throttle control lever (See fig. 2.20.1).

Trim Switch Control Pad  
Fig. 2.21.1



- ① ALL ENGINES TRIM SWITCH
- ② PORT ENGINE TRIM SWITCH
- ③ PORT CENTER ENGINE TRIM SWITCH
- ④ STARBOARD CENTER ENGINE TRIM SWITCH
- ⑤ STARBOARD ENGINE TRIM SWITCH

It is recommended to have the engines trimmed all the way down or in for best visibility and reduced planing time. Once on-plane adjust trim angle for maximum engine RPM and efficiency.

### NOTICE

#### AVOID DAMAGE

**Be aware that the port engine cowl can hit the livewell if the engine is turned to the port and trimmed fully UP.**

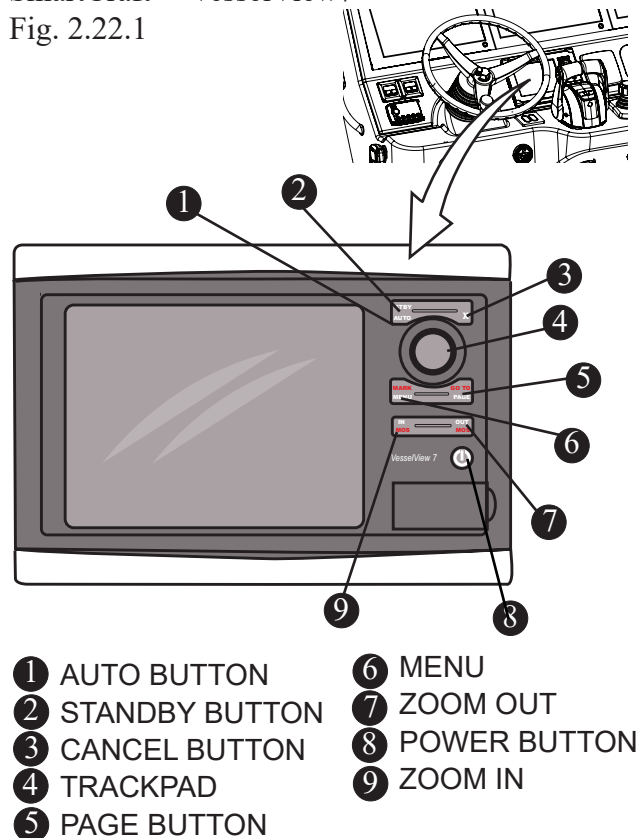
REFER TO THE ENGINE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS, INFORMATION AND WARRANTY.

### SmartCraft™ VesselView

Your boat is equipped with the SmartCraft™ VesselView feature. The display unit is located above the throttle/shift controller. VesselView allows the boat's operator to receive a wealth of critical operational information, displayed clearly and instantly at the helm on the LCD display. VesselView continuously monitors and reports information ranging from basic operating data to detailed vessel environment information.

SmartCraft™ VesselView7

Fig. 2.22.1



### C-Zone™ Vessel View Interface

The C-Zone™ interface allows access to the C-Zone™ system from the Vessel View ( See pg. 4-17).

### System Calibration (For First Time Use)

Boston Whaler® or your Boston Whaler® dealer has calibrated the Smartcraft™ VesselView to the equipment on your boat. If equipment is added, the system will need to be recalibrated.

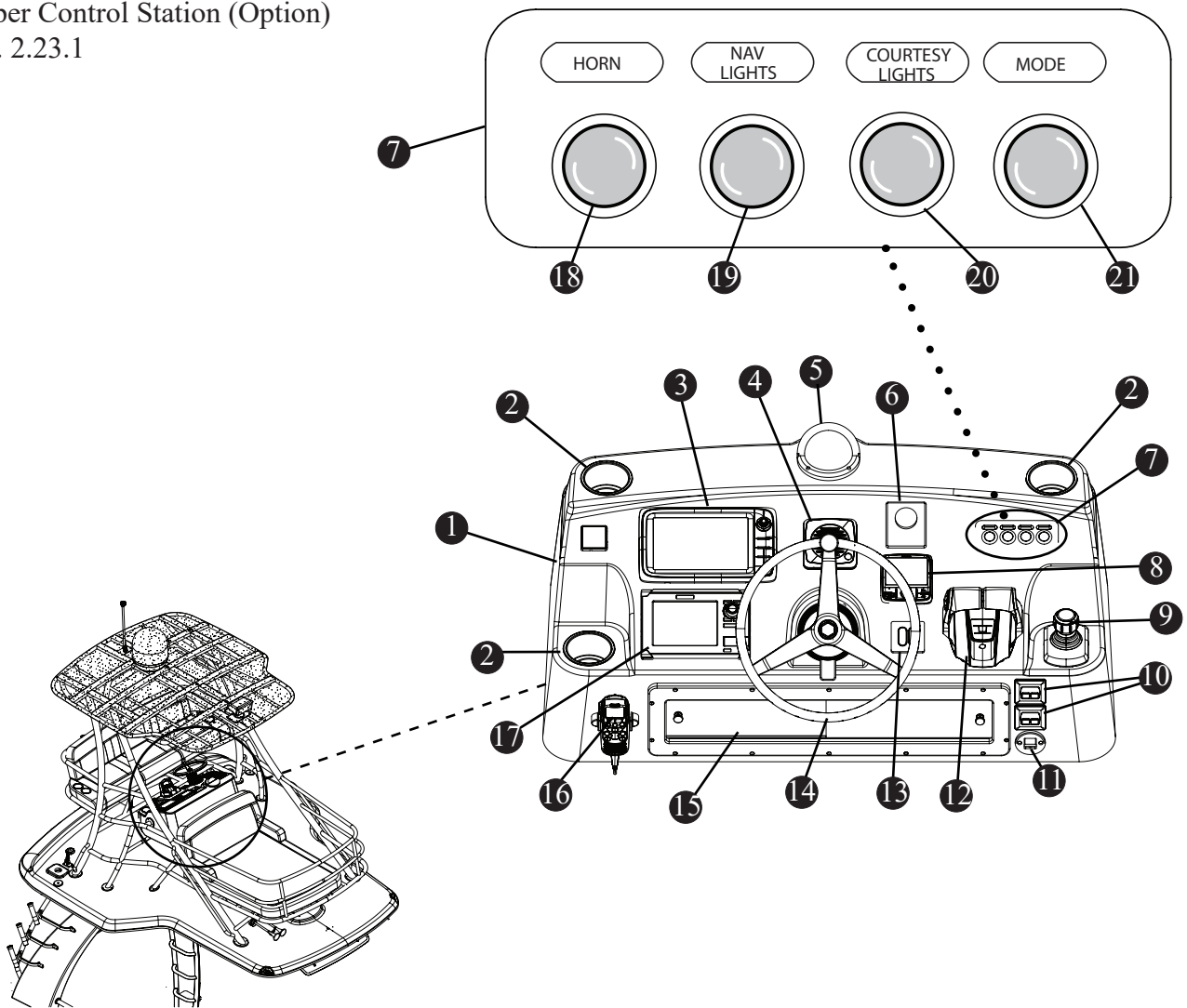
For recalibration or manufacturers information regarding the Smartcraft™ VesselView refer to the manufacturer's owner's manual found in your owner's packet.

### SmartCraft™ VesselView MOBILE (Option)

If equipped, VesselView MOBILE connects the SmartCraft™ data network to your iPhone or android mobile device via Bluetooth Low Energy4.0(BLE). With VesselView MOBILE you have the power of SmartCraft™ on your mobile device with all the digital data your SmartCraft™ engine supports plus new features such as:

- Manitenance reminders
- Mapping
- Performance summary
- Fault code diagnostics

Upper Control Station (Option)  
Fig. 2.23.1



- 1 UPPER CONTROL CONSOLE
- 2 CUPHOLDERS
- 3 RAYMARINE CHART/PLOTTER
- 4 VHF RADIO SPEAKER
- 5 MAGNETIC COMPASS
- 6 SPOTLIGHT CONTROL
- 7 SWITCH PANEL
- 8 AUTOPILOT (OPTION)
- 9 JOYSTICK PILOTING (OPTION)
- 10 ENGINES START/STOP SWITCHES
- 11 ENGINE SHUT DOWN SWITCH
- 12 GEAR SHIFT/THROTTLE CONTROL

- 13 TRIM TAB CONTROL PAD
- 14 STAINLESS STEEL STEERING WHEEL
- 15 STORAGE DRAWER
- 16 VHF RADIO
- 17 SMARTCRAFT VESSELVIEW 7
- 18 HORN
- 19 NAVIGATION LIGHTS
- 20 COURTESY LIGHTS
- 21 MODE



### Upper Control Station (Option)

#### Station Transfer

Station transfer allows engine control to be transferred from one control station to the other. Station transfer can be achieved by either of two methods.

**NOTE:** It is preferred to have the engines in neutral position when performing a station transfer. If conditions do not allow the remote controls to be placed in a neutral position, a station transfer can be made while the engines is in gear.

#### METHOD 1

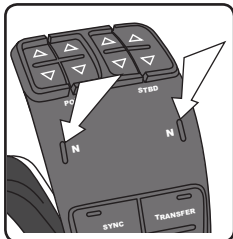
**Transfer delay:** This method delays station transfer until the control handles at the station you are transferring to match the handle positions of the station you are transferring from.

1. Press and release the TRANSFER button at the control station where you want to take control. A beep will be heard.



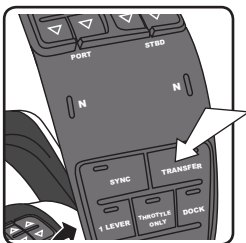
The neutral light will turn on.

2. The lights will blink if the positions of the control handles are not aligned with the control handles at the station you are transferring from. Move the control handles until the blinking stops and the lights are solid.



**NOTE:** The lights will blink faster as the handles are nearing their matched position.

3. Press and release the TRANSFER button a second time. A beep will be heard. This completes the transfer.



**NOTE:** Station transfer is cancelled if not completed within ten (10) seconds. Press and release the TRANSFER button again to re-initiate a station transfer.

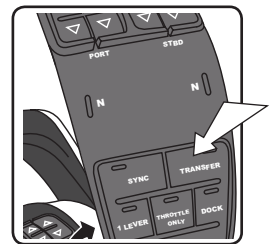


4. Adjust the control handles to the desired throttle and gear position.

#### METHOD 2

**Immediate transfer:** This method requires you to press the TRANSFER button twice at the control station where you want to take control. This completes the transfer. Engine speed and gear position will automatically adjust at a slow rate to the handle settings at the new active station.

1. Press and release the TRANSFER button two times at the control station where you want to take control. Two beeps will be heard (one beep for each button push). This completes the transfer.



2. Adjust the control handles to the desired throttle and gear positions.



### ! WARNING

**Avoid serious injury or death from loss of boat control. The boat operator should NEVER LEAVE THE ACTIVE STATION while the engines are in gear. Helm transfer should only be attempted while both stations are manned. One person helm transfer should only be attempted while engines are in neutral.**



### Navigation Lighting

Your boat comes equipped with navigation lighting for your safety. Regulations state that all boats, no matter the size, must display navigation lights. The lights must be displayed at night or in low visibility conditions.

These lights let other vessels know the approximate size and direction of travel of your boat, depending on which lights they can see. In the “Anchor Light” position, the white, 360°, all around light will illuminate, showing other boaters your location while at anchor.

It is the responsibility of the operator to ensure that the navigation lights are in good working order and that the proper lighting is shown

### Operating the Navigation Lighting

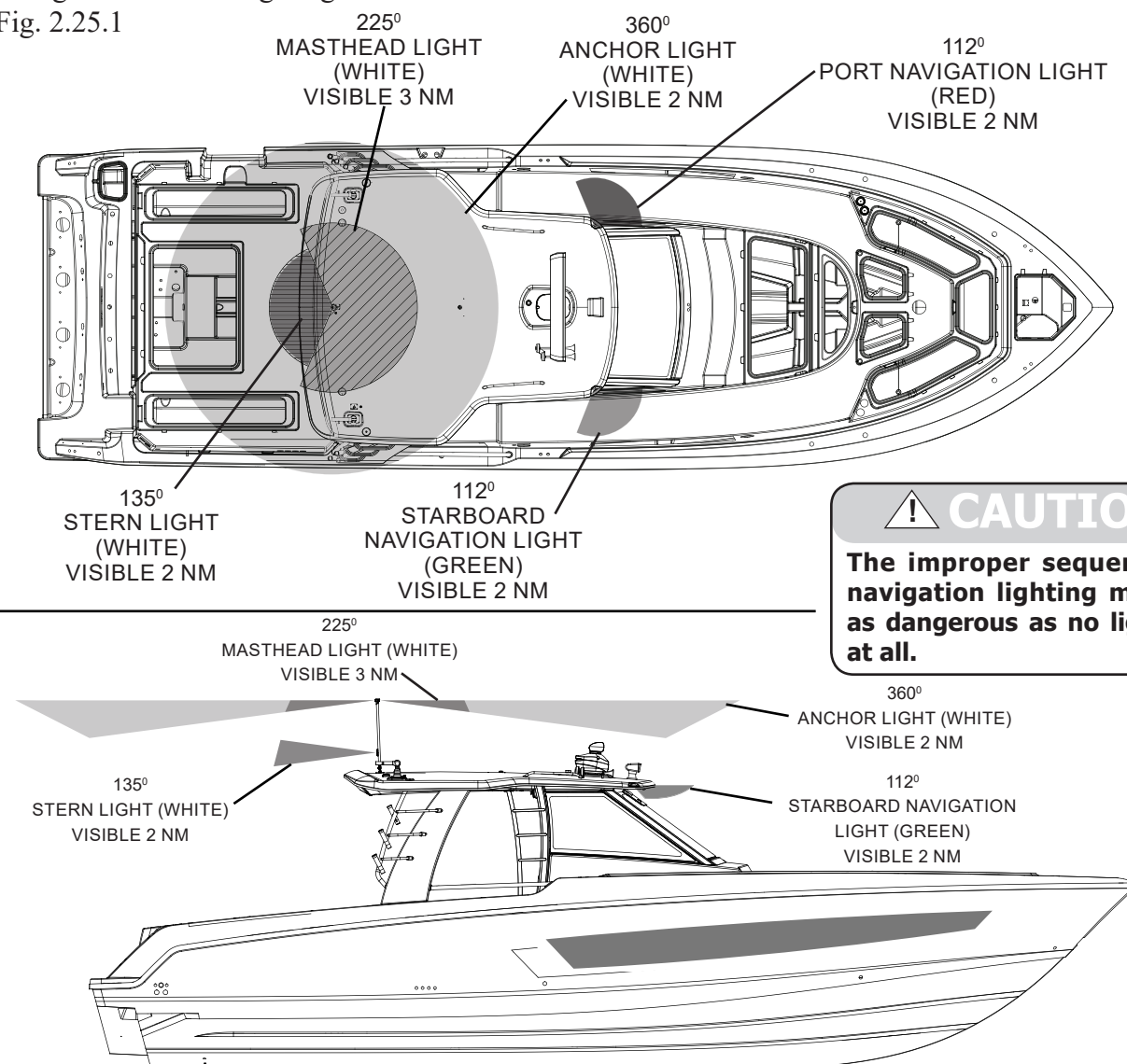
A three-position switch, located on the console switch panel marked “NAV/ANC” (See page 2-19) controls the navigation and anchor lighting.

- **First press:** Port (red) and starboard (green), masthead (white forward) and stern (white aft) lights are ON.
- **Second press:** All around (anchor Light) is ON.
- **Third press:** All around (anchor Light) is OFF.

When anchor or navigation lights are on, the small LED step lights are also illuminated.

### Navigation/Anchor Lighting

Fig. 2.25.1

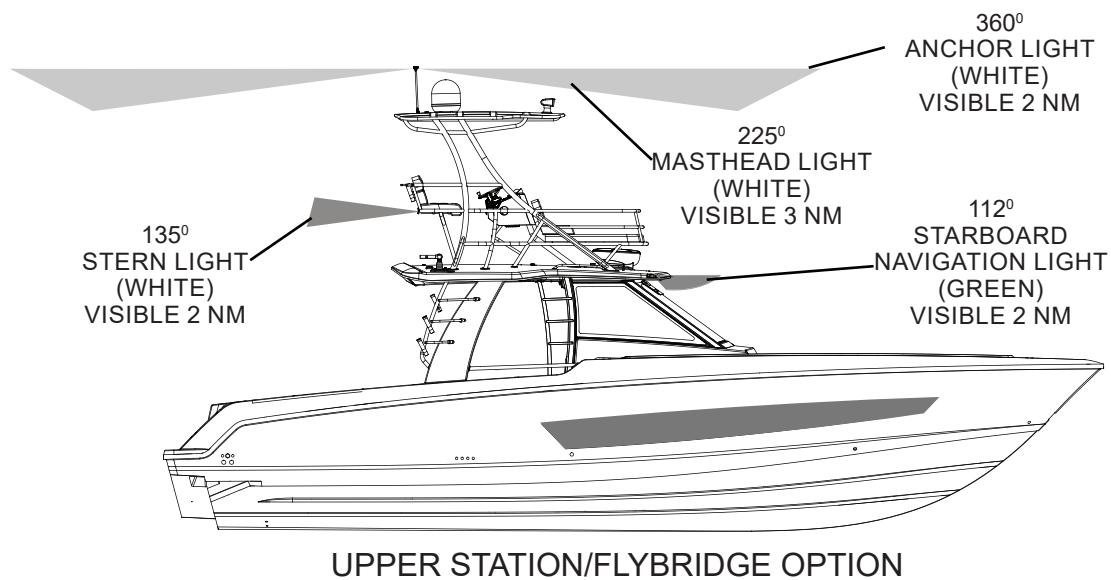
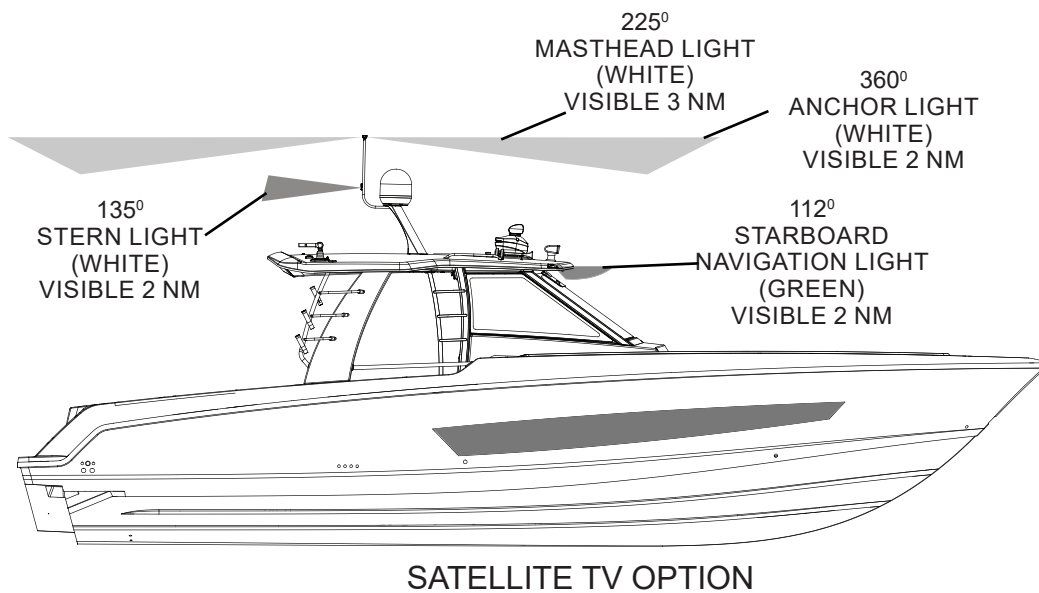


### CAUTION

The improper sequence of navigation lighting may be as dangerous as no lighting at all.

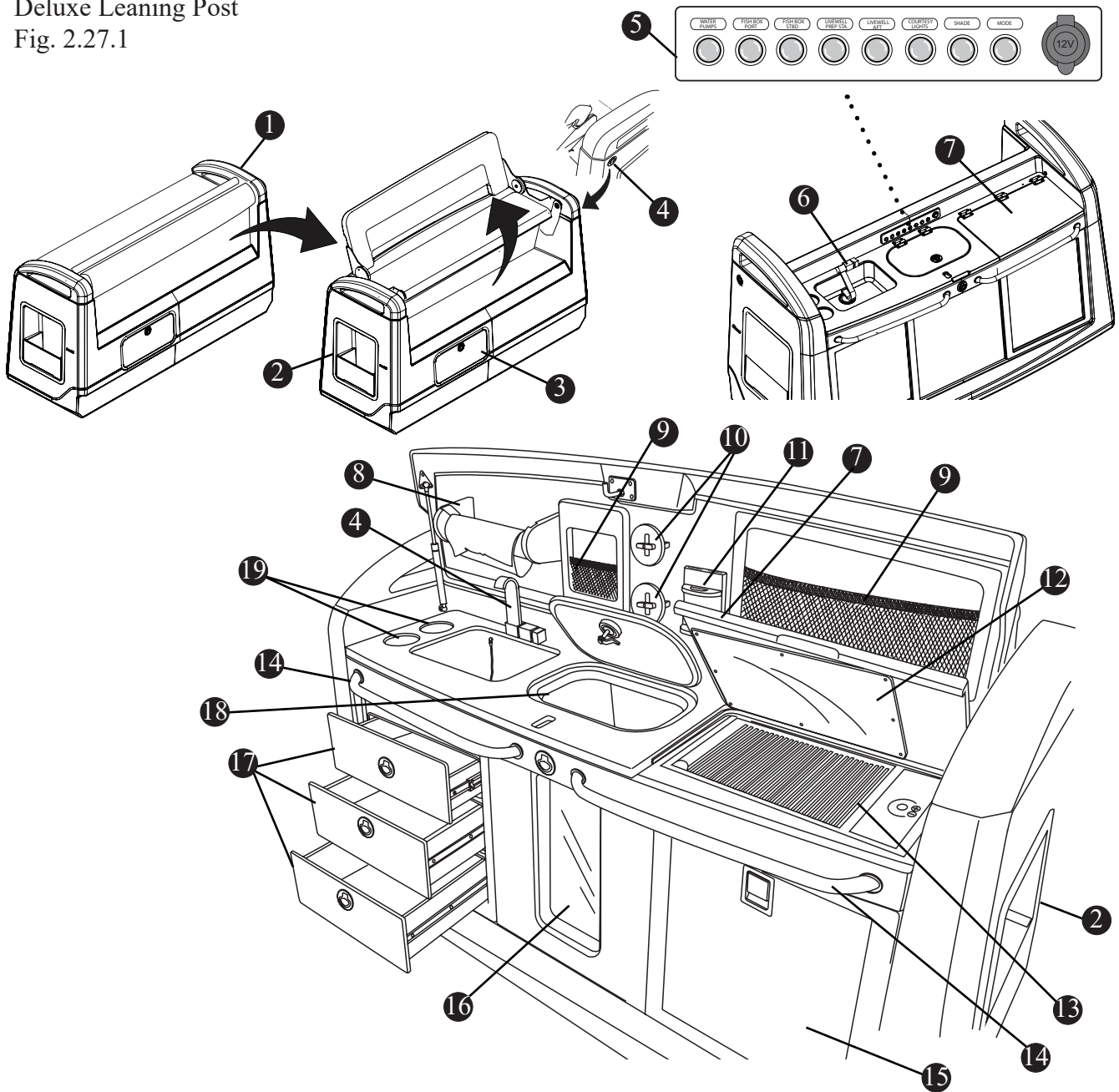
### Navigation/Anchor Lighting (Options)

Fig. 2.26.1



## Deluxe Leaning Post/Bait Prep Station

Deluxe Leaning Post  
Fig. 2.27.1



- |                                                 |                           |
|-------------------------------------------------|---------------------------|
| ① DELUXE LEANING POST/BAIT PREP STATION         | ⑪ TOOL HOLDER             |
| ② SIDE POCKET STORAGE W/120V RECEPTACLE (P&S)   | ⑫ GRILL HEAT SHIELD       |
| ③ ACCESS TO BREAKER PANEL & LIVEWELL FLOW VALVE | ⑬ ELECTRIC GRILL          |
| ④ BENCH SEAT RELEASE LATCH (SEE PAGE 2-38)      | ⑭ GRAB RAIL               |
| ⑤ SWITCH PANEL W/12V ACCESSORY RECEPTACLE       | ⑮ 12V/120V (2.3 CF)       |
| ⑥ FRESHWATER FAUCET W/HOT & COLD WATER          | REFRIGERATOR/FREEZER      |
| ⑦ HINGED GRILL LID/COUNTER SURFACE              | ⑯ LIVEWELL VIEWING WINDOW |
| ⑧ PAPER TOWEL HOLDER                            | ⑰ TACKLE STORAGE DRAWERS  |
| ⑨ NET STORAGE                                   | ⑱ LIVEWELL/STORAGE        |
| ⑩ LEADER HOLDERS                                | ⑲ CUPHOLDERS              |

### Deluxe Leaning Post/Bait Prep Station

Your boat features a deluxe leaning post located directly behind the helm seating.

The leaning post cushion converts into a 3-person bench seat providing a second row of seating behind the helm seats (See page 2-27).

The unit contains, among other amenities, a cutting surface, a livewell with viewing window, and an electric Grill which provides a safe method of grilling without the hazard of open flames associated with propane gas or charcoal grills.

A concealed electric element eliminates grease flare-ups and a reuseable grease pan located under the heating element collects all the fat and juices associated with grilling. **The grease pan must be emptied after each use.**

### Electric Grill

#### ⚠ WARNING

Please read and understand the safety precautions found in the Kenyon® Custom Electric Grill owner's manual located in your owner's packet.

To remove the grease pan (Fig. 2.28.1):

- Remove the grate.
- Lift the heating element.
- Remove the grease pan.

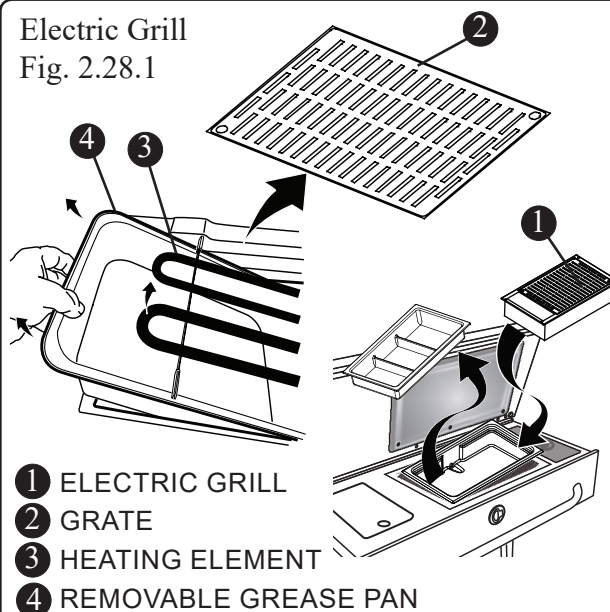
When replacing the pan, assure that it is completely contained within the grill and that the side of the pan does not extend outside of the grill sides.

### Automatic Shut-Off

There is an automatic shut-off switch located at the back of the grill cover. When the cover is closed the shut-off switch is engaged and power to the grill will be turned off. Do not under any circumstances override the automatic shut-off switch.

The "GRILL" breaker on the prep station breaker panel must be ON to operate the grill.

Electric Grill  
Fig. 2.28.1



#### NOTICE

To prevent the contents of the grease pan from smoking, place 1 cup of water in the grease pan before cooking.

#### ⚠ CAUTION

**The electric grill will become dangerously hot.**

Depending on the level of heat used for cooking, the grill will automatically shut off 60-90 minutes after ignition. However, it is good practice to close the lid when not in use. This action will engage the automatic shut-off switch and cut power to the grill.

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

### Prep Station Refrigerator/Freezer

The refrigerator/freezer is located on the starboard aft side of the prep station. The refrigerator is powered by the house batteries or shore power. The "STBD REFRIG" breaker on the prep station breaker panel in the front of the leaning post must be ON to operate the refrigerator/freezer.

An optional 12V/120V, 2.3 cu ft refrigerator/freezer is available for your boat. The freezer would take the place of the standard tackle drawers on the port

aft of the prep station. The refrigerator is powered by the house batteries or shore power. The “port REFRIG” breaker on the prep station breaker panel in the front of the leaning post must be ON to operate the refrigerator/freezer.

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

### Stowable Cockpit Tables (Option)

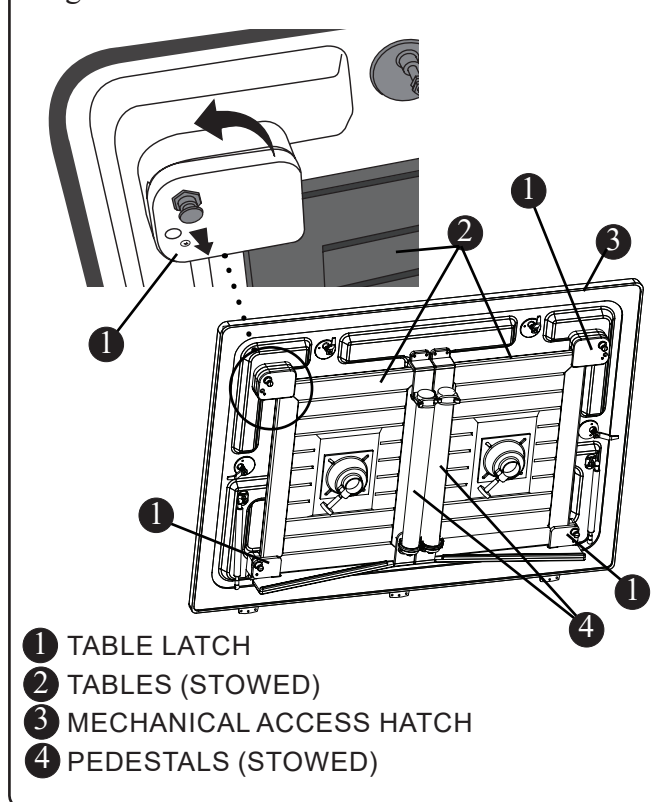
Your boat can be equipped with a tables for entertaining in the cockpit. The tables are removable and stowable. If equipped, the tables and pedestals are stowed in the underside of the mechanical hatch in the aft cockpit deck.

#### To set up the tables:

- Remove the table top from the underside of the mechanical access hatch by pulling the knob on each of the corner latches and rotating it away from the stowed table.

Cockpit Tables (Option)

Fig. 2.29.1



- Set tables aside in the cockpit.
- Remove the pedestals from the storage clips and place them upright in the receiver plates located on the top of the mechanical hatch in the cockpit.
- Place the tables on the top of the pedestals and assure that they are securely seated on the pedestals.

### Electric Downrigger Receptacles, (Option)

If equipped, the two (2) 12V/30 amp electrical receptacles for powering electric downriggers, or any electrical equipment aptly rated, are located inside the cockpit on the aft section of the port and starboard gunwales. The plugs are supplied in the owners packet when this option is purchased.

Push the plug into the receptacle and turn clockwise to secure the connection.

The receptacles are protected by inline fuses (P/S) which can be accessed through the mechanical hatch in the cockpit deck. The receptacles are protected by a weatherproof cover.

There are areas on the gunwales that are designed specifically for downrigger mounting bases. See your “Wood Location Diagram” (Page 5-13 thru 5-21) for proper mounting.

There are downrigger weight cradles located in the port and starboard cockpit to store your downrigger weights when not in use.

### ⚠ CAUTION

The location for mounting of the downrigger base is important, refer to the wood location diagram for areas on the gunwales that are specifically designed for withstanding the stress generated by a downrigger.

There are a variety of downrigger mounting base plates that can be used, it is important that you consult with your salesperson to find the mounting base that will best suit your application.



## Section 2 • General Information

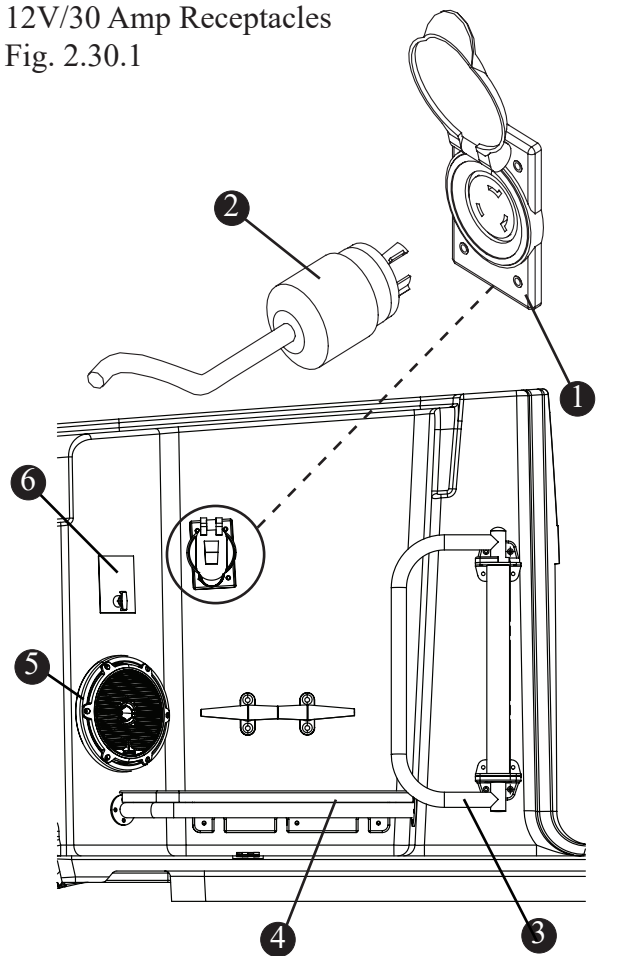
Consult with your Boston Whaler® dealer for details on selecting and mounting the downriggers that will best suit your application.

### NOTICE

**If the optional port foldaway bench is installed, the port downrigger weight cradle is not present.**

REFER TO THE DOWNRIGGER MANUFACTURER'S MANUAL FOR COMPLETE INSTRUCTIONS AND WARRANTY.

12V/30 Amp Receptacles  
Fig. 2.30.1



- ① 12V/30A RECEPTACLE (P&S)
- ② PLUG (SUPPLIED)
- ③ DEPLOYABLE GRAB RAIL FOR DIVE DOOR
- ④ DOWNRIGGER WEIGHT CRADLE
- ⑤ STEREO SPEAKER
- ⑥ FIRE SUPPRESSION MANUAL OVERRIDE

**NOTE:** Port side shown, Starboard placement typical

### Canvas (Option)

#### ⚠ DANGER

##### CARBON MONOXIDE DANGER

**Prolonged exposure can cause serious injury or death. To reduce CARBON MONOXIDE accumulation, increase air movement by opening windows or adjusting the canvas to allow for more air circulation**

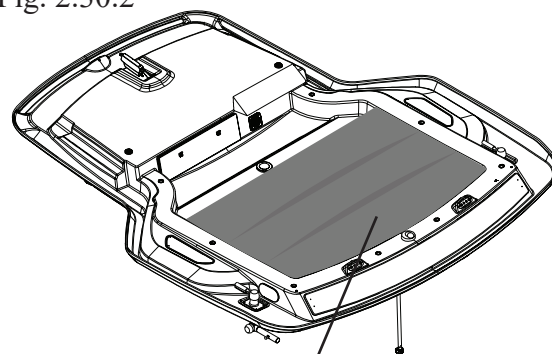
Your canvas set will keep its appearance and maintain proper working order provided you follow a few simple steps for cleaning and maintenance (See “Canvas Care & Maintenance”, section 5 of this manual).

The canvas is stored in a pouch on the underside of the hardtop.

Removing or installing canvas on the open water can be difficult since rough water or wakes can cause you or your passengers to lose their balance while attempting to install or remove canvas panels.

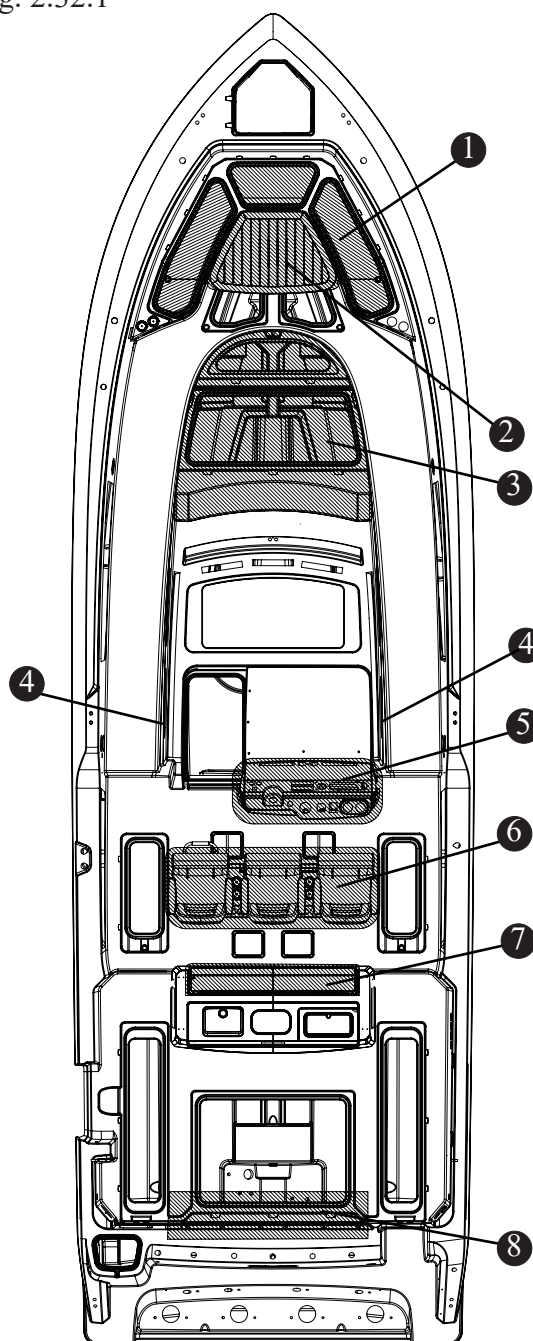
For your safety and ease of installation or removal of the canvas, use two (2) people to perform the operation. Remove or install canvas before leaving the boat slip.

Canvas/lifejacket storage  
Fig. 2.30.2



LIFE JACKET/CANVAS  
STORAGE  
POUCH

Canvas (Option)  
Fig. 2.32.1



- 1 FORWARD CUSHIONS COVER (P&S)
- 2 BOW TABLE COVER
- 3 FORWARD LOUNGE COVER
- 4 WING CURTAINS (P&S)
- 5 CONSOLE COVER
- 6 HELM SEATS COVER
- 7 LEANING POST COVER
- 8 STERN SEAT COVER

## Installation

To install your canvas (for the first time):

Insert the zipper track into the canvas rail around the underside of the hardtop.

Once installed, it is not necessary to remove the zipper tracks each time you remove the canvas

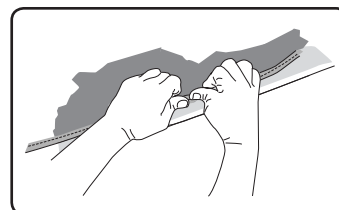
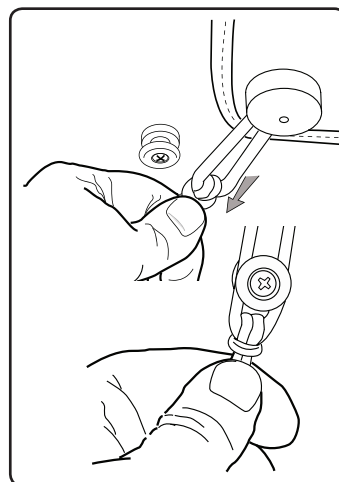
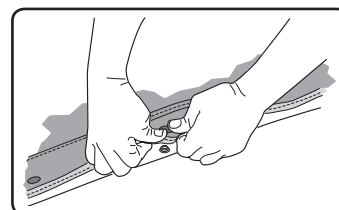
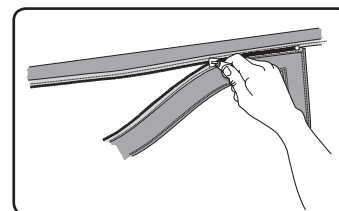
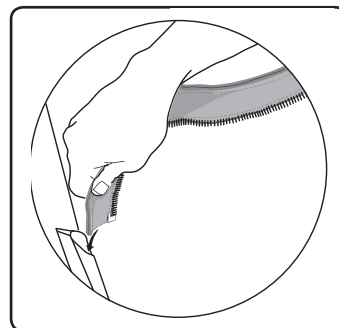
Zip the canvas panel section(s) to the zipper track to secure the canvas panel. Zip only partially (approx. 4") at first.

Attach the bottom of the canvas section(s) to the snaps where appropriate.

Secure the corners of the canvas with the bungee style fasteners if appropriate.

Finish zipping the canvas section(s) carefully without forcing.

When zippers are new they can be a little difficult to zip. A zipper lubricant may be used to help new zippers as well as maintaining trouble-free service. Use care when starting a zipper to prevent damage.



## Section 2 • General Information

When all canvas is zipped, secure the overlapping edges by pressing them together, thus engaging the hook and loop fabric.

Never remove canvas by pulling roughly on one edge. To prevent damage to the fabric, fasteners should be unsnapped as close to the button as possible. If the snaps become difficult to unsnap use a lubricant for snaps or zippers or vaseline, chapstick, etc. Take care that the lubricant will not stain the fabric.

### To Remove Canvas

- Unzip each piece of canvas leaving approximately 4" attached. This will relieve the tension on the snaps.
- Unsnap the remaining sides of the canvas pieces.
- Remove one piece at a time and store per manufacturers recommendations.

### DANGER

**Exhaust fumes from engines contain deadly carbon monoxide gas (CO). Boats enclosed with canvas or with poor ventilation are most likely to collect fumes.**

**CO sickness symptoms include headache, nausea and dizziness. DO NOT mistake these symptoms for sea sickness.**

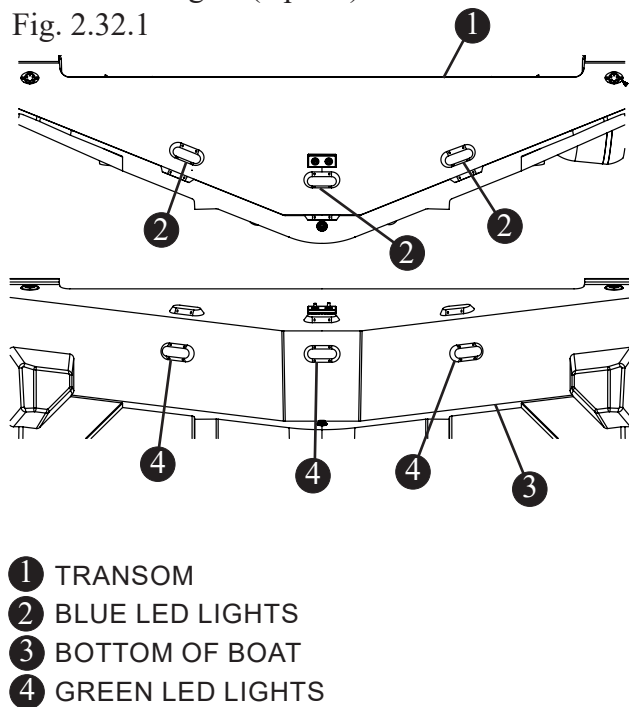
**Even in rainy and/or cold weather, fresh air must circulate through the boat to avoid carbon monoxide poisoning.**

**See page 1-6 of this manual for additional important information regarding carbon monoxide.**

REFER TO THE CANVAS MANUFACTURER'S INSTRUCTIONS FOR COMPLETE CARE AND MAINTENANCE OF YOUR CANVAS SET.

### Underwater lights (Option)

Fig. 2.32.1



### Underwater Lights (option)

If equipped, there are six (6) underwater lights. Three (3) located on the transom just below the surface of the water and three (3) green lights on the bottom of the hull (Fig. 3.32.1). When lit the lights illuminate the water in a translucent glow which enhances the after dark experience of being on the water and in addition may on occasion attract a myriad of marine life.

The underwater lights are powered by the "U/W LTS" switch on the helm switch panel (See fig. 4.26.1).

### CAUTION

**Underwater lights are not to be used when navigational lights are in use as this may interfere with the effectiveness of the navigational lights.**

## Bow Thruster

### WARNING

**Be sure you thoroughly understand the operation and safety requirements of the thruster before using.**

**The thruster should not be operated in close proximity to swimmers, as a powerful suction is created when in use.**

The bow thruster system on your boat includes a 24V/DC Lewmar® bow thruster, two (2) 12V batteries, and a 24V battery charger which can be accessed through a hatch in the forward storage area in the cabin. A battery switch is located on the battery switch panel in the port side of the cabin (See fig. 4.3.1).

### WARNING

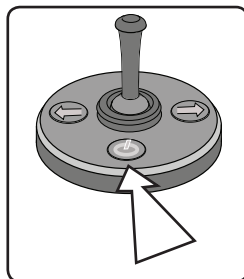
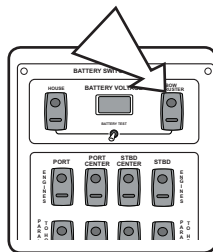
**BOW THRUSTER BATTERIES MUST BE OF A DEEP-CYCLE, SEALED DESIGN**  
Failure to do so will result in an increased and dangerous presence of battery discharge gases accumulating in the forward cabin.

The electrically driven bow thruster gives the operator more maneuverability of the bow when docking or maneuvering the vessel in narrow channels or where space is at a premium.

The bow thruster joystick located on the control station switch panel is used to operate the thruster and maneuver the bow of your boat.

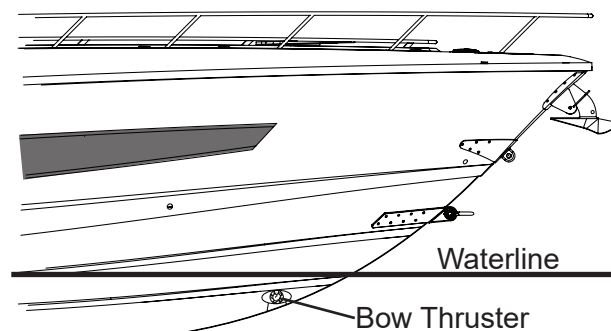
### To Operate The Bow Thruster:

- Turn ON battery switch.
- Press the activation button for 1 second.
- Lift the joystick and move it in the direction you wish to move the bow.



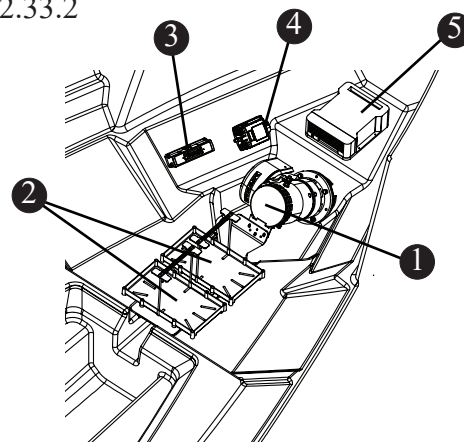
### Bow Thruster

Fig. 2.33.1



### Bow Thruster Location

Fig. 2.33.2

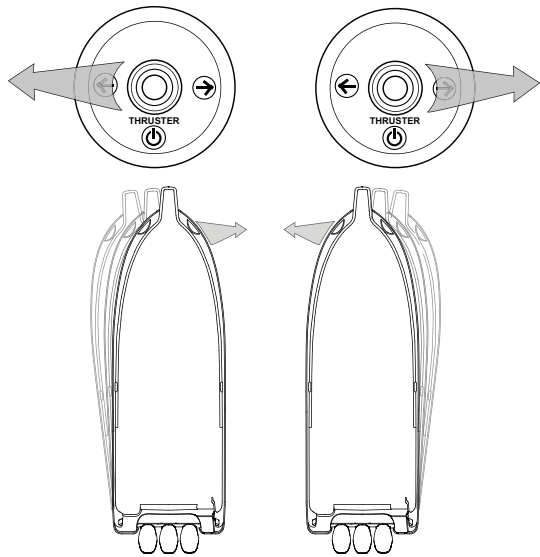


- 1 BOW THRUSTER
- 2 BATTERY TRAYS
- 3 FUSE BLOCK
- 4 AUTOMATIC CHARGING RELAY (ACR)
- 5 BOW THRUSTER BATTERY CHARGER

When the desired boat movement has been achieved return the joystick to the center position (spring return).

The bow thruster motor is equipped with an internal thermally activated breaker. The thermal breaker protects the motor from overheating. To avoid damage to the thruster, if the thermal breaker trips allow the unit to cool down before continuing operation.

Bow Thruster Movement  
Fig. 2.34.1



### CAUTION

**DO NOT** move the joystick port to starboard in quick succession as this could damage the motor.

### NOTICE

**If thruster is operated constantly for 3 minutes it will power down and panel will deactivate.**

**The system is designed to automatically power down after 20 minutes of no operation.**

**If thermal cut-out is activated all power to the controls is disabled. WAIT FOR UNIT TO COOL DOWN.**



### DANGER

**DO NOT OPERATE THRUSTER  
OUT OF WATER**

**It is very dangerous to run the thruster out of the water, even for a few seconds. The motor will overspeed by 300%, causing damage to the unit and the propeller will cause serious damage to whatever comes in contact with it.**

**In addition, this action will void the warranty.**

REFER TO THE BOW THRUSTER MANUFACTURER'S MANUAL IN YOUR OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

### Joystick Piloting (Option)

Joystick technology is the latest enhancement in vessel control, providing effortless maneuverability. The joystick Piloting system replaces the traditional bow thruster set up. Joystick Piloting takes the stress out of docking, maneuvering in tight spaces and operating in less-than-ideal environments by providing the vessel operator 360-degree movement at their fingertips.

The system allows the operator to effortlessly move a multi-engine boat in any direction - including sideways, diagonally or spinning on its own axis - with a simple push or twist of a joystick. The operator controls the throttle, shifting and steering with one hand, with the joystick working in conjunction with the independently steered engines to move the boat in the desired direction.

If equipped, the joystick is located on the control console starboard of the throttle/gearshift.

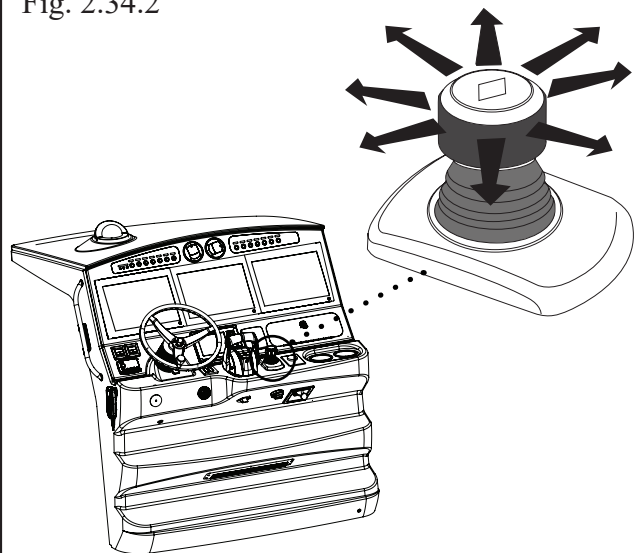
### System Features

#### Digital Throttle & Shift (DTS)

Amazingly smooth and responsive, DTS replaces the lag and hesitation of traditional throttle and shift

#### Joystick Piloting (Option)

Fig. 2.34.2



REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

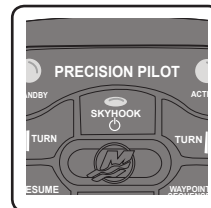


cables with digital precision, resulting in smooth shifting and instant throttle response. DTS includes many advanced features to improve your boating experience. Auto Sync synchronizes multiple engine rpms automatically and Single Lever Mode allows you to control multiple engines with just one control lever.



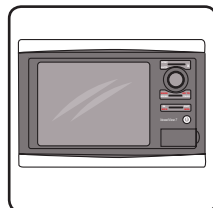
### Skyhook® (digital anchor)

With the push of a button, Skyhook pinpoints the boat's position using a GPS satellite antenna and the engines and drives move independently to maintain the position and heading. It's ideal for holding a boat over a fishing spot, waiting for a drawbridge to open or maintaining position while waiting to refuel at a marina.



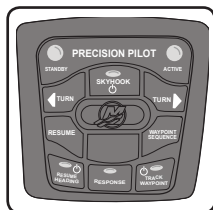
### VesselView®

VesselView provides up-to-date information for more than 30 engine parameters, including fuel level and range, oil temperature and pressure, water depth and more. It also provides advanced features such as Smart Tow®, ECO-Screen, Troll Control, Cruise Control, and much more.



### Integrated Autopilot

Auto Heading and Waypoint Sequencing make navigating to a destination simple and efficient. A built-in digital compass on Auto Heading allows the captain to maintain course and make precise corrections with the touch of a finger. One-degree heading adjustments can be made with a tap on the joystick; 10-degree adjustments can be accomplished using the control panel. Trips with multiple stops between the starting point and final destination are a breeze with Waypoint Sequencing, which allows the operator to plot the boat's course using multiple points.



### Propeller Warning Lights

#### **WARNING**

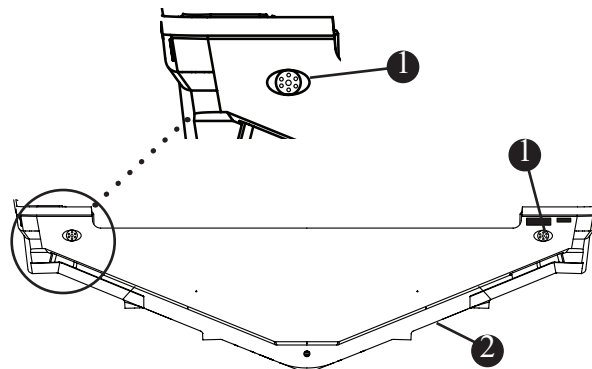
**When joystick piloting is activated the propellers spin. This can injure swimmers.**

- Check that no one is in the water.
- Inform passengers not to enter the water

Joystick Piloting adds special lighting to the transom of the boat. When Joystick Piloting is engaged the lights will flash when the propellers are spinning.

The lights on the transom will flash continuously while Skyhook is engaged.

Joystick Piloting Transom Warning Lights  
Fig. 1.35.1



- ① JOYSTICK WARNING LIGHTS
- ② TRANSOM

### Yacht Tender Package (Option)

If equipped, the yacht tender package consists of the following components (Figure 2.36.1):

- Clam shell covers over thru hull outlets to prevent water coming back into the boat.
- Ball valves on port and starboard fish box outlets.
- High water float switch (original equipment).
- Trumpet horn on hardtop (original equipment).
- Strobe light added to hardtop.
- On/Off tow system switch.

The system is activated by a switch located inside the mechanical access hatch (Figure 2.36.1).

### Preparing Yacht Tender Package

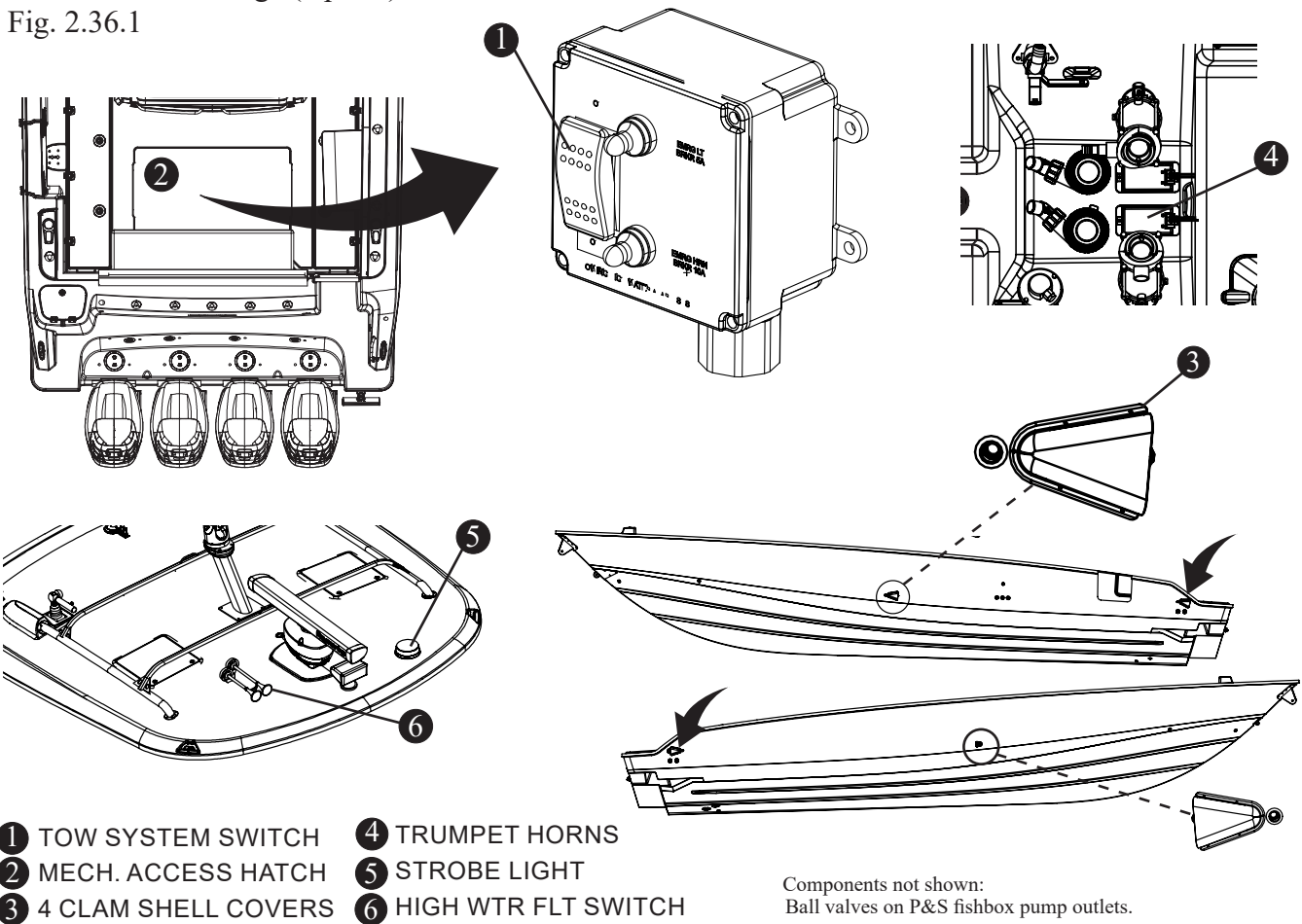
- Close the fishbox pump outlet ball valves in the aft bilge on both port and starboard side between the pumps and hull sides.
- Turn OFF all battery switches.

The power to the system is on the unswitched side of the house battery switch. The house battery switch can remain OFF while under tow except in the tow condition where vessel navigation lights are needed.

- Turn ON tow switch (Figure 2.36.1).
- Switch must be in the ON position while under tow. This provides power to the horn and the emergency strobe light on the hardtop. Both are activated by the high water float switch in the aft bilge (Figure 2.36.1).

#### Yacht Tender Package (Option)

Fig. 2.36.1



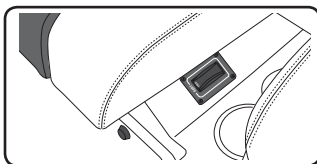
### Helm Area Seating

#### Captain's Chair

The captain's chair features a flip up thigh bolster for comfort. The chair can be adjusted forward and aft by means of a switch located to the port of the seat base.

#### Adjusting Captain Chair

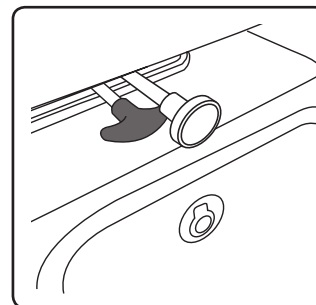
- Depress the switch on the port side of chair to achieve the desired forward or aft position.



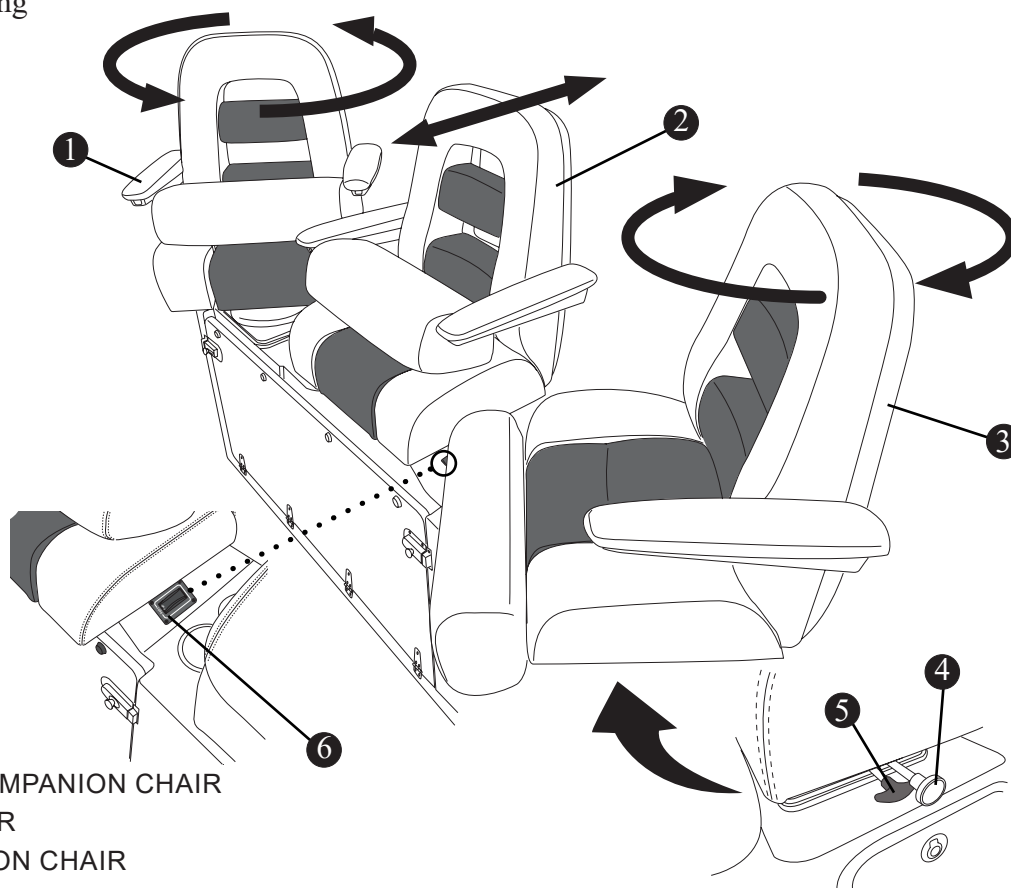
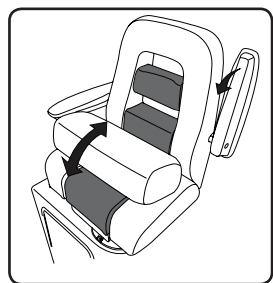
#### Companion Chairs

The companion chairs are fully adjustable and feature a flip up thigh bolster for comfort. The chairs can be adjusted forward and aft as well as rotated 360°.

The levers for adjustment are located under the seat. The levers and slides should be checked periodically and lubricated with a light lubricating oil to provide smooth action and easy adjustment.



Adjustable Helm Seating  
Fig. 2.37.1



- 1 STARBOARD COMPANION CHAIR
- 2 CAPTAIN'S CHAIR
- 3 PORT COMPANION CHAIR
- 4 COMPANION CHAIR FORWARD/AFT ADJUSTMENT LEVER\*
- 5 COMPANION CHAIR ROTATION ADJUSTMENT LEVER\*
- 6 CAPTAIN'S CHAIR ELECTRIC SWITCH

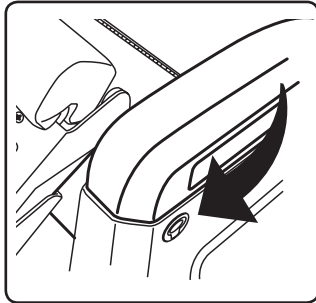
\*Port chair shown, starboard chair typical.

### Prep Station Foldaway Seating

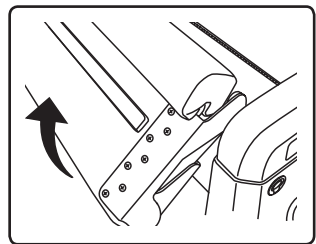
The custom prep station features a unique foldaway bench seat for your passengers comfort.

#### To Access the Bench Seat

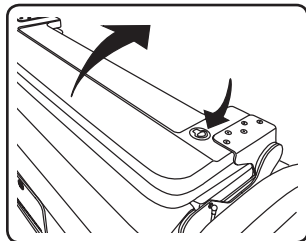
- Pull on the latch located on the port side of the prep station.



- Pull up on the front of the seat rotate it all the way until the bottom side is facing upward.



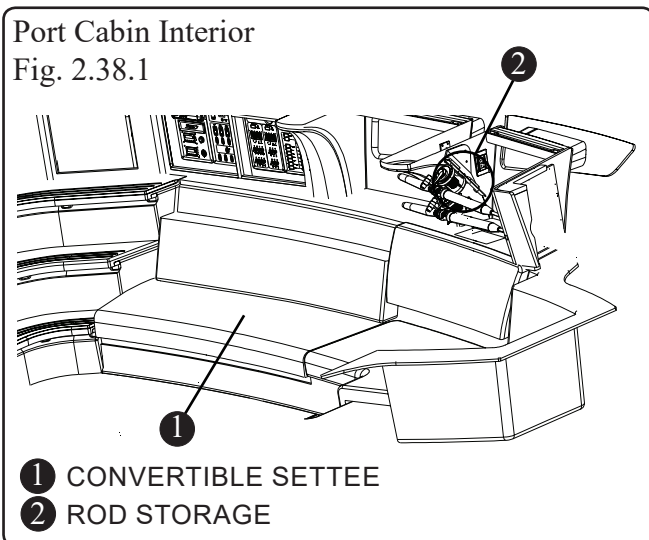
- Pull up on the latch at the port side of the bench and rotate the back of the bench into an upward position.



### Cabin Settee

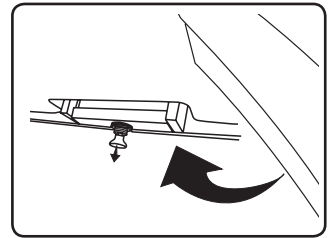
The settee in the forward cabin can be easily converted into a comfortable single bed.

Port Cabin Interior  
Fig. 2.38.1

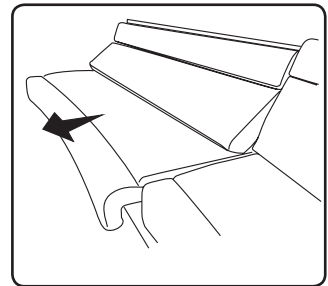


### To convert the settee:

- Pull the latch under the center of the cushion.



- Pull the base settee cushion out all the way until it stops.



### Bait Prep Station Refrigerator

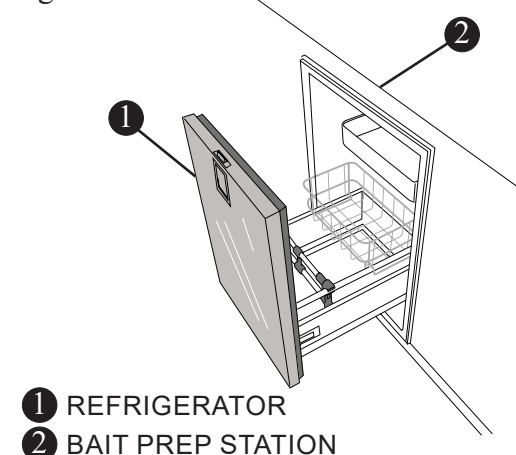
The refrigerator located on the starboard side of the bait prep station is a 12V/120V (2.3 cf) unit.

The “PREP STATION” breaker on the DC or AC breaker panel (See page 4-6 and 4-7) must be ON to operate the refrigerator. The unit is protected by a breaker on the bait prep station breaker panel (Figure 4.8.1) which must also be ON to operate the unit.

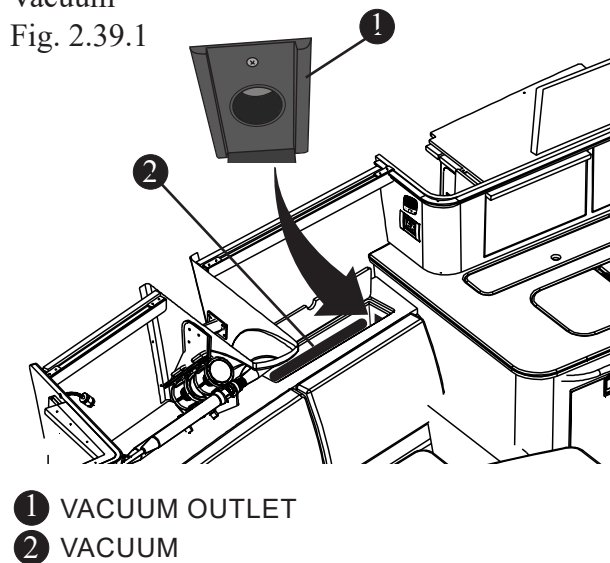
## NOTICE

**The optional summer kitchen is equipped with a refrigerator on both the port and starboard side of the unit.**

Bait Prep Station Refrigerator  
Fig. 2.38.1



Vacuum  
Fig. 2.39.1



### Vacuum

The vacuum located in a storage cabinet on the starboard side of the cabin (Figure 2.39.1) is a 120V/220V unit.

The shore power 2 breaker on the AC breaker panel (See page 4-7) must be ON and shore power connected to power the vacuum. The unit can also be powered by the generator when shore power is not available. The “VACUUM” switch on the AC breaker panel must also be ON to operate the vacuum.

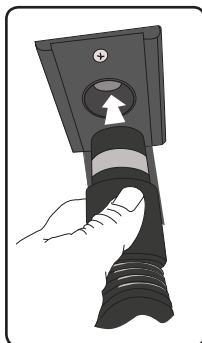
The power unit and dust bag are located behind a panel on the aft wall of the head vanity interior and can be accessed by removing the panel. **It is important to periodically remove and clean the dust bag to ensure reliable operation of the vacuum.**

### Vacuum Operation:

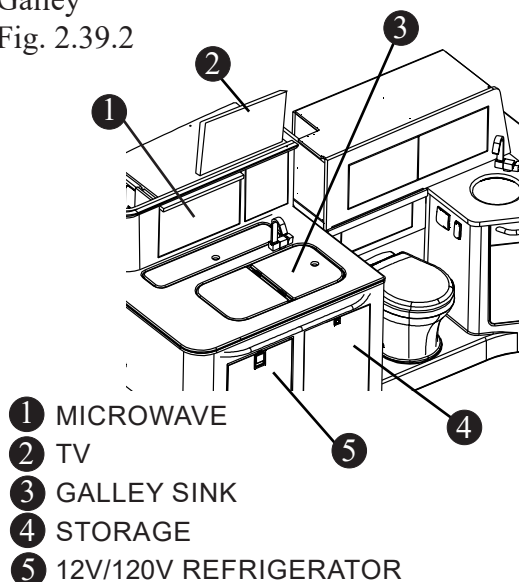
The vacuum comes with attachments and a flexible hose which is capable of reaching the entire interior cabin and head.

The vacuum switch is integrated into the outlet at the aft of the storage cabinet (Figure 2.39.1).

Insert the end of the flexible hose into the vacuum outlet to activate the vacuum. When the hose is removed the vacuum will shut off.



Galley  
Fig. 2.39.2



### Cabin Refrigerator

The refrigerator located on the front of the galley (Figure 2.39.2) is a 12V/120V (2.3 cf) unit.

The “CABIN REFRIG” breaker on the AC breaker panel (See page 4-7) must be ON to operate the refrigerator from shore or generator power.

The “CABIN REFRIG” breaker on the 12V DC breaker panel (See page 4-6) must be ON to operate the refrigerator from house battery power. The unit is protected by a breaker on the 12V DC breaker panel (see page 4-6).

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

### Microwave

The microwave, located above the galley in the starboard cabin is powered by the generator or shore power and is protected by the 15 amp “CABIN OUTLETS” breaker on the AC breaker panel located in the port side of the cabin.



### CAUTION

**Failure to store the microwave plate while underway may cause damage to the equipment, or injury to persons on board.**

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

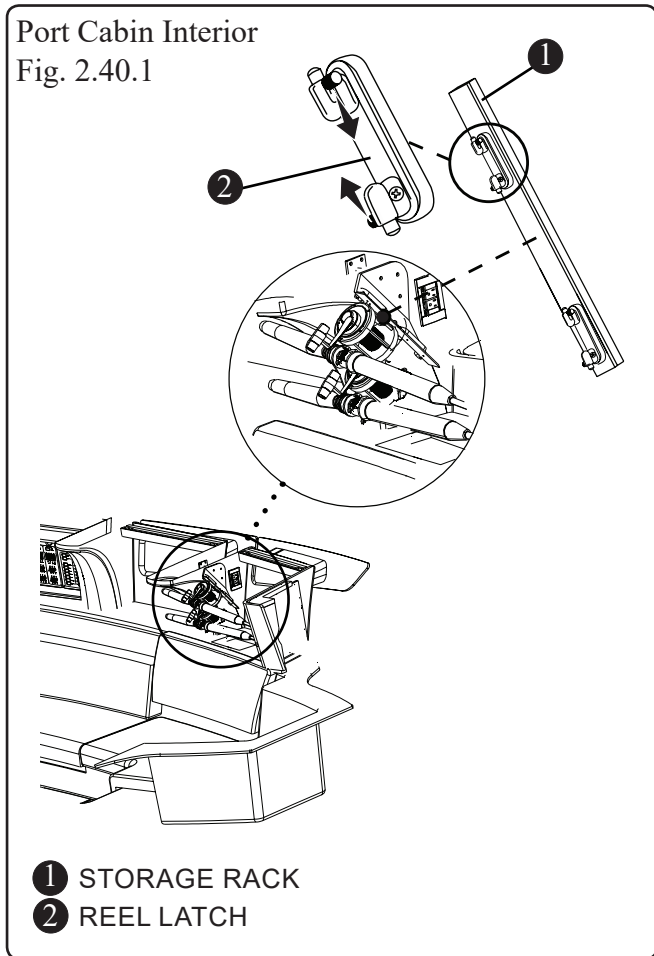


### Rod Storage

Located conveniently forward, port and starboard in the cabin, the rod holders provide storage for four fishing rods.

Port Cabin Interior

Fig. 2.40.1



### Ship's Bell

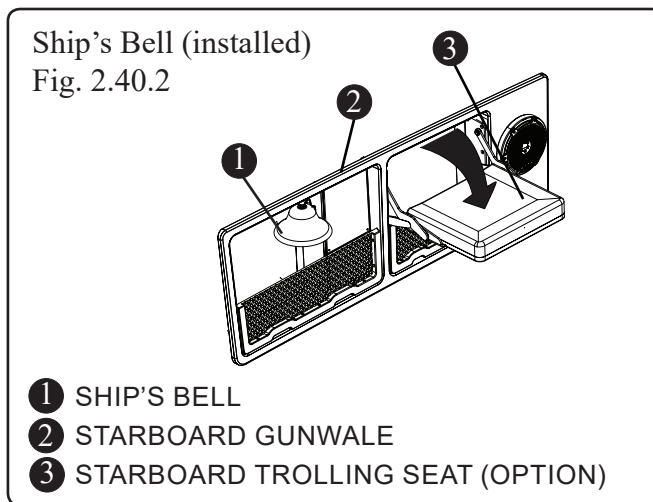
Maritime requirements include that vessels over 12m but less than 20m have onboard sound-signaling equipment capable of sounding a distinct audible tone for a distance of .05 miles.

The ship's bell, stowed in the cockpit can be installed in the starboard gunwale when needed in inclement, foggy weather.

It is important that you familiarize yourself with the use of the ship's bell.

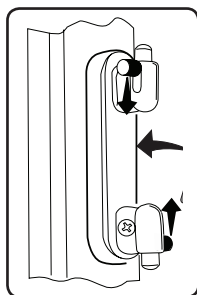
Ship's Bell (installed)

Fig. 2.40.2



### To Attach Reel:

- Squeeze the side knobs on the reel latch to retract the pins.
- Place the reel against the latch and release the knobs allowing the pins to engage the reel.



### Entertainment System

The entertainment system on your boat consists of a Fusion® AM/FM w/USB/VHF/AUX/iPod/iPhone/Android compatible via integrated bluetooth/SiriusXM-ready and a 28" flat screen TV. The stereo is protected by a 20 amp breaker on the 12V DC panel on the starboard side of the cabin.

### TV and DVD Player

Your boat is equipped with a 28" flat screen 12V TV with remote located on the starboard wall of the cabin above the galley sink (Figure 2.39.2). The TV can be connected to dockside cable where available.

### Stereo

The stereo unit is located on the port side of the cabin above the A/C controls. There are two (2) stereo remote controls, one on the control console and another on the port side of the bow. There are eight (8) waterproof speakers positioned throughout the boat (4 helm deck, 2 cockpit, 2 bow). There is also two (2) 10" sub-woofers located on the helm deck. An additional two (2) speakers are located in the cabin.

### Controlling Cockpit and Cabin Volume

- Press the 'Menu' button to switch to the sound adjustment selection display.
- Use the Rotary Encoder to select 'Zones' (Figure 2.40.1) and select "ON".

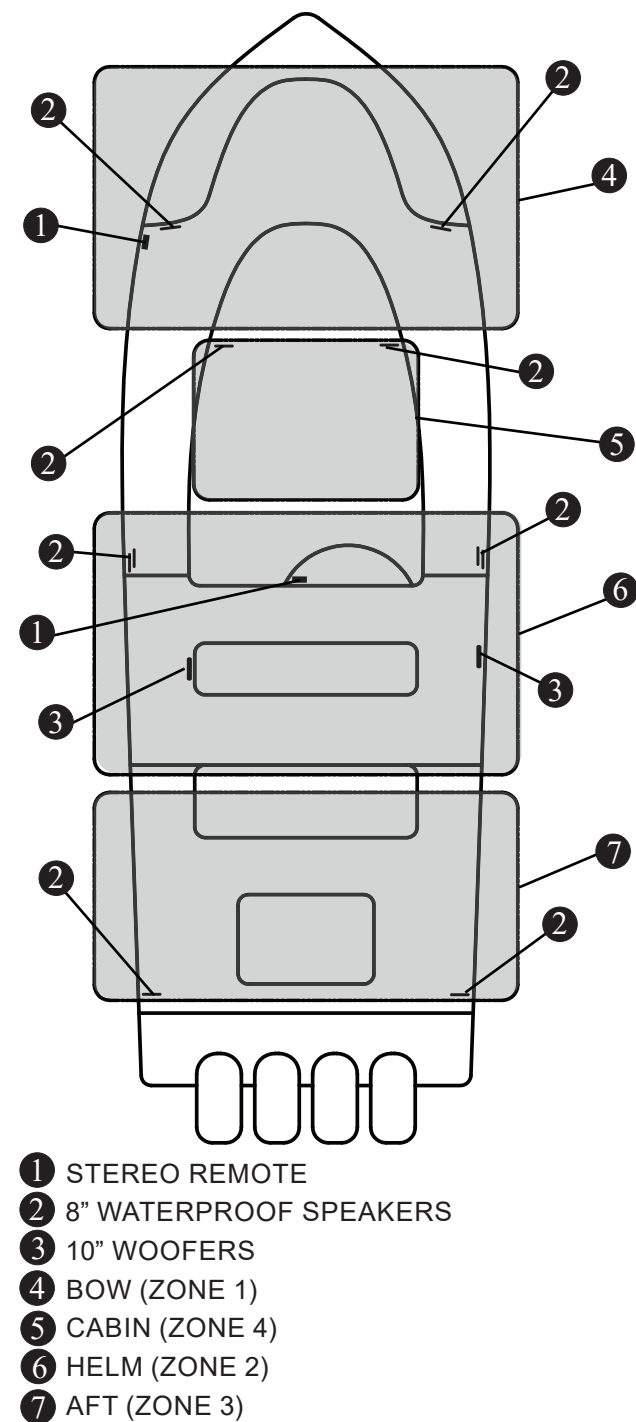
**NOTE:** Zone 1 cannot be turned OFF.

- Select 'Zone 1' then 'Link Zone 1 + 2'. Select 'ON' to activate.

Linking zone 1+2 allows the volume control to operate zones 1+2 as a combined pair. The zone set up for zone 1 and 2 can be configured separately when in this mode.

- Select 'Volume Limit' to set the desired output volume for each individual zone.
- Rotate the Rotary Encoder control clockwise to increase volume; turn counterclockwise to decrease volume.

Audio diagram  
Fig. 2.41.1

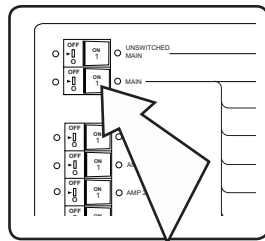
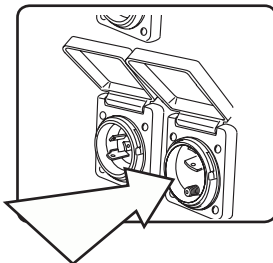


### TV Dockside Connection

The TV can be connected to dockside cable where available.

#### To Connect Cable Television:

- Plug the TV cable from the dock into the cable receptacle located under the gunwale on the aft starboard side of the cockpit.
- Assure that “MAIN” breaker switch on the DC breaker panel is ON.



#### To Operate The DVD Player:

- Assure TV is ON.
- Turn ON stereo unit.
- Push the IPOD/DVD selection button to select DVD.
- Depress the release button to open the unit, insert the DVD.

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

### Satellite TV (Option)

The satellite TV option adds equipment to your boat (antenna & receiver) which enables the satellite service (Direct TV subscription required) to play through the TV.

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

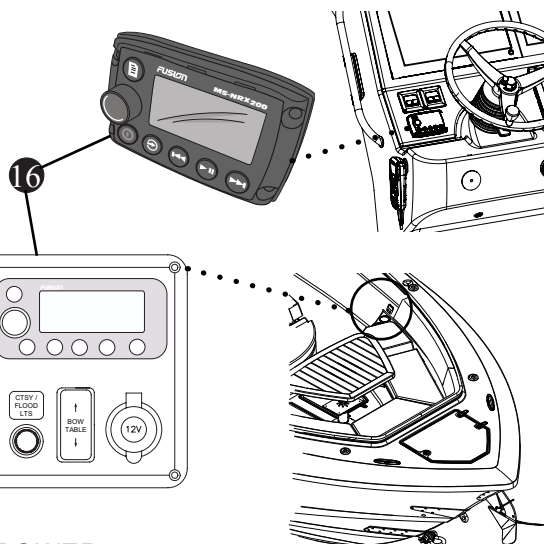
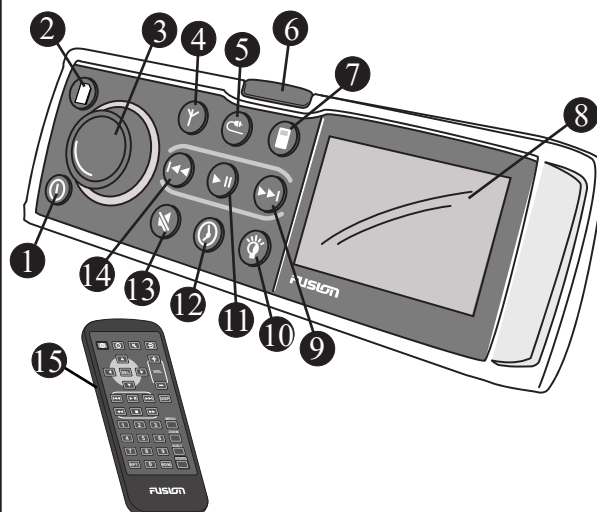
### Satellite Radio (Option)

The satellite radio option adds equipment to your boat (antenna and receiver) which enables the satellite service (Sirius/XM subscription required) to play through the stereo unit.

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

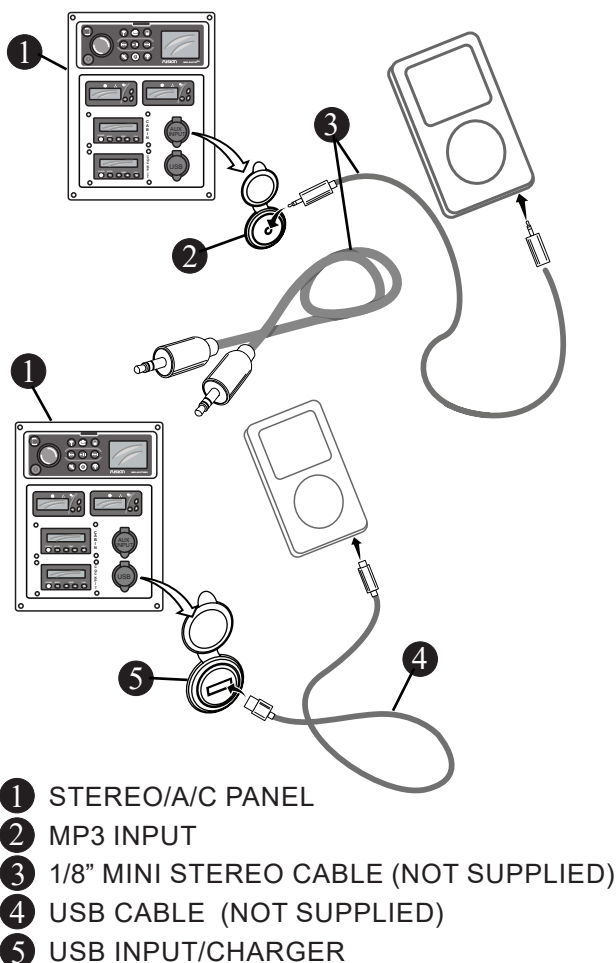
Stereo

Fig. 2.41.1



- 1 POWER
- 2 MENU
- 3 ROTARY ENCODER
- 4 AM/FM RADIO (SIRIUS OPTION)
- 5 MP3
- 6 CATCH RELEASE BUTTON
- 7 IPOD/DVD SELECTION BUTTON
- 8 DISPLAY SCREEN
- 9 FORWARD/NEXT
- 10 DISPLAY CONTRAST/BRIGHTNESS
- 11 PLAY/PAUSE
- 12 CLOCK
- 13 MUTE
- 14 BACK/PREVIOUS
- 15 HAND HELD TV/DVD REMOTE
- 16 STEREO REMOTE

MP3 Operation  
Fig. 2.43.1



## Operating MP3 Player

The MP3 input on your boat uses a standard 1/8" mini stereo cable (not included) which can be purchased at any electronic store.

- Insert one end of the stereo cable into your MP3 player and the other end into the MP3 input on the stereo.
- Turn the stereo ON.
- Press the MP3 button at the top of the stereo unit to access the MP3 source.
- Turn your MP3 player ON.

You will be able to control volume and menu from either your MP3 unit or the stereo.

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS, INFORMATION AND WARRANTY.

## Electric Sun Shade

The electrically actuated cockpit sun shade can be deployed or retracted by depressing the "SHADE" switch located on either the port helm switch panel or the bait prep station switch panel (Figure 2.19.1).

The "SHADE" switch extends and retracts the cockpit shade using "Garage Door Logic".

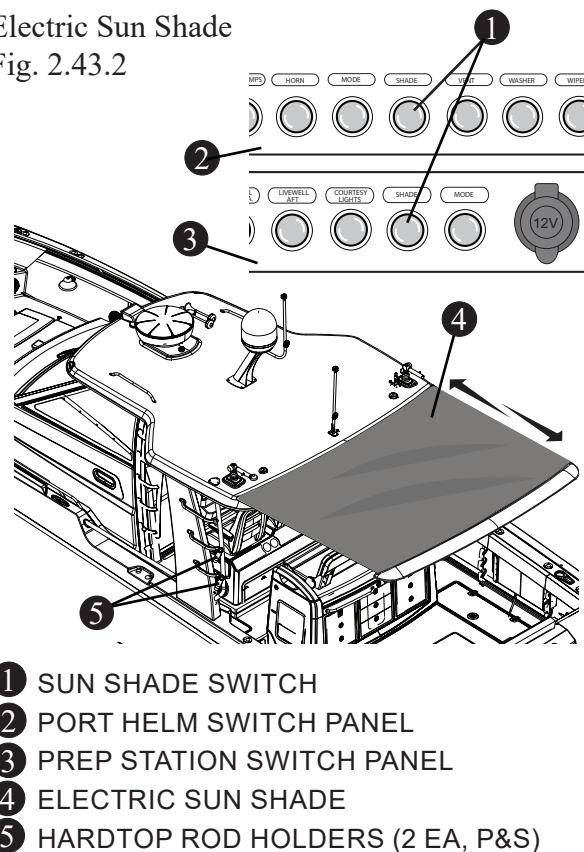
- The first press results in the shade extending OUT.
- The second press STOPs it if full extension is not desired. Otherwise it will stop in full extension.

The LED switch will remain illuminated for a short period of time after full extension.

### To retract the shade:

- The first press results in the shade retracting all the way IN.
- The second press STOPs it if full retraction is not desired. Otherwise it will retract all the way in and stop by itself.

Electric Sun Shade  
Fig. 2.43.2



The LED will again remain illuminated for a short period of time.

The sun shade and shade controller is protected by breakers located on the port side of the hardtop electronic box above the control console.

Follow the canvas care instructions in section 5 of this manual to keep the sun shade fabric clean.

### CAUTION

**ENSURE THAT THERE ARE NO RODS IN THE HARDTOP ROD HOLDERS BEFORE ACTIVATING THE SUN SHADE.**

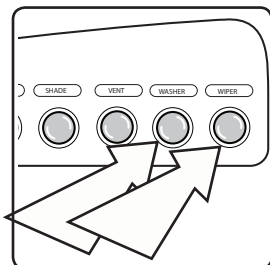
### CAUTION

**In rough seas the sunshade should be stowed to prevent damage to the rails and or curtain.**

## Windshield Wipers/Washer

The windshield wiper and washer are controlled by switches on the control console port switch panel (See figure 2.19.1). The switches are protected by 20 amp reset breakers located on the DC breaker panel on the port side of the cabin (See figure 4.6.1).

The washer is activated by momentarily pushing the switch.



## Docking, lifting and trailering

### Docking

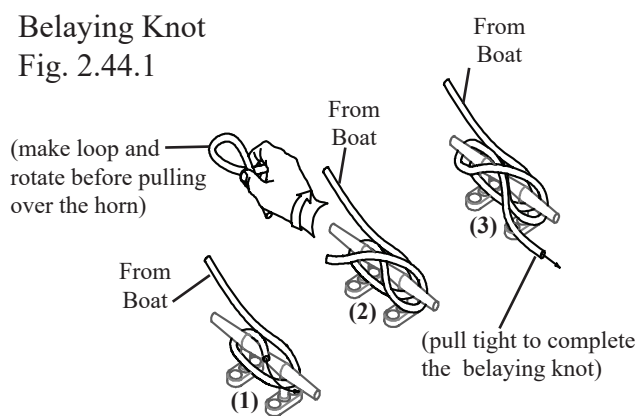
Your boat has nine (9) 10 inch cleats, one located in the anchor locker, two located at the bow (P&S), two located amidship (P&S), two located in the aft cockpit under the gunwale (P&S) and two at the stern (P&S) (See fig. 2.44.1).

The cleats are used to secure the boat to the dock. While loading/unloading or mooring, please learn the proper way to secure the boat and how best to use the mooring points of your boat.

Figure 2.44.2 shows the correct method for tying a belaying knot, commonly used to secure a boat to a dock. This knot will hold fast and is simple to release when needed.

The bow eye is used to haul and hold your boat onto a trailer. The stern eyes are used as tie down points while trailering the boat. **DO NOT** use the bow and stern eyes for lifting the boat.

Belaying Knot  
Fig. 2.44.1



### Lifting

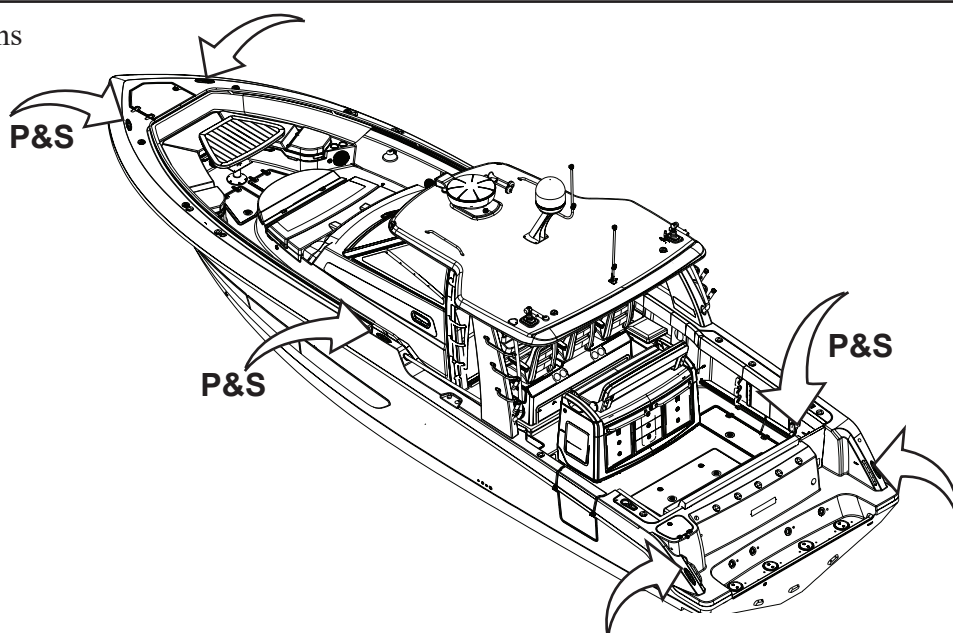
## NOTICE

### CLOSE THE A/C SEACOCK

**Before removing your boat from the water be sure to close the A/C seacock. Failure to do so will cause an air lock in the line when the boat is returned to the water. The A/C system will then have to be primed before it will operate properly.**

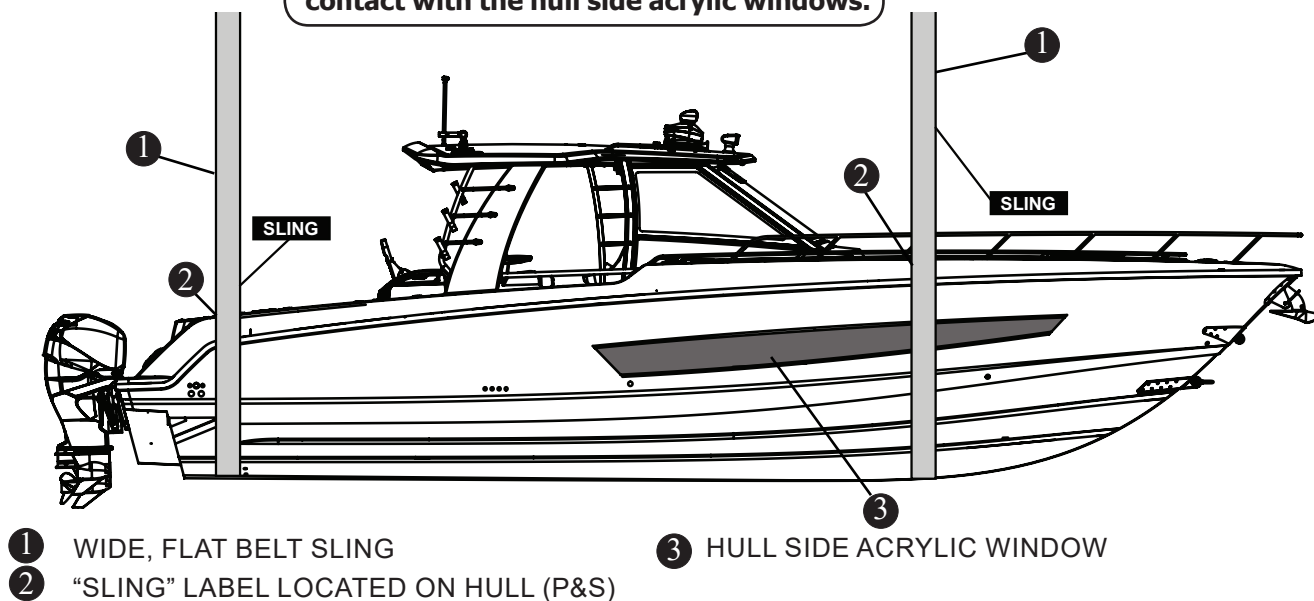


Cleat Locations  
Fig. 2.45.1



Proper Lifting  
Fig. 2.45.2

**CAUTION**  
Ensure that the lifting straps do not come in contact with the hull side acrylic windows.



### **⚠ DANGER**

Use only flat, wide belt-type slings and spreaders to lift the boat.

Lifting with bow and stern eyes will cause stress on the fiberglass & gel coat and may cause injury or death.

**DO NOT** use the bow and stern eyes for lifting the boat.

Whether you are lifting your boat out of the water for routine maintenance or long term storage, consider the following:

- When using a professional lifting service, it is prudent to check all credentials and ask for proof of insurance to protect your investment.

## Section 2 • General Information

- Ensure that fishboxes and bilge are pumped out prior to lifting.
- Use a wide, flat, belt sling for lifting to minimize stress on the gunwales.
- Careful location of the sling is required. **DO NOT place slings where contact with underwater fittings will occur. Also ensure that the lifting straps do not come in contact with the hull side acrylic windows.**
- When secured on land, pull the garboard drain, ensure that motorwell drains and deck drains are free flowing and position the boat with the bow slightly higher than the stern so that any water which is allowed to accumulate in the cockpit, motorwell or bilge can easily drain from the boat.



### CAUTION

**Ensure that the lifting straps do not come in contact with the hull side acrylic windows.**

### Trailer

- **Trailers equipped with rollers** instead of bunks can damage the foam sandwich hull of your boat and **should never be used.**
- Bunks provide a more even weight distribution.

### NOTICE

**Use a trailer with bunks ONLY. Your warranty may be voided if you use a trailer with rollers.**

### Trailer Safety

**Safety Chain/Cable** - There is a safety chain/cable that attaches to the bow eye and will keep the boat from sliding off the trailer in the event that the winch strap or cable breaks. Hook this up first.

**Tie-Down Straps** - Can be used to secure the boat from the stern. The tie-down straps hook into the tie-down loops on the trailer frame and to the stern eyes on the transom. Padding (or similar) chafe protection should be used wherever the tie-down straps come in contact with the hull.

If you have a trailer or plan on purchasing a trailer separately there are some points you need to consider, such as:

- Having a center roller and keel guards will help provide good support for the keel, also provide good fore and aft support.

### Securing the Boat to the Trailer

**Safety Chains/Cables** - Safety chains/cables connected to the trailer should be of sufficient length to reach the frame of the tow vehicle and should be long enough to allow the tow vehicle to turn without binding or tensioning.

### Securing the Trailer to the Tow Vehicle

**Safety Chains/Cables** - Safety chains/cables connected to the trailer should be of sufficient length to reach the frame of the tow vehicle and should be long enough to allow the tow vehicle to turn without binding or tensioning.

**Trailer Hitch** - A properly matched trailer hitch ball and coupler is important.

Make certain that the coupler and the hitch ball are properly seated and locked.



### DANGER

**Tie-down straps should never be used by themselves, they are only used to help in keeping the boat secured to the trailer. Make certain that the safety chain/cable is properly secured to the bow eye.**

### Trailer the Engines

### NOTICE

**REFER TO THE ENGINE MANUAL IN YOUR OWNER'S MANUAL PACKET FOR PROPER ENGINE SUPPORT WHILE TRAILERING.**

It is best to trailer your boat with the outboards tilted down in a vertical operating position.

However, if additional road clearance is required due to railroad crossings, driveway clearance, trailer bounce, etc., the outboard should be tilted up and supported using an accessory outboard support device.

## Section 2 • General Information

Your Boston Whaler dealer will have recommendations regarding engine support.



### CAUTION

**DO NOT** rely on the power trim/tilt system or tilt support lever on your outboards to maintain proper ground clearance for trailering. **THE OUTBOARD TILT SUPPORT LEVER IS NOT INTENDED TO SUPPORT THE OUTBOARDS FOR TRAILERING**

### Out of Water Storage

If it becomes necessary to store your boat out of the water it is imperative that the boat is supported in a manner which will not damage the hull nor the keel.

Boston Whaler recommends that the hull be supported by a minimum of three (3) keel stands. In addition, by a minimum of six (6) side stands, three (3) placed at port and three (3) placed at starboard.

### NOTICE

**The side stands are for stability only and are not intended to be load bearing.**



### CAUTION

**In addition to the three (3) keel stands, use a minimum of six (6) side stands, three (3) placed at port and three (3) placed at starboard.**

**Use ONLY the keel stands required by Boston Whaler for support of your boat out of water.**

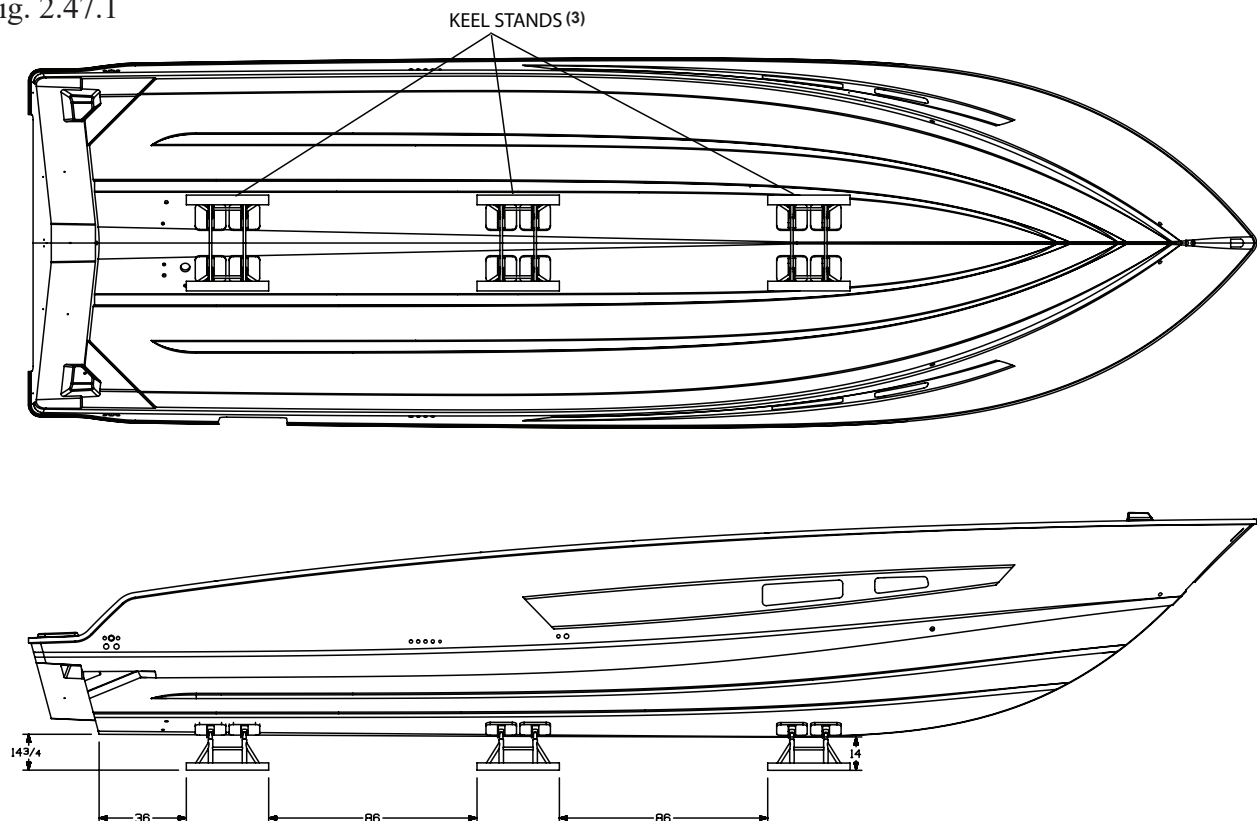
**Specifications for the keel stands can be obtained from your dealer or Boston Whaler.**

Specifications for keel stands (Figure 2.46.1) which meet the Boston Whaler requirements for support of your boats keel can be obtained by contacting your dealer or Boston Whaler.

### Out of Water storage (Option)

In the event that required keel stands are not available see figure 2.47.1 for recommended out of water support of your boat.

Keel Stands  
Fig. 2.47.1





### CAUTION

In addition to the six (6) wood blocks, use a minimum of six (6) side stands, three (3) placed at port and three (3) placed at starboard.

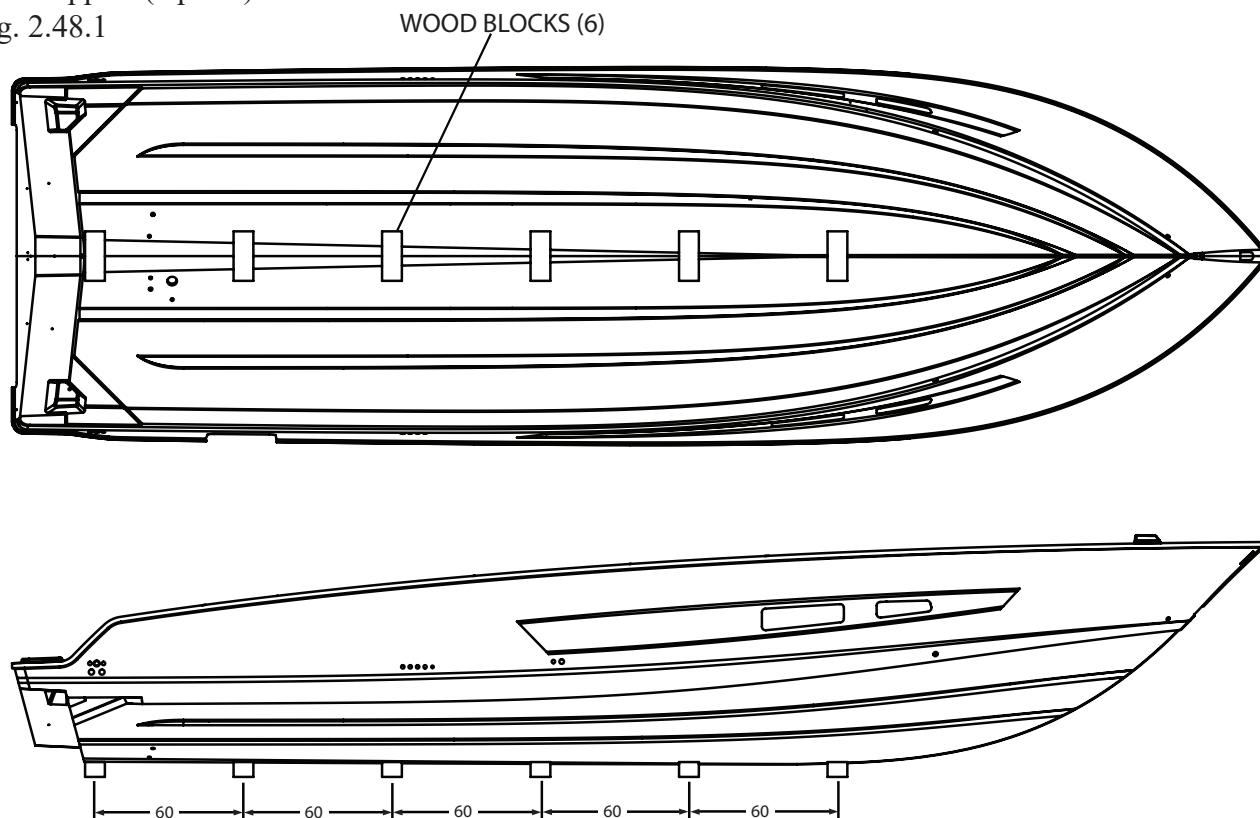
**EACH WOOD BLOCK MUST CONTACT THE HULL FOR A MINIMUM LENGTH OF 8 INCHES.**

### NOTICE

The side stands are for stability only and are not intended to be load bearing.

Hull Support (Option)

Fig. 2.48.1



## Bilge Pumps

Your boat is equipped with three (3) automatic bilge pumps, one forward (2000 GPH - 7,571LP), one aft (1,100 GPH - 4,160LPH) and one high water emergency pump (2000 GPH - 7,571LPH).

Each pump is activated automatically by a float switch when the water in the bilge reaches a predetermined level.

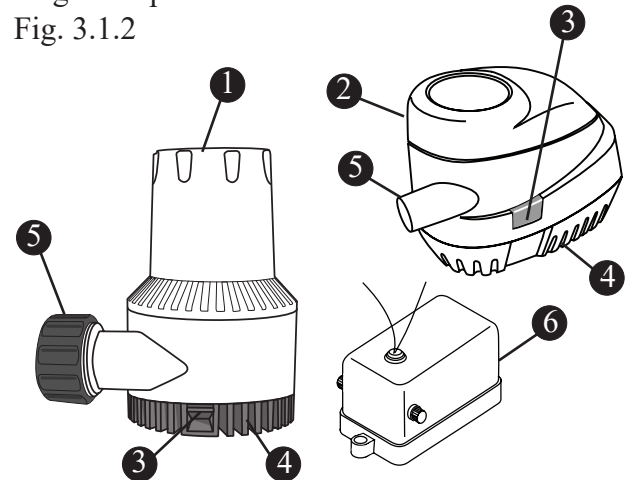
By depressing the switch on the control station labeled FWD BILGE, AFT BILGE or AUX bilge (See figure 2.19.1) the operator can energize the pumps regardless of the position of the float switches.

The aft pump discharges water overboard by way of a thru-hull fitting on the aft starboard hull.

The high water pump discharges water overboard by way of a thru-hull fitting on the aft port hull.

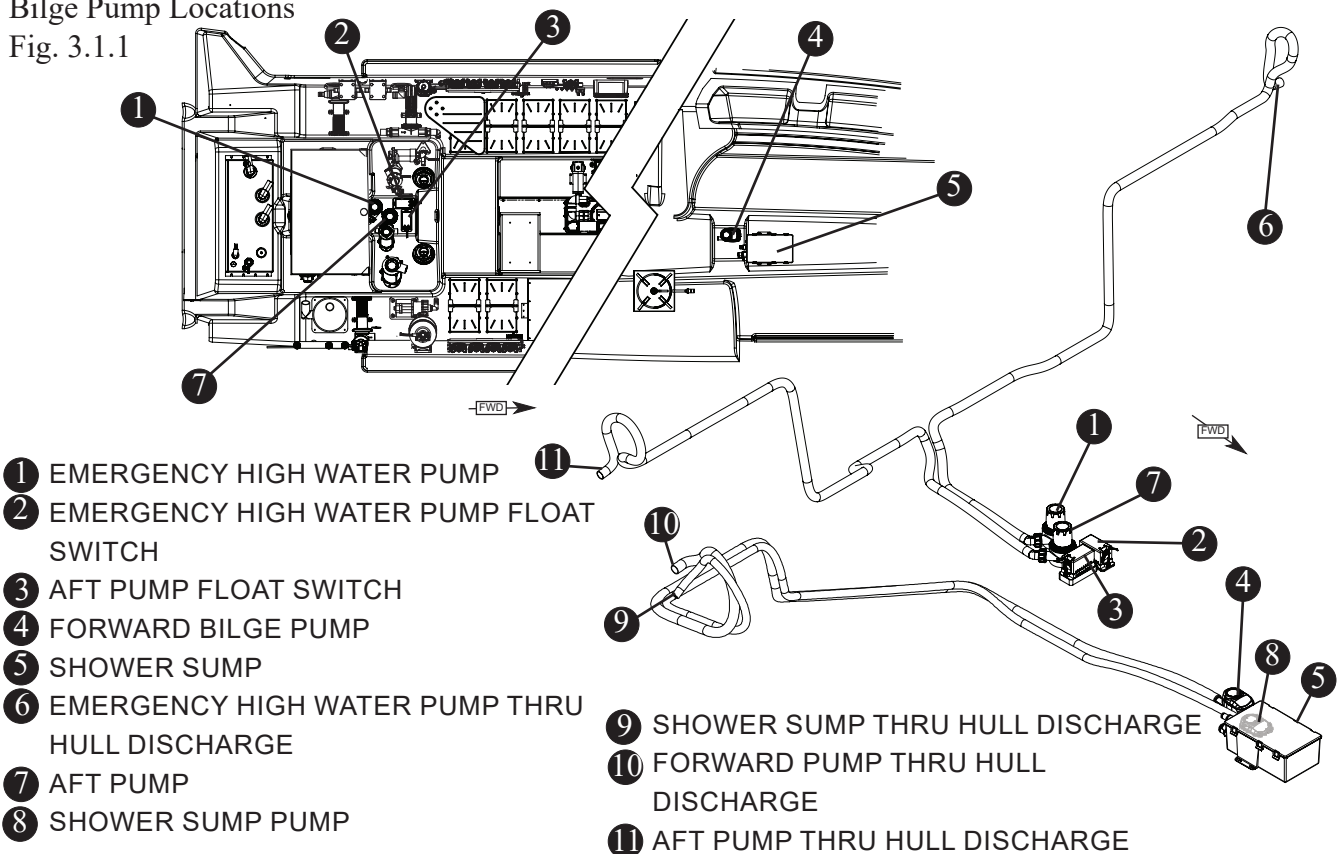
The forward pump discharges water overboard by way of a thru-hull fitting on the midship starboard hull (See figures 2.9.1 & 2.9.2).

Bilge Pumps & Float Switch  
Fig. 3.1.2



- ① 2000 GPH (7571 LPH) BILGE PUMP
- ② 1100 GPH (4160 LPH) BILGE PUMP
- ③ LOCK TAB
- ④ WATER INLET
- ⑤ DISCHARGE
- ⑥ FLOAT SWITCH

Bilge Pump Locations  
Fig. 3.1.1





### Emergency High Water Bilge Pump

In the event that water has risen in the bilge sufficiently to activate the high water float switch, the emergency high water bilge pump will automatically begin to pump water out of the bilge, an audible alarm (loud buzzer) will sound at the helm and the “HIGH WATER INDICATOR” light on the control station switch panel (See fig. 2.17.1) will be ON.

#### Take immediate action:

- Switch all bilge pumps ON.
- Use your radio to broadcast a PAN-PAN distress call (See page 1-11).

### Bilge Pump Maintenance

#### NOTICE

**Inspect the bilge pump intakes frequently and keep them free of dirt or material which may impede the flow of water through the pump.**

The aft pump and high water pump can be accessed through the equipment hatch in the aft cockpit floor. The forward pump can be accessed through a hatch in the floor of the cabin.

To clean the pump strainer, depress the lock tabs on both sides of the pump and lift the pump motor (Figure 3.1.1).

If water does not come out of the discharge hose:

1. Remove the motor module to see if the impeller rotates with the power on.
2. Remove any debris that may have accumulated in the impeller section or strainer base.
3. Check hose and connection on hull side for debris and proper connections.

### Float Switch

Frequently inspect the area under or around the float switches to ensure they are free from debris and gummy bilge oil.

#### To clean:

- Soak in heavy duty bilge cleaner for 10 minutes, agitating several times.
- Check for unrestricted operation of the float.
- Repeat the cleaning procedure if necessary.

### Fuel & Oil Spillage

Regulations prohibit discharging fuel or oily waste in navigable waters. Discharge is defined as any action which causes a film, sheen or discoloration on the water surface, or causes a sludge or emulsion beneath the water surface. A common violation is bilge discharge.

Use rags or sponges to soak up fuel or oily waste, then dispose of them properly ashore. If there is a large quantity of fuel or oil in the bilge, contact a knowledgeable marine service to remove it. Never pump contaminated bilge discharge overboard.

### Gray Water Sump

Your boat is equipped with a gray water/condensate sump which can be accessed through the hatch in the floor of the cabin in front of the galley (See fig. 3.3.1). Gray water from the galley, shower, condensate from the cabin air conditioner and freezer plates all drain into the sump.

The sump contains its own automatic pump to discharge water when there is enough water in the sump to raise the float switch and start the pump.

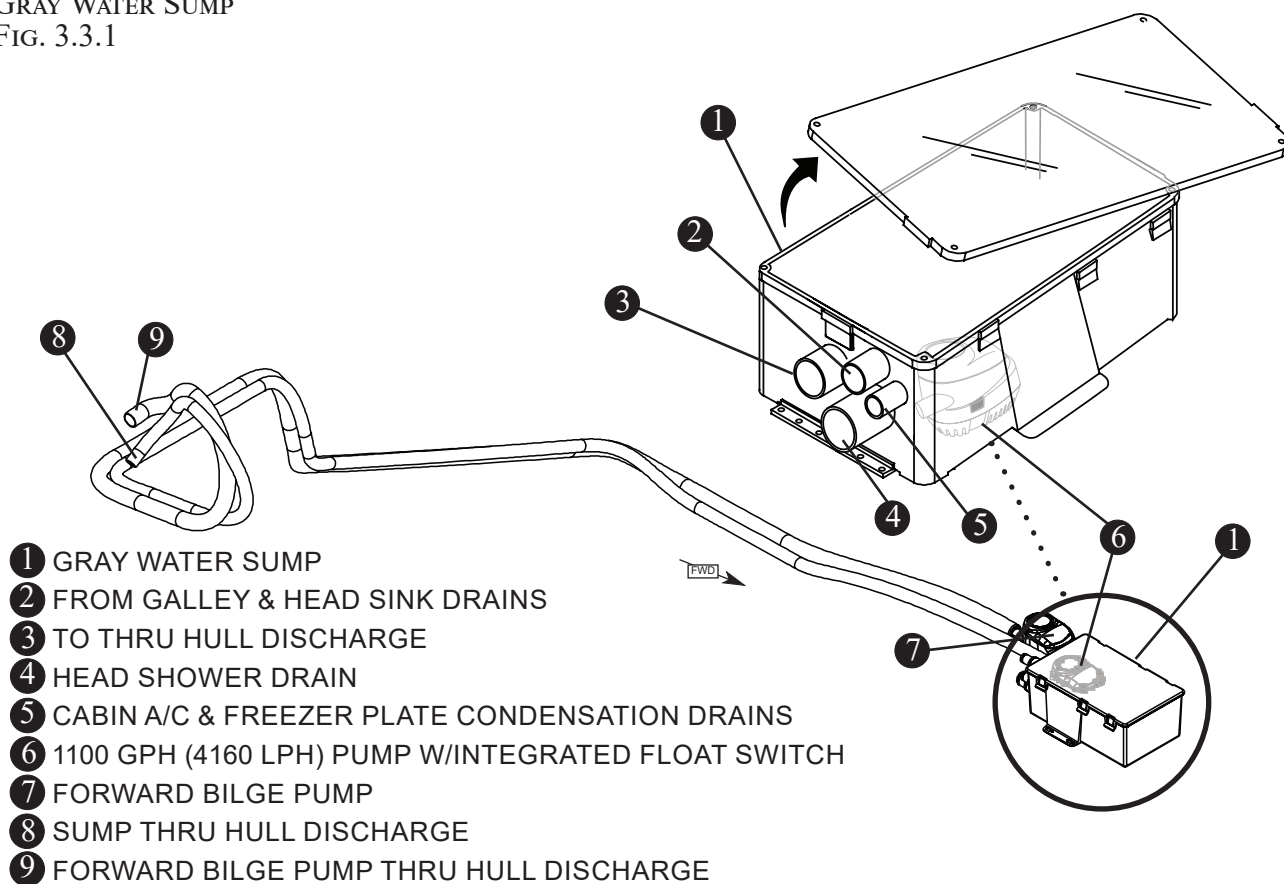
#### NOTICE

**After using the shower, it is recommended that you run a gallon of clean water through the shower drain to flush out any soap residue.**

### Maintenance

Periodically remove the clear cover and check the pump and float switch for proper working order. Clean out any obstructions which may inhibit the pump from performing correctly.

GRAY WATER SUMP  
FIG. 3.3.1



## Fuel System

### CAUTION

- Oil and fuel spills can be dangerous and can subject offenders to severe penalties
- Leaking fuel is a fire and explosion hazard, inspect the system regularly. Examine fuel tanks and exposed lines for leaks and corrosion.

This system has been designed to meet the EPA regulations using certified components to limit the fuel vapor emissions.

Your fuel system provides the following benefits:

- Automotive style refueling, automatic nozzle shut-off, fuel nozzle retention. This

system sends a signal to the pump nozzle to shut off before there is any spit-back or well-back through the fill opening.

- Overfill protection is included with each system, reducing the possibility of accidental fuel spills.
- Reduce hydrocarbon emissions through the use of a specially designed fuel fill. This fuel fill has a permanent cap with a closure mechanism that has an audible click, to inform you when it is sealed.

### Fuel tank

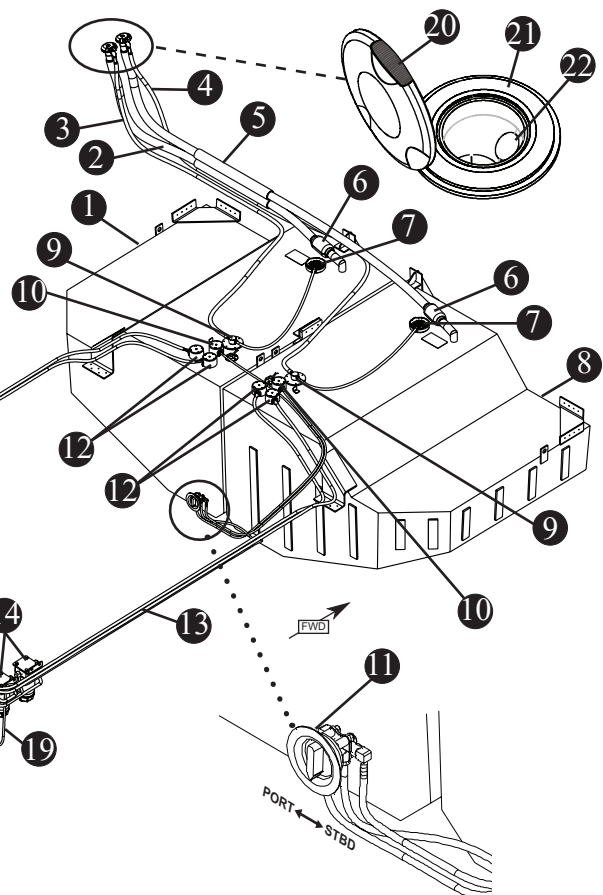
Your boat is equipped with two (2) low permeation aluminum fuel tanks with a usable fuel capacity of 600 gallon (2271 L). The usable capacity of the fuel tank is different from the tank capacity marked on the tank from the manufacturer. The difference

Fuel Tank  
Fig. 3.4.1

- 1 300 GAL. (1,135 L) PORT FUEL TANK
- 2 PORT TANK FUEL FILL HOSE
- 3 PORT FUEL FILL VENT HOSE
- 4 STARBOARD FUEL FILL VENT HOSE
- 5 STARBOARD TANK FUEL FILL HOSE
- 6 INTEGRATED CHECK VALVE (ICV)
- 7 GRADE VALVE
- 8 300 GAL. (1,135 L) STARBOARD FUEL TANK
- 9 GENERATOR FUEL DEMAND VALVE (FDV)
- 10 FILL LIMIT VENT VALVE (FLVV)
- 11 GENERATOR SELECTOR VALVE
- 12 FUEL DEMAND VALVE (FDV)
- 13 FUEL FEED LINES
- 14 FUEL/WATER SEPARATOR
- 15 PORT ENGINE FUEL FEED
- 16 PORT INBOARD ENGINE FUEL FEED
- 17 STARBOARD INBOARD ENGINE FUEL FEED
- 18 STARBOARD ENGINE FUEL FEED
- 19 GENERATOR FUEL FEED
- 20 FUEL FILL CAP RELEASE BUTTON
- 21 FUEL FILL DECK PLATE
- 22 FUEL FILL INTEGRATED VENT

### NOTICE

Fuel gauge only reads accurately when boat is level (not underway).



## ⚠ CAUTION

**Use of improper fuel can seriously damage your engine. Engine damage resulting from use of improper fuel is considered misuse of engine and will void the warranty. Follow engine manufacturer's recommendations regarding the types of fuel and oil to use.**

## NOTICE

**It is your responsibility to read and understand the engine manufacturer's manual in your owner's manual packet for complete fuel and fueling information and warnings.**

is the non-usable portion of the tank which results from the fuel in the tank that is below the pickup tube and the ullage area that has been incorporated into your tank. It is recommended that you follow all instructions regarding the filling of fuel tanks. **Please take time to read and understand all the fuel related information and warnings regarding gasoline and your boat, in the engine owner's packet.** Fuel tanks with levels less than 1/4 full can cause engine stalling problems due to fuel starvation or by allowing sediment and dirt to enter the fuel supply lines. Keep the tank full and monitor the fuel level often to prevent this from happening.

### Fuel Vent

The fuel tank vent is integrated into the fuel fill deck fitting (see fig. 3.4.1). The VaporTec fuel pressure management system, (fuel fill deck fitting, integrated check valve, fill limit vent valve, grade valve), ensures that the fuel system constantly maintains proper vapor pressure in all situations. This eliminates any unintended pressure which can seriously damage a boat or engine. The vent serves as an over pressure/vacuum release with anti-surge and flame/spark arresting protection. The fuel vent system also plays an important role in controlling the "FULL" level of fuel with the use of the FLVV (Fill Limit Vent Valve). Grade Valves have been added to the tank which allows proper ventilation of the tank when the boat is stored, or trailered, on a moderate incline, without fuel seepage.

### Fuel Distribution System

The fuel is delivered from the tank to the engine through the Fuel Demand Valve (FDV), anti-siphon valve, and the fuel line. The FDV prevents the built up pressure inside the tank from being transferred to the engine while still allowing fuel to flow as the engine requires it for operation. The anti-siphon valve is a safety feature designed to prevent the fuel from siphoning out of the tank if the fuel line were to be cut or broken below the level of the fuel in the tank. In this case, some fuel would leak from the line, but would not allow the entire contents of the tank to siphon into the boat.

### Filling the Tank

This fuel system is designed to automatically shut off the fuel nozzle when the tank is full, similar to an automotive fuel system. The tank is filled when the fuel fill nozzle has shut itself off the second time. The SecureStop automatic fuel shut off system (Fuel Fill Deck Fitting, Integrated Check Valve, Fill Limit Vent Valve), guarantees the boater a clean a trouble-free fill -up. Details such as the valve design and deck fill nozzle retention features ensure consistent fill-up/shutoff. Attempting to fill the tank past this point may cause some of the components to not function properly, or malfunction.

## NOTICE

**Fuel gauge only reads accurately when boat is level (not underway).**

## ⚠ WARNING

**The use of a portable fuel tank to fill your boat's tank can result in overfilling and circumvent the safety features designed into your tank.**

## ⚠ WARNING

**The modification of any fuel system components or the replacement of these components with unauthorized parts may result in over-pressurization of fuel system and circumvent the safety features designed into your tank.**

### NOTICE

**Keep records of the fuel capacity and consumption of your boat. Drastic changes in consumption and mileage may indicate a problem.**

REFER TO THE ENGINE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

### Maintenance

Follow your engine manufacturers recommendations for scheduled maintenance. Check the hoses for cracks, abrasions and deterioration on a regular basis and **NEVER start your engines if there is a strong gasoline odor present**. Replace worn or damaged hoses and fittings with marine grade replacement parts only. Your Boston Whaler® dealer will have all the parts and information you will need to maintain your boat.

Excessive water and sediment in the fuel tank(s) due to improper usage may require you to have the tank(s) professionally cleaned. Consult a professional tank cleaning contractor regarding this procedure and the proper disposal of residue and water.

### NOTICE

**Improper disposal of fuel or oily waste can subject the offender to severe state and federal penalties.**

### Static Electricity and the Fuel System

There is a danger that static electricity can ignite gasoline vapors that have not been ventilated outside an enclosed area. Use extreme caution when fueling your boat from a source outside the regular venues, (e.g. marinas, fuel service stations).

Your boats bonding system protects it from creating and discharging static electricity. Your boat must be in contact with the water or a land based grounding system while fueling.

Your boat has safety features that can be circumvented by not adhering to standard fueling practices. The following suggestions will help keep you safe from static electricity while refueling your boat.

- **NEVER** fuel your boat in unsafe conditions such as suspended on a sling or in a situation that increases the likelihood of static discharge.
- **NEVER** use homemade containers to fill your fuel tanks.
- Fuel carried on-board outside of a fixed fuel system should be stored in an approved container or in a portable tank such as provided for outboard engines and be stowed safely outside of the engine or living compartment(s).
- Shut down the engine, motors and fans prior to taking on fuel. Any ignition sources should be extinguished before filling the fuel tanks.
- Close all ports, windows, doors and hatches.
- Fueling should never be done at night except in well-lighted areas.
- Always keep the fuel nozzle in contact with the fuel fill plate or the edge of the fuel tank opening throughout the filling process.
- Allow areas where gasoline vapors could collect to be ventilated before starting the engine.
- Wipe any spillage completely and dispose of rags or waste on shore.
- Secure the fuel cap tightly.
- Portable tanks should only be filled while on the ground, never on board the boat.

### DANGER

**Static electricity can ignite gasoline vapors causing serious injury/death and/or destruction of property.**

**Check for leaks in tubing, connections and hoses. Correct the cause of any leaks and ventilate the area to insure that no fumes remain, prior to energizing any electrical equipment and/or starting the engines.**

REFER TO THE “DO’S AND DON’TS AT THE GAS PUMP” DVD IN YOUR OWNER’S MANUAL PACKET FOR MORE INFORMATION.



### Ethanol-Blended Fuels

Ethanol is an oxygenated hydrocarbon compound that has a high octane rating and therefore is useful in increasing the octane level of unleaded gasoline.

#### NOTICE

**The use of improper gasoline or additives can damage your fuel system and is considered misuse of the system. Damaged caused by improper gasoline or additives WILL NOT be covered under warranty.**

The fuel-system components of your Mercury engine(s) have been tested to perform with the maximum level of ethanol-blended gasoline (10% ethanol) currently allowed by the EPA in the United States.

Special precautions should be considered with the use of fuel containing ethanol in your system. Fuels with ethanol can attack some fuel-system components, such as tanks and lines, if they are not made from acceptable ethanol-compatible materials. This can lead to operational problems or safety issues such as clogged filters, leaks or engine damage.

Your boat was manufactured, and shipped from the factory, with ethanol-compatible materials. Before introducing gasoline with ethanol into your fuel tank, ask your dealer if any components have been added or replaced that are not recommended by Boston Whaler, Mercury or may not be ethanol-compatible.

### Filling The Tank

It is best to maintain a full tank of fuel when the engine is not in use. This will reduce air flow in and out of the tank due to changes in temperature as well as limiting exposure of the ethanol in the fuel to humidity and condensation.

### Phase Separation

Humidity and condensation create water in your fuel tank which can adversely effect the ethanol blended fuel. A condition called phase separation can occur



#### CAUTION

**The use of fuels containing ethanol higher than 10 percent (E-10) can damage your engine and/or fuel system and will void the warranty.**

**E85 FUELS COULD SERIOUSLY DAMAGE YOUR ENGINES AND MUST NEVER BE USED.**

if water is drawn into the fuel beyond the saturation point. The presence of water in the fuel beyond the saturation level will cause most of the ethanol in the fuel to separate from the bulk fuel and drop to the bottom of the tank, significantly reducing the level of ethanol in the fuel mixture in the upper level (phase). If the lower level (phase), consisting of water and ethanol, is deep enough to reach the fuel inlet, it could be pumped directly to the engine(s) and cause significant problems. Engine problems can also result from the reduced ethanol/fuel mixture left in the upper phase of the tank.

### Additives

There is no practical additive known that can prevent or correct phase separation. The only solution is to keep water from accumulating in the tank.

If phase separation does occur, your only remedy is to drain the fuel, clean and dry the tank completely and refill with a fresh, dry load of fuel.

### Fuel Filters

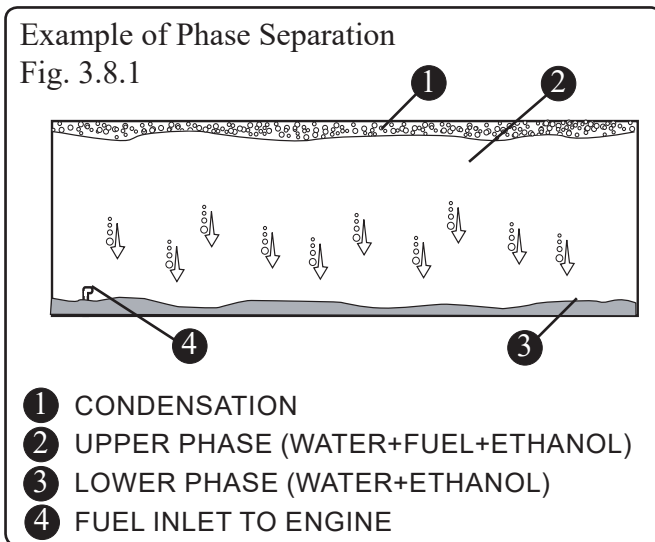
Mercury already provides the appropriate level of filtration to protect the engine from debris. The addition of another *in-line* filter to the system will create a possible flow restriction that can starve the engine(s) of fuel.

### Fuel/water Separator

The fuel/water separator has been determined to be within Mercury specifications and will not restrict the flow of adequate fuel to the engine(s).

### Example of Phase Separation

Fig. 3.8.1



### Maintenance

Periodically inspect for the presence of water in the fuel tank. If any is found, all water must be removed and the tank completely dried before refilling the tank with any fuel containing ethanol.

### Storage

Long periods of storage and/or non-use, common to boats, create unique problems. When preparing to store a boat for extended periods, of two months or more, it is best to completely remove all fuel from the tank. If it is not possible to remove the fuel, maintaining a full tank of fuel with a fuel stabilizer added to provide fuel stability and corrosion protection is recommended.

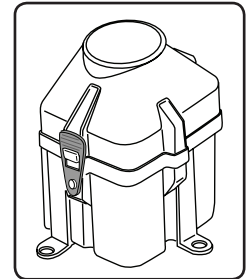
- Add fuel stabilizer/treatment at manufacturers recommended dosage.
- Run engine(s) for 10 minutes.
- Shut OFF fuel valve.
- Allow engine to run until it stops.
- Top off fuel tank, leaving space for expansion. DO NOT fill to point of overflow.
- DO NOT cap the tank vent.

A partially full tank is not recommended because the void above the fuel allows air movement that can bring in water through condensation as the air temperature moves up and down. This condensation could potentially become a problem.

REFER TO THE ENGINE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

### Power Steering

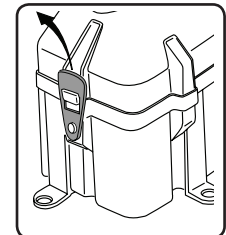
The Verado four-stroke engines use enclosed hydraulic pump units. **The pumps are electrically operated to provide hydraulic pressure to the steering system.** The pumps are located in the forward center of the bilge and can be accessed by lifting the equipment hatch in the aft cockpit deck.



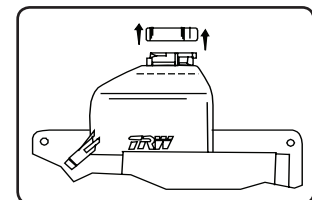
### Filling & Maintenance

The system is virtually maintenance free, aside from regular fluid checks and visually inspecting the outside of the unit for signs of leaks or damage.

- Remove the pump cover by pulling up and out on the locking tabs on the sides of the unit.



- Unscrew the cap and check the fluid level in the reservoir, fill **ONLY** with SAE 10W-30 Full Synthetic Power Steering Fluid if necessary.
- Replace cap and cover



Check the fluid level before each trip.

## NOTICE

**Ensure that cover is properly seated to prevent intrusion of water into the pump enclosure.**

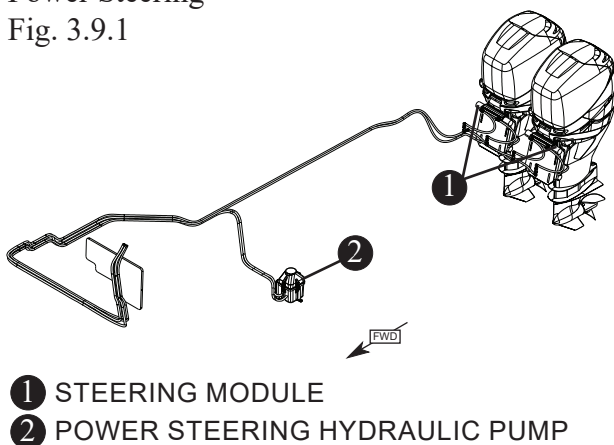
Proper maintenance of this system will ensure worry-free usage for the life of your boat. Steering system integrity is imperative when engaging in recreational water activities. Special care and attention must be taken to ensure proper performance of the steering system and should include the following:

- After the first few hours of operation and at regular intervals, check all fasteners and the complete steering system for security and integrity.
- Inspect for corrosion. Any part affected by corrosion must be replaced.
- When replacing parts, self locking hardware must be used.
- Check the fluid level in the helm pump unit.
- Lubricate slides on the engine cylinders.

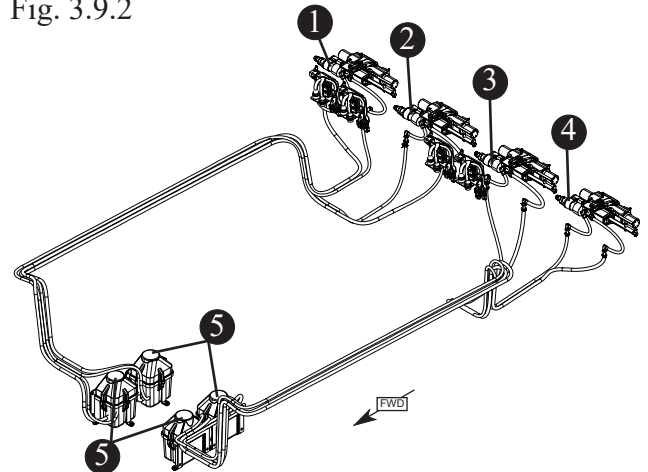
All steering systems whether mechanical or hydraulic require regular inspections, periodic adjustment and occasional replacement may be necessary.

REFER TO THE ENGINE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

Power Steering  
Fig. 3.9.1



Power Steering w/ Joystick Piloting (option)  
Fig. 3.9.2



- 1 STARBOARD ENGINE STEERING MODULE
- 2 STARBOARD INBOARD ENGINE STEERING MODULE
- 3 PORT INBOARD ENGINE STEERING MODULE
- 4 PORT ENGINE STEERING MODULE
- 5 POWER STEERING HYDRAULIC PUMPS

## Starting/Stopping the Engines

### CAUTION

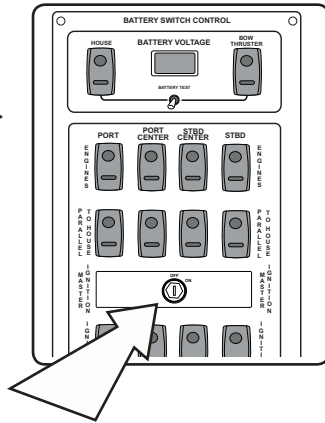
**NEVER start or operate your outboard (even momentarily) without water circulating through all the cooling water intake holes in the gearcase to prevent damage to the water pump (running dry) or overheating of the engine.**

### Prior to Starting

- Operator should know boating safety, safe navigation, and boat operating procedures.
- Make sure that the lower unit of the engines are in the water.
- Make certain the gear shift/throttle control is in the neutral position. (The engines will not start if the control lever is in any other position than NEUTRAL)
- Be sure the emergency stop switch (See figure 1.14.1) is in the "RUN" position.

## Starting the Engines

The master ignition key switch is located on the battery switch panel located on the port side of the cabin (See fig. 2.16.1). **The switches must be turned on to activate the system.**



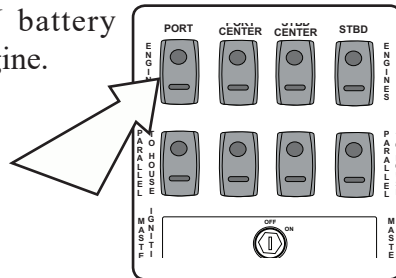
## NOTICE

**The engines CANNOT be started from this location.**

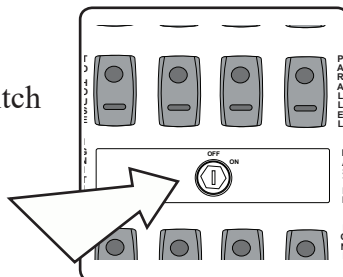
- Be sure the throttle control levers are in the NEUTRAL position.



- Switch ON battery for each engine.



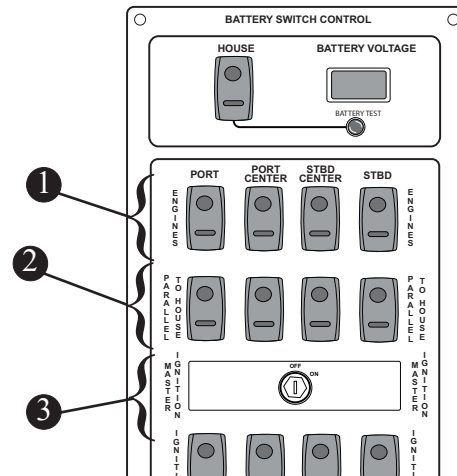
- Turn the master ignition key switch ON (clockwise).



## NOTICE

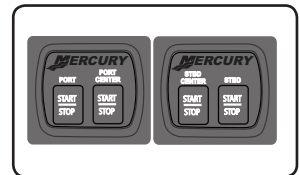
**The gear shift/throttle control levers will not allow engine starting if the control levers are in any other position than NEUTRAL.**

Battery Switch Panel (Joystick Piloting Option)  
Fig. 3.10.1



- ENGINE BATTERY SWITCHES
- PARALLEL TO ENGINE SWITCHES
- IGNITION KEY SWITCHES

- Press the START/STOP button on the ignition pad for the appropriate engine.

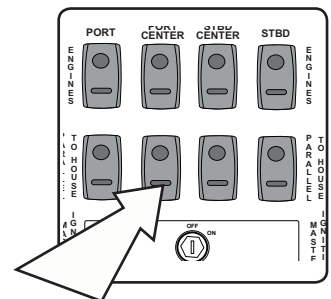


The neutral (N) lights located on the throttle control pad will become illuminated once the engines are started and communicating with the throttle control.



## Parallel Switching

In the event the battery for a particular engine is not sufficiently charged to start the engine depress the “Parallel to Engine” switch for the particular engine. The engine will then be connected to the house battery which will initiate ignition.





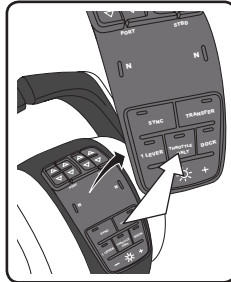
## CAUTION

**Before initiating parallel switching. Proceed to start the remaining engines. When the engines are running a sufficient charge should be present to start the failed engine.**

### Warming Up the Engines

The “THROTTLE ONLY” button on the throttle control pad allows the operator to increase engine RPM for warm-up without shifting the engines into gear.

- Be sure that the gear shift and throttle control levers are in the NEUTRAL position.



- Press and hold the “THROTTLE ONLY” button while moving the control handle ahead to the forward position.
- Hold in the button until the horn sounds twice and the neutral lights start flashing. The flashing lights indicate that throttle only is engaged.
- Advance the control handles to increase engine RPM.

**NOTE:** Engine RPM is limited to prevent engine damage.

- To disengage, return the control handles back to the neutral position.

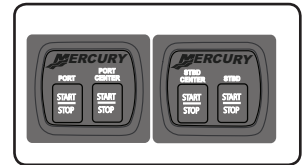
The warm-up mode can be re-activated by turning the engines off and re-starting.

### Stopping the Engines

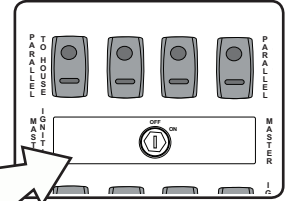
- Be sure that the gear shift and throttle controls are in the NEUTRAL position.



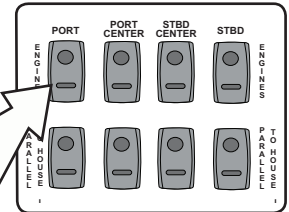
- Press the START/STOP button on the ignition pad for the appropriate engine.



- Turn the master ignition key switch OFF (counter clockwise).

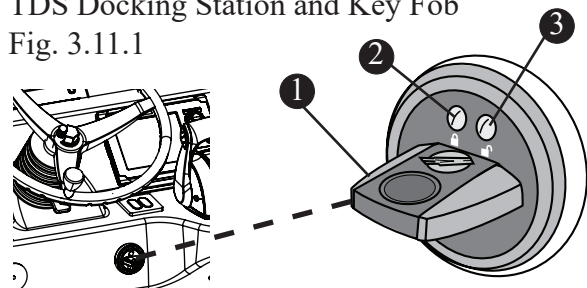


- Switch OFF battery for each engine



### Starting the Engines w/Theft Deterent System (Option)

TDS Docking Station and Key Fob  
Fig. 3.11.1



- ① FOB
- ② RED LIGHT
- ③ GREEN LIGHT

- Insert the fob into the docking station.
- Switch ON battery for each engine.
- Turn ignition key to the ON position.

The red light will come on for a moment followed by the green light. The system is now unlocked and you may start the engines using normal procedure (See page 3-9).

## NOTICE

**If the fob is missing the engines can still be started. However, engine power will be limited to low engine RPM.**



### Fresh Water System

#### NOTICE

- **Be sure to fill the water tank from a source known to provide safe, pure drinking water.**
- **If you do not use the freshwater system for long periods of time or only use it seasonally it is recommended that you follow the disinfecting practice before using it.**

The freshwater system on your boat includes a 60 gal (227 L) fresh water tank, a pump and a distribution manifold with connections for hot and cold water service to the head, galley, cockpit and transom shower. The system also incorporates dockside water service.

#### Maintenance and servicing

The fresh water pumps and distribution manifold can be accessed through the mechanical hatch in the aft cockpit.

Individual valves can be turned off to accommodate servicing or maintenance on the particular fresh water system (See Figure 3.13.2).

#### Filling the Tank

The water tank can be filled through the water fill deck plate located midship on the starboard gunnel (See figure 2.11.1). There is a tank level indicator integrated into Vessel View at the helm.

Fill the tank only from a source known to provide safe, pure drinking water. Use only a plastic hose to fill the water tank. Using a rubber hose can give the water a disagreeable taste.

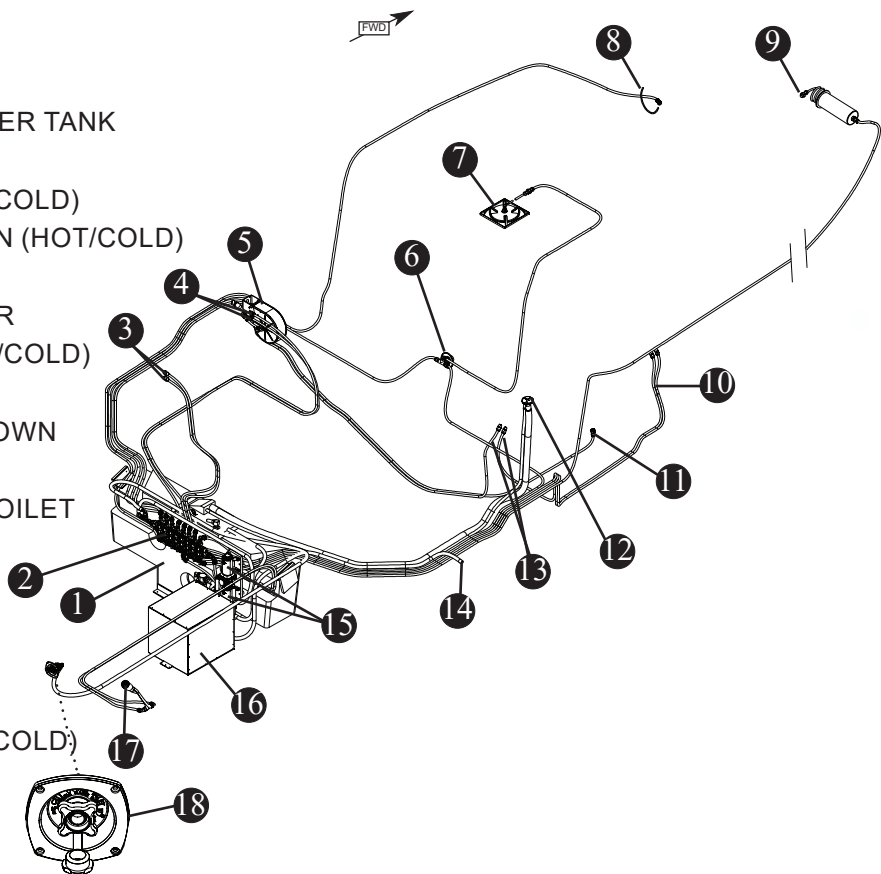
The hose should be dedicated to filling use only and should be stored in a clean, dry place. It is a good practice to cover the ends of the hose to ensure the inside stays clean.

Before you fill the freshwater system it is vital that it be properly disinfected. Ask your dealer if this has been done.

Fresh Water System

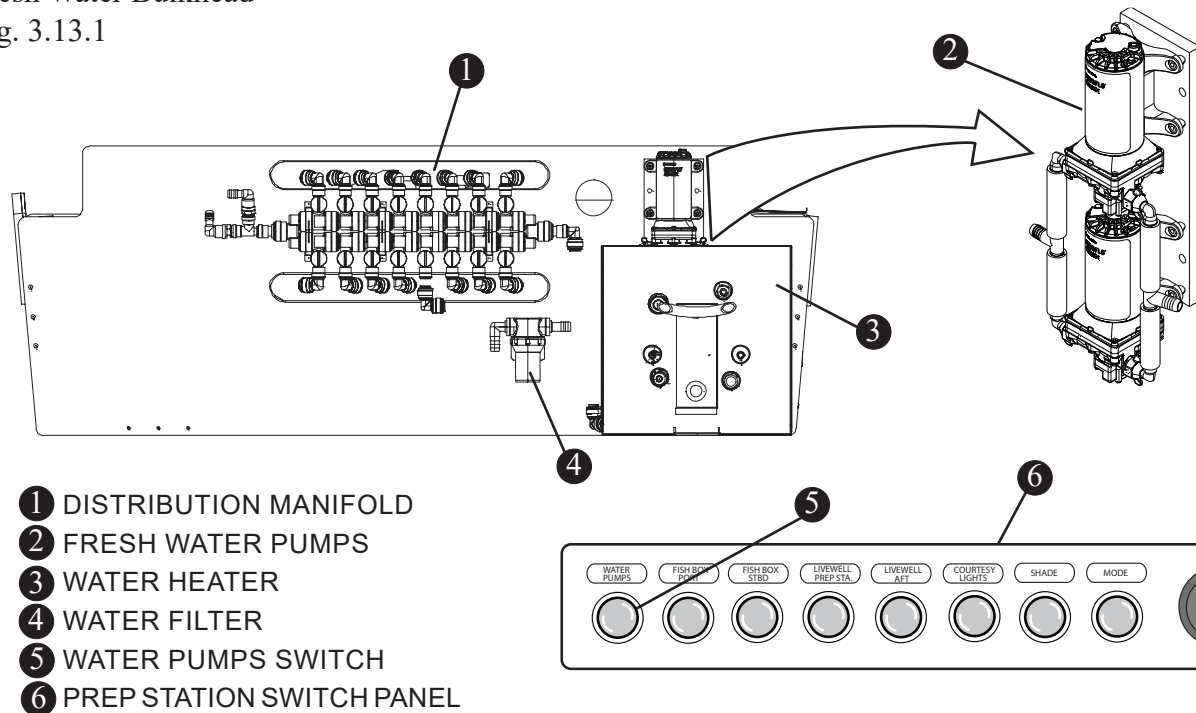
Fig. 3.12.1

- 1 60 GAL. (227 L) FRESH WATER TANK
- 2 DISTRIBUTION MANIFOLD
- 3 PREP STATION SINK (HOT/COLD)
- 4 FRESH WATER WASHDOWN (HOT/COLD)
- 5 HOSE REEL
- 6 RAIN SHOWER REGULATOR
- 7 RAIN SHOWER HEAD (HOT/COLD)
- 8 WINDSHIELD WASHER
- 9 ANCHOR LOCKER WASHDOWN
- 10 GALLEY SINK
- 11 ELECTRIC VACU-FLUSH® TOILET
- 12 FRESH WATER FILL
- 13 HEAD SINK
- 14 WATER TANK VENT
- 15 PUMPS
- 16 WATER HEATER
- 17 TRANSOM SHOWER (HOT/COLD)
- 18 DOCKSIDE WATER INLET



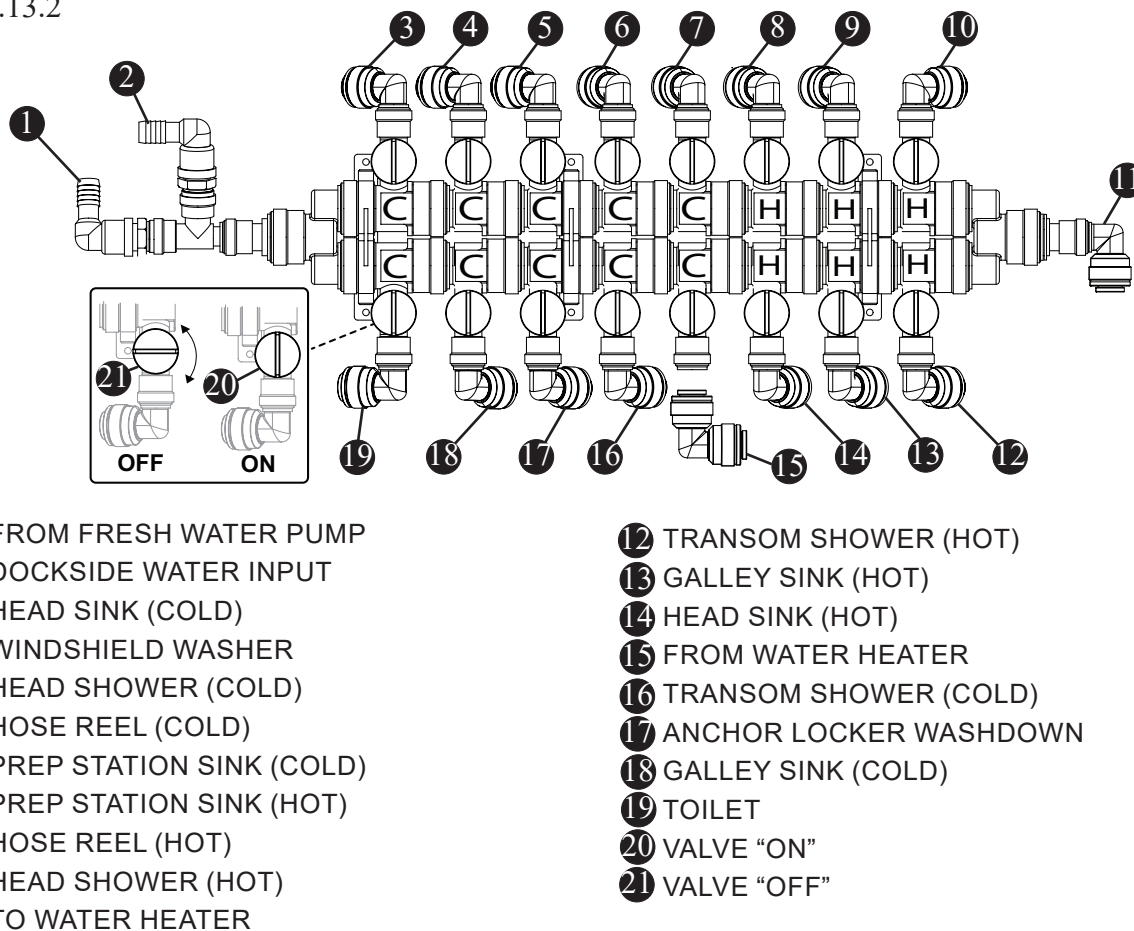
Fresh Water Bulkhead

Fig. 3.13.1



Fresh Water Distribution Manifold

Fig. 3.13.2



## Section 3 • Systems & Components Overview & Operation

The following procedure is recommended to disinfect the freshwater system:

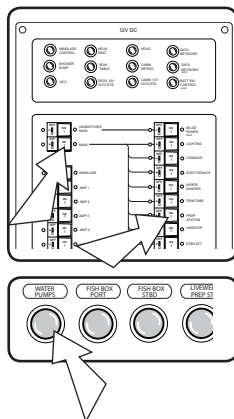
1. Flush the entire system thoroughly by allowing potable water to flow through it.
2. Drain the system completely.
3. Fill the entire system with an approved disinfecting solution (check with your dealer for recommendations) and follow the method prescribed by the manufacturer.
4. After disinfecting, drain the entire system.
5. Flush the entire system thoroughly several more times with potable water.
6. Now the system is ready for use, fill with potable water.

This should be done annually or before using the system if it has been laid up for an extended amount of time.

### Operation

To operate the system, turn ON the “MAIN” and the “PREP STATION” breakers located on the DC Breaker Panel in the aft starboard of the forward cabin (See page 4-7).

Press the “WATER PUMPS” switch on the Prep Station switch panel (See fig. 2.19.1).



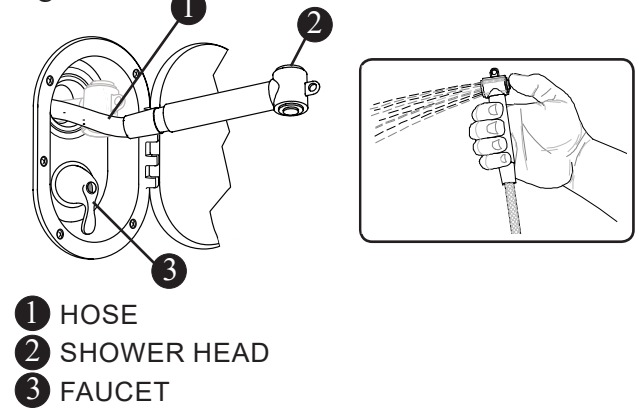
The freshwater pumps draw water from the water tank and provide pressure to the entire freshwater system. Periodically check the hoses and connections for leaks and/or loose fittings. A loss of pressure will result in low water flow.

### Transom Shower

The transom shower is located on the starboard side, aft of the transom door. The shower is supplied by the fresh water system and has a hose which extends approximately 6' (1.82M). The unit features a control handle to adjust the temperature of the supplied water. The shower unit is pressurized by the fresh water pumps and the spray head is activated by twisting the center of the unit.

### Transom Shower

Fig. 3.13.1



### Anchor Locker Washdown

For your convenience, there is an expandable, fresh water washdown hose located in the anchor locker. The unit features a control handle to adjust the flow of the supplied water.

The washdown unit is pressurized by the washdown pumps and the spray head is activated by twisting the center of the unit.

The “WATER PUMPS” switch on the bait prep station (See page 4.21) must be ON to operate the freshwater washdown. If desired, the switch can be left ON permanently without any damage to the system.

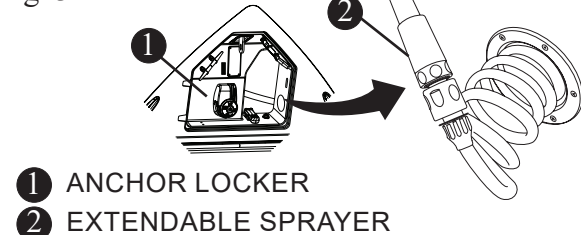
- The first press turns ON both pumps.
- The second press turns OFF both pumps.

## NOTICE

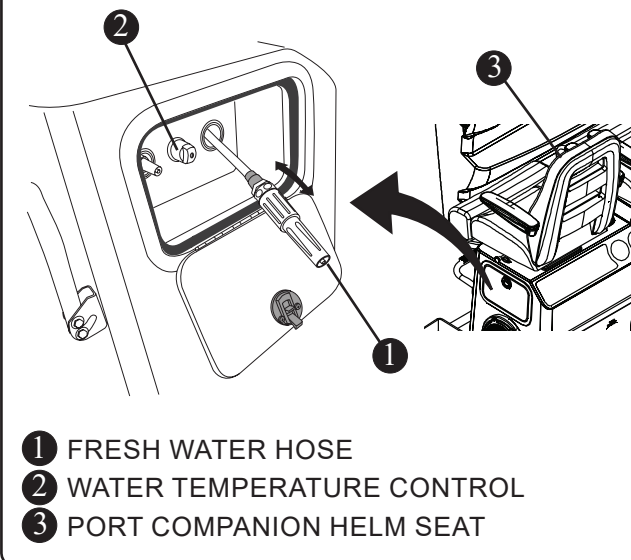
**The “WATER PUMPS” switch activates both the fresh water and raw water pumps. If only one system is required the other pumps can be turned off via the iPad, Raymarine or Czone on Vessel View.**

### Anchor Locker Washdown

Fig. 3.14.2



Cockpit Fresh Water Washdown  
Fig. 3.15.1



## Cockpit Washdown

Your boat features a unique hot and cold water retractable hose reel located on the port side wall of the helm seating platform (See fig. 3.15.1)

The washdown unit is pressurized by the fresh water pump and the spray head is activated by twisting the unit. The temperature of the water can be regulated by adjusting the valve at the center of the unit.

The “WATER PUMPS” switch on the bait prep station (See page 4.21) must be ON to operate the freshwater washdown. If desired, the switch can be left ON permanently without any damage to the system.

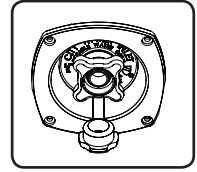
- The first press turns ON both pumps.
- The second press turns OFF both pumps.

## NOTICE

The “WATER PUMPS” switch activates both the fresh water and raw water pumps. If only one system is required the other pumps can be turned off via the iPad, Raymarine or Czone on Vessel View.

## Dockside Water Inlet

The dockside water inlet located in the aft starboard cockpit (See figure 2.10.1) allows for use of a dockside water source to provide water for the boat's freshwater system.



### To Use The System:

- Make sure the “WATER PUMPS” switch is OFF.
- Remove the cap from the dockside water inlet.
- Connect a drinking water hose to the water outlet on the dock, then to the dockside water inlet on the boat.
- Turn on the water at the dock.

All fresh water outlets on your boat are now functional.

### To disconnect the system:

- Turn off the dockside water.
- Disconnect the hose from the boat.
- Replace cap on the dockside water inlet.

## NOTICE

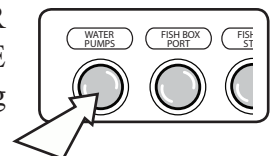
As a precaution against accidental flooding, remove the hose when leaving the boat for an extended period of time.

## Water Heater

## NOTICE

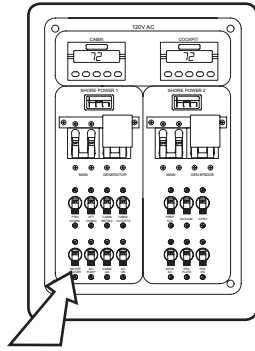
Make sure the fresh water tank is full before operating the water heater. Operating the water heater empty will cause damage to the system.

Make sure the “WATER PUMPS” switch is “ON” (SEE FIG. 2.19.1) before energizing the water heater.



Turn “ON” the “WATER HEATER” switch located on the AC Main Distribution Panel.

Once both the “WATER PUMPS” switch and the “WATER HEATER” switches are “ON” the system can be utilized.



**NOTE:** If the water heater has not been used for some time it will take approximately 20 minutes for the water to heat.

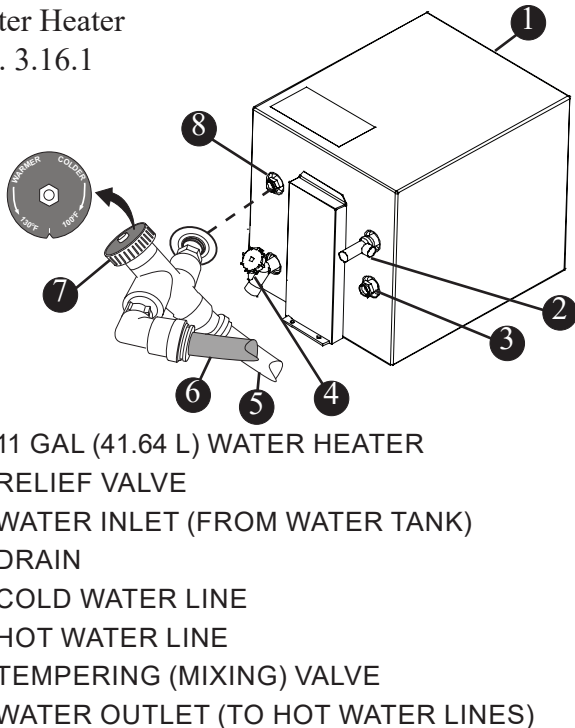
### NOTICE

**The water heater is equipped with a temperature and pressure relief valve that complies with the standard for Relief Valves & Automatic Gas Shut off Devices for Hot Water Systems, ANSI Z 21.22**

### Tempering Valve

A tempering valve is installed on the hot water outlet of the water heater (Fig. 3.16.1) to reduce the risk of scalding. The valve is set at it's lowest temperature (100°F) at the factory. The water temperature can be adjusted up to a maximum of 130°F by turning the valve counterclockwise until the water temperature reaches your desired limit.

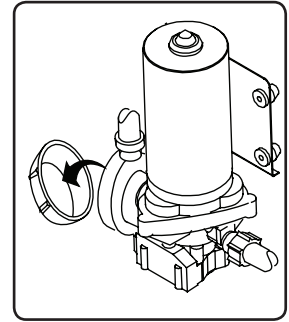
Water Heater  
Fig. 3.16.1



- 1 11 GAL (41.64 L) WATER HEATER
- 2 RELIEF VALVE
- 3 WATER INLET (FROM WATER TANK)
- 4 DRAIN
- 5 COLD WATER LINE
- 6 HOT WATER LINE
- 7 TEMPERING (MIXING) VALVE
- 8 WATER OUTLET (TO HOT WATER LINES)

### Maintenance

Very little maintenance is required for the freshwater system, other than annual disinfecting and winterizing. Periodically check the entire system to assure that the hose connections, tube fittings, electrical connections and mounting bolts are properly secured, and free of chafing.



Periodically check the in-line strainer attached to the pump, and clean if necessary.

The system should be run at least every other month to maintain the pump's impellers in a stable operating condition.

### CAUTION

**SCALDING INJURY - Turn OFF the water heater and wait for the water in the storage tank to cool before opening the drain valve to flush the tank.**

### WARNING

**Hydrogen gas may form in the tank if the system has not been used for more than two weeks. DO NOT smoke or have any flame near an open faucet.**

### Winterizing The System

If the water system will not be used for an extended amount of time it is recommended that it be drained. Draining the freshwater system will require you to energize the freshwater pump switch on the instrument panel, press the button on the freshwater shower head and empty the freshwater tank. Next disconnect the hoses to and from the water pump to allow as much water as possible to drain out. De-energize the fresh water pump switch. Some service facilities may recommend filling the freshwater system with a non-toxic, non-freezing solution. This procedure should be completed by an authorized service center.

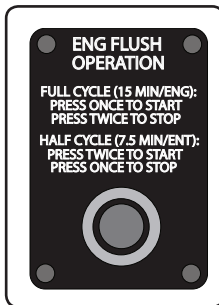
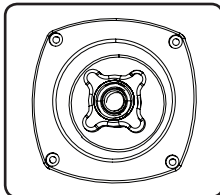


### Automatic Engine Flushing System (Option)

If equipped, the engine flushing system is fully automatic and flushes salt and minerals from the internal components of marine engines more effectively and conveniently than conventional methods.

#### Operation

- Attach a water hose to the hose fitting.
- Activate the system by depressing the button on the panel.



#### Full Cycle (15 minutes)

- Push the start button ONCE. The system will cycle for 15 minutes per engine.
- Push the start button TWICE to stop in the middle of cycle if desired.

#### Half Cycle (7.5 minutes)

- Push the start button TWICE. The system will cycle for 7.5 minutes per engine.
- Push the start button ONCE to stop in the middle of cycle if desired.

### Raw Water System

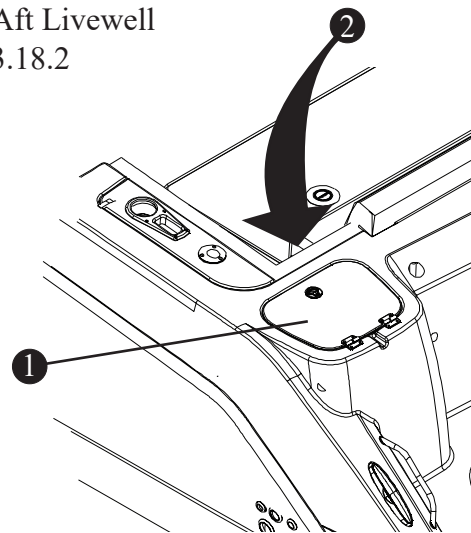
The Raw water system includes a seacock with auxiliary pump and a livewell and raw water hose connection.

The seacock must be set in the OPEN position for the raw water system to function. The seacock, livewell pump and raw water pump can be accessed through the mechanical hatch in the aft cockpit deck.

### Port Aft Livewell

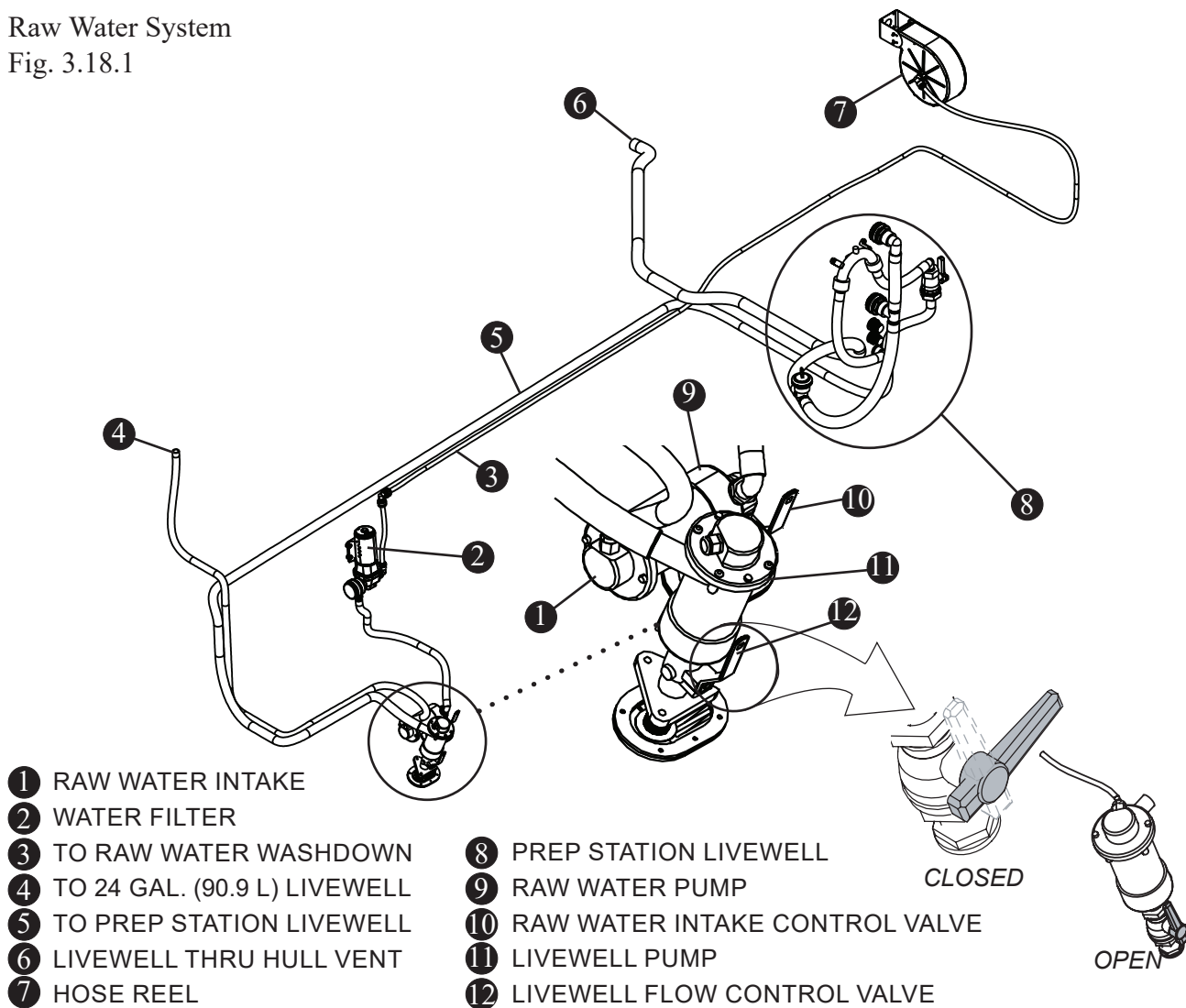
The livewell located in the aft port side of the transom will keep baitfish alive by circulating fresh seawater through the tank.

Port Aft Livewell  
Fig. 3.18.2

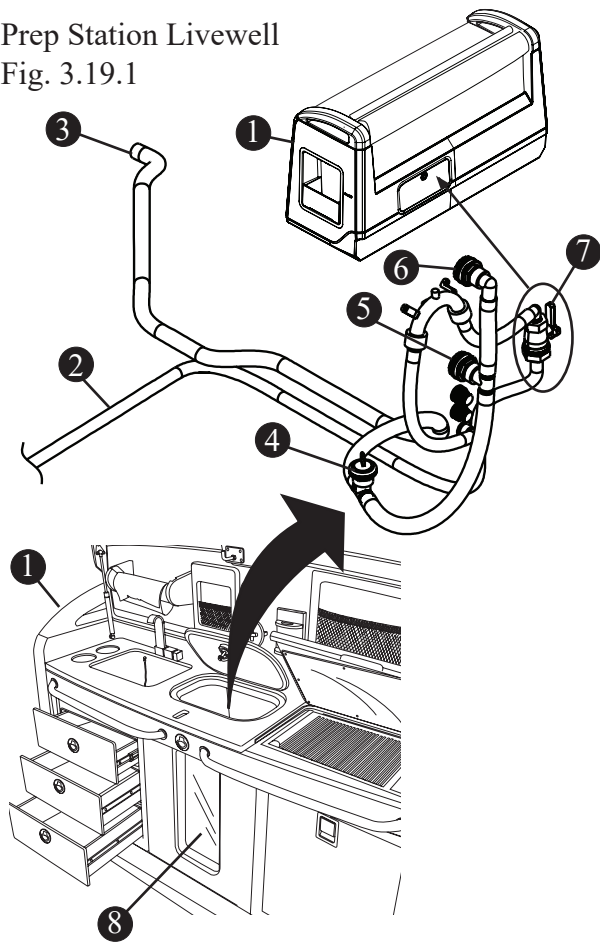


- 1 24 GAL. (90.9 L) LIVEWELL
- 2 LIVEWELL FLOW CONTROL ACCESS

Raw Water System  
Fig. 3.18.1



Prep Station Livewell  
Fig. 3.19.1



- 1 BAIT PREP STATION
- 2 FROM RAW WATER PUMP
- 3 THRU HULL VENT
- 4 BOTTOM DRAIN
- 5 MID LEVEL DRAIN
- 6 LIVEWELL FILL
- 7 FLOW CONTROL VALVE
- 8 LIVEWELL VIEWING WINDOW

The livewells have three (3) drains to regulate the amount of water in the unit. The bottom drain is used to empty the livewell of water completely. By utilizing the drain plug (supplied) between the two overflow drains in the side of the livewell you can adjust the level of water in the unit. This “Full-Fill” design provides a stable environment to reduce fatigue on your baitfish resulting in a more active and longer lasting product.

A drain tube with strainer connects to the livewell overflow drains and will direct overflow/excess water to the port thru-hull drain.

## Livewell Operation

- Make sure that the hull seacock is in the open position (See fig. 3.17.1).
- Place plug in bottom drain.
- Open the livewell flow control valve.
  - The port aft livewell flow control valve is located behind the access door in the port aft cockpit (See fig. 3.18.2).
  - The prep station livewell flow control valve is located behind the access door on the forward base of the prep station (Figure 3.18.1).
- Fill the livewell(s) by depressing either the “LIVEWELLAFT” or “LIVEWELL PREP STA.” switch on the bait prep station switch panel (See page 2-19). The raw water pump will be activated and the system will become functional.

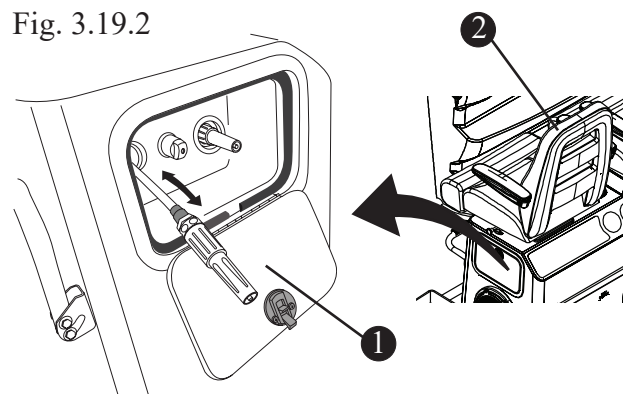
## NOTICE

**The seacock MUST be in the OPEN position. Running the pump dry may cause damage to the unit.**

## Raw Water Washdown

The raw water washdown hose is located on the port side wall of the helm seating platform. The washdown unit is pressurized by the raw water

Raw Water Washdown Hose  
Fig. 3.19.2



- 1 RAW WATER HOSE
- 2 PORT COMPANION HELM SEAT

pump which is activated by depressing the “WATER PUMPS” switch on the prep station switch panel (See page 2-19). The spray head is activated by twisting the unit.

### NOTICE

**The “WATER PUMPS” switch activates both the fresh water and raw water pumps. If only one system is required the other pumps can be turned off via the iPad, Raymarine or Czone on Vessel View.**

### Maintenance

Maintenance of the raw water system requires periodic inspection of the raw water intake strainer and all fittings and hoses for system integrity to prevent leaks.

Clean away debris and/or tighten hose connections as required. The system should be run at least every other month to keep the pumps impellers in good condition.

### Head System

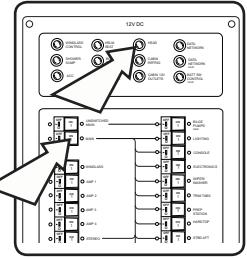
#### Environmental Considerations

*The Environmental Protection Agency (EPA) standards state that in freshwater lakes, reservoirs, impoundments whose inlets or outlets are such as to prevent the ingress or egress by vessel traffic subject to this regulation, or in rivers not capable of navigation by interstate traffic subject to this regulation, marine sanitation certified by the United States Coast Guard (U.S.C.G.) installed on vessels shall be designed and operated to prevent the overboard discharge of sewage, treated or untreated or any other waste derived from sewage.*

*The EPA standards further state that this shall not be construed to prohibit the carriage of Coast Guard certified flow through treatment devices which have been secured so as to prevent such discharges. They also state that the waters where a Coast Guard certified marine sanitation device permitting discharge is allowed include: Coastal waters, Estuaries, The Great Lakes and Intercoastal waterways, Freshwater lakes and Impoundments accessible through locks and other flowing waters that are navigable interstate by vessels subject to this regulation. (40CFR 140.3)*

### Electric Vacu-Flush® Head

Your boat is equipped with a waste disposal system located in the head on the starboard aft side of the cabin. The system is protected by the “HEAD” breaker on the DC Breaker Panel on the port side of the cabin. The vacuum pump switch must be ON for the system to function (See page 4-7).



The waste system includes an electric Vacu-Flush® toilet, vacuum generator, a 60 Gal. (227 L) holding tank and thru-hull vent.

When depressed, the “FLUSH” button on the function panel (See fig. 3.21.2 ) opens a mechanical seal which allows a vacuum to force waste through the opening in the bowl to the vacuum generator and then to the holding tank.

### Operation

- If there is no water in the bowl, depress the “ADD WATER” button on the function panel (Fig. 3.21.2).

### NOTICE

**Severe state and federal penalties are levied for discharging raw sewage and solid waste in waters where it is not permitted.**

**Demonstrating that you have disabled the macerator by locking the system and/or removing the seacock handle may avoid a fine.**

**It is illegal for any vessel to dump plastic trash anywhere in the ocean or navigable waters of the United States.**

### NOTICE

**This boat is equipped with a direct overboard discharge valve. Discharging of sewage directly overboard is for use where approved only. Damage to the system could occur if the discharge seacock is not open during operation.**

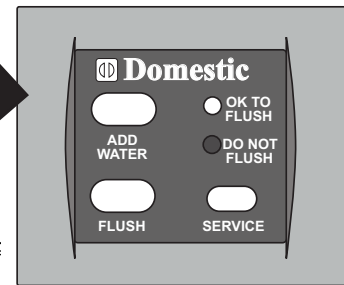
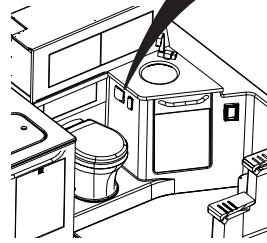
- To flush, depress the “FLUSH” button on the function panel (Fig. 3.21.2) until bowl is clear.

Waste from the head is directed into the holding tank located in the bilge. A holding tank fluid level indicator light is located on the function panel (Fig. 3.21.2). When the “DO NOT FLUSH” light is on, the holding tank must be emptied before the head can be reused.

## Maintenance

After long periods of non-use, the vacuum generator pump may not turn freely. Regular use of the system will reduce the chances of this occurring. If the system does require maintenance contact your

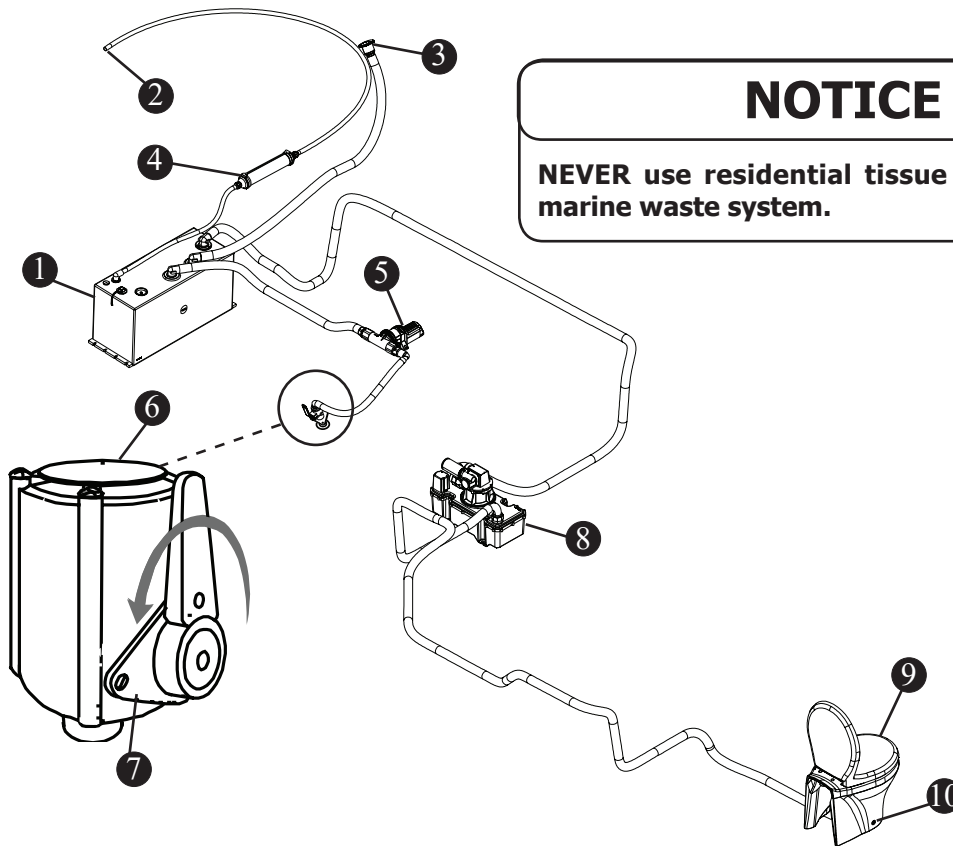
Head Panel  
Fig. 3.21.2



nearest dealer.

Because your waste system is a low water use device, there is special paper which must be used to prevent clogs.

Head System  
Fig. 3.21.1



## NOTICE

**NEVER use residential tissue paper in your marine waste system.**

- |                                        |                               |
|----------------------------------------|-------------------------------|
| ① 20 GAL ( 75.7 L ) WASTE HOLDING TANK | ⑥ LOCKABLE DISCHARGE SEACOCK  |
| ② THRU-HULL VENT                       | ⑦ LOCKING PLATE               |
| ③ DOCKSIDE PUMP OUT DECK PLATE         | ⑧ VACUUM GENERATOR            |
| ④ IN-LINE FILTER                       | ⑨ ELECTRIC VACU-FLUSH® TOILET |
| ⑤ OVERBOARD DISCHARGE PUMP             | ⑩ FRESH WATER INLET           |



### Waste System Vent

The waste system vents odors associated with waste operations through an in-line filter to a thru-hull vent on the aft of the transom below the dockside pump-out deck plate.

#### Replacing Old Vent Filter

##### NOTICE

**Replace vent at beginning of each boating season for most effective odor control.**

##### NOTICE

**If holding tank overflow occurs and vent filter becomes fouled, replace vent filter immediately.**

The vent filter is located on the aft wall of the bilge and can be accessed through the mechanical hatch in the aft cockpit deck.

- Unscrew vent hose fittings from old vent filter.
- Remove old filter from bracket, seal open ends with tape or wrap inside plastic bag, and discard.
- Install new vent filter in bracket and attach to vent hose fittings.

#### Dockside Pump-Out

##### NOTICE

**Dockside discharge is a preferred method of waste disposal.**

The system can be emptied by means of dockside pumpout (preferred) through the “Waste” deck plate on the port transom.

To empty the holding tank, the services of a dockside pump-out station is required. Follow instructions at the station and make sure the pump out hose is inserted into the deck plate marked “WASTE”. located on the port transom.

Access is gained by use of a special key that is included in the owners manual packet.

The dockside facility will have a connection to fit your boat.

### Overboard Discharge

**Avoid overflowing the holding tank.** If the “DO NOT FLUSH” light is lit on the function panel located in the head, you **MUST** empty the holding tank before the system can be reused.

##### NOTICE

**Severe state and federal penalties are levied for discharging raw sewage and solid waste in waters where it is not permitted.**

The system also provides for overboard discharge by way of a lockable discharge seacock.

Demonstrating that you have disabled the pump by locking the system and/or removing the seacock handle may avoid a fine.

To lock the discharge seacock; rotate the handle until the hole in the handle is aligned with the hole in the locking plate (See figure 3.21.1) and insert a padlock (not supplied).

The overboard discharge pump draws solid and liquid waste from the holding tank and discharges it overboard through the discharge seacock located in the bilge.

#### To Operate Overboard Discharge

- Assure that the PORT AFT breaker located on the DC Distribution Panel is ON (See page 4-7).
- Make sure the discharge seacock is in the open position.
- Activate discharge by turning the keyswitch located inside the vanity cabinet clockwise.

##### WARNING

**The discharge seacock should always be in the closed position when the toilet is not in use. Failure to do so could result in flooding or property damage.**

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

## Air Conditioning

Your boat is equipped with two (2) air conditioning units which provide comfortable climate control throughout the cabin and helm deck of your boat.

The cabin A/C unit (18,000 BTU) is located under the cabin entry steps and can be accessed through a panel on the port side of the head. The unit controls the air temperature in the cabin.

The helm deck unit (12,000 BTU) is located behind an access door below the captain's chair. The unit controls the air temperature in the helm/cockpit area.

The helm deck A/C unit has been designed to provide a comfortable environment in the helm area. However, keep in mind that sunlight and high ambient temperatures will impact the unit's ability to provide adequate cooling. If more heat is entering the area than the unit is designed to remove, the temperature will rise.

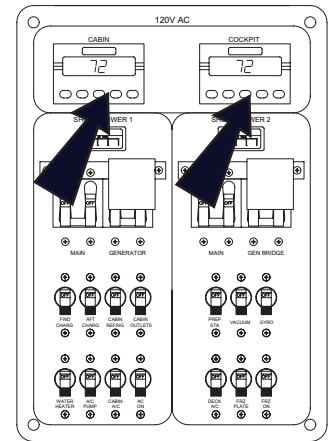
## Operation

The units are individually powered by either shore power or the onboard generator.

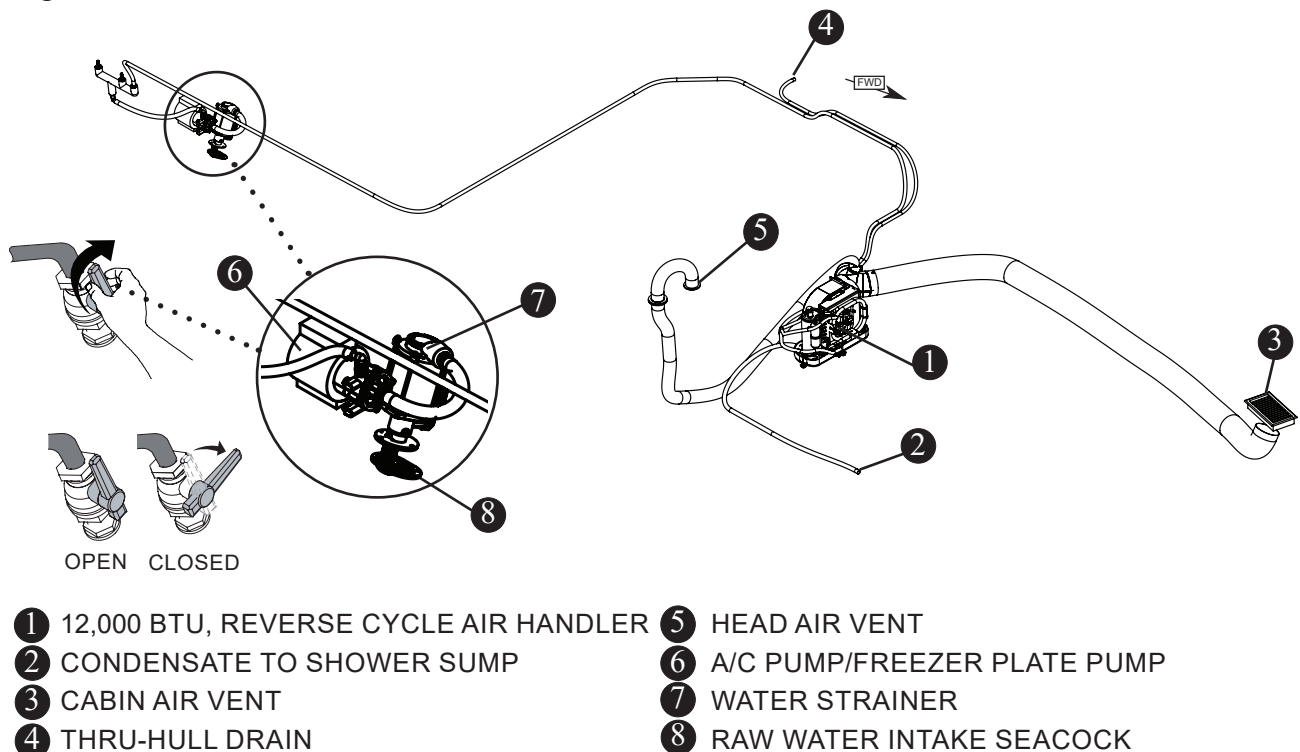
The A/C PUMP, CABIN A/C and DECK A/C breakers on the AC Main Breaker Panel (See page 4-7) must be ON for the systems to function. In addition, the cabin A/C can be turned ON and OFF using the Theft Deterrent System w/remote connectivity (option) (See pg. 4-19). OPEN the A/C system raw water seacock located in the bilge. The seacock and A/C pump (Figure 2.15.1) can be accessed by lifting the equipment hatch in the aft cockpit deck.

## Control Panel

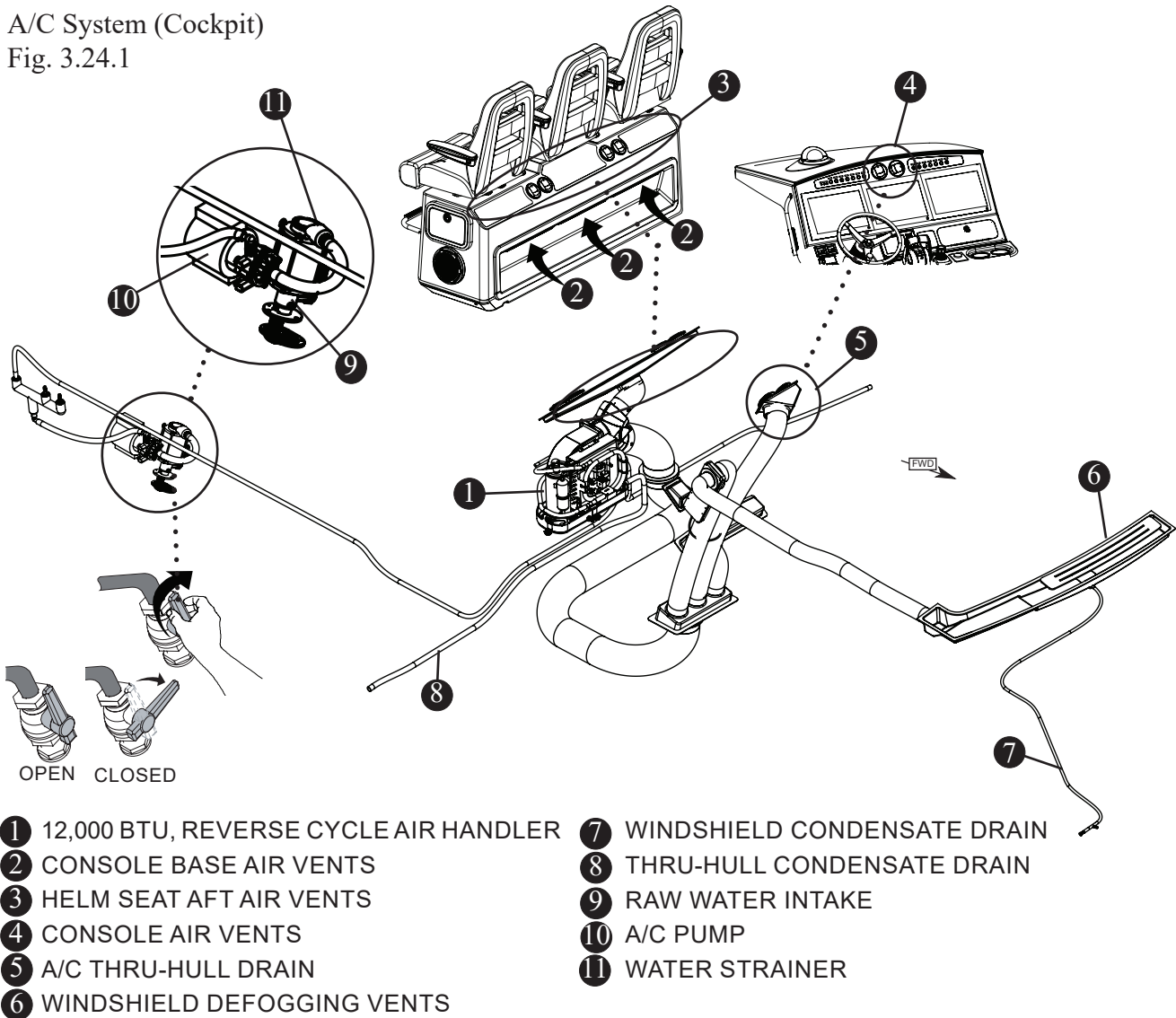
The air conditioning/heating system for each unit is controlled by a keypad located on a panel on the port side of the cabin. The keypad allows the operator to preset the temperature for the cabin/helm. The air unit will activate automatically when the temperature is not consistent with



A/C System (Cabin)  
Fig. 3.23.1



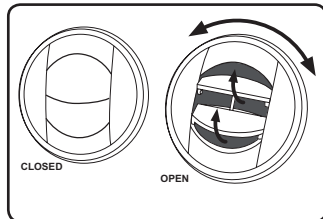
A/C System (Cockpit)  
Fig. 3.24.1



the preset temperature. When the air handler is activated, seawater pumped into the system by way of a seacock and strainer passes through the compressor cooling the condensing coils, and then flows overboard through the thru-hull drain.

## A/C VENTS

The A/C vents located on the face of the console and the aft of the helm seat (Figure 3.24.1) can be opened, closed and rotated for maximum comfort. There is also a set of stationary vents at the base of the aft helm seat podium.



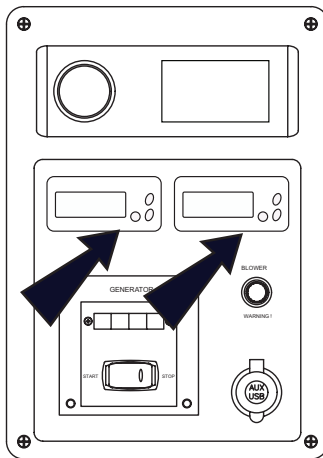
## Fish Box Freezer Plates (Option)

If equipped, the optional fishbox freezer plates transform the cockpit fishboxes into a deep cold cooler.

The compressor for the freezer plate(s) is located behind an access panel in the starboard side of the cabin behind the Vacu-Flush® toilet. Limited access is possible through the door in the panel. For complete access to the compressor the panel must be removed.

The system utilizes the A/C intake seacock to provide the raw water necessary for the plate(s) to function. The water is discharged through a thru hull fitting on the starboard side of the hull (See page 2-8).

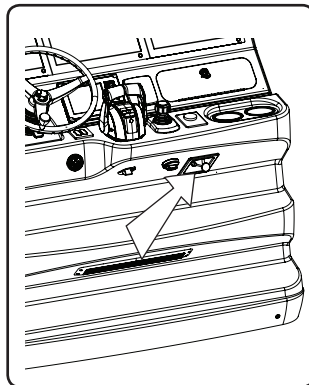
The temperature of the fish boxes can be regulated from the temperature control panels located on the port side of the cabin. The A/C PUMP, and FRZ PLATE breakers on the AC Main Breaker Panel must be ON for the systems to function.



In addition, the freezer plates can be turned ON and OFF using the Theft Deterrent System w/remote connectivity (option).

## Windshield Defogging vents

The vents located on the forward most area of the console (Figure 3.24.1) can be opened by pulling the release cable on the face of the console to defog the windshield of condensation accumulation.



REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

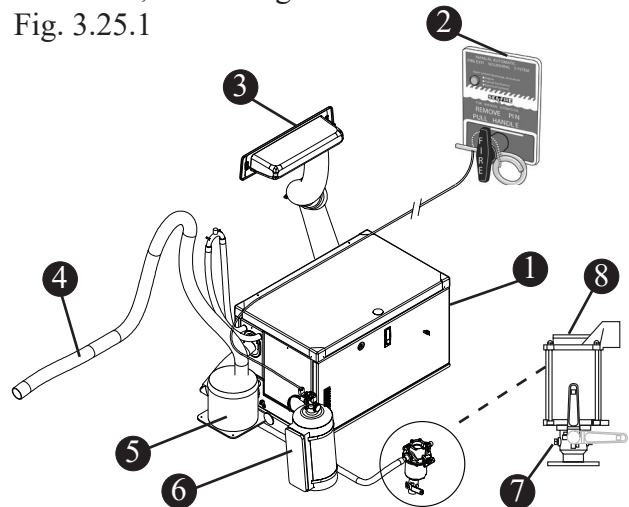
## Generator

**It is recommended that you read and understand the information in the manufacturers owners manual before operating the generator.**

Your boat's AC electrical system operates on 120V/60Hz or 220V/50Hz from the generator and/or shore power.

The low CO, gas 10 kW generator provides power to your boat's electrical system through the AC Main Breaker Panel. Connections to the AC electrical system are made through the slide selector switch on the AC panel. There is a remote operation panel also located on the AC panel (Figure 3.26.1).

Generator, Low CO gas  
Fig. 3.25.1

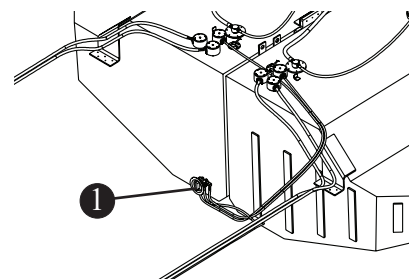


- 1 10 KW LOW CO GAS GENERATOR
- 2 FIRE SUPPRESSION MANUAL OVERRIDE
- 3 THRU-HULL VENT
- 4 EXHAUST TO THRU-HULL
- 5 MUFFLER
- 6 AUTOMATIC FIRE EXTINGUISHER
- 7 RAW WATER INTAKE
- 8 WATER STRAINER

The generator has a built in cooling pump which draws cooling water through a seacock located in the aft machinery compartment. The raw water passes through a strainer before entering the engine cooling manifold. The seacock **MUST** be open in order for the generator to function.

The generator can draw fuel from both the port and starboard fuel tanks by means of a selector valve located at the aft of the fuel tanks (Figure 3.25.1)

Generator Fuel Tank selector Valve  
Fig. 3.25.2



- 1 GENERATOR FUEL TANK SELECTOR VALVE

## Section 3 • Systems & Components Overview & Operation

The generator fuel system is designed to run out of fuel with about 1/4 tank of fuel remaining, leaving a reserve of fuel for the propulsion engines. The exhaust from the generator passes through a high efficiency marine lift type water cooled muffler and is discharged by a flexible hose via a through hull fitting. The generator has a housing which acts as protection and a sound shield. It can be removed by pulling latches located on the housing.

### Starting the Generator

There is a remote operation panel also located on the Stereo, fishbox freezer plate, blower, generator panel (Figure 3.26.1).

## ! WARNING

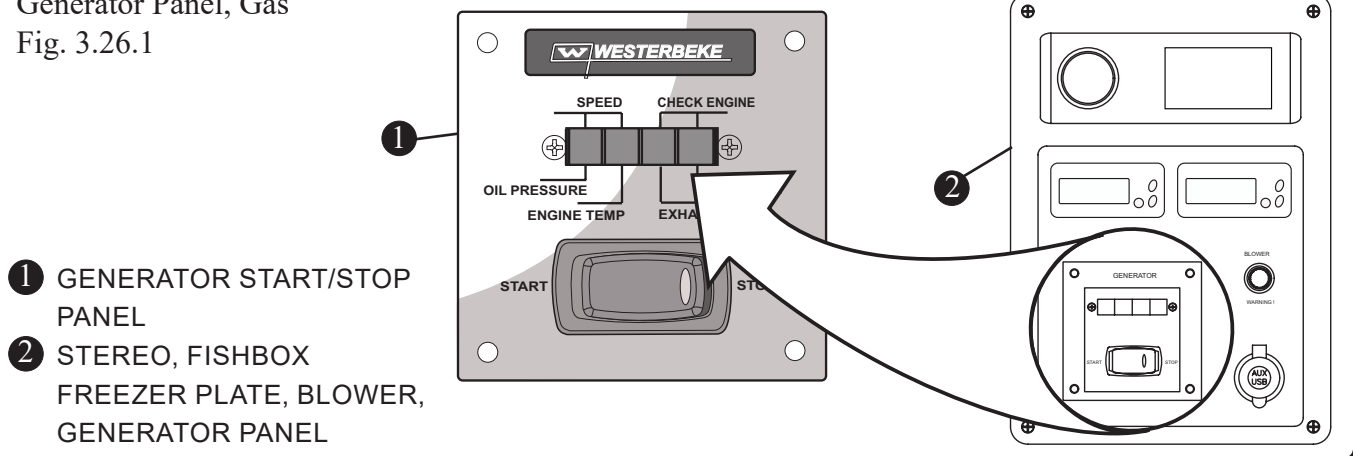
**CARBON MONOXIDE** can cause severe NAUSEA, FAINTING or DEATH. The exhaust system must be leakproof and routinely inspected.

**FIRE** Can cause SEVERE INJURY or DEATH. Do not smoke or permit flames or sparks near fuels or the fuel system.

**EXPLOSIVE FUEL VAPORS** Can cause SEVERE INJURY or DEATH. Use extreme care when handling, storing and using fuels.

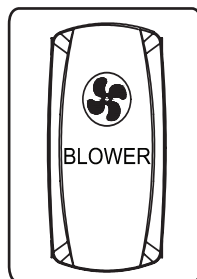
**MOVING PARTS** Can cause SEVERE INJURY or DEATH. Operate the generator set only when all guards, screens and covers are in place.

Generator Panel, Gas  
Fig. 3.26.1

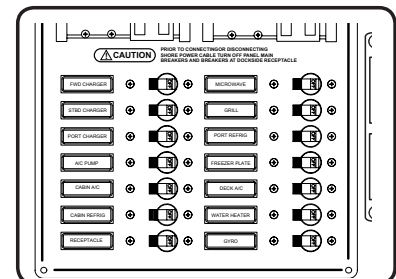


Your owner's manual packet will have the complete operations manual for your generator. Be sure to read the manual before operating the generator. Several key points are indicated below:

- Locate the blower switch on the DC Breaker Panel (See page 4-7) and operate the blower for 4 minutes. Manually check the bilge for fuel or fuel vapor.

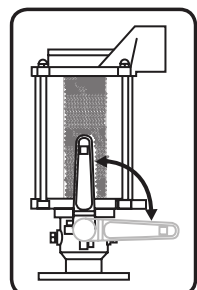


- Make sure that ALL breakers on the AC Panel are switched OFF.

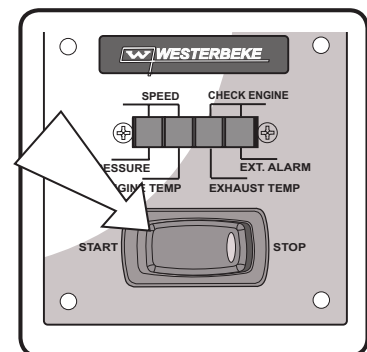


NOTE: Refer to the manufacturer's Operations Manual for a Pre-Start Checklist.

- OPEN the generator seacock (See Fig. 3.31.1).



- Press the START/STOP button until the generator starts (the green light will illuminate).





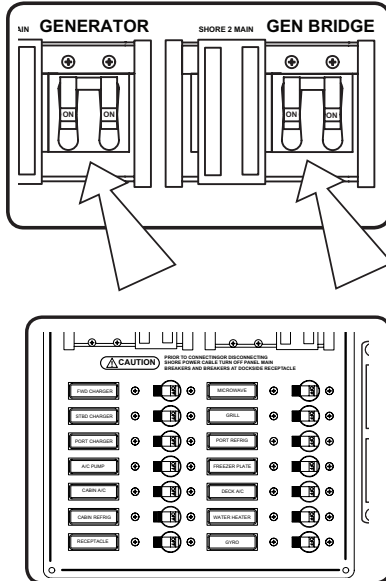


## WARNING

Under no circumstances override the source select system.

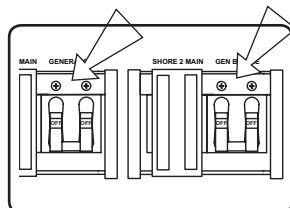
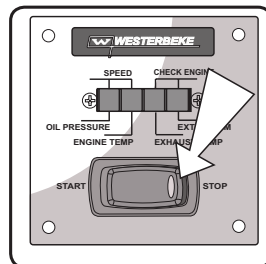
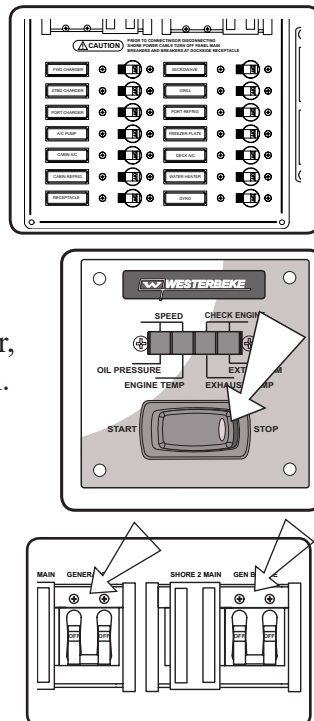
**DO NOT** press the button more than once. Allow for a 60 second cool down period between cranking attempts. If the generator fails to start after the first attempt, check fuel flow, if ok, attempt start sequence again. If the unit fails to start after 3 attempts, contact an authorized dealer/distributor for service.

- Slide the selector on the AC Panel to expose the Generator & Bridge switches and switch the line breakers ON.
- After a successful start, breakers can be switched ON.



## Stopping Generator

- Make sure that ALL breakers on the AC panel are switched OFF.
- To STOP the generator, press the STOP button.
- Switch line breakers OFF.



## NOTICE

The generator should be shut off before the fuel level reaches the 1/4 tank level where it is designed to run out of fuel.



## WARNING

**ACCIDENTAL STARTING** can cause severe injury or death. Disconnect the battery cables before working on the generator set. Disconnect the negative, (-) cable first when removing and reconnect it last when replacing.

## Maintenance

Your operations manual will have a complete maintenance schedule that will need to be followed to keep your generator in peak operating condition. Inspect the parts often and perform required service at the prescribed intervals. Maintenance work must be performed by appropriately skilled and suitably trained maintenance personnel familiar with generator set operation and service.

## Raw Water Strainer Maintenance

Periodically check the raw water strainer, located on the port side of the bilge, forward of the generator for debris and clean as necessary.

1. Ensure generator is not running.
2. Remove the lid.
3. Remove the strainer and clean it of debris.
4. Replace the strainer.
5. Replace the lid.
6. Replace and hand tighten securing knob.

## Operation in EU Member Countries

This generator set is specifically intended and approved for operation below the deck in the engine compartment. Operation above the deck and/or outdoors would constitute a violation of European Union Directive 2000/14/EC noise emission standard.

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

### Diesel Generator (Option)

It is recommended that you read and understand the information in the manufacturers owners manual before operating the generator.

Your boat's AC electrical system operates on 120V/60Hz or 220V/50Hz from the generator and/or shore power.

If equipped, the Fischer Panda 12 kW diesel generator provides power to your boat's electrical system through the AC Main Breaker Panel. Connections to the AC electrical system are made through the slide selector switch on the AC panel. There is a remote operation panel also located on the 120V AC MDP panel on the port side of the cabin.

The generator has a built in cooling pump which draws cooling water through a seacock located in the aft machinery compartment. The raw water passes through a strainer before entering the engine cooling manifold. The seacock **MUST** be open in order for the generator to function. **Inspect the strainer frequently and clean if necessary.**

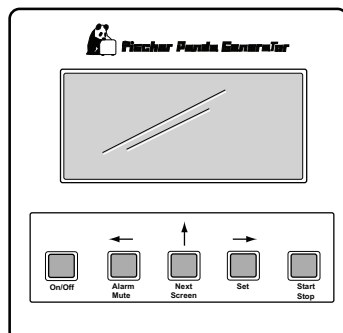
### Fuel

Use a clean, good quality diesel fuel with a cetane number of 45 or greater. Clean fuel prevents the fuel injectors and pumps from clogging. Avoid storing the fuel for more than a month. Take care to keep

### NOTICE

**Fuel Recommendation  
# 2 Diesel**

Generator Control Panel  
Fig. 3.28.1



### ! WARNING

**CARBON MONOXIDE** can cause severe NAUSEA, FAINTING or DEATH. The exhaust system must be leakproof and routinely inspected.

**FIRE** Can cause SEVERE INJURY or DEATH. Do not smoke or permit flames or sparks near fuels or the fuel system.

**EXPLOSIVE FUEL VAPORS** Can cause SEVERE INJURY or DEATH. Use extreme care when handling, storing and using fuels.

**MOVING PARTS** Can cause SEVERE INJURY or DEATH. Operate the generator set only when all guards, screens and covers are in place.

all dirt, water and other contaminants out of the fuel to prevent the growth of microbes. Microbes form slime that clogs the fuel filter and lines.

The generator draws fuel from its own tank located on the starboard aft side of the machinery compartment. The fuel system has its own fuel and water separating filters.

The exhaust from the generator passes through a high efficiency marine lift type water cooled muffler and is discharged by a flexible hose via an aft starboard through hull fitting (See fig. 2.9.2).

The generator cover acts as protection and a sound shield. It can be removed by pulling latches located on the bottom of the housing.

### NOTICE

**NEVER store diesel fuel in galvanized containers; the galvanized coating reacts chemically to produce flaking that quickly clogs filters or causes fuel pump or injector failure.**

## Starting the Generator

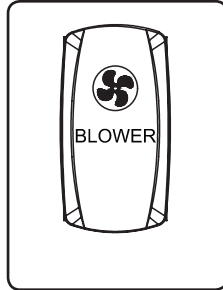


### CAUTION

**DO NOT start the generator if water has accumulated beneath the generator.**

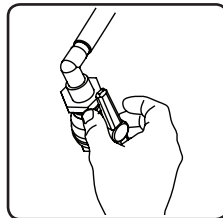
Your owner's manual packet will have the complete operations manual for your generator. Be sure to read the manual before operating the generator. Several key points are indicated below:

- Locate the blower switch on the AC Breaker Panel and operate the blower for four (4) minutes. Manually check the bilge for fuel or fuel vapor.

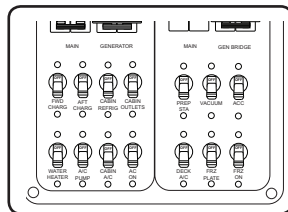


**NOTE:** ALWAYS run the blower when operating below cruising speed.

- Refer to the Manufacturers Operations Manual for a Pre-Start Checklist.
- OPEN the generator seacock.



- Make sure that ALL breakers on the AC Panel are switched OFF.



- Slide the selector on the AC Panel to expose the GENERATOR & BRIDGE switches.



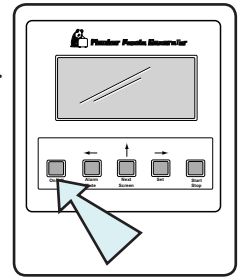
Switch the line breakers ON.



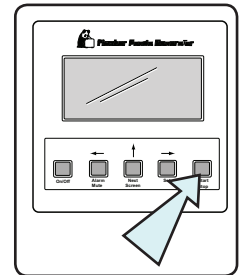
### WARNING

**Under no circumstances override the source select system.**

- Press the On/Off button on the remote start panel. The indicator light will illuminate and the fuel gauge will be activated.



- Press and release the START button ONLY ONCE. The light will begin blinking and the generator will start.

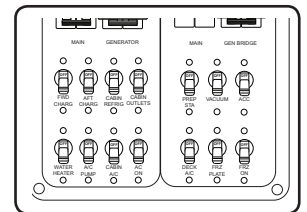


**DO NOT press the button more than once.** Allow for a 60 second cool down period between cranking attempts.

If the generator fails to start after the first attempt, check fuel flow, if ok, attempt start sequence again.

If the unit fails to start after 3 attempts, contact an authorized dealer/distributor for service.

- After a successful start, breakers can be switched ON.

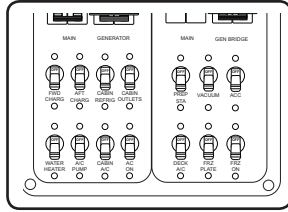


## NOTICE

**DO NOT run the generator set out of fuel because the fuel lines will draw in air and necessitate bleeding the system before restarting the unit. The operations manual included in the owners packet will have complete instructions on bleeding the fuel system should it be needed.**

### Stopping The Generator

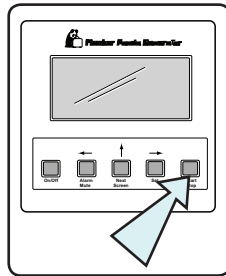
- Make sure that ALL breakers on the AC Panel are switched OFF.



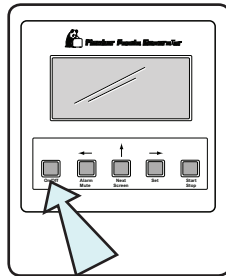
### NOTICE

**If the electrical load has been operating at more than 70% OR if the ambient temperature is higher than 77° the generator temperatures should be stabilized by turning OFF the breakers at the AC panel and letting the generator run for a minimum of 5 minutes before shutting down.**

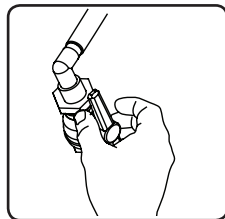
- To STOP the generator, press the Start/Stop button.



- Press the On/Off button to de-activate the panel.



- Close the seacock.



### Maintenance

#### **WARNING**

**ACCIDENTAL STARTING** can cause severe injury or death. Disconnect the battery cables before working on the generator set. Disconnect the negative, (-) cable first when removing and reconnect it last when replacing.

Your Fischer Panda operation manual will have a complete maintenance schedule that will need to be followed to keep your generator in peak operating condition.

Inspect the parts often and perform required service at the prescribed intervals (See NOTICE below). Maintenance work must be performed by appropriately skilled and suitably trained maintenance personnel familiar with generator set operation and service.

### NOTICE

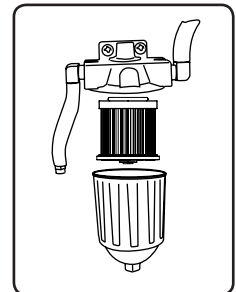
**Your first maintenance is required at 35 hours, by a qualified technician, at which time a maintenance checklist must be completed.**

**Failure to comply will invalidate the generator warranty.**

### Generator Fuel Filter

A fuel filter located on the starboard wall of the bilge, forward of the diesel fuel tank provides clean fuel to the generator.

A major cause of poor starting or power loss is the result of a clogged filter element or a fuel system air leak.



### Fuel Filter Maintenance

#### Replacing the Filter

Replace the filter according to manufacturers recommendations or if a power loss is detected.

1. Ensure engine is not running
2. Remove bottom casing.
3. Remove the filter by slowly pulling upward with a twisting motion.
4. Insert the new filter with a slow downward twisting motion.
5. Fill the filter with clean fuel.
6. Replace the bottom casing. **DO NOT** overtighten.

### NOTICE

**It is recommended that spare filters are carried aboard as contaminated fuel can easily clog a filter.**

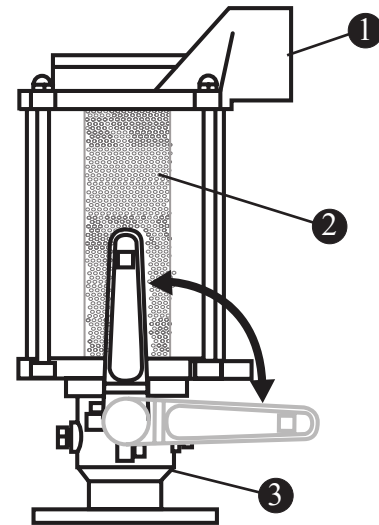
### Raw Water Strainer Maintenance

Periodically check the raw water strainer for debris and clean as necessary.

1. Ensure generator is not running.
2. Remove the lid.
3. Remove the strainer and clean it of debris.
4. Replace the strainer.
5. Replace the lid.

Raw Water Strainer

Fig. 3.31.1



- ① OUTLET TO GENERATOR
- ② STRAINER
- ③ INTAKE SEACOCK

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

### Operating the generator in European Union Member Countries

This generator set is specifically intended and approved for operation below the deck in the engine compartment. Operation above the deck and/or outdoors would constitute a violation of European Union Directive 2000/14/EC noise emission standard.

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

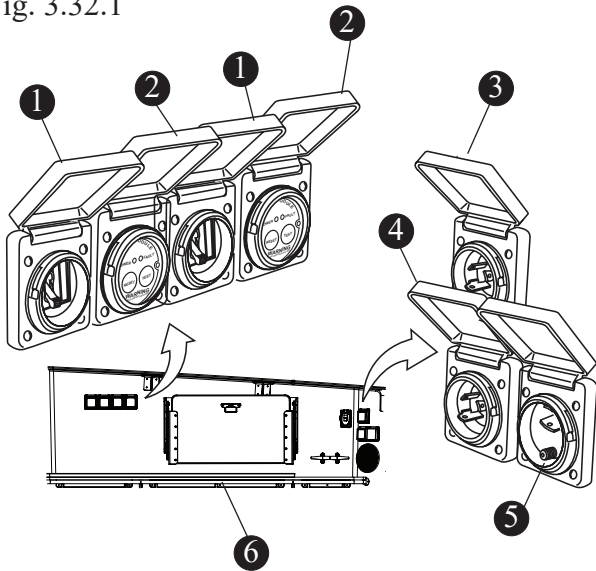


### Shore Power

The shore power system on your boat provides dockside power to operate all of your boat's electrical system and charge your batteries.

Use the supplied 50 ft. power cord to connect your boat to a dockside power source. The on board receptacles are located under the aft starboard gunwale. The AC Main Breaker panel for the shore power system is located on the port side of the cabin.

Shore Power Receptacles  
Fig. 3.32.1



- ① SHORE POWER INTERMEDIATE BREAKER
- ② ELCI (EQUIPMENT LEAKAGE CIRCUIT INTERRUPTER)
- ③ LINE 1 SHORE POWER RECEPTACLE
- ④ LINE 2 SHORE POWER RECEPTACLE
- ⑤ TV/PHONE RECEPTACLE
- ⑥ AFT STARBOARD COCKPIT

### **⚠ DANGER**

**EXTREME HAZARD** - Swimming near a boat operating on an AC electrical system can lead to severe shock and/or death. Never swim or allow swimming when AC system is in use.

### ELCI (Equipment Leakage Circuit Interrupter)

The shore power system on your boat includes an ELCI (Equipment Leakage Circuit Interrupter) located on the aft starboard freeboard (Figure 3.28.1).

The ELCI is designed to protect people from line-to-ground shock hazards which may occur from defective, misused or neglected electrical equipment. The ELCI will not prevent line-to-ground electric shock, but does limit the time of exposure to a period considered safe for normal healthy persons. If an imbalance of current is sensed, the ELCI will trip when the ground fault exceeds 0.030 amps. This tripping action will occur within a fraction of a second to prevent serious injury.

### **⚠ DANGER**

The receptacle will not protect against line-to-line or line-to-neutral faults, short circuits or overloads.

### TESTING & TROUBLESHOOTING TEST BEFORE EACH USE

**NORMAL OPERATING STATE** - Sensing device GREEN LED is ON and circuit breaker is at ON position.

**Step 1** - Press TEST button. GREEN LED should go OUT and RED LED should come ON and circuit breaker should trigger to OFF position.

**Step 2** - If sensing device LED or breaker does not trip or change state DO NOT USE. Consult an electrician for assistance.

**Step 3** - Press RESET button. The RED LED should turn OFF and the GREEN LED should turn ON.

**Step 4** - Manually reset (switch) circuit breaker to ON position to restore circuit power.

### **WARNING**

IF ABOVE TESTS FAIL, **DO NOT USE**.  
CONSULT A QUALIFIED ELECTRICIAN FOR  
REPAIR OR REPLACEMENT.

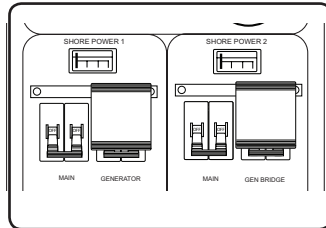
## ⚠ CAUTION

- Be certain that the shore power main switch is turned OFF before connecting the power cord cordset.
- Connect the cordset to the boat inlet first, then to the shore inlet.
- NEVER alter the cordset connectors.

### Shore Power Operation

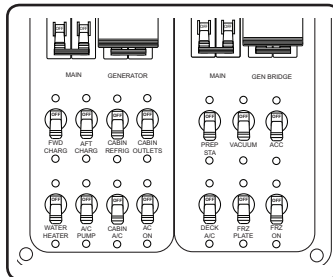
Before making shore power connections make sure your boat is properly moored.

- Slide the covers on the panel to expose SHORE POWER # 1 & SHORE POWER #2 breakers.

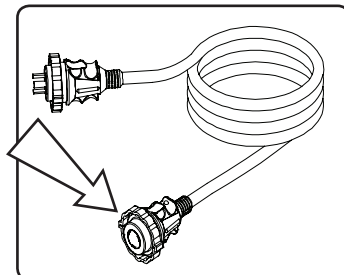


- Make sure the breakers are OFF.

- Assure that ALL component breakers are OFF.



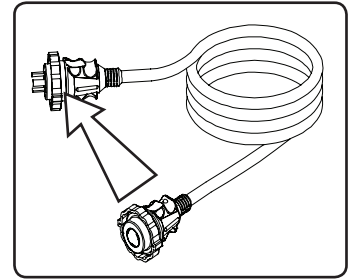
- Using the shore cords, (supplied) connect the female plug to the boat receptacle first.



## ⚠ CAUTION

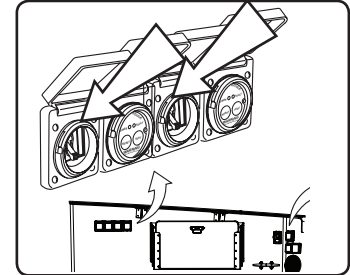
Shore power cords should be secured or routed to avoid laying or falling into water and to avoid stress on shore power plug and inlet.

- Next connect the male plug to the dockside panel.

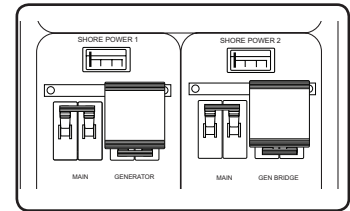


- Turn dockside panel breakers ON.

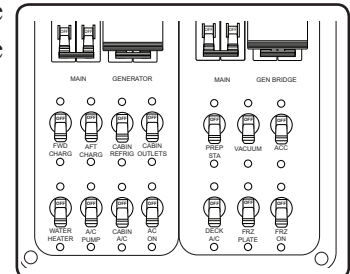
- Switch the boat side shore power breaker(s) ON.



- Switch the shore power main breaker(s) ON.



- It is now safe to turn on the component breaker.



## ⚠ CAUTION

The use of extension power cords is not recommended. Excessive power cord extensions can cause a voltage drop and may prevent some electronic devices from operating properly.

## ⚠ CAUTION

It is imperative that the shore power outlet is dry before plugging into the dock power outlet.

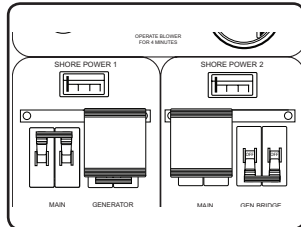
## Section 3 • Systems & Components Overview & Operation

### Single Cord Shore Power

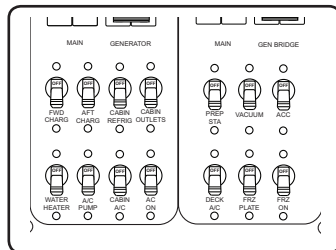
In some cases you may be limited to operating your boat's equipment utilizing only a single shore power cord. The following procedure will provide the most efficient power to the boat.

- **Make sure ALL breakers are OFF.**

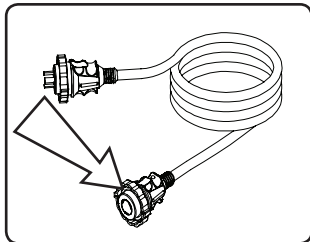
- Slide the covers on the panel to expose the SHORE POWER #1 & GEN BRIDGE breakers.



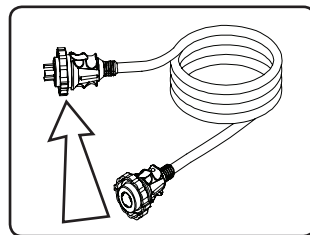
- Ensure that ALL component breakers are OFF.



- Using the shore cords, connect the female plug to the boat receptacle first.

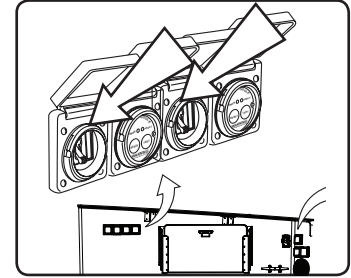


- Next connect the male plug to the dockside panel.

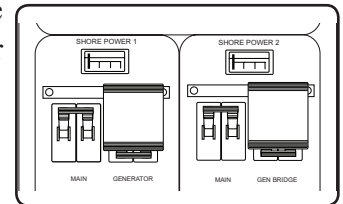


- Turn dockside panel breaker ON.

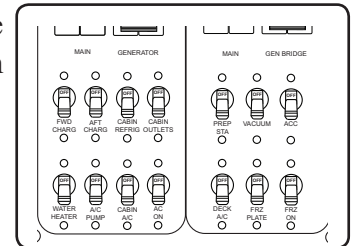
- Switch the boat side shore power breaker ON.



- Switch the shore power main breaker(s) ON.



- It is now safe to turn on component breaker.



### Shore Power Load Management

Your boat is equipped with many devices that require AC power for their operation. While many of these devices are continuous use items, others are not.

The design of the electrical system has been optimized to support the most commonly used equipment. However, there may be situations where the operator will need to power off certain appliances based on load requirements, shore power connections and/or generator operation.

To obtain the most power for your appliances, it is best to use the “GENERATOR” and “GENERATOR BRIDGE” combination which will deliver a higher load capability.

### Battery Charging

In addition to supplying AC power to your boat, shore power hookup gives you the ability to charge your batteries without running the engines.

The system is automatic and little or no maintenance is required. The battery charger can be accessed through the equipment hatch in the aft cockpit deck.

### Isolation Transformers

Your boat is equipped with isolation transformers. The boat's electrical system and grounding conductor are not actually connected to the dockside system. The isolation transformer transfers power from the dockside electrical system to the boat's electrical system by magnetic coupling. This means there is no direct electrical connection between the earth-grounded shore AC power and the boat AC power. Isolating the power this way has several benefits:

- Eliminates shock hazards to people swimming around the boat.
- Prevents reverse polarity due to a miss-wired shore power pedestal providing further protection to people onboard as well as sensitive AC appliances.
- Prevents galvanic current corrosion due to the direct connection to AC shore power.

### **⚠ DANGER**

**The above statement pertains to the 420 Outrage ONLY.**

**Other boat systems may or may not provide shock protection to swimmers.**

**NEVER ALLOW SWIMMING in close proximity to other boats which may be running AC electrical systems.**

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

### Fire Suppression System

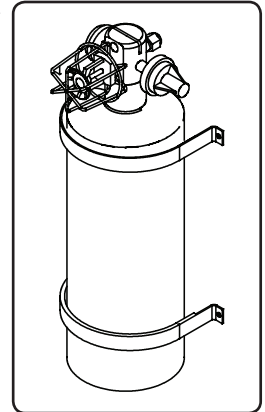
### **⚠ DANGER**

**DO NOT handle the actuator. The fire suppression system is under pressure (195 psi.). Accidental discharge may result in death or serious injury.**

Your boat has a USCG approved automatic fire suppression system which is located on the starboard side of the bilge and can be accessed by lifting the mechanical hatch in the aft cockpit deck.

The system will activate when the temperature in the enclosed area reaches 165°F (74°C).

When activated there will be a bang, (similar to small arms fire) followed by a rushing air sound.



### **NOTICE**

**The fire extinguishant contained in this unit is CHLOROTETRAFLUORATHANE, None of the components in this material is listed by major health associations as a carcinogen. Toxic by-products are produced when this agent extinguishes fire. Avoid breathing these fumes.**

### **⚠ DANGER**

**Inhalation of high concentrates of the contents of the fire suppression tank may cause sudden death without warning.**

**Skin contact will require flushing of the area with water for at least 15 minutes. Seek immediate medical assistance.**

### **⚠ CAUTION**

**NEVER attempt to modify or disassemble any components of this system. If the system has been discharged, have a qualified technician replace it.**

## Section 3 • Systems & Components Overview & Operation

It is recommended that the fire suppression tank be weighed on an accurate scale every six (6) months. There is a chart in the manufacturers owner's manual that lists the weight of the canister and contents.

### In The Event of Discharge:

- Shut down all electrical systems, engines and extinguish all smoking materials.
- Allow the agent to “soak” the compartment for at least 15 minutes.
- DO NOT open the machinery access compartment hatch.
- DO NOT breathe the fumes or vapors caused by fire as they are hazardous and toxic.
- When opening the hatch, have a portable fire extinguisher at hand and ready for use.
- High concentrations of the agent may cause DEATH without warning. The vapor reduces available oxygen for breathing.
- If possible; allow the compartments vapor to dissipate before opening the hatch.

Once the system has been discharged the power to the generator and the blower fan will be cut. This insures that the compartment will be “soaked” with extinguishant.

### Manual override System

The automatic fire extinguisher can be activated manually by pulling the manual override handle located in the port aft cockpit (See fig. 2.14.1).

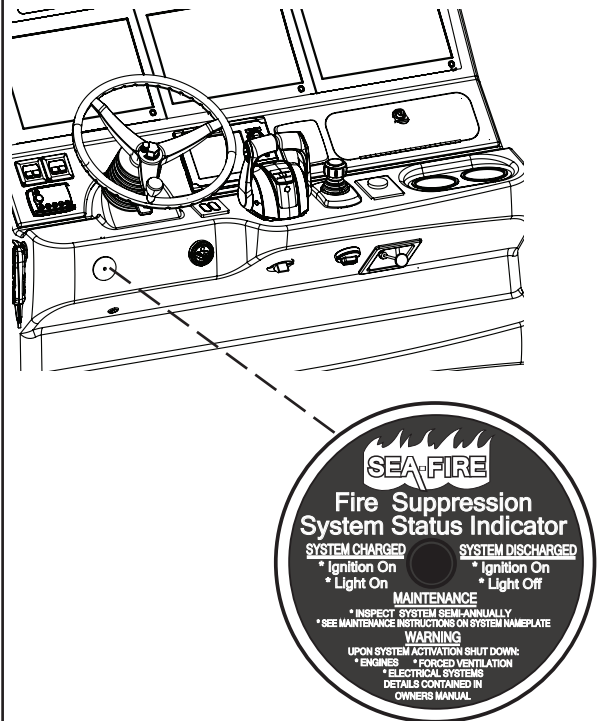
Early detection and use of the manual override system will reduce fire damage by eliminating the time necessary for heat in the bilge to rise sufficiently to activate the automatic fire system.

### To Operate

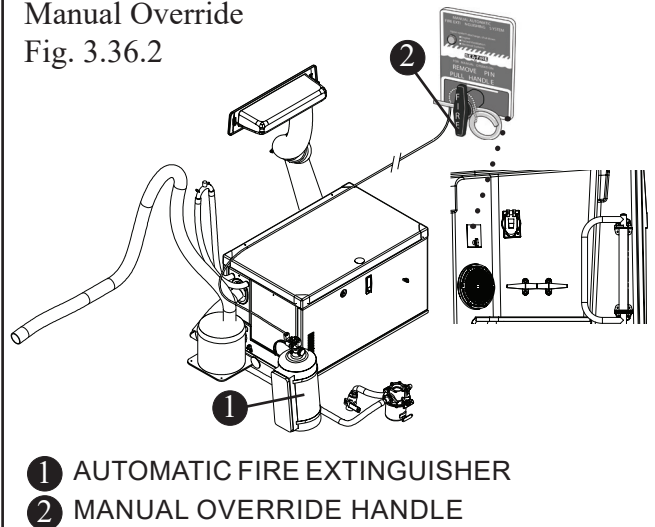
1. Pull pin securing the handle.
2. Pull red FIRE handle quickly and briskly.

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

Fire Suppression System Panel  
Fig. 3.36.1



Manual Override  
Fig. 3.36.2



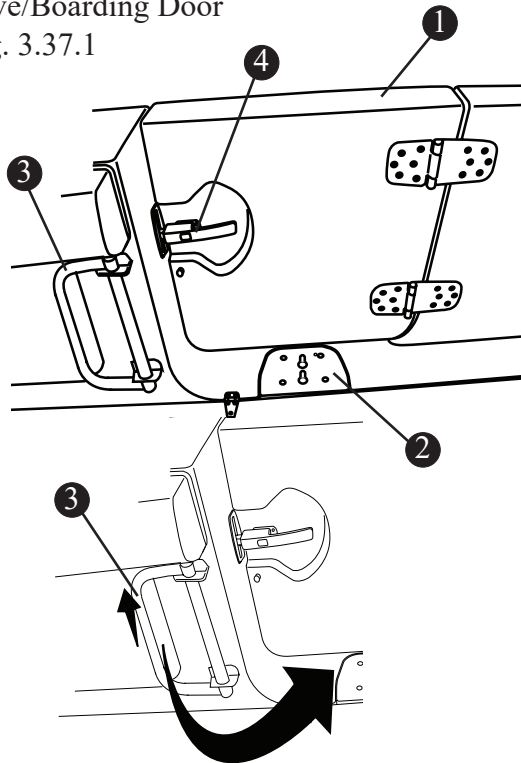


## Dive Door

The inovative design of your boat includes a portside door for ease of transition to and from the water or dock. The door opens wide and features a swivel grab handle to assist persons entering or exiting the water. To use the grab handle, lift up and swivel into place.

The stainless steel deck bracket accomodates a removable ladder which is stowed in base of the aft bench seat when not in use.

Dive/Boarding Door  
Fig. 3.37.1



- ① PORTSIDE FIBERGLASS DIVE DOOR
- ② STAINLESS STEEL LADDER BRACKET
- ③ SWIVEL GRAB HANDLE
- ④ STAINLESS STEEL LATCH

## ⚠ DANGER

Ensure that door is closed and securely latched when boat is underway.

## Dive Ladder

### ⚠ DANGER

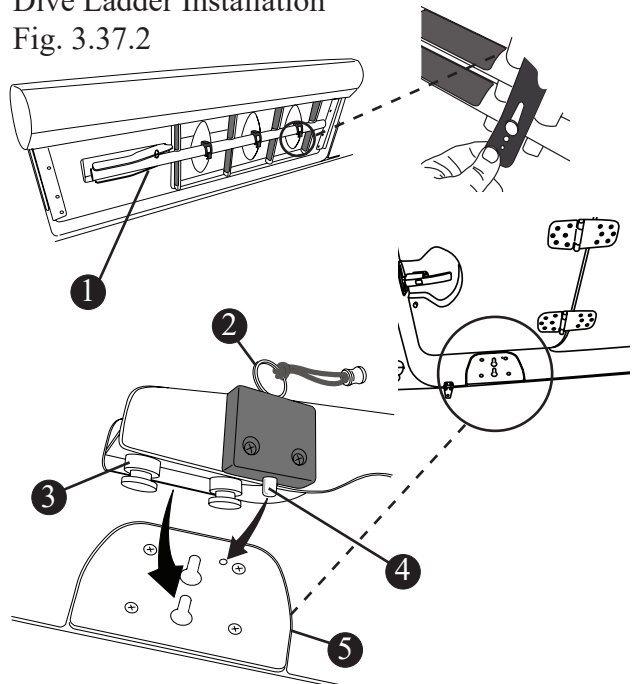
The dive ladder should NEVER be deployed when boat is in motion or the engines are running.

To avoid risk of injury or death, shut off engines when using the dive door to enter or exit the water.

The installation of the dive ladder is quick and easy:

- Remove the ladder from its stowed position on the base of the aft bench seat.
- Rotate the brace at the top of the ladder so that it is perpendicular to the shaft.
- Insert the two pegs on the brace into the deck bracket.
- Secure the ladder into place by pushing the brace outboard until it seats firmly into the bracket and the locking pin has snapped into place.

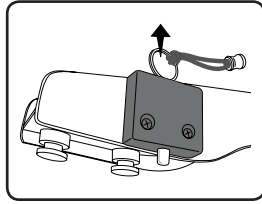
Dive Ladder Installation  
Fig. 3.37.2



- ① DIVE LADDER (STOWED)
- ② LOCKING PIN RELEASE RING
- ③ DIVE LADDER BRACE
- ④ LOCKING PIN
- ⑤ DECK BRACKET

To remove the dive ladder from the dive door bracket:

- Pull up and hold the release ring.
- Pull dive ladder brace inboard and lift up out of the deck bracket.



- Secure the ladder into place on the aft bench seat (See fig. 3.37.2).

### NOTICE

**ALWAYS** use bungee straps to secure the dive ladder in the aft bench seat brackets (See fig. 3.37.2).

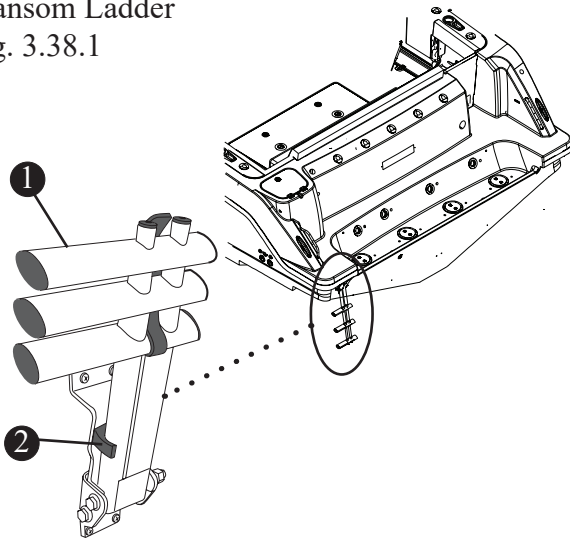
### Transom Ladder

#### ⚠ DANGER

The transom ladder should **NEVER** be deployed when boat is in motion or the engines are running.

To avoid risk of injury or death, shut off engines when using the transom ladder to enter or exit the water.

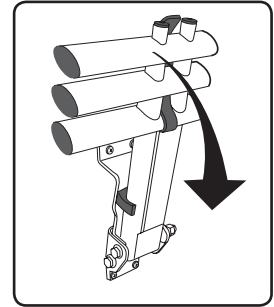
Transom Ladder  
Fig. 3.38.1



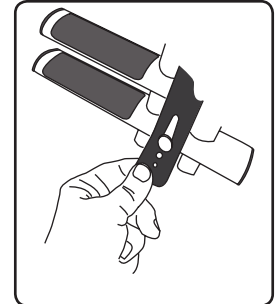
- ① TRANSOM LADDER (STOWED)
- ② HOLDING BRACKET

To deploy the transom ladder:

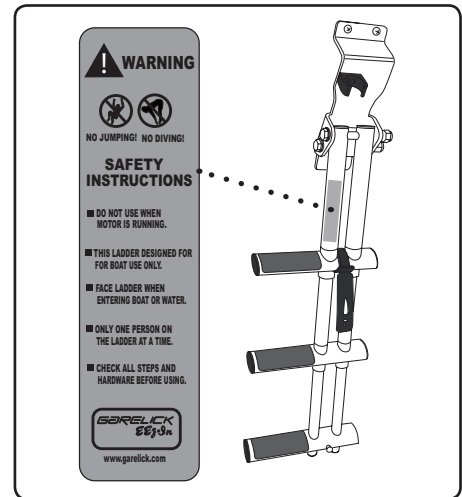
- Pull the ladder from the holding bracket and rotate downward.



- Release the steps by pulling down on the strap holding the steps.



- Extend the ladder to its full length.



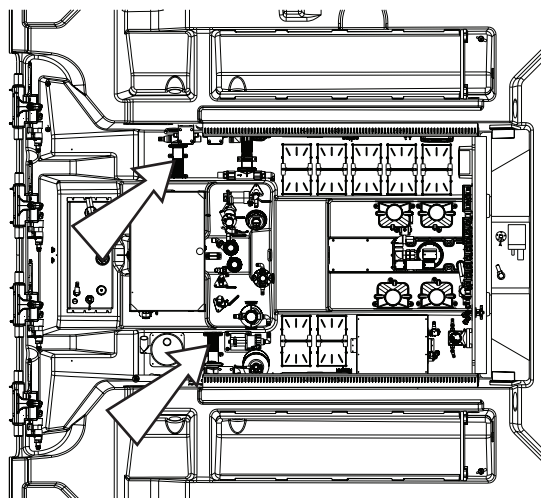
### Fish Boxes with Pump Out Discharge

Your boat has two (2) deep well, insulated fish boxes. One (1) located in the starboard cockpit deck and one (1) in the port cockpit deck.

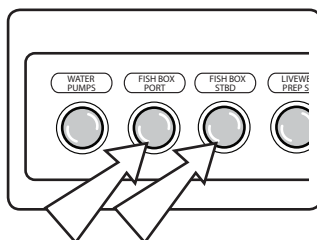
The boxes have gasketed lids and draw latches for a secure seal. The fish boxes utilize an electrical pump system to discharge water overboard by way of thru-hull fittings port and starboard (See page 2-8).

The discharge pumps are located in the bilge and can be accessed through the hatch in the aft cockpit deck (See page 2-13).

Fish Box Discharge Pumps  
Fig. 3.39.1



The pumps are independently activated by switches on the prep station switch panel and are protected by breakers located on the 120V AC MDP on the port side of the cabin. Check these breakers first and reset if a problem arises with the pumps failing to activate when the switches are depressed.



## Dynamic Running Surface™ (Trim Tabs)

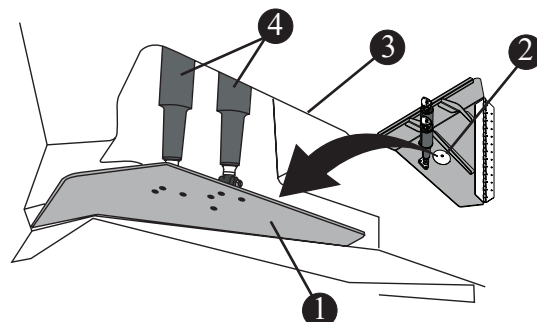
### NOTICE

**Ensure continuous visibility of other boats, swimmers and obstacles during bow-up transition to planing. Adjust engine to an intermediate trim as soon as boat is on plane.**

The electrically powered trim tabs on your boat are of a unique design which further enhances the ride and handling of your vessel.

The trim tabs, located on the lower section of your transom, port and starboard are used to trim the list of your boat caused by uneven weight distribution, too many persons on one side of the boat, or strong cross winds.

Electrically Powered Trim Tabs  
Fig. 3.39.2



- 1 DYNAMIC RUNNING SURFACE™
- 2 ZINC ANODE
- 3 TRANSOM
- 4 ACTUATORS

### An untrimmed boat will:

- Decrease operator visibility
- Reduce fuel economy
- Increase wear on your engine.

Trim tabs are also beneficial when accelerating from a non-planing to a planing operation.

While accelerating there is some loss of forward visibility before the boat is on plane, the trim tabs can be used to adjust for forward visibility while transitioning to a planing operation..

### Auto Glide Boat Control System

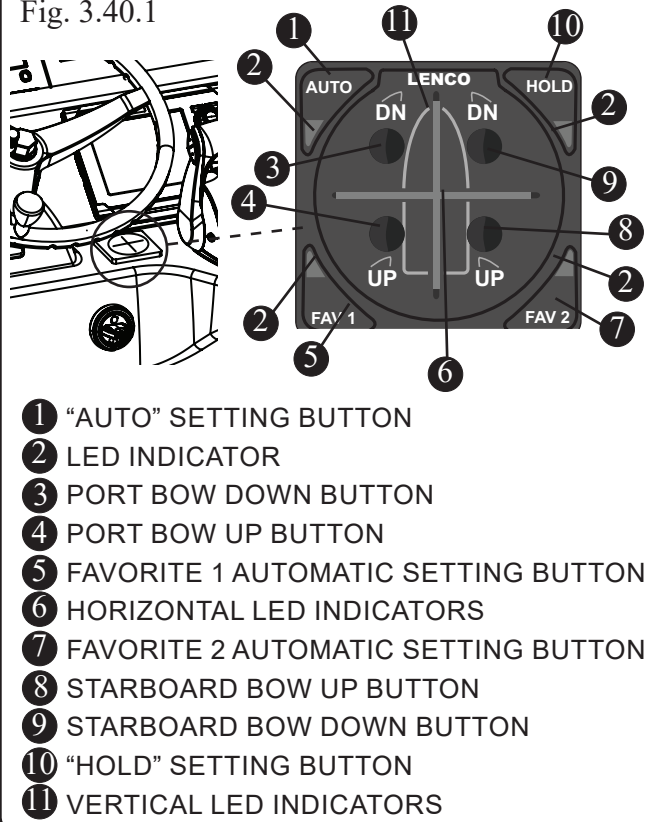
The Auto Glide system uses engine and GPS data to drive your boat to the most efficient running angle by adjusting the trim tabs as needed.

With the Auto Glide, your boat's running angle is measured 25 times per second. The data is used by the Auto Glide control box to:

- Automatically put your boat in the most efficient running angle.
- Reduce the amount of bow rise of your boat during hole shot mode.
- Eliminate bow porpoising (bow bounce).
- Keep your boat level at all times.

Auto Glide Key Pad

Fig. 3.40.1

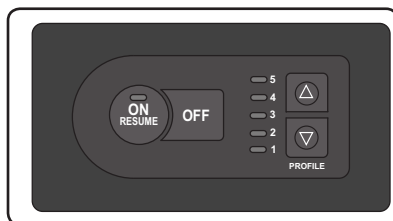


The results of these actions is a smoother ride and the best possible fuel efficiency.

Although you will most likely keep your Auto Glide in automatic mode, you may convert to manual mode simply by pressing one of the four up/down buttons on the key pad.

### Active Trim (Option)

If equipped, the Active trim panel is located on the forward hardtop above the console.



Active Trim provides the benefit of perfect trimming without constantly monitoring and adjusting trim with changes to boat speed or when going into turns.

Active Trim controls the trim in accordance with boat speed and engine rpm. This avoids potential problems such as engines trimming up (instead of

down) if the propeller breaks loose in a hard turn. It also avoids issues with the engine trimming up too early or too late when the boat is getting on plane.

Active Trim has five selectable trim profiles that accommodate nearly any boat application. These profiles allow operators to compensate for changes in boat load, operator preference and weather conditions, while maintaining full auto operation.

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

### Electrolytic Corrosion & Zinc Anodes

Electrolytic corrosion of metals on power boats can result in serious deterioration. You should be aware of the possibility of electrolysis and/or galvanic action (the deterioration of metals due to dissimilar characteristics when placed in salt water).

Zinc buttons (anodes) are installed on the trim tabs to protect underwater hardware. Zinc, being less noble than copper based alloys and aluminum used in underwater fittings, will deteriorate first and protect the less noble metals.

The zinc anodes generally need replacement once a year in fresh water, every 6 months in a salt water environment.

The need to replace anodes more frequently may indicate a stray current problem within your boat or at the slip or mooring. If your anodes do not need replacement after one year, loose anodes or low-grade zinc may be the problem.

### Maintenance

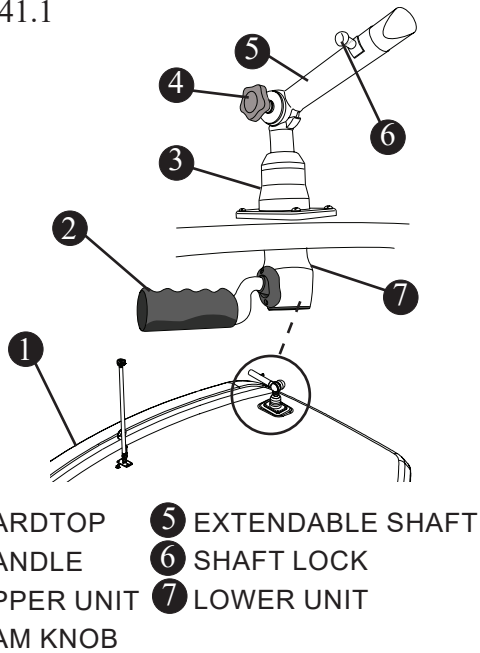
The trim tabs are a completely sealed unit and are waterproof and maintenance free.

Aside from a general cleaning when the boat is out of the water you should also inspect the planes and hinges for marine growth and remove as necessary.

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

## Radial Outriggers (Option)

Fig. 3.41.1



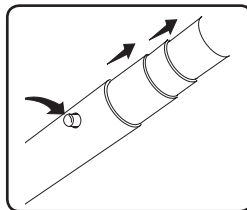
## Radial Outriggers (Option)

If equipped, there are two(2) radial outriggers. One each located on the port and starboard side of the hardtop. The outriggers are adjustable to provide ease of operation and convenient ready-to-use storage.

### Operation

#### To extend the outriggers:

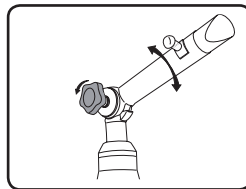
Starting with the outboard section, extend each section out until the locking button snaps into place.



#### To position the outriggers:

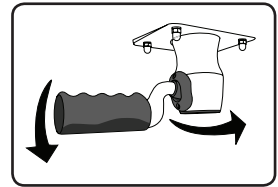
Raising or lowering:

Turn the cam knob counterclockwise to loosen, position the outrigger up or down to the desired position and tighten the cam by turning the knob clockwise.



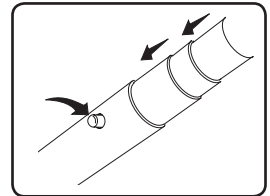
### Rotating the outriggers:

Pull down on the lower unit handle and rotate to the desired position. When released the handle will hold the outrigger shaft into position.



### To retrieve the outriggers:

Starting with the inboard most section, Push in the locking button on each succeeding section and insert sections into the shaft until all sections are completely seated in the stowed position.



### Maintenance

With very little care your equipment will maintain its appearance and operate trouble free. When at port, extend the outriggers and flush with fresh water, wipe with a dry cloth and allow to air dry. When dry collapse the outriggers to the stowed position. Periodically lightly lubricate the cam and the shaft of the cam knob to keep them working freely.

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

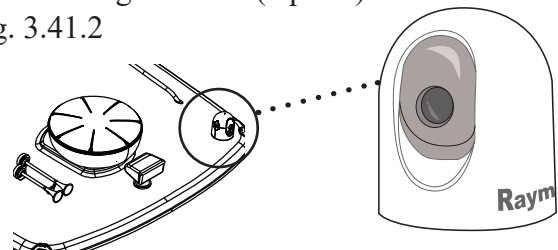
## Thermal Night Vision (Option)

If equipped, the fixed mount thermal night vision camera (Figure 3.41.1) gives the operator the ability to detect floating objects, navigation aids, other vessels and even people in the water at night using thermal imaging technology.

The camera is controlled remotely from the IR camera application on the Raymarine display.

### Thermal Night Vision (Option)

Fig. 3.41.2

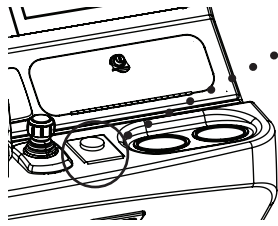


REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

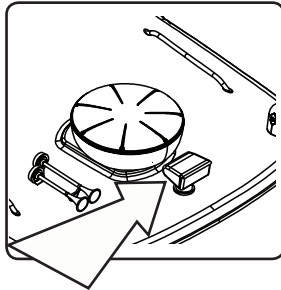


### Spotlight

Spotlight Control Panel  
Fig. 3.42.1



The spotlight with Directional Flexibility is controlled by a remote control pad located at the helm station which gives the operator a full 360° horizontal rotation and vertical tilt with fingertip control.



REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS.

### Foldaway Trolling Seats (Option)

#### ⚠ CAUTION

**Trolling seats are for use ONLY when your boat is stopped or at slow trolling speed. DO NOT use the trolling seats above trolling speeds as injury can occur.**

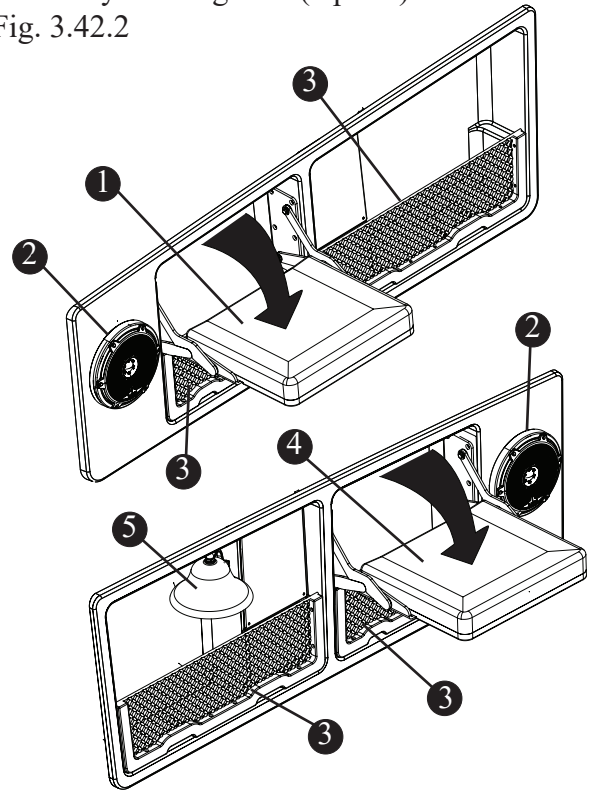
Unique trolling seats (Figure 3.42.2) are located on the port and starboard walkways opposite the console. The seat is folded away into the freeboard when not in use but can be dropped down to provide stable additional seating when necessary.

Simply lift up on the seat using the molded hand hold and pull away from the freeboard to drop down in a seated position.

### Foldaway Aft Bench Seat

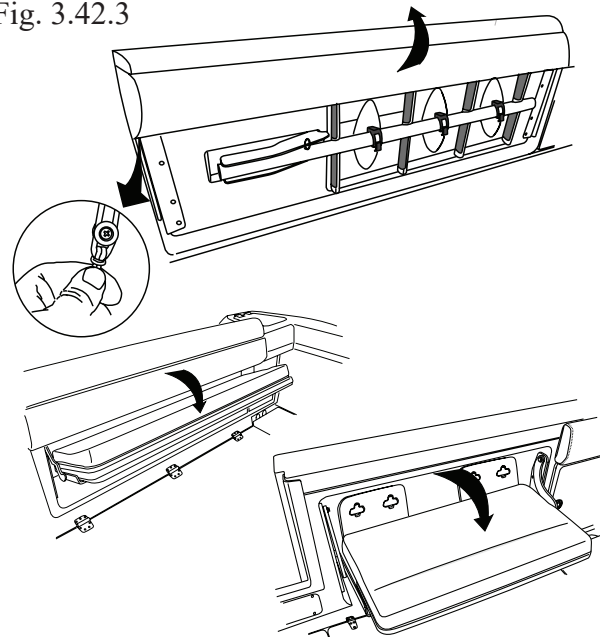
When the aft bench (Figure 3.42.3) is not in use it can be folded flush into the transom. To use the seat; raise the bolster, then, using the handle lift the seat up and out toward you and push down.

Foldaway Trolling Seat (Option)  
Fig. 3.42.2

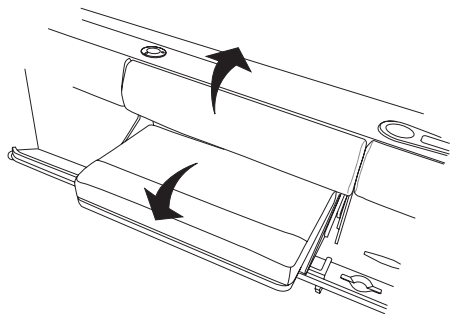


- 1 PORT FOLDAWAY TROLLING SEAT
- 2 STEREO SPEAKER
- 3 NETTED STORAGE
- 4 STARBOARD FOLDAWAY TROLLING SEAT
- 5 SHIP'S BELL

Aft Bench Seat  
Fig. 3.42.3



Starboard Cockpit Bench Seat  
Fig. 3.43.1



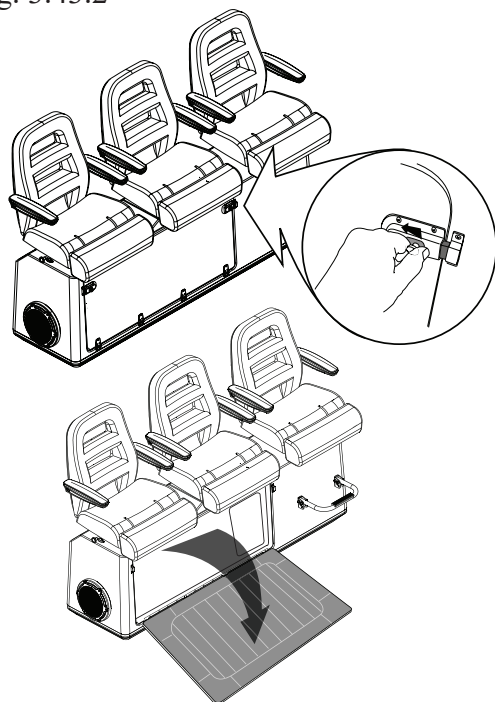
## Foldaway Starboard cockpit Bench Seat (option)

If equipped, the starboard bench (Figure 3.43.1) can be folded flush into the gunnel when not in use.. To use the seat; raise the bolster, then, using the handle lift the seat up and out toward you and push down.

## Fold Down Visibility Platform

The innovative design of the helm incorporates a foldaway platform which can be lowered to provide improved visibility for shorter operators or when conditions mandate.

Visibility Platform  
Fig. 3.43.2



## Bow Table (Option)

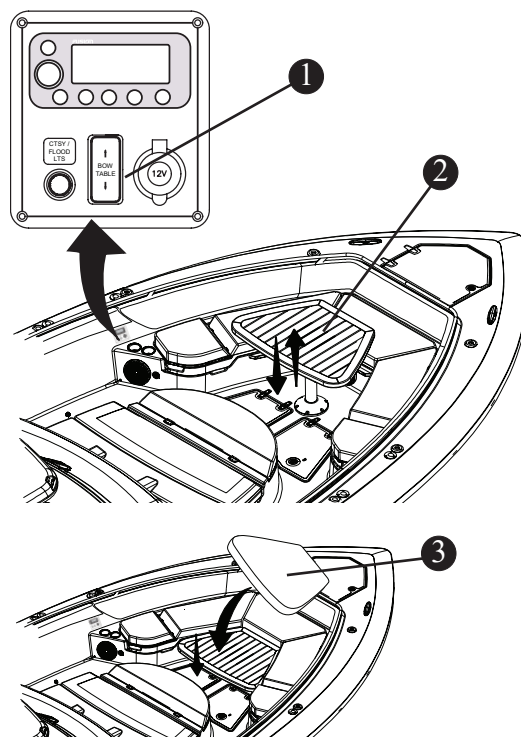
The optional bow table is electrically actuated, powered by the house batteries. The switch to raise and lower the table is located on the portside wall of the bow.

Fully raised, the table can be used for entertaining in the bow. When completely lowered the table becomes a stable surface for the optional cushion which expands the lounge surface of the bow.

The “TABLE” switch raises and lowers the bow table using “Garage Door Logic”.

- The first press raises the table if down.
- The second press will stop the table or it will stop by itself when fully raised. The LED switch will remain illuminated for a short period of time after full extension.

Bow Table (Option)  
Fig. 3.43.3



- 1 BOW TABLE SWITCH
- 2 BOW TABLE
- 3 CUSHION (OPTION)

- The third press will lower the table all the way down but it can be stopped with a fourth press.

NOTE: At times, after power has been turn off on the boat, the table electronics do not know if the table is up or down. So it may take 3 presses before the table starts to operate. From then on the table will operate as above until the house battery switch is turned off again. This is normal.

### Forward Console Lounge

The forward console lounge provides comfortable seating with fold-down armrests, four (4) drink holders, backrests and removable cushions. The mid section of the lounge can be flipped up to provide additional seating with backrests. There is a latch on the port and starboard sides of the lounge which need to be released in order for the lounge to be opened.

In addition, the lounge provides lighted storage for miscellaneous gear, fenders or can be equipped for optional dive tank storage. The forward end of the lounge features a built in insulated storage/cooler compartment.

### Maintenance

The seats and components on your boat with moving parts or mechanical slides or hinges require periodic cleaning and lubrication to provide long lasting ease of usage.

### To Clean

- Wash with soap and water.
- Lubricate with standard marine lubrication.

### Seakeeper Gyro Stabilizer (Option)

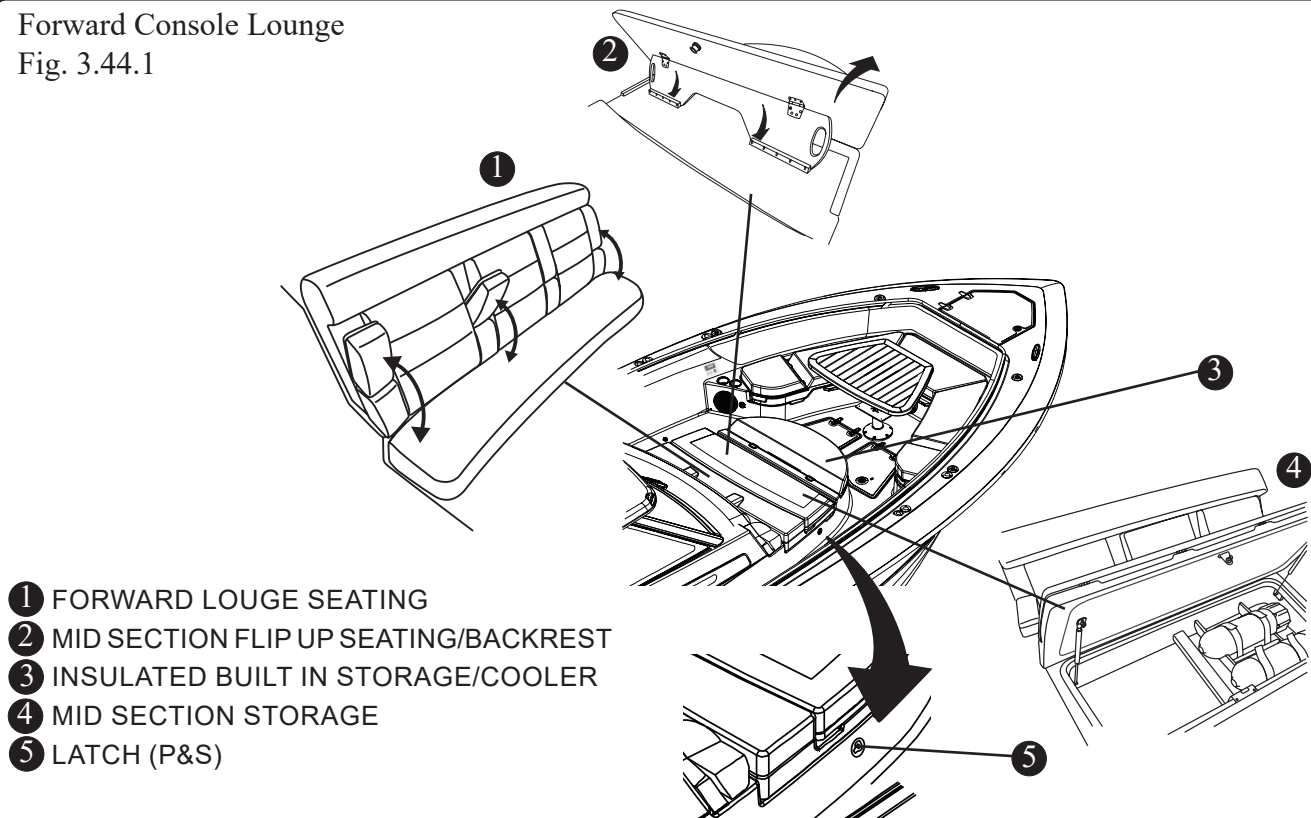
If equipped, the innovative gyro stabilizer (See fig. 3.44.1) is located aft of the fuel tank in the center of the cockpit.

The stabilizer uses gyroscopic principals to reduce boat roll motions in waves and wakes independent of boat speed. The stabilizer eliminates the risk of motion sickness and safely walking around the deck in rough water.

In addition to the gyro assembly a remote display unit is located on the hardtop above the control console (See fig. 3.45.1).

Forward Console Lounge

Fig. 3.44.1



## NOTICE

**The generator must be ON in order for the gyro stabilizer to function.**

Spool-up Time to Rated Speed - 50 minutes

Spool-up Time to Stabilization - 35 minutes

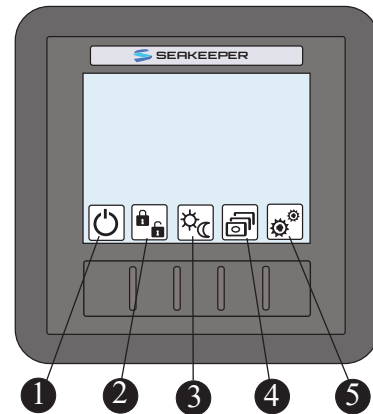
Full speed to zero RPM - approx 2 hours

## ⚠ WARNING

Gyro cover panels are provided to prevent personnel or equipment from contacting the gyro while it is in operation. These covers should not be stood on, or have anything placed on top. The covers should always be in place during operation. If it is ever necessary to touch the gyro while the flywheel is spinning, the gyro must be locked at the display to stop the gyro from precessing (tilting). Gyro maintenance should not be attempted unless the gyro is locked and the flywheel has stopped spinning.

## Gyro Stabilizer Remote Display (Option)

Fig. 3.45.2

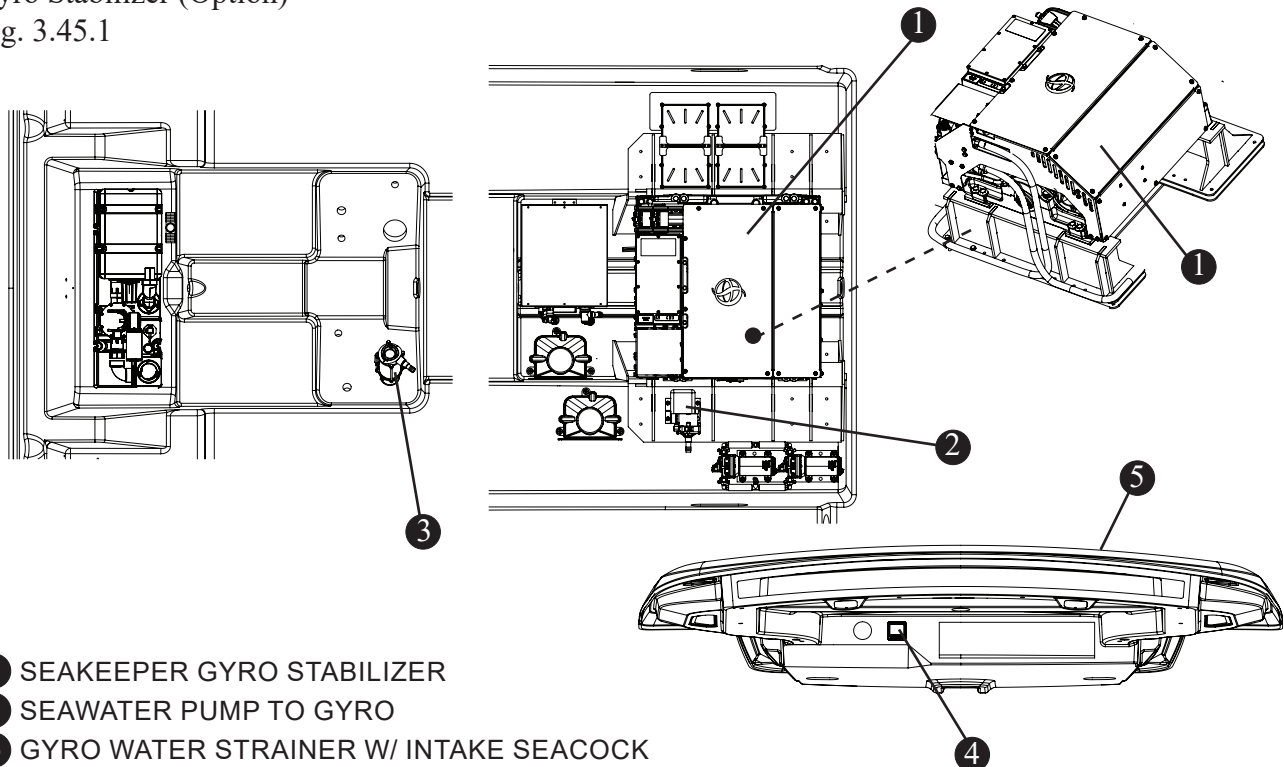


- ① ON/OFF AND FAULT RESET
- ② GYRO LOCK/UNLOCK
- ③ DISPLAY BRIGHTNESS (DAY/NIGHT)
- ④ SCREEN VIEWS (TOGGLE)
- ⑤ SETTINGS

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

## Gyro Stabilizer (Option)

Fig. 3.45.1



- ① SEAKEEPER GYRO STABILIZER
- ② SEAWATER PUMP TO GYRO
- ③ GYRO WATER STRAINER W/ INTAKE SEACOCK
- ④ GYRO STABILIZER REMOTE DISPLAY
- ⑤ HARDTOP

## Propeller

### NOTICE

- It is advised that you always carry a spare propeller, propeller hardware and propeller wrench on board. Should your propeller become damaged it can then be easily replaced.
- Under no circumstance should you use a propeller which allows the engine to operate at a higher than recommended RPM.

The engines on your boat have been equipped with propellers which our tests have shown to be best suited for general use under normal conditions and load. Your boat has been propped to achieve maximum RPMs which meet Mercury requirements.

### Trimming the Engines

When trimmed correctly, your boat will achieve maximum RPMs, minimize steering effort, allow for more stability and increased performance.

Trimming the engines IN full will drive the bow down causing the boat to plow through the water and will prevent the engines from achieving maximum RPMs.

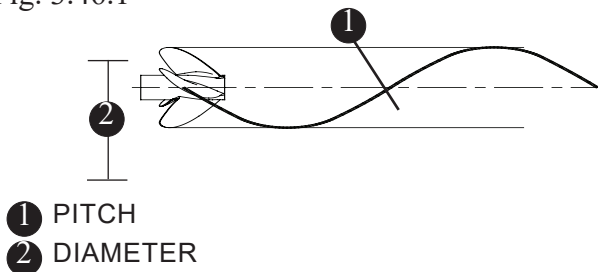
Trimming the engines OUT will push the stern down and raise the bow. If OUT too far the maximum engine RPMs cannot be achieved.

A properly trimmed boat will have the bow slightly UP while running at full speed.

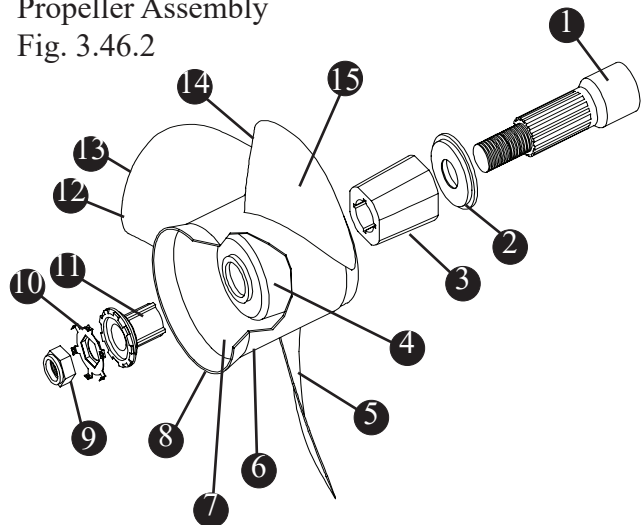
Different seas or operating conditions will necessitate running the boat in different trim positions. The operator will need to use his/her best judgement while boating in different conditions.

Propeller Pitch & Diameter

Fig. 3.46.1



Propeller Assembly  
Fig. 3.46.2



- 1 ENGINE SHAFT
- 2 FORWARD THRUST WASHER
- 3 DRIVE SLEEVE
- 4 INNER HUB
- 5 BLADE BACK
- 6 OUTER HUB
- 7 EXHAUST PASSAGE
- 8 DIFFUSER RING
- 9 PROP NUT
- 10 LOCK RING
- 11 DRIVE SLEEVE ADAPTER
- 12 BLADE TIP
- 13 LEADING EDGE
- 14 TRAILING EDGE
- 15 BLADE FACE

### Changing Propellers

#### DANGER

**Disconnect power by moving the battery switch to the "OFF" position prior to removing the propeller.**

In some situations you may wish to change the propeller to give your boat slightly different performance characteristics.

In general, changing to a lower pitch propeller will increase acceleration and load pulling capability, with a slight decrease in top end speed. If you choose



to change propellers, the type should be discussed with your Boston Whaler® dealer. All propellers are designed to provide maximum forward thrust, consequently, the reverse thrust of the propeller will not be as efficient.

Propellers have two basic characteristics, diameter and pitch.

**Diameter** is that distance measured across the propeller hub from the outer edge of the 360° that is made by the propeller's blade during a single rotation.

**Pitch** is that distance in inches that a propeller will travel if rotated one revolution without any slippage.

### Anchor Windlass

#### **⚠ DANGER**

**Use the windlass switch on the helm whenever possible. Use care when operating the anchor windlass with the hand-held remote.**

The anchor windlass located at the bow gives you a mechanical means of raising and lowering the anchor.

The anchor windlass is controlled by switches located on the control station starboard switch panel (See fig. 2.19.1) or by a hand held remote located in the bow locker.

The “WINDLASS” switch on the control station switch panel controls power to the windlass.

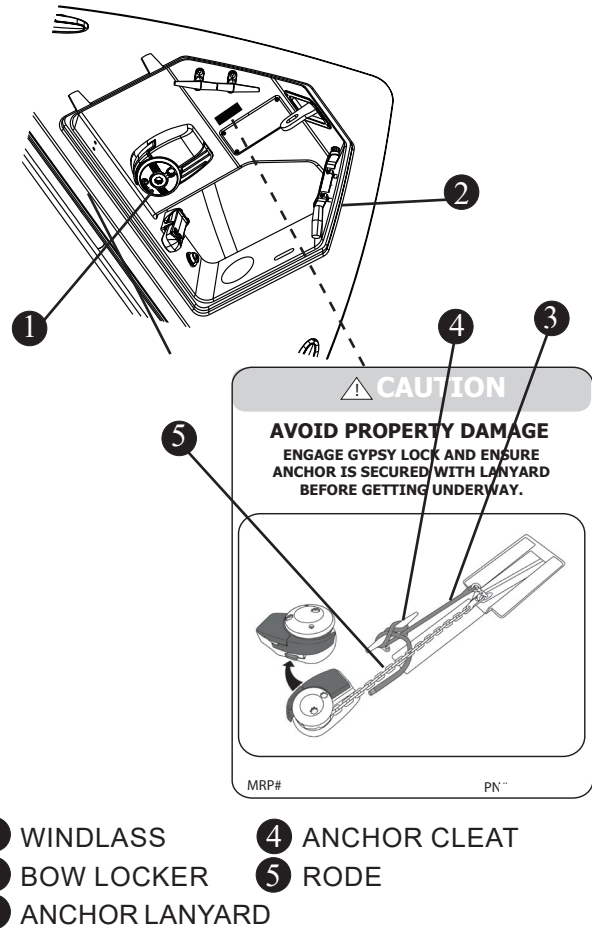
The operation switches are momentary type switches which means that there must be constant pressure applied to the switch to operate the anchor windlass.

When not in use, the remote can be stored in a receptacle located on the bulkhead of the bow locker.

There is also a handle that can be used to raise and lower the anchor manually in case the power to the anchor windlass is lost.

A anchor lanyard secures the anchor when stowed and the boat is underway.

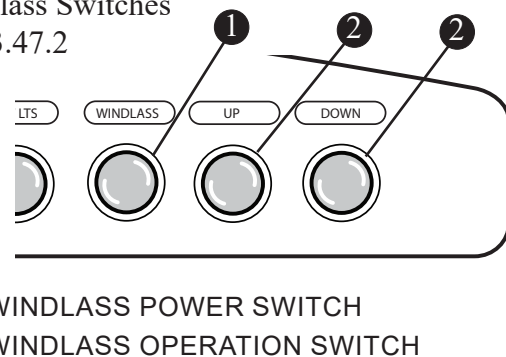
Windlass  
Fig. 3.47.1



The windlass is protected by an 100 amp circuit breaker located on the battery switch panel (See page 4-6). If there is a loss of power to the windlass, check the “WINDLASS” circuit breaker. If the breaker is tripped, reset the breaker.

If the breaker continues to trip, have the anchor windlass system checked by a qualified marine electrician.

Windlass Switches  
Fig. 3.47.2



### NOTICE

#### **ALWAYS SECURE THE LANYARD WHEN UNDERWAY**

**Failure to do so may allow accidental deployment of the anchor.**

### Operation

### NOTICE

**Before operating the windlass be sure that the safety lanyard is removed from the anchor and is clear of the rode as it pays out or is retrieved.**

#### **Operating From the Helm**

**LOWERING-** Pushing the top part of the switch down will power the anchor windlass **DOWN**. Make certain that the safety lanyard is detached from the chain and is clear of any moving parts of the anchor windlass.

**RAISING-** Pushing the lower part of the switch will power the anchor windlass **UP**. Once the anchor and rode is secure in the **UP** position, the safety lanyard can be re-attached to the anchor and secured to the cleat.

### **⚠ DANGER**

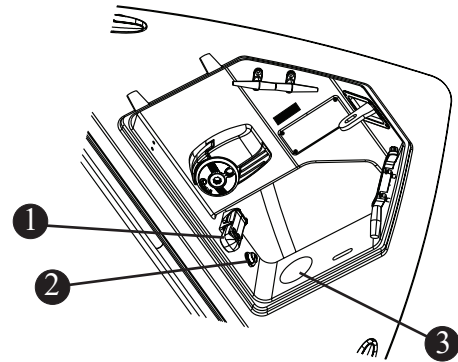
**Use the anchor windlass switch on the helm when possible. Use care when operating the anchor windlass with the hand-held remote.**

#### **Operating From the Bow**

The anchor windlass can be operated from the bow with the use of the windlass remote which is stowed in the bow locker.

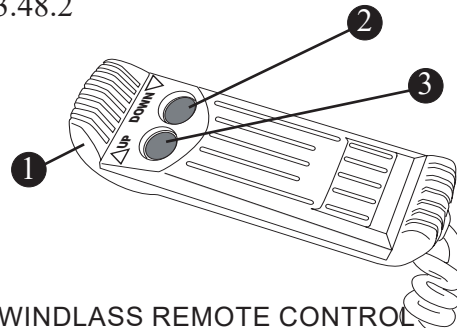
The windlass remote control is protected by a 10 amp reset breaker located on the 12V DC breaker panel on the port side of the cabin (See page 2-14). If there is a loss of power to the windlass remote, check the “WINDLASS CONTROL” breaker. If the breaker is tripped, reset the breaker.

Windlass Remote  
Fig. 3.48.1



- 1 HAND HELD REMOTE
- 2 POWER SOURCE
- 3 EXPANDABLE WASHDOWN HOSE

Anchor Windlass Remote  
Fig. 3.48.2

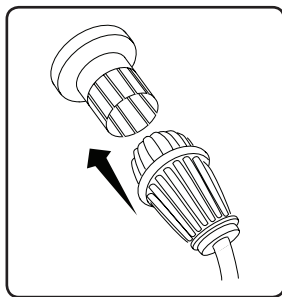


- 1 WINDLASS REMOTE CONTROL
- 2 “DOWN” BUTTON
- 3 “UP” BUTTON

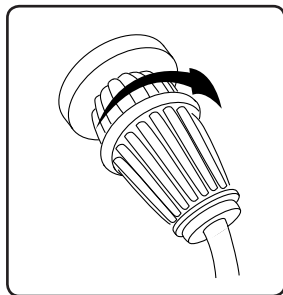
### **⚠ WARNING**

**Keep hands, feet, hair and loose clothing clear of moving parts. Entanglement may cause severe bodily injury (i.e. loss of fingers or toes).**

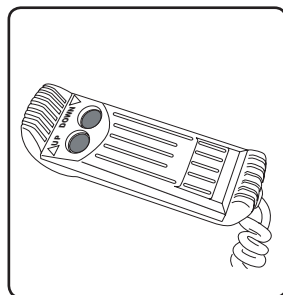
- Plug the power cable into the power receptacle on the aft of the bow locker (Figure 3.44.1)



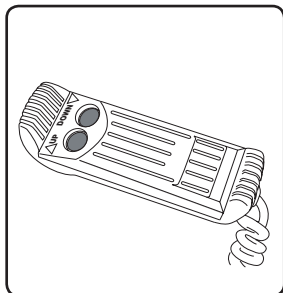
- Turn the forward portion of the plug clockwise to lock.



- **To raise** the anchor, press and hold on the “UP” button of the remote.



- **To lower** the anchor, press and hold on the “DOWN” button on the remote.



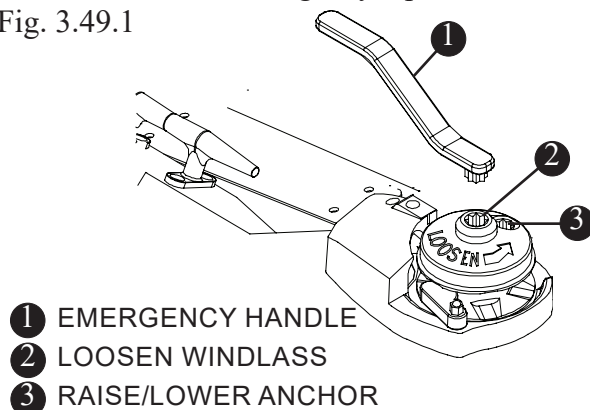
## Operating The Windlass Manually

In the event that there is a loss of power to the windlass the anchor can be raised and/or lowered manually by using the emergency handle located in the bow locker.

There are two star sockets on the top of the windlass used for manual deployment of the anchor. Inserting the emergency handle into the center socket and turning it counter-clockwise will loosen the anchor windlass chainwheel. The star socket located off-center is used for retrieving and lowering the anchor. Turning the handle counterclockwise will allow you to lower the anchor, while turning it clockwise will raise it.

When operation is complete, insert the handle into the center star socket and tighten the windlass chainwheel by rotating the handle clockwise. Be sure to attach the safety lanyard when the anchor is stowed in the bow pulpit.

Windlass Manual/Emergency Operation  
Fig. 3.49.1



REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

### Anchoring

Your boat is equipped with a windlass, anchor, rode and an anchor chute. Stow the anchor in the chute when not in use.

NOTE: Before using the anchor, be sure the safety lanyard is removed and the anchor is secured to the windlass chain.

To anchor, bring the bow into the wind or current and put the engine(s) in neutral. When the vessel comes to a stop, lower the anchor from the bow.

### Considerations

- Wind and sea conditions can affect the boat.
- Because the boat is not moving through the water, there is no control.
- Be sure that the anchor will hold under all circumstances if you are leaving the boat.
- Understand the principles of rode and scope and their effect on anchor performance.

Proper anchoring requires knowledge of RODE and SCOPE and understanding the relationship between rode, scope and anchor performance.

**The rode** is the line connecting the anchor to the boat. Nylon line is ideal because it is light, strong and stretches, it also can be stored wet and is easy to handle. Add a length of chain between the anchor and the nylon line to prevent abrasion of the line.

**The scope** is technically defined as the ratio of rode length to the vertical distance from the bow to the sea floor. Scope also depends on the type of anchor, tides, winds, sea conditions and type of sea floor the anchor is in. Since you want to know how much rode to use when anchoring, use this common formula:

**Rode length** = (bow height + water depth) X Scope

The minimum is 5:1 for calm conditions; normal is 7:1, and severe conditions may require a 10:1.

#### Example:

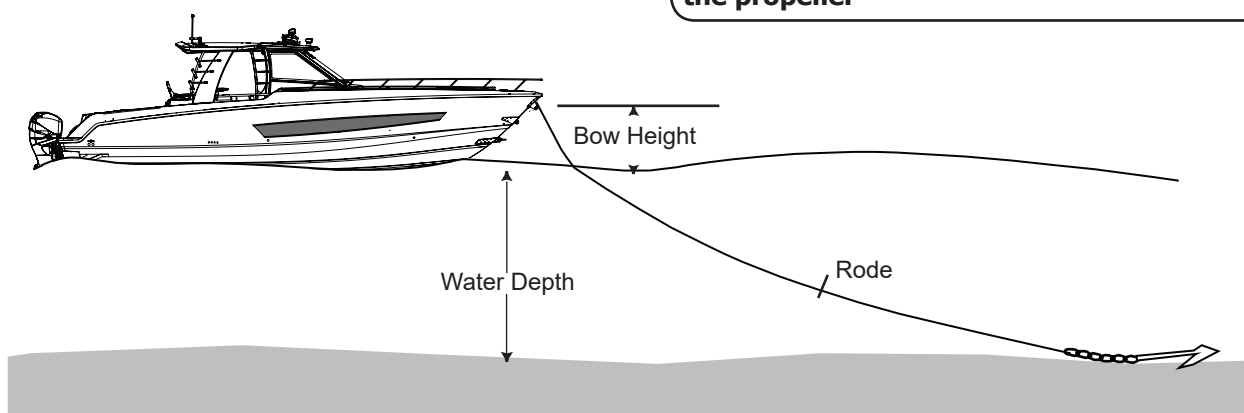
$$\text{Rode length} = (3 \text{ feet} + 10 \text{ feet}) \times 7^*$$

$$\text{Rode length} = 13 \text{ feet} \times 7^*$$

$$\text{Rode length} = 91 \text{ feet}$$

\* Scope may range from 5 to 10 or more. However, less than 5, the anchor will break out too easily.

Proper Anchoring  
Fig. 3.50.1



### CAUTION

Be careful that the trailing lines do not foul in the propeller

$$\text{Rode length} = (\text{bow height} + \text{water depth}) \times \text{Scope}$$

### NOTICE

**Before using the anchor be sure the anchor line is secured to the eye in the bottom of the anchor locker.**

#### Lowering The Anchor

- Be sure there is adequate rode.
- Secure rode to both the anchor and the boat.
- Stop the boat completely before lowering the anchor.
- Keep feet clear of lines.
- Turn on the anchor light when at anchor or drifting (not under power) at night or in low visibility.

NOTE: If using the windlass, refer to the windlass operator's manual for anchoring instructions

#### Setting the Anchor

There is no best way to set an anchor. Experiment to see how it performs. One method is to turn the rode around a bitt or a cleat and slowly pay out as the boat backs from the anchor site. When the proper scope has been reached snub the rode quickly, causing the anchor to dig in to the sea bottom.

- Reverse the engine slowly to drive the anchor in and to prevent it from dragging.
- Secure the rode to the bitt or cleat.

#### Weighing the Anchor

To weigh (or retrieve) the anchor, start the boat and run slowly up to the anchor, taking up the rode as you go. The anchor will usually break out when the rode becomes vertical. Coil lines to let them dry before stowing.



### CAUTION

**Be careful that the trailing lines do not foul in the propeller**



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## Electrical Systems

### DC Electrical System

Your boat is equipped with an electrical system powered by a series of deep-cycle, lead-acid batteries. The batteries are charged by running the generator or when the engines are running or can be charged by shore power when the engines and generator are off.

A battery charger located on the forward wall of the battery compartment (See fig. 4.1.1) facilitates the charging of the batteries when using shore power. See Section 3, page 3-30 for shore power operation.

The electrical system utilizes selector switches to control the delivery of power to the following:

- Engine Ignition.
- Engine tilt trim system
- Helm switch panel & helm instrument panel
- Lighting/Navigation systems
- Livewell system
- Add-on accessories and electronics

## Batteries

### NOTICE

**REFER TO YOUR ENGINE OWNER'S MANUAL FOR EXACT BATTERY REQUIREMENTS.**

The chart below is provided for reference purposes only. Use only AGM batteries with Verado engines.

Application	Group	Volts	MCA*	RC 25	Qty.
USA (SAE)	31	12	800	135 min	7

\* Marine Cranking Amps

\*\* Additional battery needed with triple engines.

Application	Group	Volts	CCA*	Reserve	Qty.
Int'l (EN)	31	12	975	65Ah	7

\* Cold Cranking Amps

### NOTICE

**Ensure that your batteries meet Mercury's AGM & CCA requirements**

### ⚠ DANGER

**Batteries contain sulfuric acid which is dangerous and can cause serious injury. AVOID contact with skin, eyes and clothing. If contact occurs, immediately flush the affected area with large quantities of water and call for medical assistance.**

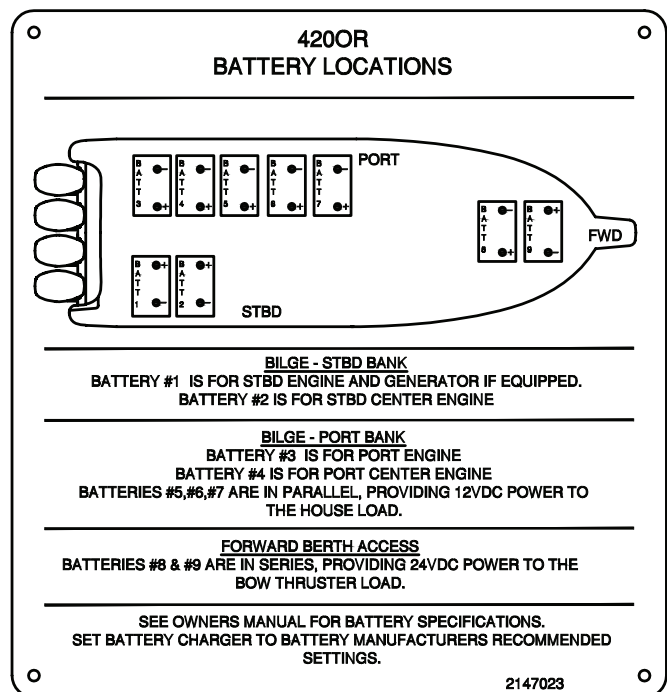
### NOTICE

**Always store the batteries in the battery trays. Tighten the knobs on the top of the trays to keep the batteries secure.**

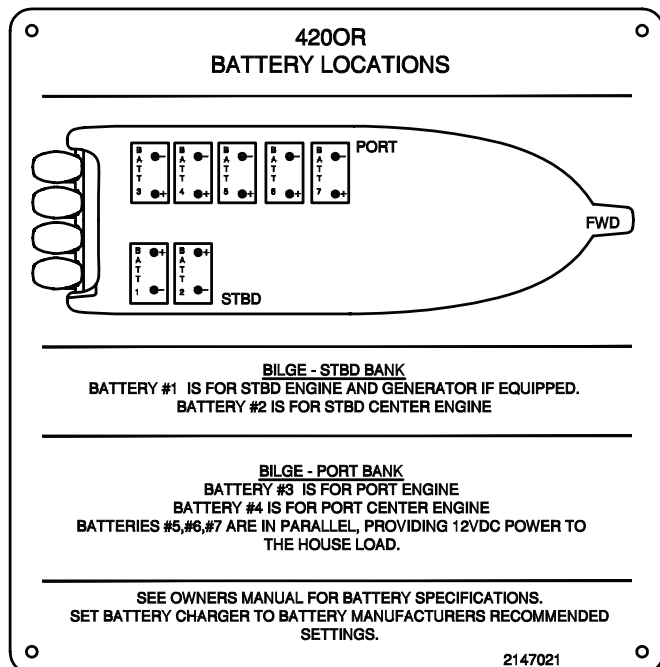
## Battery Trays

The battery trays, house and secure the batteries (See charts below).

## Battery Locations Chart



## Battery Locations Chart w/Joystick Option



Your batteries should always be enclosed in the battery trays provided with your boat and secured in place by the retaining lids. The trays will ensure that while underway the batteries will not move

## ⚠ WARNING

**BOW THRUSTER BATTERIES  
MUST BE OF A DEEP-CYCLE, SEALED DESIGN**  
Failure to do so will result in an increased and dangerous presence of battery discharge gases accumulating in the forward cabin.

around, thus causing damage to components fitted in the same area. The batteries can be removed by loosening the wing nuts and removing the retaining lid on the battery tray.

### Bow Thruster Battery trays

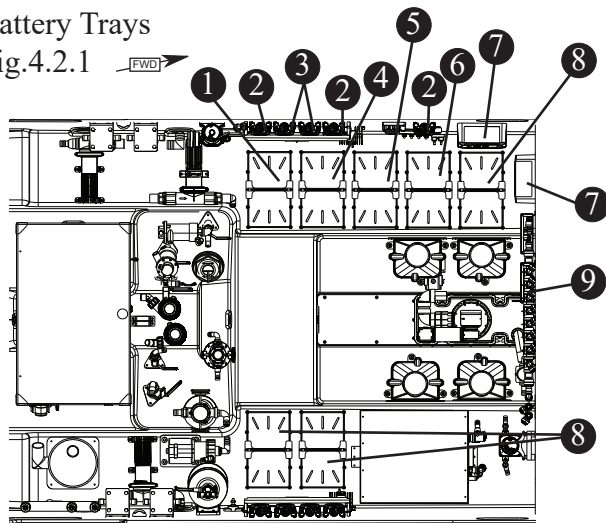
There are battery trays, for the two (2) batteries which provide the 24 volts necessary to operate the bow thruster, along with a battery charger located under the forward cabin storage. Access to the bow thruster equipment can be made through the hatch in the floor (Figure 4.2.1).

## NOTICE

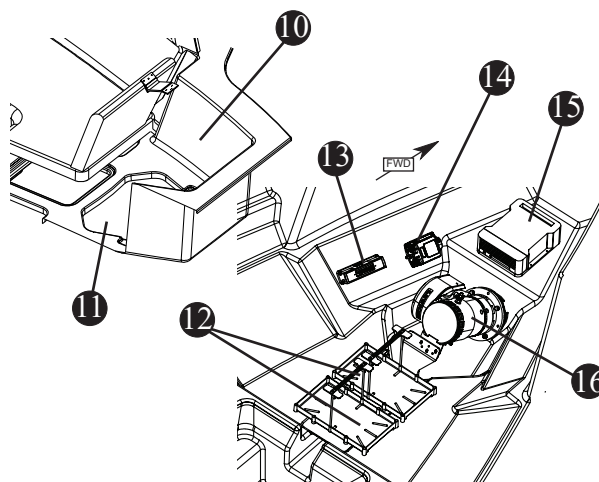
**The bow thruster, battery charger, and battery trays are deleted w/ joystick option.**

Battery Trays

Fig.4.2.1



- ① STARBOARD ENGINE/GENERATOR BATTERY
- ② BATTERY SWITCHES (P/S)
- ③ AUTOMATIC CHARGING RELAYS (ACR)
- ④ STARBOARD CENTER ENGINE BATTERY
- ⑤ PORT ENGINE BATTERY
- ⑥ PORT CENTER ENGINE BATTERY
- ⑦ AFT BATTERY CHARGERS
- ⑧ HOUSE BATTERIES
- ⑨ FRESH WATER MANIFOLD



- ⑩ CABIN FORWARD STORAGE
- ⑪ BOW THRUSTER\* ACCESS HATCH
- ⑫ BOW THRUSTER BATTERY TRAYS\*
- ⑬ FUSE BLOCK
- ⑭ BOW THRUSTER BATTERY SWITCH\*
- ⑮ FORWARD BATTERY CHARGER\*
- ⑯ BOW THRUSTER\*

\* Standard bow thruster gets deleted w/Joystick options

## Maintenance

Before use, check each battery and the charging system for loose connections or wiring. Normal maintenance should include:

- Coat the terminals with dielectric grease
- Keep the batteries dry
- Remove the batteries from the boat during cold weather or long term storage.

The most life shortening experience for the battery is to be drained to zero charge before recharging.

## Battery charger

The battery chargers, (See figure 4.2.1) automatically increase current output when there is a drop in battery voltage. When the batteries are charged, the units maintain a small current flow to keep the batteries fully charged and ready for service without overcharging.

## NOTICE

**The bilge pumps, TDS (if equipped), battery switch control, and iPad charger draw power from the batteries, even if the switches are set to "OFF".**

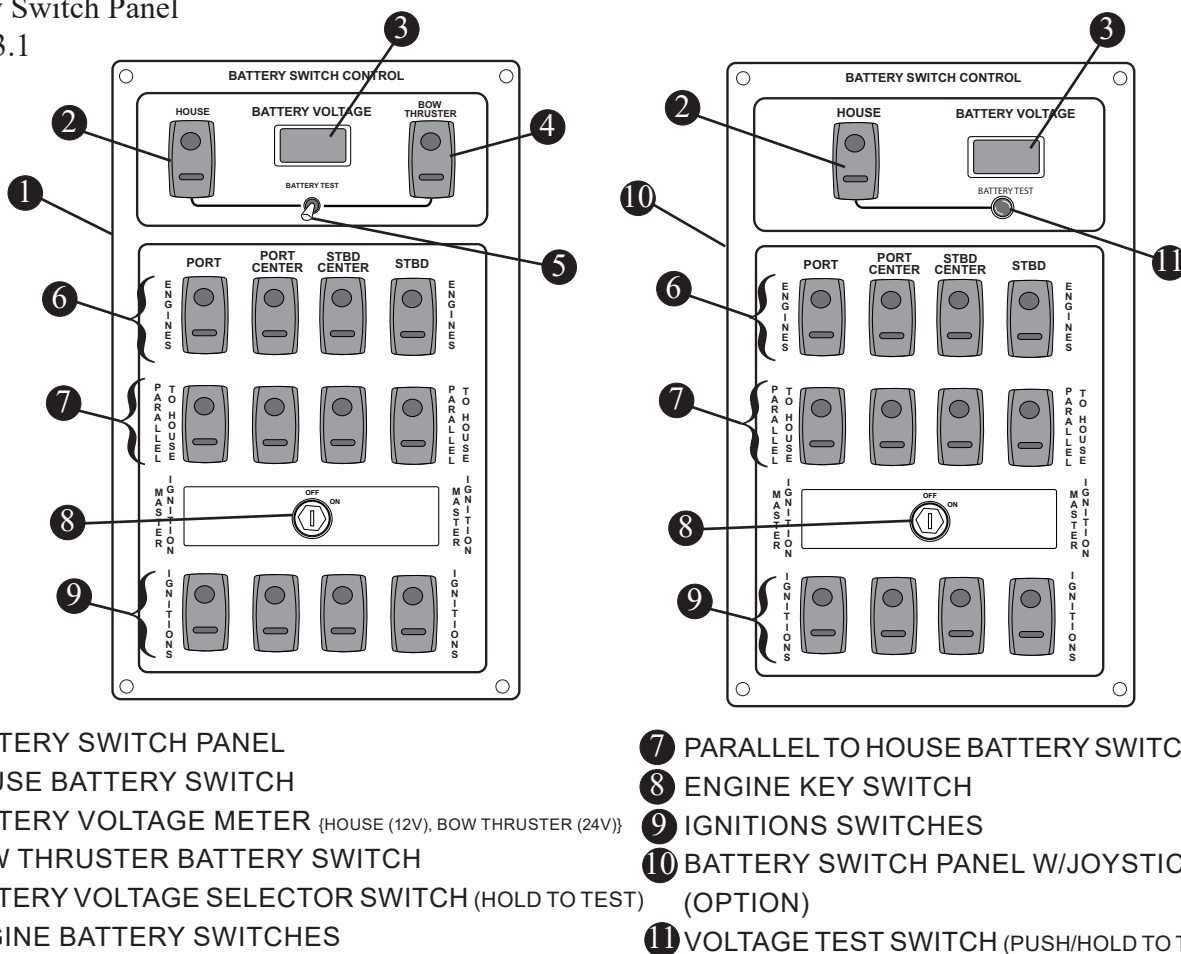
## Overload Protection

If an electrical short or overload occurs in the electrical system the charger will reduce its output voltage to avoid internal damage. When an electrical short occurs, the red LED on the front panel of the unit will be illuminated. The overload or short must be removed in order for the charger to resume charging characteristics.

## Maintenance

The charger is fully automatic and requires no maintenance. However, the battery terminals should be cleaned periodically with baking soda and all connections tightened to provide trouble free operation.

Battery Switch Panel  
Fig. 4.3.1



### **CAUTION**

**You must stop the engine(s) before moving the battery switch(es) to the "OFF" position.**

### **CAUTION**

- **Never use an open flame in the battery storage area.**
- **Avoid striking sparks near the battery.**
- **A battery will explode if a flame or spark ignites the free hydrogen given off during charging.**
- **The battery should always be disconnected before doing any work or maintenance on the electrical system.**
- **Never reset a breaker without first determining and correcting the cause of the trip. Should a circuit repeatedly trip, have a qualified electrician determine and correct the cause.**
- **If equipped with a battery switch, you will need to stop the engine before moving the switch to the "OFF" position.**

### **Battery Selector Switches**

Your boat uses battery switches to control delivery of DC power from the batteries. The battery switches are located behind an access door on the port wall of the cabin. When the engine is shut down or not providing a charge, the system will draw power from the house batteries. This will allow you to run all the boat's functions without affecting the port or starboard battery.

### **Remote Battery Parallel Switches**

The remote battery parallel switches located on the 12VDC distribution panel (See fig. 4-3) give the operator the ability to parallel either the port and center batteries or the center and starboard batteries for increased amperage when an insufficient charging source is present.

### **Automatic Charging Relays (ACR)**

Battery banks are automatically connected in parallel through the use of Automatic Charging Relays when a sufficient charging source is present. The battery banks are automatically separated when the charging source falls below a certain voltage level for a predetermined amount of time.

REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS, WARRANTY AND SAFETY INFORMATION.

### **Component Breakers**

Your boat utilizes reset breakers for the various components throughout the boat. The breakers can be found on the AC and DC breaker panels (See fig. 4.6.1 & 4.7.1), the prep station breaker panel (See fig. 4.8.1), and in the electronics box above the console (See fig. 4.8.2). If a component breaker trips, determine and correct the problem before resetting the breaker. Should a circuit breaker trip repeatedly, have a qualified marine electrician determine and correct the cause of the trip.

In the event it is necessary to replace a breaker, use only the same amperage as the original. If a breaker is replaced with one of lower amperage, it will not be sufficient to carry the electrical load of the equipment it is connected to and will cause nuisance breaker tripping. Conversely, if a breaker is replaced with one of higher amperage, it will not provide adequate protection against an electrical malfunction and will create a fire hazard.

### **WARNING**

**Use of higher amperage fuses or breakers is a fire hazard.**

### **NAUTIC-ON™ Remote Connectivity\* (if equipped)**

- 24/7 access to your boat's information using the NAUTIC-ON™ app
- Monitor house and engine battery state and bilge pump activity
- Review live engine data and diagnostics
- Track location with smart breadcrumbing and geofence
- View weather conditions at the boat

\*First 12 months are included and thereafter the service is subscription based (if equipped).

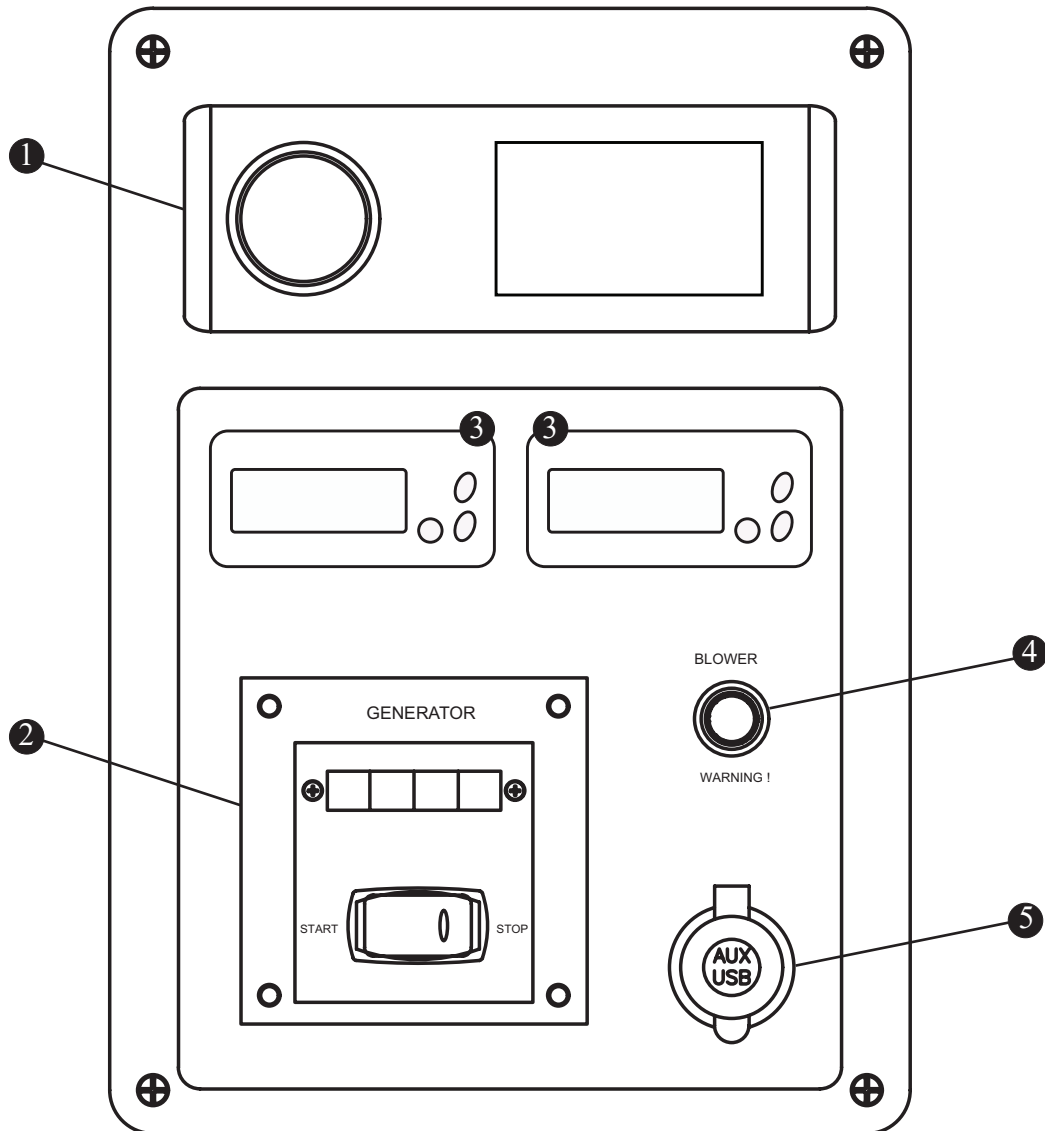
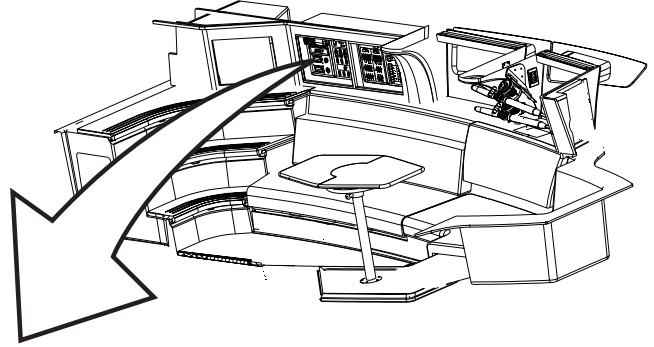
REFER TO MANUFACTURER'S MANUAL IN OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.



## Main Distribution Panel

The following pages detail the four panels that make up the main distribution panel, located in the port cabin.

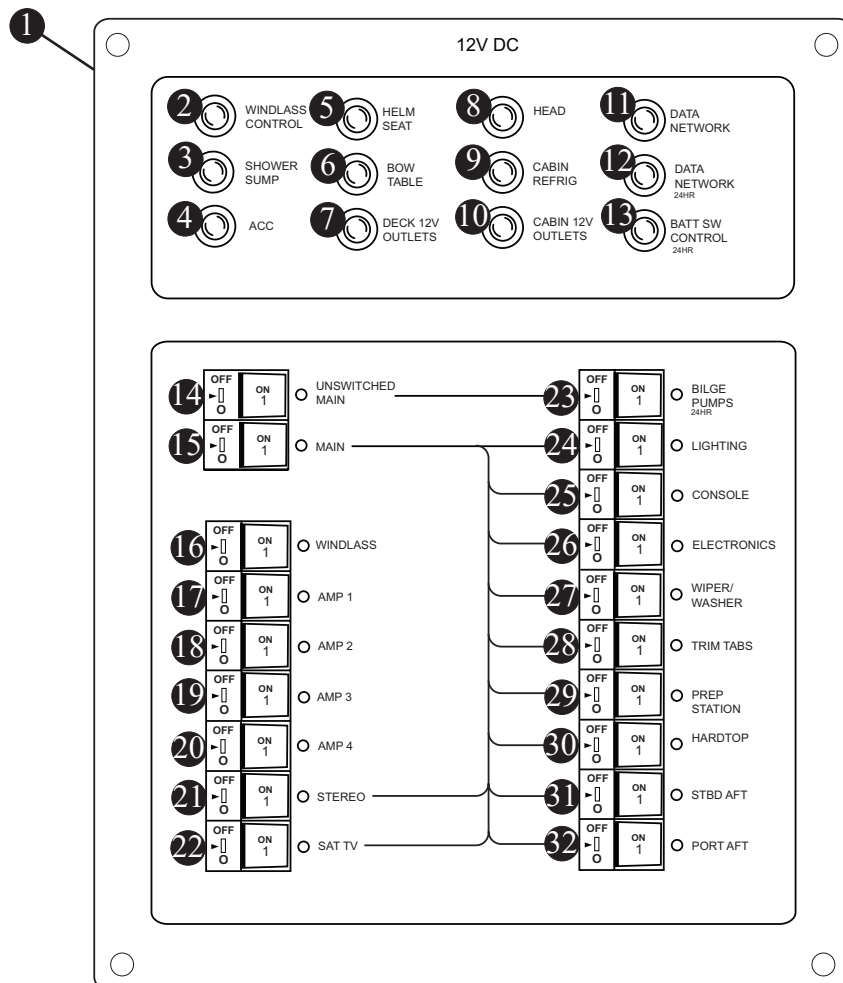
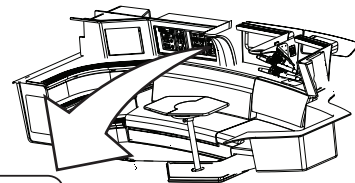
Stereo, Generator, Blower, 12V Receptacle  
Fig. 4.5.1



- ① STEREO
- ② FISH BOX FREEZER CONTROLS (OPTION)
- ③ GENERATOR
- ④ BLOWER SWITCH
- ⑤ 12V RECEPTACLE

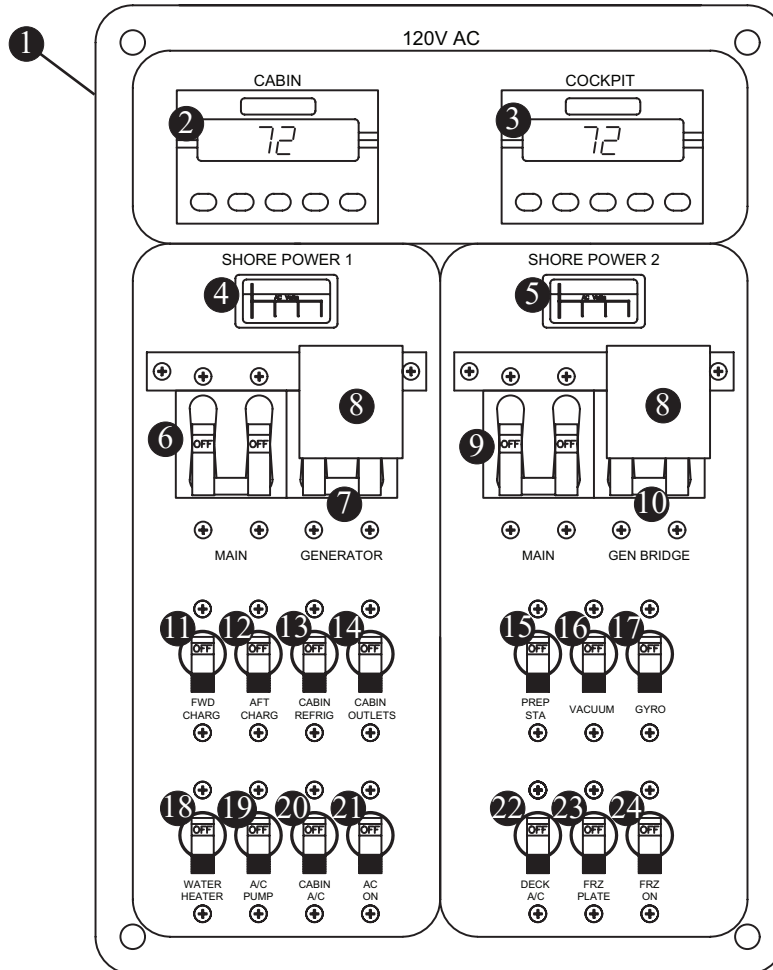
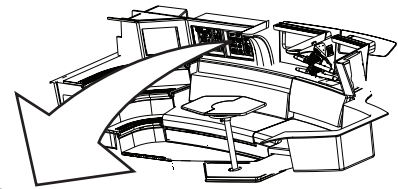
## Section 4 • Electrical System

DC Distribution Panel  
Fig. 4.6.1



<b>1</b> 12V DC BREAKER PANEL	
<b>2</b> WINDLASS CONTROL . . . . . 10 AMPS	
<b>3</b> SHOWER SUMP . . . . . 5 AMPS	
<b>4</b> ACCESSORY . . . . . 10 AMPS	
<b>5</b> HELM SEAT . . . . . 15 AMPS	
<b>6</b> BOW TABLE . . . . . 20 AMPS	
<b>7</b> DECK 12V OUTLETS . . . . . 15 AMPS	
<b>8</b> HEAD . . . . . 3 AMPS	
<b>9</b> CABIN REFRIGERATOR . . . . . 20 AMPS	
<b>10</b> CABIN 12V OUTLETS . . . . . 15 AMPS	
<b>11</b> DATA NETWORK . . . . . 10 AMPS	
<b>12</b> DATA NETWORK (24 HR) . . . . . 10 AMPS	
<b>13</b> BATT SWITCH CONTROL (24 HR) . . 15 AMPS	
<b>14</b> UNSWITCHED MAIN . . . . . 50 AMPS	
<b>15</b> MAIN . . . . . 125 AMPS	
<b>16</b> WINDLASS . . . . . 100 AMPS	
<b>17</b> AMP 1 . . . . . 50 AMPS	
<b>18</b> AMP 2 . . . . . 50 AMPS	
<b>19</b> AMP 3 . . . . . 50 AMPS	
<b>20</b> AMP 4 . . . . . 50 AMPS	
<b>21</b> STEREO . . . . . 20 AMPS	
<b>22</b> SAT TV . . . . . 20 AMPS	
<b>23</b> BILGE PUMPS (24 HR) . . . . . 30 AMPS	
<b>24</b> LIGHTING . . . . . 20 AMPS	
<b>25</b> CONSOLE . . . . . 30 AMPS	
<b>26</b> ELECTRONICS . . . . . 50 AMPS	
<b>27</b> WIPER/WASHER . . . . . 20 AMPS	
<b>28</b> TRIM TABS . . . . . 30 AMPS	
<b>29</b> PREP STATION . . . . . 30 AMPS	
<b>30</b> HARDTOP . . . . . 30 AMPS	
<b>31</b> STBD AFT . . . . . 40 AMPS	
<b>32</b> PORT AFT . . . . . 40 AMPS	

AC Distribution Panel (120V)  
Fig. 4.7.1

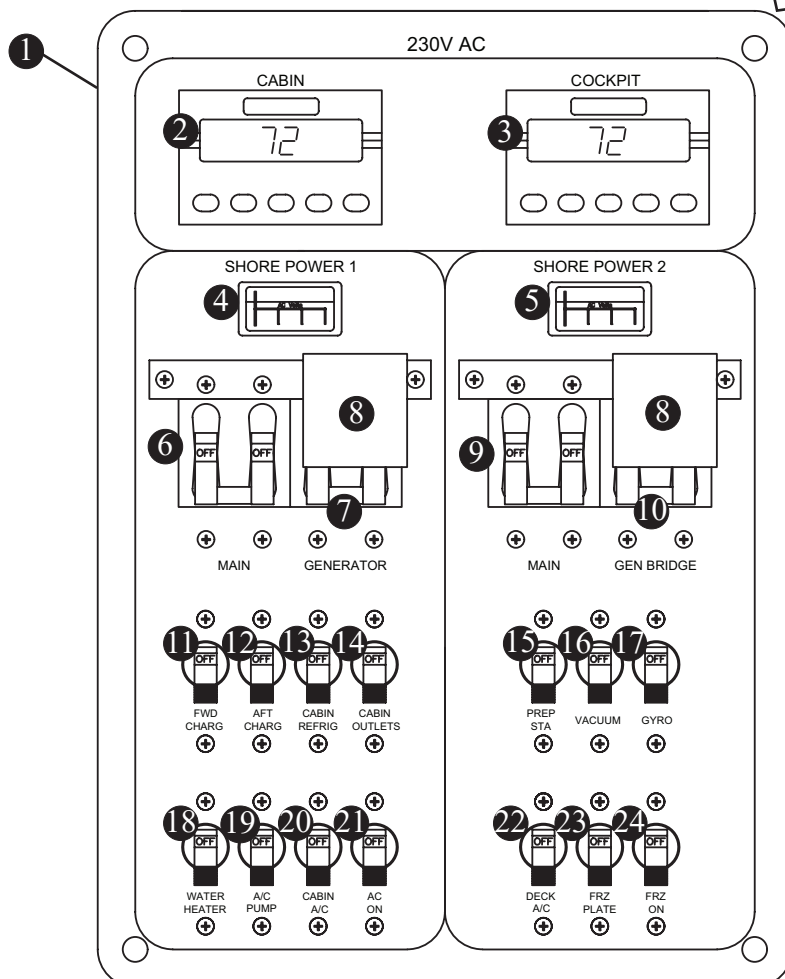
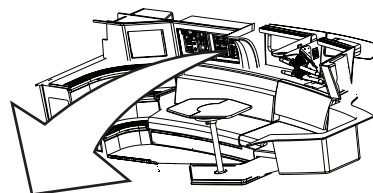


- |                                         |                                    |
|-----------------------------------------|------------------------------------|
| 1 120V AC BREAKER PANEL                 | 13 CABIN REFRIGERATOR ..... 15 AMP |
| 2 CABIN AC                              | 14 CABIN OUTLETS ..... 15 AMP      |
| 3 COCKPIT AC                            | 15 PREP STATION ..... 20 AMPS      |
| 4 LINE 1 VOLTAGE METER                  | 16 VACUUM ..... 10 AMPS            |
| 5 LINE 2 VOLTAGE METER                  | 17 SEAKEEPER GYRO ..... 25 AMPS    |
| 6 LINE 1 MAIN BREAKER ..... 30 AMP      | 18 WATER HEATER ..... 15 AMPS      |
| 7 LINE 1 GENERATOR BREAKER .... 70 AMP  | 19 A/C PUMP ..... 5 AMPS           |
| 8 SOURCE SELECTOR SLIDE                 | 20 CABIN A/C ..... 15 AMPS         |
| 9 LINE 2 MAIN BREAKER ..... 30 AMP      | 21 AC ON ..... 1 AMPS              |
| 10 LINE 2 GENERATOR BREAKER .... 70 AMP | 22 DECK A/C ..... 15 AMPS          |
| 11 FORWARD BATTERY CHARGER 15 AMP       | 23 FREEZER PLATES ..... 15 AMPS    |
| 12 AFT BATTERY CHARGER ..... 15 AMP     | 24 FREEZER PLATES ON ..... 1 AMPS  |

## Section 4 • Electrical System

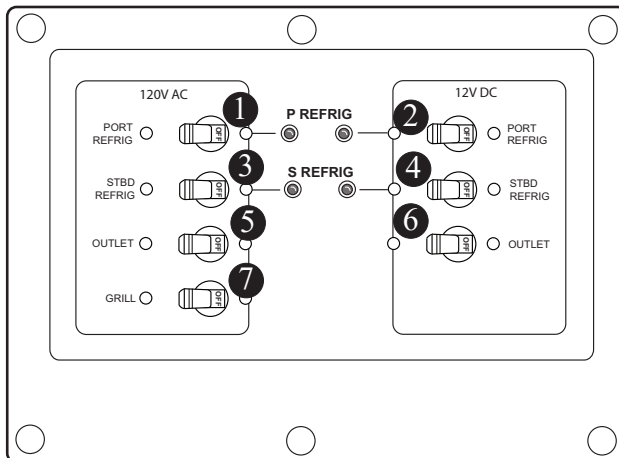
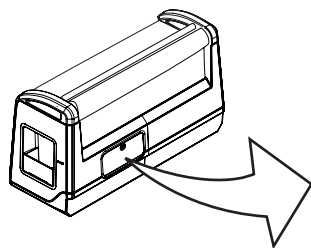
AC Distribution Panel (230V)

Fig. 4.8.1



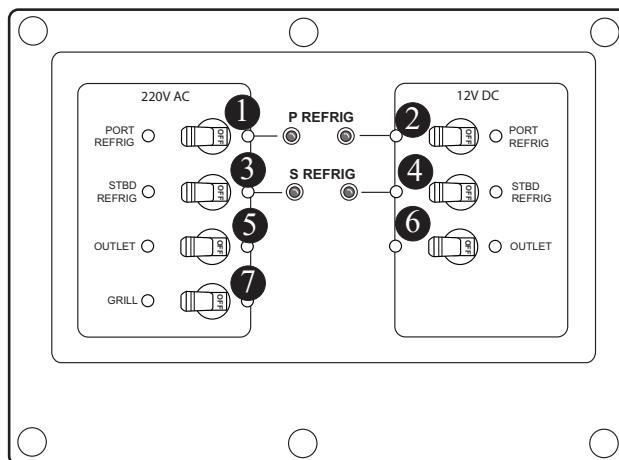
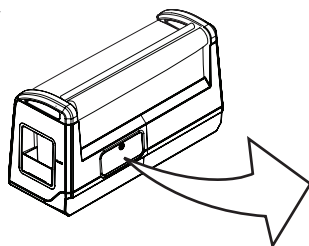
- |                                         |                                        |
|-----------------------------------------|----------------------------------------|
| ① 230V AC BREAKER PANEL                 | ⑬ CABIN REFRIGERATOR . . . . . 7.5 AMP |
| ② CABIN AC                              | ⑭ CABIN OUTLETS . . . . . 10 AMP       |
| ③ COCKPIT AC                            | ⑮ PREP STATION . . . . . 10 AMPS       |
| ④ LINE 1 VOLTAGE METER                  | ⑯ VACUUM . . . . . 7.5 AMPS            |
| ⑤ LINE 2 VOLTAGE METER                  | ⑰ SEAKEEPER GYRO . . . . . 25 AMPS     |
| ⑥ LINE 1 MAIN BREAKER . . . . . 16 AMP  | ⑱ WATER HEATER . . . . . 10 AMPS       |
| ⑦ LINE 1 GENERATOR BREAKER . . . 30 AMP | ⑲ A/C PUMP . . . . . 2 AMPS            |
| ⑧ SOURCE SELECTOR SLIDE                 | ⑳ CABIN A/C . . . . . 10 AMPS          |
| ⑨ LINE 2 MAIN BREAKER . . . . . 16 AMP  | ㉑ AC ON . . . . . 1 AMPS               |
| ⑩ LINE 2 GENERATOR BREAKER . . . 30 AMP | ㉒ DECK A/C . . . . . 10 AMPS           |
| ⑪ FORWARD BATTERY CHARGER 10 AMP        | ㉓ FREEZER PLATES . . . . . 10 AMPS     |
| ⑫ AFT BATTERY CHARGER . . . . . 10 AMP  | ㉔ FREEZER PLATES ON . . . . . 1 AMPS   |

Prep Station Breaker Panel (120V)  
Fig. 4.9.1



- ① PORT REFRIGERATOR 120V AC ..... 15 AMPS
- ② PORT REFRIGERATOR 12V DC ..... 20 AMPS
- ③ STARBOARD REFRIGERATOR 120V AC .... 15 AMPS
- ④ STARBOARD REFRIGERATOR 12V AC .... 20 AMPS
- ⑤ 120V AC OUTLET ..... 15 AMPS
- ⑥ 12V DC OUTLET ..... 15 AMPS
- ⑦ GRILL ..... 15 AMPS

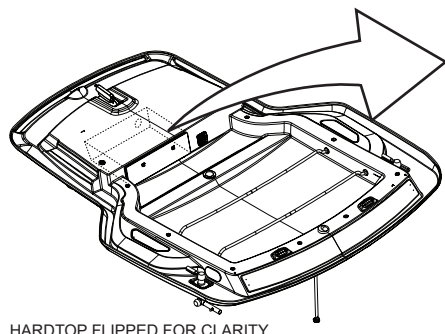
Prep Station Breaker Panel (220V)  
Fig. 4.9.2



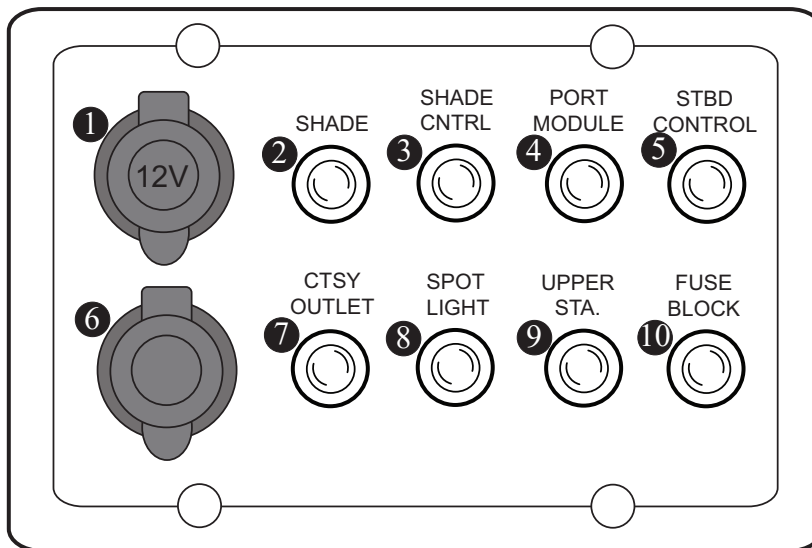
- ① PORT REFRIGERATOR 220V AC ..... 7.5 AMPS
- ② PORT REFRIGERATOR 12V DC ..... 20 AMPS
- ③ STARBOARD REFRIGERATOR 220V AC .... 7.5 AMPS
- ④ STARBOARD REFRIGERATOR 12V DC .... 20 AMPS
- ⑤ 220V AC OUTLET ..... 10 AMPS
- ⑥ 12V DC OUTLET ..... 15 AMPS
- ⑦ GRILL ..... 10 AMPS



Electronics Box Breaker Panel  
Fig. 4.10.1



HARDTOP FLIPPED FOR CLARITY

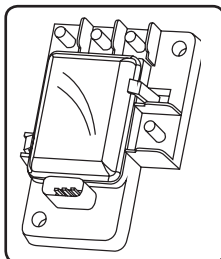
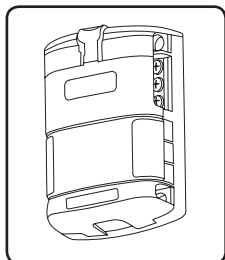


- |                                       |                                     |
|---------------------------------------|-------------------------------------|
| 1 12V ACCESSORY . . . . . 10 AMPS     | 6 USB CHARGER                       |
| 2 SHADE . . . . . 15 AMPS             | 7 COURTESY OUTLET . . . . . 10 AMPS |
| 3 SHADE CONTROL . . . . . 5 AMPS      | 8 SPOT LIGHT . . . . . 15 AMPS      |
| 4 PORT MODULE . . . . . 15 AMPS       | 9 UPPER STATION . . . . . 20 AMPS   |
| 5 STARBOARD CONTROL . . . . . 15 AMPS | 10 FUSE BLOCK . . . . . 20 AMPS     |

## Fuse Blocks

Your boat is equipped with four (4) fuse blocks.

1. Located behind the console. Accessed through a panel on the aft wall of the head.
2. Located under the cabin steps. Accessed through a panel on the port wall of the head.
3. Located on the port wall of the electronics box above the console.
4. A heavy duty fuse box is located in bilge and can be accessed by rising the mechanical hatch in the aft cockpit deck.



In the event you need to replace a fuse, use only the same amperage as the original. It is recommended that you carry spare fuses.

If a fuse is replaced with one of lower amperage, it will not be sufficient to carry the electrical load of the equipment it is connected to and will cause nuisance fuse failure or breaker tripping.

If a fuse is replaced with one of higher amperage, it will not provide adequate protection against an electrical malfunction and will create a fire hazard.

## ! WARNING

**Use of higher amperage fuses or breakers is a fire hazard.**

**Use fuses and breakers having the same amperage rating as the original or as specified.**

The heavy duty fuse box contains three (3) 150 Amp fuses which protect the DC Main, the windlass and the Stereo amps.

## 12 Volt Accessory Receptacles



### CAUTION

**DO NOT use accessories that exceed the rated capacity of the circuit (10 Amps).**

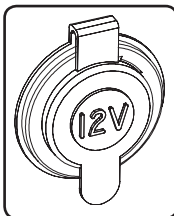


### CAUTION

**DO NOT insert a cigarette lighter into the 12V receptacles. Damage to the unit and system may occur.**

Your boat is equipped with six (6) 12 volt receptacles:

- Port bow
- Starboard helm in the lockable glove box
- Prep station switch panel
- Stereo panel in cabin
- Port cabin under the CO monitor
- Electronics box above console



These receptacles are made of corrosion resistant marine grade materials and have a moisture proof cap. There is a 10 amp reset breaker button located on the DC breaker panel which protects the receptacles.

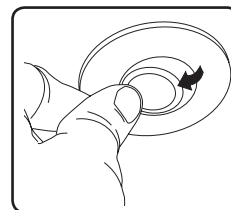
## Cabin Lighting

Your boat is equipped with contemporary LED lighting throughout the forward cabin controlled toggle switches located on the aft wall of the cabin. There is also a switch on the aft wall of the head vanity for the head overhead light.

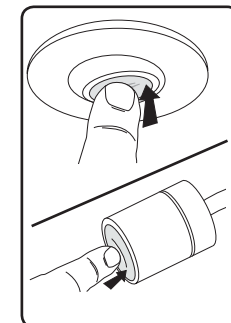
The cabin lighting is protected by a breaker on the DC breaker panel located on the port side of the cabin (See figure 4.6.1). The “LIGHTING” breaker must be ON for the lighting to function.

There are also swivel spot lamps located port and starboard in the forward cabin.

The lights can be directed in any direction by pushing on the side of the lamp lens.



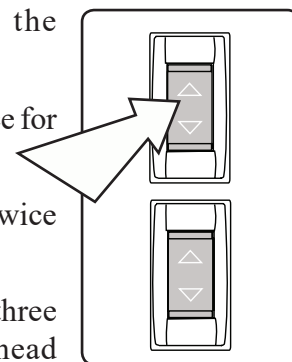
In addition to the wall switch, individual lights can be turned OFF and ON by pushing on the lens.



## Cabin Light Switches

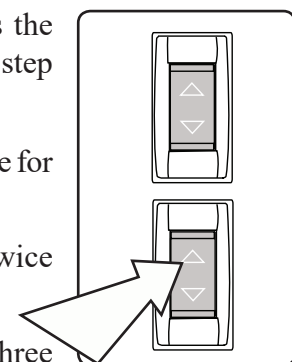
The top switch controls the overhead and Sky light.

- Press top of switch once for overheads.
- Press top of switch twice for sky light.
- Press top of switch three times for both overhead lights and sky light.
- Press bottom of switch to turn all lights OFF.



The bottom switch controls the blue accent lighting and the step lights..

- Press top of switch once for blue accent lighting.
- Press top of switch twice for step lights.
- Press top of switch three times for both blue accent lighting and step lights
- Press bottom of switch to turn all lights OFF.



### Ground Fault Interrupter (GFI)

Your boat is equipped with two (2) Ground Fault Interrupter (GFI) receptacles.

One is located on the front of the vanity cabinet in the head and the other is located in the starboard storage pocket of the prep station.

The GFI receptacle is designed to protect people from the line-to-ground shock hazards which could occur from defective tools or appliances operating from the receptacle, or from down-line outlets protected by it.

The GFI will not prevent line-to-ground electric shock, but does limit the time of exposure to a period considered safe for normal healthy persons. The receptacle will not protect people against line-to-line or line-to-neutral faults, short circuits or overloads.

Please read and understand the WARNING block regarding GFI receptacles.



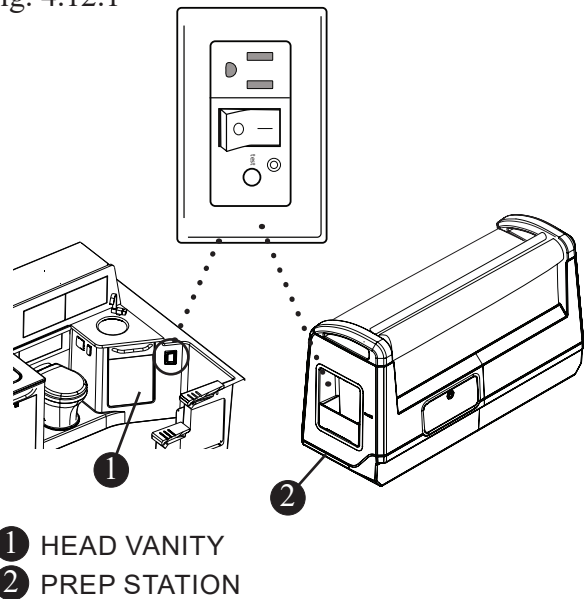
### WARNING

**Persons with heart problems or other conditions which may make them susceptible to electric shock may still be injured by ground faults on circuits protected by the GFI receptacle. No safety devices yet designed will protect against all hazards or carelessly handled or misused electrical equipment or wiring.**

### Testing

The GFI outlet has a TEST and RESET button that you can use to regularly test the outlet for proper operation. Before testing the outlet, push the RESET button in. Plug an appliance into the outlet (such as a lamp) and turn it on. Push the TEST button, the appliance should shut OFF. If it does, the circuit was interrupted and it is working properly. Push the RESET button to return the power to the outlet. If the power to the appliance was not interrupted, have a qualified marine electrician check the system to find the problem.

Ground Fault Interrupter Receptacle  
Fig. 4.12.1



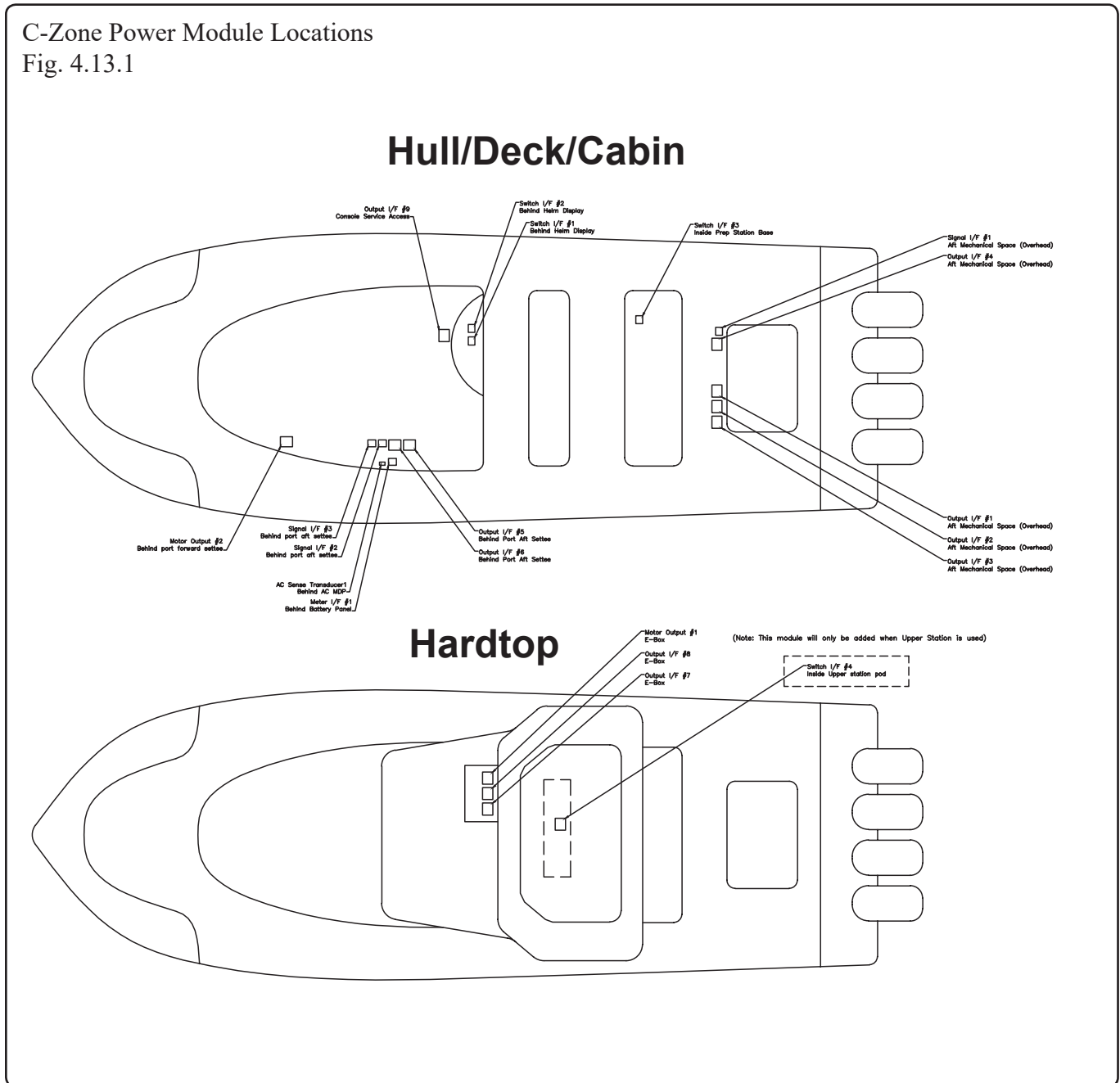
## C-Zone™ Digital Switching System

Your boat is equipped with an intelligent, single cable system which allows monitoring and control of the electrical system (See fig. 4.44.1 thru 4.48.1) when, where and how you want it.

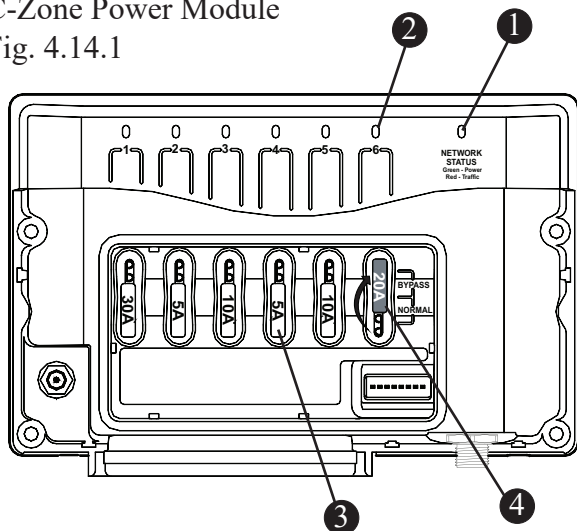
Centralized breaker panels are replaced by a series of customizable power modules placed strategically

throughout the boat (Figure 4.13.1) and connected via a bus system to screens and switches for control and monitoring of the electrical system on board with the Raymarine navigational monitor and/or the VesselView display. In addition the system can be controlled using an iPad (supplied).

C-Zone Power Module Locations  
Fig. 4.13.1



C-Zone Power Module  
Fig. 4.14.1



- 1 POWER/CURRENT INDICATOR (LED)
- 2 CHANNEL CURRENT INDICATOR (LED)
- 3 FUSE (NORMAL POSITION)
- 4 FUSE (BYPASS POSITION)

## C-Zone™ Power Modules

Power modules/Output Interface (OI) provides the power supply, control and fusing for a circuit throughout the boat (Figure 4.14.1).

In the event of a system failure or you wish to test the output channels manually, the channels can be easily placed into manual override position.

There is a label on the inside of the OI cover which shows the LED codes and manual bypass instructions (Figure 4.14.2).

LED Flash Code Label  
Fig. 4.14.2

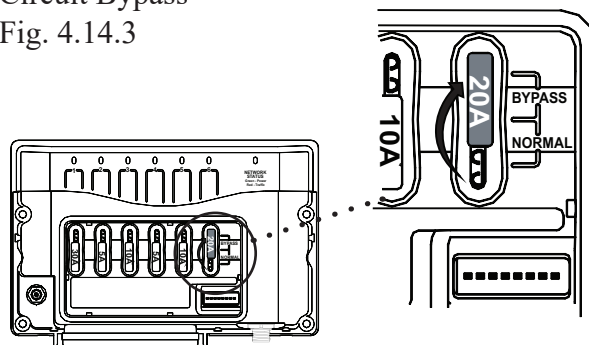
LED Flash Codes: Fault Description	
Gn solid on	Channel on
Gn slow flash	Channel in timer mode
1x RED	Channel not configured
2x RED	Configuration conflict
3x RED	Dip switch conflict
4x RED	Memory comms failure
5x RED	No modules detected
6x RED	Low Run Current
7x RED	Over current
8x RED	Short circuit
9x RED	Missing commander
10x RED	Reverse current
11x RED	Current calibration

**manual Bypass:**  
Remove fuse from "normal" (lower) position and place into "bypass" (upper position).

**Ignition Danger!**  
Ensure area is free of explosive gases before removing or replacing fuse!



Circuit Bypass  
Fig. 4.14.3



## To Bypass or Test Circuit

### CAUTION

**Bypassing can cause a potential ignition source. Ensure surrounding area is free of flammable/explosive gasses and vapors.**

- Remove the cover from the Output Interface module (OI).
- Locate the channel you wish to bypass.
- Remove the fuse from it's "NORMAL" position.
- Place the fuse in the "BYPASS" position (Figure 4.14.3).

All internal electronics and software control has now been bypassed providing complete mechanical bypass.

## NOTICE

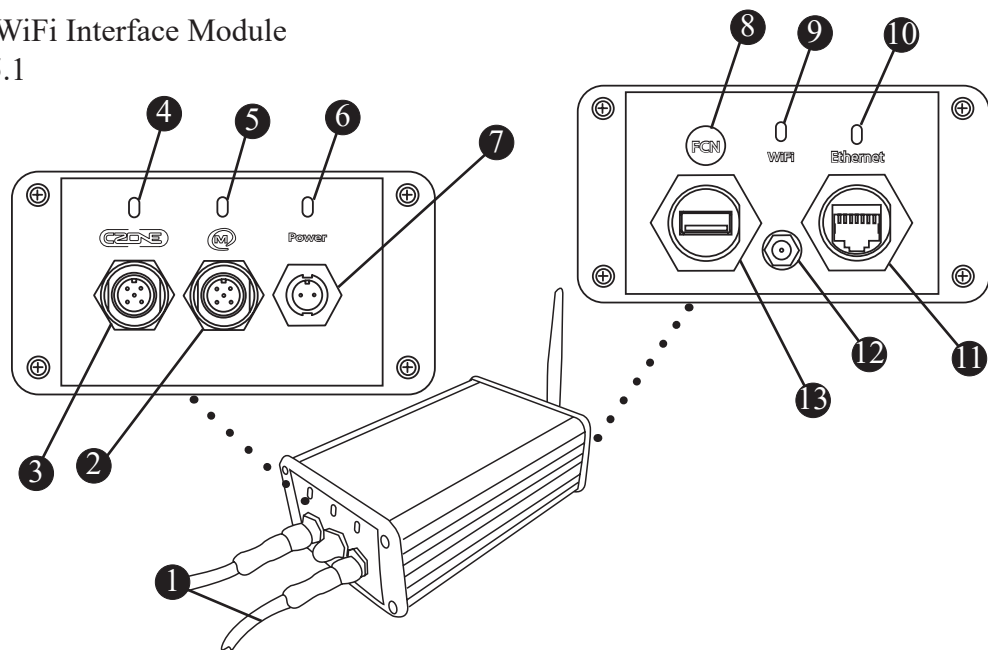
**Contact your dealer if it becomes necessary to use the "BYPASS" position for continuous operation of a circuit**

## C-Zone™ WiFi Interface Module

The C-Zone WiFi Interface Module (See figure 4.15.1) is located behind the hardtop electronics box. The module is designed to connect your iPad (supplied) to the The C-Zone digital switching system.



C-Zone WiFi Interface Module  
Fig. 4.15.1



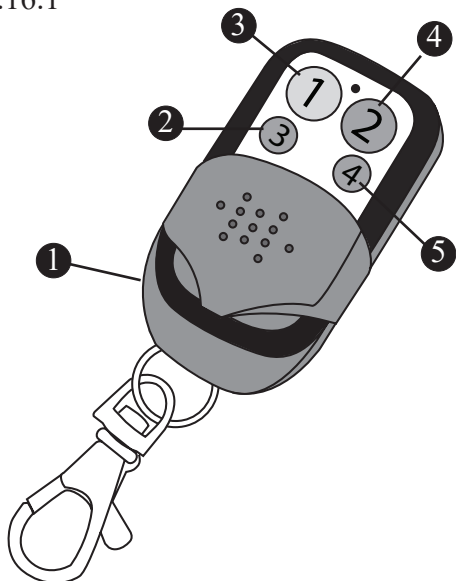
- 1 C-ZONE™ WiFi INTERFACE MODULE
- 2 NMEA2K - MASTERBUS
- 3 NMEA2K - CZONE
- 4 CZONE DATA/POWER LED
- 5 MASTERBUS DATA/POWER LED
- 6 POWER LED
- 7 DC INPUT
- 8 FUNCTION BUTTON
- 9 LED WiFi
- 10 LED ETHERNET
- 11 ETHERNET SOCKET
- 12 WIFI AERIAL
- 13 USB SOCKET

LED FUNCTION

LED	LED State	LED Meaning
Power LED	Green	Power ON
CZone and MasterBus Data/Power LED	Green	Connected
CZone and MasterBus Data/Power LED	Red Flash	Traffic

LED Mode	WiFi LED State	Ethernet LED State	Meaning
OFF	—	—	Not active or connected
ON continuously	Enabled	Connected	Normal use

C-Zone™ Wireless Remote Key Fob  
Fig. 4.16.1



- 1 WIRELESS REMOTE KEY FOB
- 2 EXTENDS COCKPIT SHADE
- 3 HOUSE BATTERY SWITCH ON AS WELL AS DECK COURTESY LIGHTS ON\*
- 4 UNDERWATER LIGHTS ON/OFF
- 5 RETRACTS COCKPIT SHADE

\* Does NOT turn them OFF

### C-Zone™ Wireless Remote Control

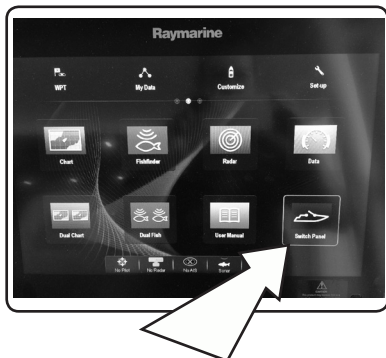
The C-Zone wireless remote control key fob provides the ability to wirelessly operate 4 (four) circuits from a distance of up to 250 FT. (80 m). To activate a selected circuit simply push the appropriate button.

### C-Zone Interfaces

#### Raymarine Interface

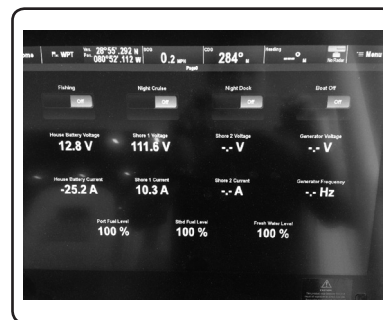
To access the C-Zone system from the Raymarine Navigation monitor:

By touching the “Switch Panel” icon, typically on the lower right of the screen, you will be able to scroll through a series of three (3)



screens which enable you to monitor and, in some cases, interface with various systems on your boat.

From this page you can monitor the voltage and amperage output of the batteries as well as the fuel and fresh water tank levels.



Scroll down to the next page and you can monitor and remotely switch lighting and various other components on your boat.



By scrolling down to the next page you can monitor and remotely switch the various pumps on the boat.

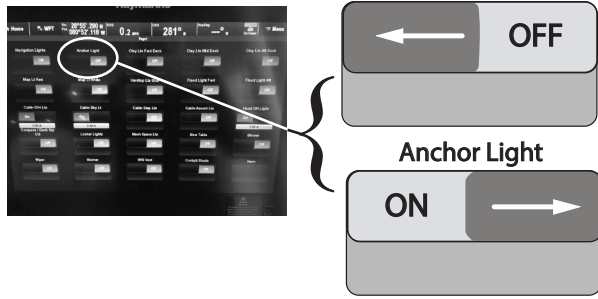


The various systems and components can be switched ON and/or OFF on the Raymarine interface by touching the selected component switch on the screen and dragging the icon to the right or left (See fig. 4.17.1).

### CAUTION

**DO NOT update software, especially iOS versions on either the Raymarine Navigation System, The Vessel View unit or your iPad without first contacting your dealer or Boston Whaler. To do so will negatively impact your ability to access C-Zone Digital Switching.**

Example of C-Zone Interface Switching  
Fig. 4.17.1

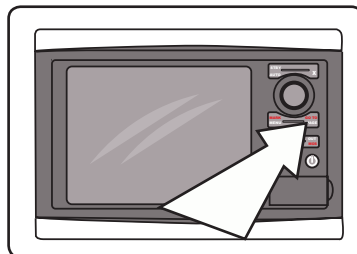


REFER TO THE MANUFACTURER'S MANUAL IN YOUR OWNER'S MANUAL PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

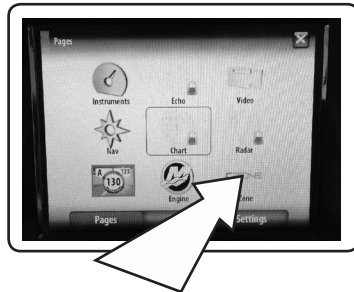
## Vessel View Interface

To access the C-Zone system from the Vessel View display:

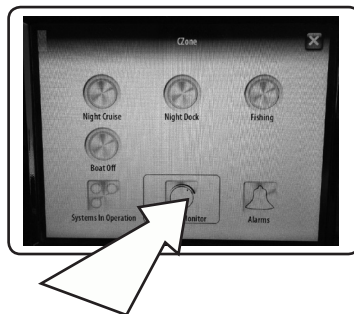
- Turn battery switches and ignition key ON.
- Press the "PAGE" button



- Touch the "C-Zone" icon on the lower right of the screen.

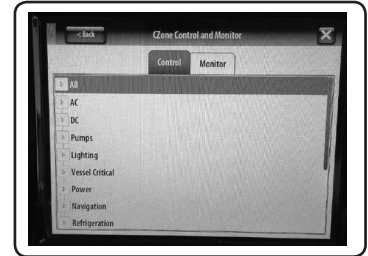


- Touch the "Control Monitor" icon on the lower center of the screen.

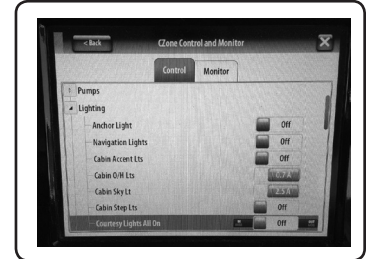


To interface with systems on your boat:

Select which system you would like to monitor by touching the appropriate box.



When the system is highlighted you are able to monitor and/or interface with the component. When "ON" the highlight will be green. The highlight will be red when "OFF".



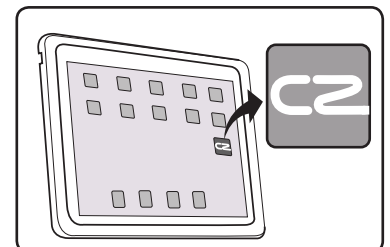
## CAUTION

**DO NOT update software, especially iOS versions on either the Raymarine Navigation System, The Vessel View unit or your iPad without first contacting your dealer or Boston Whaler. To do so will negatively impact your ability to access C-Zone Digital Switching.**

## iPad Interface

To access the C-Zone system from your iPad:

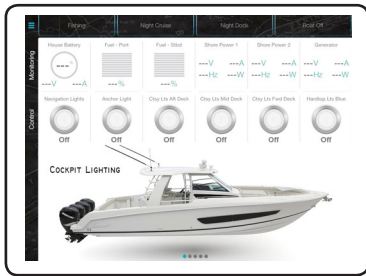
- Turn iPad ON
- Confirm that the iPad is connected to the boat's WiFi network by verifying that the WiFi symbol "📶" is displayed on the top left.
- Refer to the iPad manufacturer's manual for complete instructions on how to connect to a WiFi network.
- Select the C-Zone icon on the iPad.



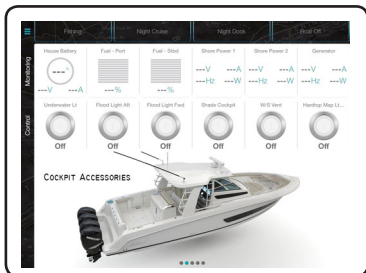
## Section 4 • Electrical System

By scrolling thru the various views the operator can control components and monitor systems thru out the boat directly from the iPad.

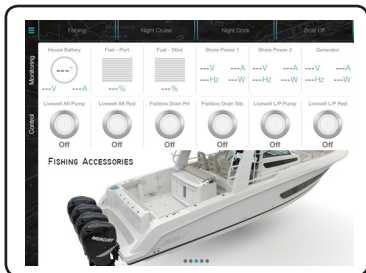
From the home page the operator can operate the navigation lights as well as the cockpit lighting.



Scroll to the next page to conveniently operate the underwater lights, flood lights, cockpit shade, windshield vent, and hardtop map light.



From the next page, operation of the livewell pumps and fishbox drain pumps can be controlled.



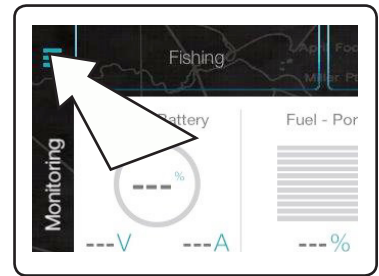
Next page gives the operator the ability to turn ON and OFF the bilge pumps, fresh water pump, washdown pump and discharge pump.



Cabin lighting is controlled from the final page in the system.



If at any time while scrolling through the pages you wish to return to the home page, which provides access to a list of all controls, simply tap the “MENU” button at the top left of the page.



### NOTICE

**After long periods of inactivity your iPad may not function correctly. If this occurs, simply close the C-Zone App and reselect the icon to restart.**

### MODES

Modes are the direct control of operational groups of circuits, including lighting, electronics and pumps.

There have been four (4) unique single switch modes at the top of the iPad home page which have been created for the boat operator by Boston Whaler. Pages 4-20 thru 4-22 illustrate various systems and components which are activated with a single switch. “Fishing”, “Night Cruise”, “Night Dock”, and “Boat OFF” modes can be accessed from Vessel View, Raymarine or your iPad.

### NOTICE

**Single switch “MODES” can be created and/or changed by Boston Whaler or a C-Zone dealer.**

**Contact customer service for details.**

### iPad Inductive Charger

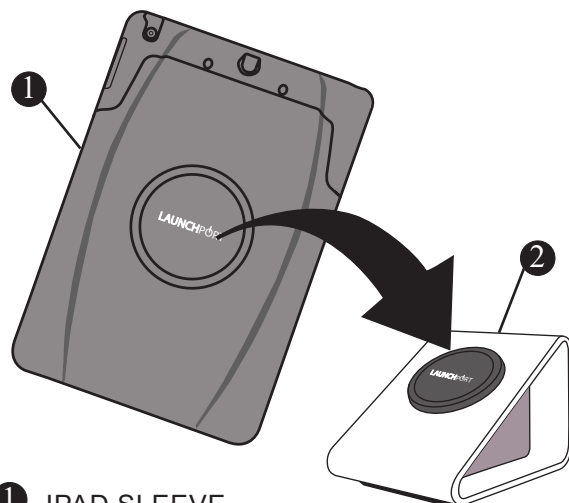
Included with your iPad is a charging system from LaunchPort. The system consists of a protective “sleeve” which fits onto your iPad and a charging base station.

By placing the iPad into the sleeve and mounting it on the base station charging will commence immediately via LaunchPort inductive charging.

The iPad is held onto the base unit with magnets in the sleeve and the charging station circuit is active continuously so that any time you place the iPad on the base with the sleeve it will be charged.



iPad Inductive Charging System  
Fig. 4.19.1



- ① IPAD SLEEVE
- ② CHARGING BASE UNIT

The base unit holds your iPad at a convenient position for usage. In addition the iPad can be rotated to landscape or portrait position while on the base.

## CAUTION

**DO NOT update software, especially iOS versions on either the Raymarine Navigation System, The Vessel View unit or your iPad without first contacting your dealer or Boston Whaler. To do so will negatively impact your ability to access C-Zone Digital Switching.**

## Theft deterrent System w/Remote Connectivity (Option)

The Theft Deterrent System (TDS) control module on your boat is mounted on the back of the electronics box in the hardtop above the control station.

The Theft Deterrent System is a GPS tracking system with satellite communication.

The system uses GPS coordinates to monitor the vessel's location. When the vessel crosses the security fence boundary, the satellite network will send an alert e-mail or text message to the addresses designated by the vessel owner.

In addition to continuously monitoring the location of the vessel, the system provides the owner the opportunity to interface with a variety of systems on the boat remotely through a secure website using a computer or any device that can connect to the internet. <http://www.whalerwatch.net>.

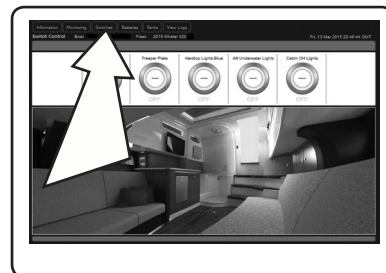
## C-Zone™ Remote Connectivity

Go to [www.whalerwatch.net](http://www.whalerwatch.net). Click on the button labeled Switches at the top of the page.

## Switches

This page enables you to remotely turn ON and OFF various devices on your vessel. Simply click on the “switch” of the desired device you

want to turn on. The switch will change to WAIT and then to ON as the signal is received back from the vessel that the device is now functioning.

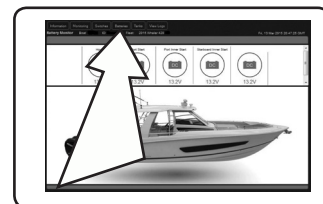


## Examples

### Batteries

Click on the button labeled Batteries.

This page will give you the state of all of your vessels batteries.



### Tanks

Click on the button labeled Tanks.

This page will give you the current level of all of your vessels onboard tanks. It will show you how much fuel is in both tanks, how much fresh water you have onboard and also the current level of the waste tank.





### NOTICE

Remote switching will not function unless the breakers on the MDP panel on your boat for the various systems are switch ON.

### NOTICE

Ensure that remote switches for any system activated are OFF following system use. Failure to do so will drain the boat batteries.

### ! CAUTION

**DO NOT** update software, especially iOS versions on either the Raymarine Navigation System, The Vessel View unit or your iPad without first contacting your dealer or Boston Whaler. To do so will negatively impact your ability to access C-Zone Digital Switching.

REFER TO THE WHALER THEFT DETERRENT MANUAL IN YOUR OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY.

### Anti-Theft Security Key

- Insert the fob into the docking station.
- Switch ON battery for each engine.
- Turn ignition key to the ON position.

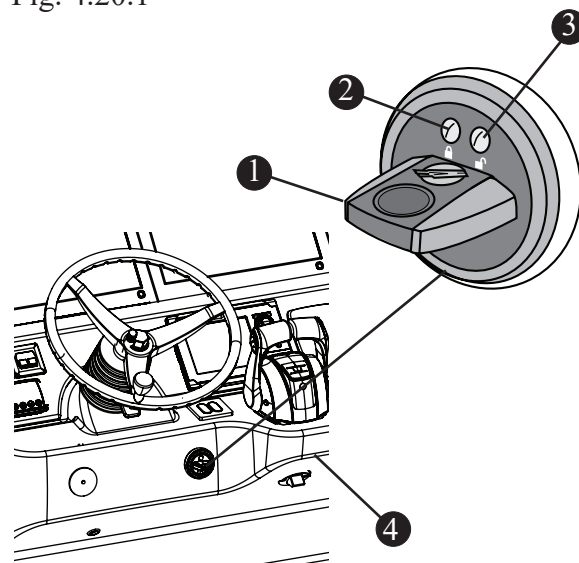
The red light will come on for a moment followed by the green light. The green light indicates the system is now unlocked and the engines are fully functional. You may now start the engines using normal procedure (See page 3-9).

- After boating, turn engine key off and remove the fob from the docking station.

### NOTICE

If the fob is missing the engines can still be started. However, engine power will be limited to low engine RPM.

TDS Docking Station and Key Fob  
Fig. 4.20.1



- ① FOB
- ② RED LIGHT
- ③ GREEN LIGHT
- ④ CONSOLE

### NOTICE

If for some reason the red light should turn ON while boating, **DO NOT** key off the engines until you return to port. Keying off the engines will limit engine power to a low engine RPM. Have the engine and system checked by your dealer before the next use.

### NOTICE

It is recommended that the fob remains in the docking station while boating.

However, once the engines are started the fob can be removed from the docking station without affecting engine performance.

Digital Switching - C-Zone™ Modes

C-Zone Mode  
Fig. 4.21.1

C-Zone Modes

Fishing

Night Cruise

Night Dock

Boat Off

FISHING	
Underwater Lights	ON
Leaning Post Courtesy lights	ON
Aft Livewell Pump	ON
Aft Livewell Light	ON
Leaning Post Livewell (if equip)	ON
Leaning Post Livewell Lt (if equip)	ON
Deck Steps Lts/Compass Lt	ON
Courtesy Lights AFT	ON
Washdown Pump	ON
Fresh Water Pump	ON

FISHING	
Fishbox Macerator Pump - Port	OFF
Fishbox Macerator Pump - STBD	OFF

## Digital Switching - C-Zone™ Modes (Cont'd)

C-Zone Mode  
Fig. 4.22.1

### C-Zone Modes

**Fishing**

**Night Cruise**

**Night Dock**

**Boat Off**

#### NIGHT CRUISE

NAV Lights	ON
Steaming Anchor Light	ON
Stern Light	ON
Deep Step Lts/Compass Lt	ON
Cabin Overhead Lts	ON
Cabin Accent Lts	ON
Cabin Step Accent Lts	ON
Cockpit Courtesy Lts Aft	ON
Fresh Water Pump	ON
Leaning Post L/W Lt Red	ON
Mech Space Lts	ON
Washdown Pump	ON
Locker Lts	ON
Leaning Post Courtesy Lt	ON
Vacuflush Pump	ON

#### NIGHT CRUISE

Hardtop Accent Blue Lts	OFF
Hardtop Map Lt	OFF
Locker Lts	OFF
Mechanical Space Lights	OFF
Aft L/W Lt Red	OFF
Cabin Accent Lts	OFF
Cabin Overhead Lt	OFF
Cabin Sky Lt	OFF
Courtesy Lts Fwd & Mid	OFF
Flood Lts Fwd & Aft	OFF
HT Accent Lts	OFF
HT Map Lts	OFF
Underwater Lts	OFF

**Digital Switching - C-Zone™ Modes (Cont'd)**

C-Zone Mode

Fig. 4.23.1

**C-Zone Modes****Fishing****Night Cruise****Night Dock****Boat Off****NIGHT DOCK**

Cabin Sky Lights	ON
Cabin Overhead Lights	ON
Cabin Accent Lights	ON
Cabin Step Lights	ON
Courtesy Aft/Mid/Fwd Lts	ON
Flood Lights Fwd & Aft	ON
Underwater Lights	ON
Lts Leaning Post & Aft	ON
Leaning Post Courtesy lights	ON
Fresh Water Pump	ON
Washdown Pump	ON
Vacuflush Pump	ON
Mech Space Lts	ON
Locker Lts	ON
HT Accent Lts	ON
Deck Step/Cmps Lts	ON

**NIGHT DOCK**

Nav Lts	OFF
Anchor Lt	OFF
Steaming Anchor Lt	OFF
Stern Lt	OFF
Fishbox Pump - Port	OFF
Fishbox Pump - Starboard	OFF
Waste Discharge Pump	OFF
Aft Livewell Lt	OFF
Aft Livewell Pump	OFF
Hardtop Map Lts	OFF
Fwd Storage Locker Lts	OFF
Mechanical Space Lights	OFF

## Digital Switching - C-Zone Modes (Cont'd)

C-Zone Mode

Fig. 4.24.1

### C-Zone™ Modes

Fishing

Night Cruise

Night Dock

Boat Off

BOAT OFF	
Nav Lts	OFF
Anchor Lt	OFF
Steaming Anchor Lt	OFF
Stern Lt	OFF
Deck Step Lts/Compass Lt	OFF
Head Overhead Light	OFF
Flood Lights - Fwd	OFF
Hardtop Map Lts Red	OFF
Underwater Lts	OFF
Locker Lts	OFF
Mechanical Space Lts	OFF
Bilge Pump - FWD (Auto still ON)	OFF
Bilge Pump - AFT (Auto still ON)	OFF
Bilge Pump - AUX (Auto still ON)	OFF
Foredeck Storage Locker Lts	OFF
Aft Livewell Lt	OFF
Aft Livewell Pump	OFF
Leaning Post Livewell Lt	OFF
Leaning Post Livewell Pump	OFF

BOAT OFF (Continued)	
Fishbox Pump - Port	OFF
Fishbox Pump - Starboard	OFF
Fresh Water Pump	OFF
Washdown Pump	OFF
Vacuflush Pump	OFF
Waste Discharge Pump	OFF
Blower	OFF
Wiper	OFF
Leaning Post Courtesy	OFF

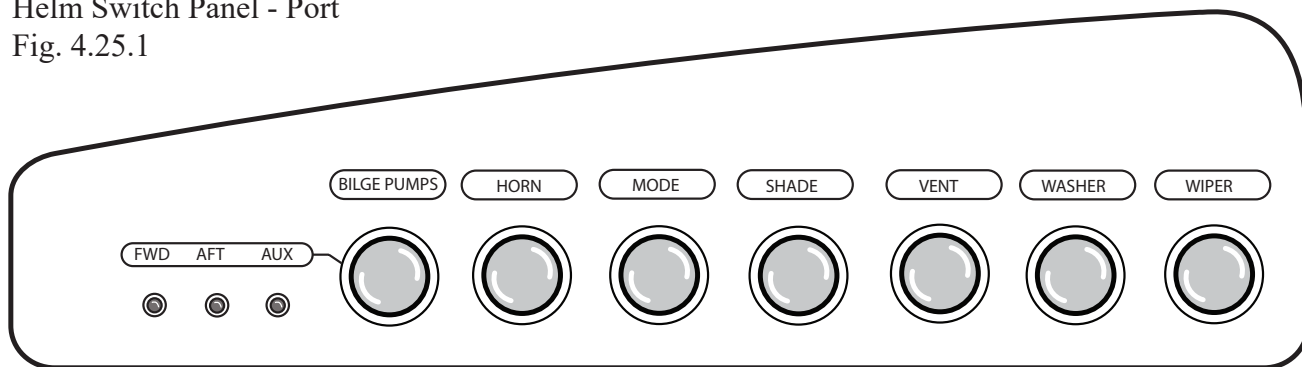
BOAT OFF (Continued) (ON for 2 minutes then OFF)	
Cabin Overhead Lts	ON
Cabin Sky Lts	ON
Cabin Accent Lts	ON
Cabin Step Accent Lts	ON
Courtesy Lights Aft	ON
Courtesy Lights Mid	ON
Courtesy Lights Forward	ON
Hardtop Accent Blue Lts	ON
Flood Lights - Cockpit	ON
Shade In	ON
Hardtop Map Lts Shite	ON
Head Overhead Lts	ON



## Digital Switching

Helm Switch Panel - Port

Fig. 4.25.1



NOTE: Switches glow blue around perimeter when activated.

### BILGE PUMPS

- Turns ON the FWD and AFT bilge pumps. They will run until no water is detected.
- The corresponding LED will light indicating the pump is running. If the LED lights and no switch has been activated, it is an indication that the pump has come ON by the automatic float switch.

### HORN

- Sounds horn when pressed

### MODE

- Cycles through Night Cruise and Night Dock.

### SHADE

- Extends and retracts cockpit shade. “Garage Door Logic”. First press results in OUT. Second press STOP’s it if full extension is not desired. Otherwise it will stop in full extension. The LED on switch will remain illuminated for a little while after full extension. Press again and the shade will retract all the way in. It can be stopped at any time with an additional press. It will retract all the way in and stop by itself. Again, the LED on the switch will remain illuminated for a little while after retraction. This is normal.

### WINDSHIELD VENT

- Opens and closes the windshield vent. “Garage Door Logic”. First press results in OPEN. It will open all the way or can be stopped at any point. Second press retracts the vent and closes it tight.

### WASHER

- Operates the windshield washer and wiper. Wiper and washer both operate as long as switch is pressed. Wiper may run a little longer to park on one side.

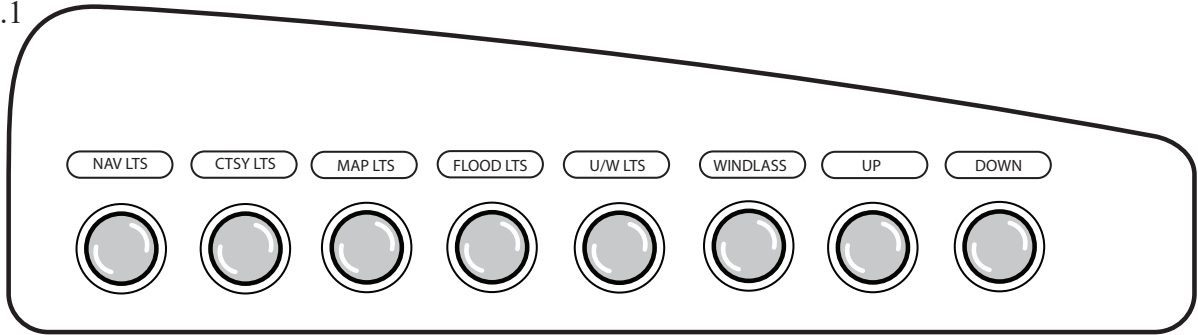
### WIPER

- Operates the windshield wiper. Toggles ON and OFF.

### Digital Switching (Cont'd)

Helm Switch Panel - Starboard

Fig. 4.26.1



#### NAVIGATION LIGHTS

NOTE: Switches glow blue around perimeter when activated.

- Operates navigation lights. First press turns ON running navigation lights. (NOTE: blue LED rings on switches dim for navigation). Second press turns ON anchor light only (blue rings on switches return to normal illumination). Third press turns anchor light OFF.
- When Nav or Anchor lights are on, the small LED step lights are also illuminated.

#### COURTESY LIGHTS

- Operates courtesy lights throughout the boat. First press, all courtesy lights, second press, Flood, locker, and fwd courtesy lights turn OFF, third press, all courtesy lights turn OFF.

#### HARDTOP MAP LIGHT

- Operates the hardtop map light above the helm. First press turns on the red LED light second press turns ON the white LED light, third press turns light OFF. Repeats.

#### FLOOD LIGHTS

- Operates the Hardtop Flood Lights. First press turns ON the Aft Cockpit Flood Lights, second press turns ON the Aft and Fore Deck Flood Lights, third press turns ON the Fore Deck Flood Lights only, fourth press turns them OFF. Repeats.

#### UNDERWATER LIGHTS

- Operates the underwater lights.



#### CAUTION

Underwater lights are not to be used when navigational lights are in use as this may interfere with the effectiveness of the navigational lights.

#### WINDLASS ON/OFF

- Enables operation of the windlass. First press provides power to windlass switches. Second press turns the windlass power OFF. NOTE: This also provides power to the remote hand held control in anchor locker.

#### WINDLASS UP

- Operates the windlass. The windlass will retrieve the anchor after being deployed. The windlass operates only while the switch is pressed.

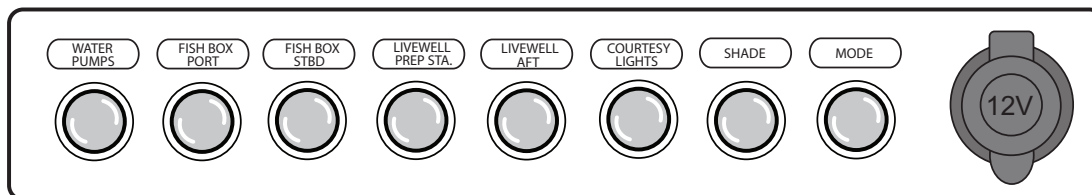
#### WINDLASS DOWN

- Operates the windlass. The windlass will deploy the anchor. The windlass operates only while the switch is pressed.

## Digital Switching (Cont'd)

### Prep Station Switch Panel

Fig. 4.27.1



#### WATER PUMPS

NOTE: Switches glow blue around perimeter when activated.

- Operates the FRESH WATER and WASHDOWN PUMPS. First press turns ON both pumps. Second press turns OFF both pumps. Repeats.
- If only one pump is required to be on, you can turn OFF the other pump via the iPad, Raymarine or vessel view displays.

#### FISHBOX - PORT

- Operates the macerator pump out for the port fish box. First press turns the pump ON. Second press turns the pump OFF. Repeats.

#### FISHBOX - STARBOARD

- Operates the macerator pump out for the starboard fish box. First press turns the pump ON, Second press turns the pump OFF. Repeats

#### L/P LIVEWELL

- Operates the Leaning Post livewell. First press turns ON the livewell pump and the RED LED light in the livewell. Second press turns both OFF. Repeats.

#### AFT LIVEWELL

- Operates the Aft Port livewell. First press turns ON the livewell pump and the RED LED light in the livewell. Second press turns both OFF. Repeats.

#### COURTESY LIGHTS

- Operates cockpit lighting. First press turns ON the Leaning Post courtesy lights. Second press turns ON aft courtesy lights, third press turns on aft flood lights and mechanical space lights, and fourth press turns it all OFF.

#### SHADE

- Extends and retracts cockpit shade. “Garage Door Logic”. First press results in OUT. Second press STOPS it if full extension is not desired. Otherwise it will stop at full extension. The LED on switch will remain illuminated for a little while after full extension. Press again and the shade will retract all the way in. It can be stopped at any time with an additional press. It will retract all the way in and stop by itself. Again, the LED on the switch will remain illuminated for a little while after retraction. This is normal

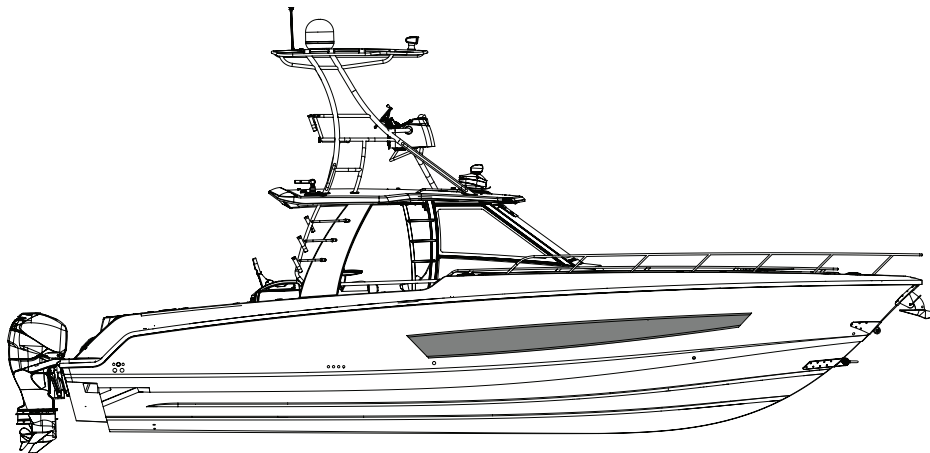
#### MODE

- Turns on Fish Mode.

### Digital Switching (Cont'd)

Upper Control Station Switch Panel (Option)

Fig. 4.28.1



NOTE: Switches glow blue around perimeter when activated.

#### HORN

- Sounds horn when pressed

#### NAVIGATION LIGHTS

- Operates navigation lights. First press turns ON running navigation lights. (NOTE: blue LED ring on switches dim for navigation). Second press turns ON anchor light only (blue rings on switches return to normal illumination). Third press turns anchor light OFF.
- When navigation or anchor lights are on, the small LED step lights are also illuminated.

#### COURTESY LIGHTS

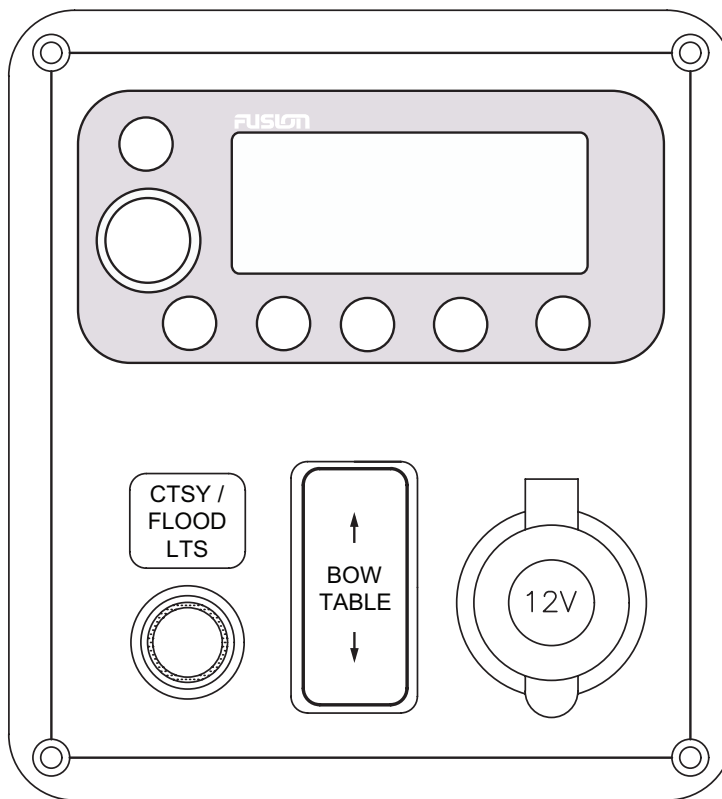
- Operates cockpit lighting. First press turns ON the AFT courtesy blue LED lights. Second press adds the AFT FLOOD lights. Third press turns lights OFF.

#### MODE

- First press turns ON deck courtesy lights (FWD, MID, AFT), flood lights (FWD, AFT), hardtop accent lights, and lower underwater lights. Second press turns OFF deck courtesy lights (FWD, MID, AFT), flood lights (FWD, AFT), hardtop accent lights, and lower underwater lights.

## Digital Switching (Cont'd)

Port Bow Switch Panel  
Fig. 4.29.1



**NOTE:** Switches glow blue around perimeter when activated.

### CTSY/FLOOD LTS

- Operates fore deck lighting. First press turns ON the Forward (FWD) courtesy Blue LED lights. Second press adds the Aft Flood lights. Third press turns lights OFF. Repeats.

### BOW TABLE

- Raises and lowers the bow table. “Garage Door Logic”. First press raises the table if down, second press will stop the table or it will stop by itself when all the way up. Third press will lower the table all the way down by itself but can be stopped with a fourth press.

**NOTE:** At times, after the power has been turn off on the boat, the table electronics do not know if the table is up or down. So it may take 3 presses before the table starts to operate. From then on the table will operate with a single press until the house battery switch is turned off again. This is normal operation.



### Rigging

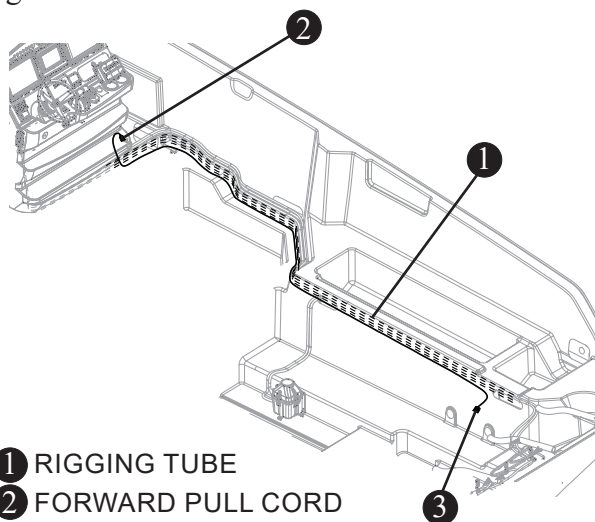
Your boat has a flexible conduit rigging tube, above the fuel tank and below the floor to allow the owner to run new wiring for electronics. There is a pull cord installed through the tube with the ends bundled and tied at either end of the tube. The ends are located in the aft bilge and inside the console where it exits the rigging boot.

There is also a cord located in the starboard frame of the hardtop which terminates in the console at one end and the electronics box at the other.

The optional upper station electrical wiring and hoses are routed through the port frame (Figure 4.24.3).

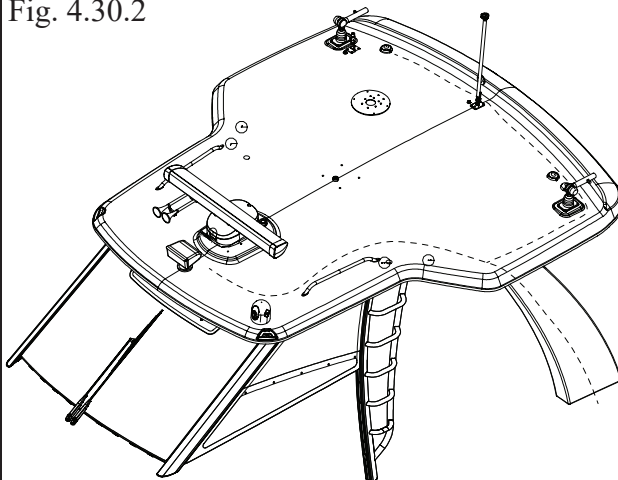
Tie another piece of nylon cord to the current accessory wiring being run and use that for later runs.

Rigging Tube/Pull  
Fig. 4.30.1

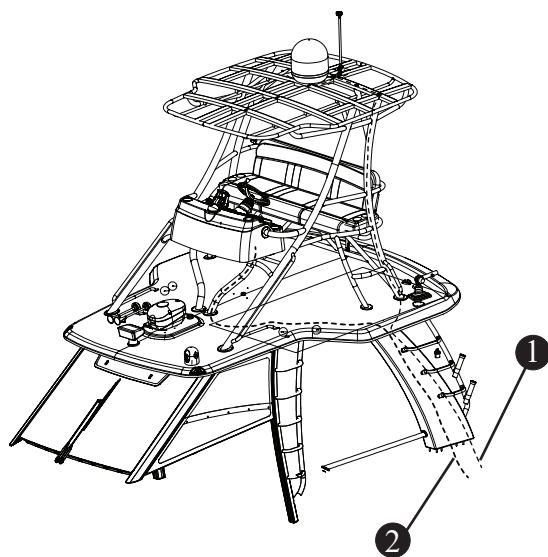


- ① RIGGING TUBE
- ② FORWARD PULL CORD
- ③ AFT PULL CORD

Hardtop Rigging  
Fig. 4.30.2



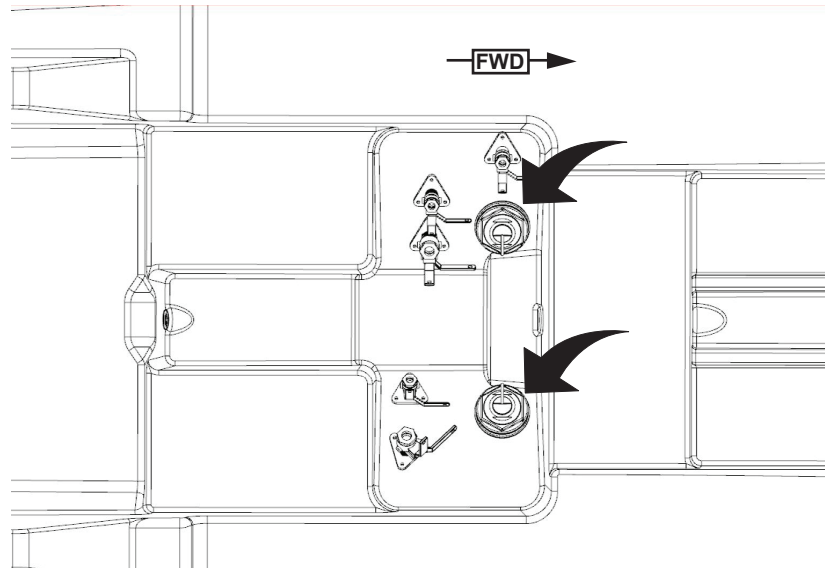
Optional Upper Station Rigging  
Fig. 4.30.3



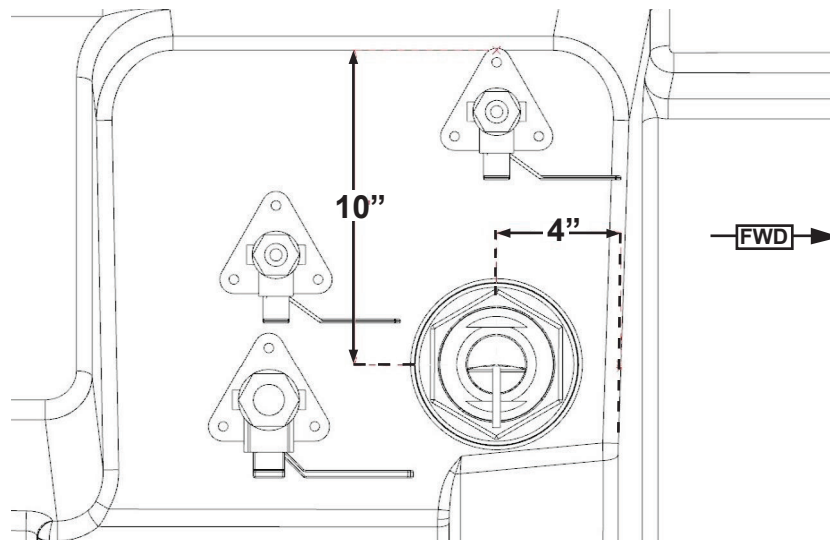
- ① ROUTING FOR ELECTRICAL WIRING
- ② ROUTING FOR STEERING HOSES AND ELECTRICAL WIRING (P&S)

## Transducer Location Diagram

Transducer Locations  
Fig. 4.31.1



Transducer Location Dimensions  
Fig. 4.31.2



## Section 4 • Electrical System

### Electrical Schematics

The following pages contain schematics pertaining to the electrical system in your boat. These images were generated by technicians in the Boston Whaler Engineering Department and are for reference and to be used by service technicians.

Boston Whaler does not recommend that you attempt to work on the electrical system yourself. Instead, we suggest that you take your boat to an authorized Boston Whaler dealer for service.

Boston Whaler reserves the right to change or update

the electrical system on any model at any time without notice to the customer and is not obligated to make any updates to units built prior to the change.

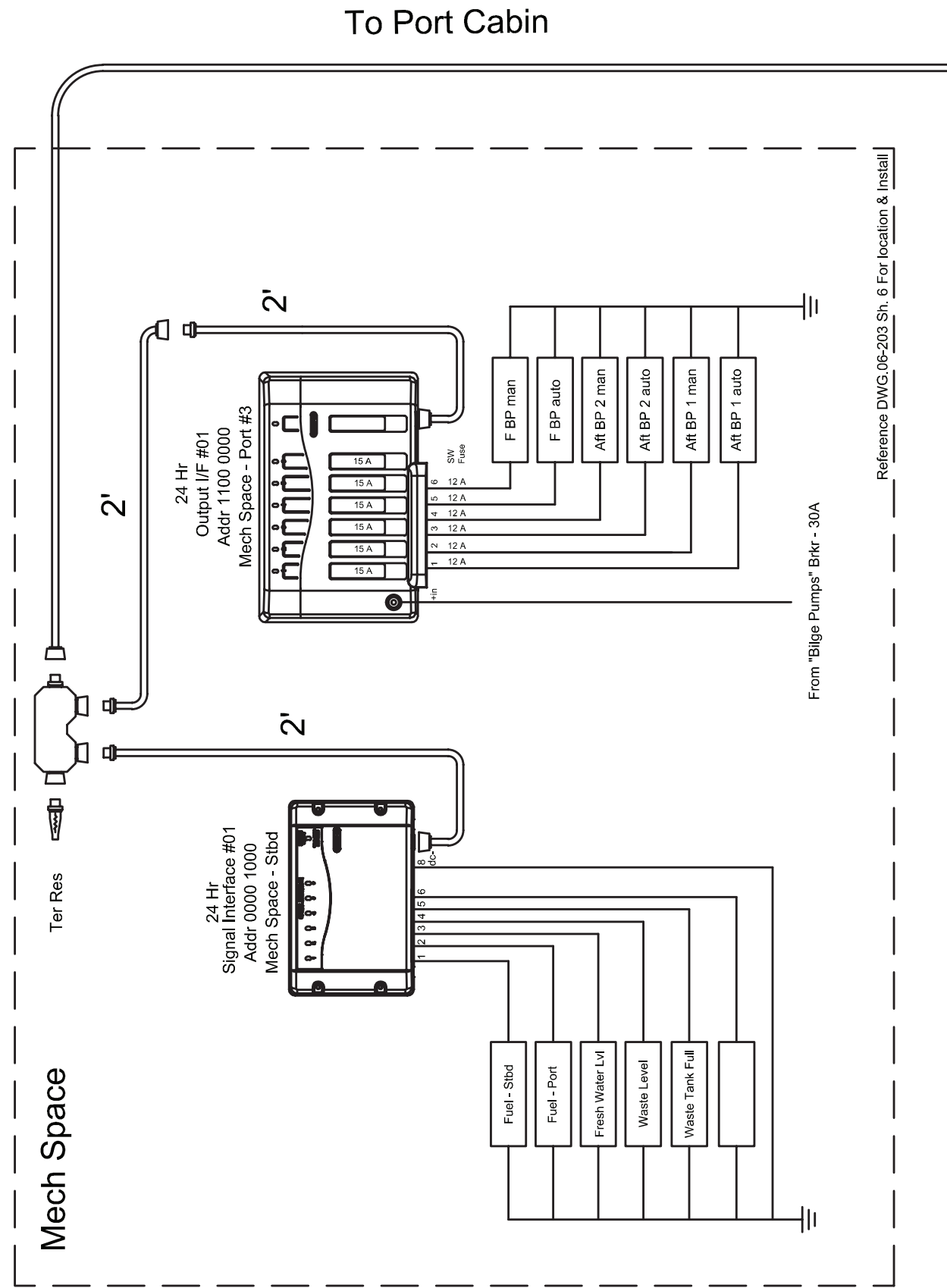
### Wiring Identification Chart

Boston Whaler adheres to electrical wiring requirements which meet all the ABYC-11 standards. The following chart outlines the gauge, color and function of the wiring used.

**Wire Color Chart for DC and Special Circuit**

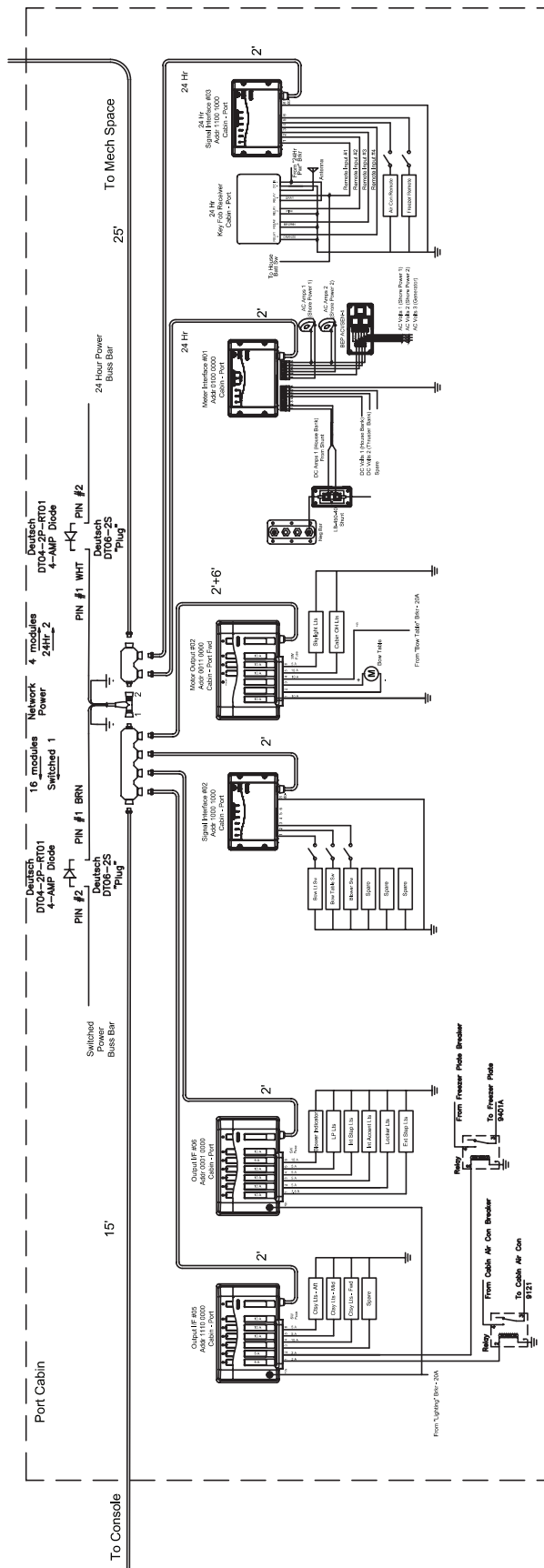
GAUGE	COLOR	FUNCTION	GAUGE	COLOR	FUNCTION
6 AWG	GRN	GROUNDING MAIN/TOWER & ALUMINUM FUEL TANKS	14 AWG	BRN/ORN	SUMP PUMP
8 AWG	GRN	GROUNDING	14 AWG	BRN/RED	BILGE PUMP (UNSWITCHED)
8GA AWG	ORN	STARBOARD 30 AMP RECEPTACLE	14 AWG	BRN/VIO	FORWARD FISHBOX PUMP
8 AWG	RED	MAIN FEEDS/PORT 30 AMP RECEPTACLE	14 AWG	BRN/WHT	MACERATOR
12 AWG	BRN/BLK	STARBOARD FISHBOX PUMP	14 AWG	BRN/YEL	LIVEWELL PUMP
12 AWG	BRN/VIO	FORWARD FISHBOX PUMP	14 AWG	GRY	RUNNING LIGHTS
12 AWG	BRN/YEL	LIVEWELL PUMP (HIGH CURRENT)	14 AWG	GRY/BLK	ACC 1
12 AWG	BRN/BLU	PORT FISHBOX PUMP	14 AWG	GRY/BLU	ACC 2
12 AWG	BLK	GROUND	14 AWG	GRY/GRN	ACC 3
12 AWG	RED	+12V MAIN	14 AWG	GRY/RED	AFT MAST/ACC 4
14 AWG	BLK	GROUND	14 AWG	GRY/WHT	ALL ROUND/FWD MAST LIGHT
14 AWG	BLK/YEL	STOP CIRCUIT	14 AWG	GRN	GROUNDING
14 AWG	BLK/WHT	GEN SHUTDOWN	14 AWG	ORN	REFRIGERATOR or CENTER WIPER
14 AWG	BLU	COMPASS	14 AWG	ORN/BLU	HORN
14 AWG	BLU/BLK	DOME LIGHT	14 AWG	ORN/BRN	STARBOARD WIPER PARK
14 AWG	BLU/GRN	SPREADER LIGHT	14 AWG	ORN/GRN	STARBOARD WIPER
14 AWG	BLU/ORN	LIVEWELL LIGHT	14 AWG	ORN/RED	PORT WIPER
14 AWG	BLU/RED	COURTESY LIGHTS	14 AWG	ORN/VIO	VACUUM PUMP
14 AWG	BLU/VIO	CABIN LIGHTS	14 AWG	ORN/WHT	CENTER WIPER
14 AWG	BRN	BILGE PUMP (SWITCHED)	14 AWG	PINK	FUEL SENDER
14 AWG	BRN/BLK	STARBOARD FISHBOX PUMP	14 AWG	RED	12V RECEPTACLE
14 AWG	BRN/BLU	PORT FISHBOX PUMP	14 AWG	VIO	IGNITION
14 AWG	BRN/GRY	RAW WATER	14 AWG	WHT	CO MONITOR/ELECTRIC TRIM TAB (SWITCHED)
14 AWG	BRN/GRN	FRESH WATER	14 AWG	YLW	BLOWER/STEREO MEMORY
			14 AWG	YLW/RED	START

C-Zone™ Network  
Fig. 4.33.1



C-Zone Network (Cont'd)  
Fig. 4.34.1

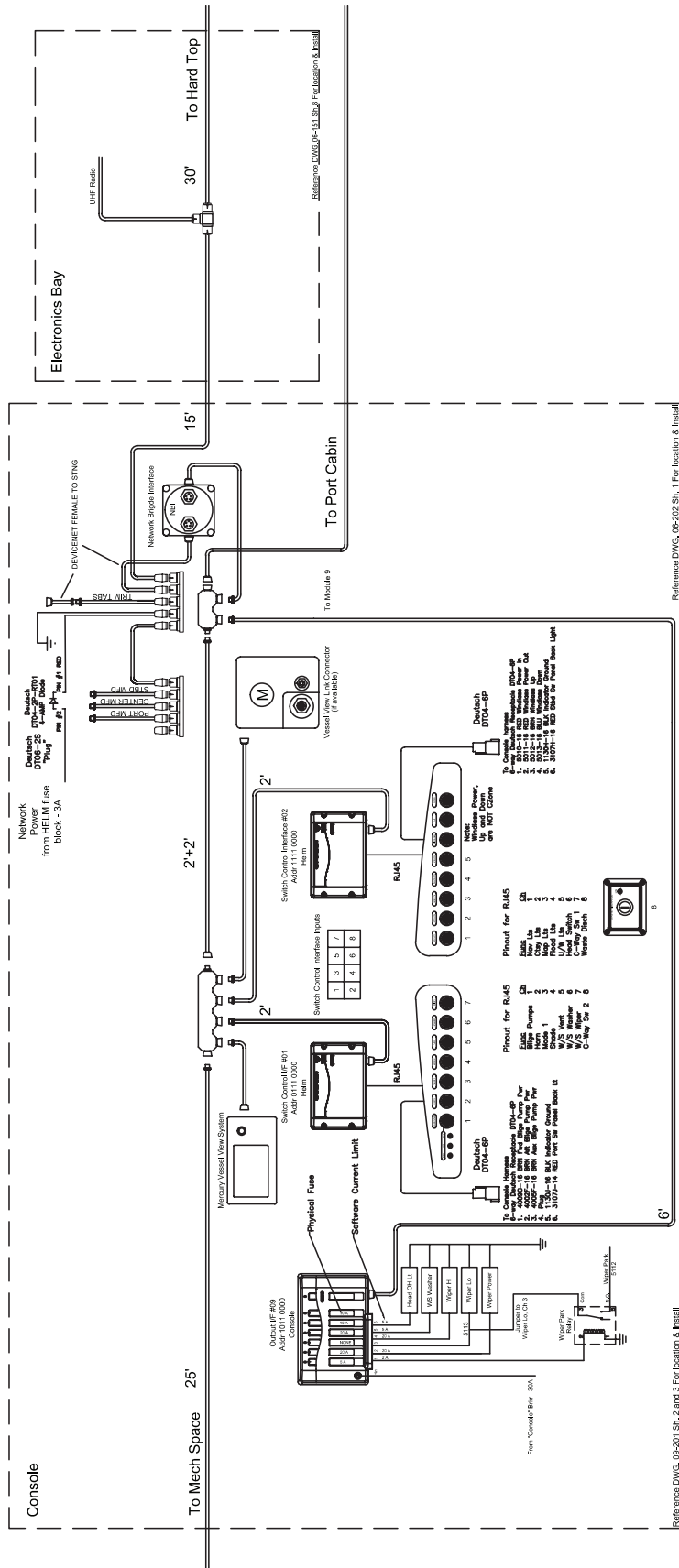
Maertron Power Tap  
(Yellow)  
Brn = Switched Network Power  
Blu = Ground  
Wht = 24 Hr Network Power  
Blk = Ground  
Gry = Shield (Gnd)



Reference DWG-08-151 Sh. 6 and 10 For Location & Insulation

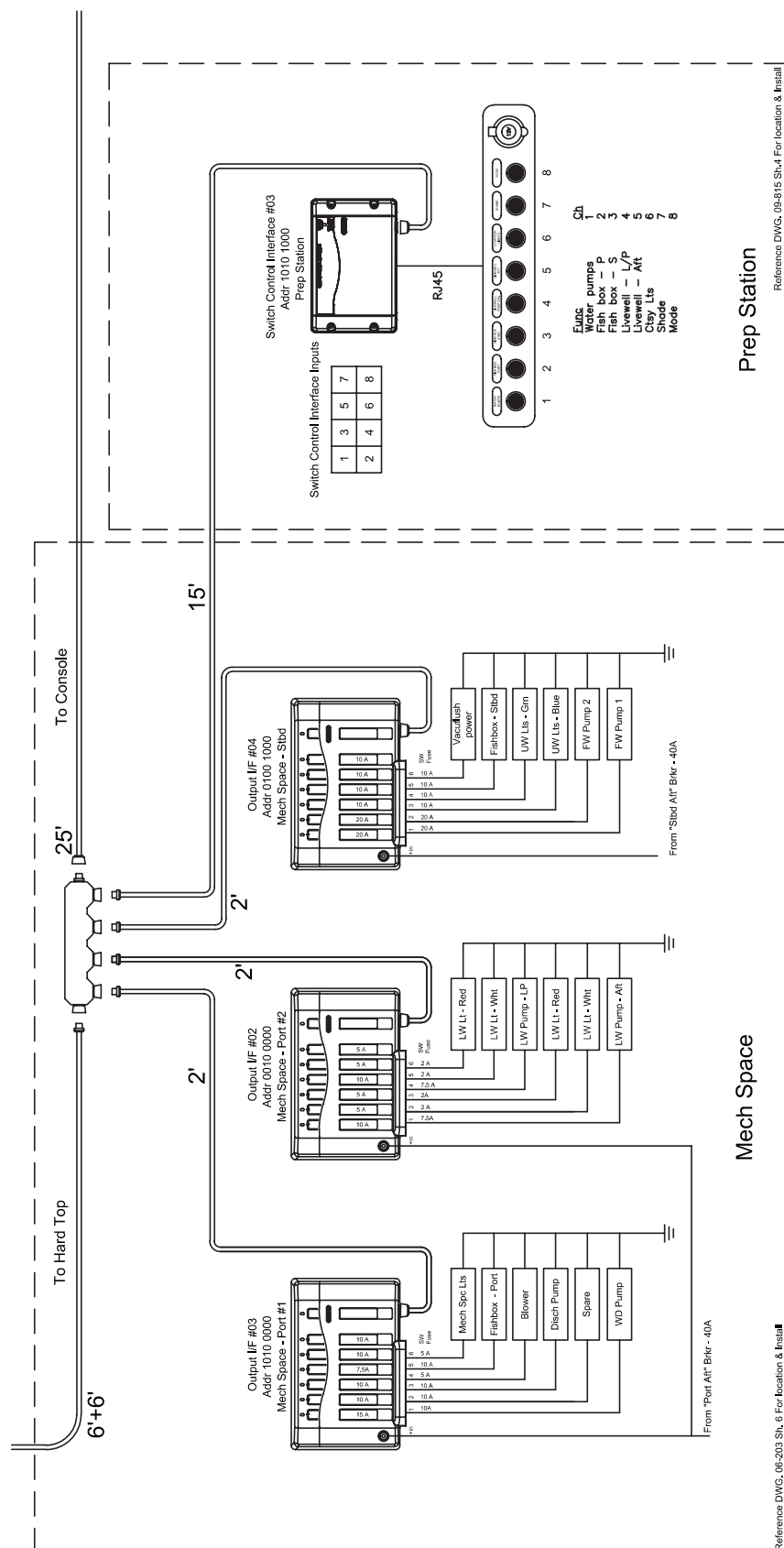


C-Zone Network (Cont'd)  
Fig. 4.35.1

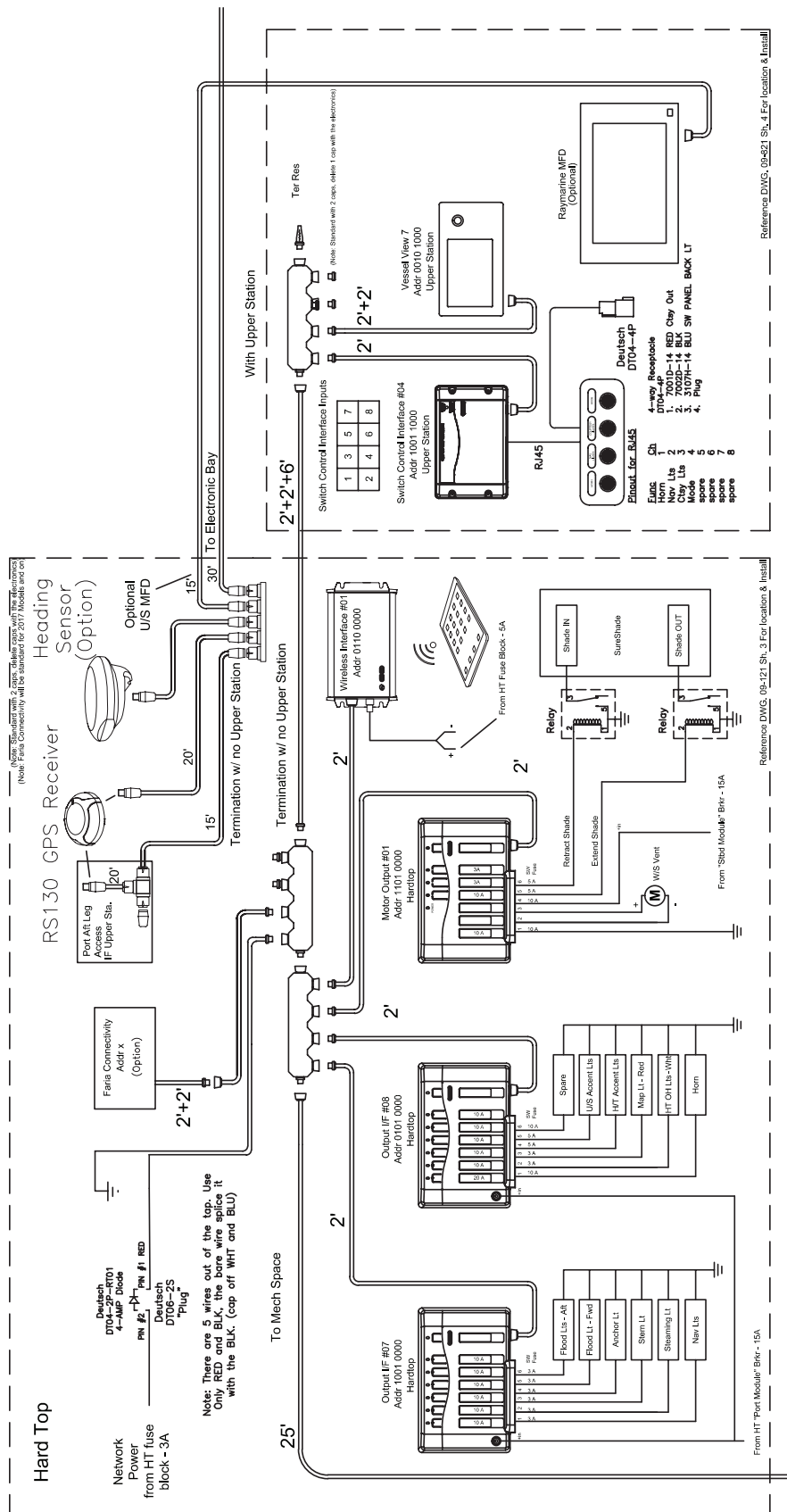


## Section 4 • Electrical System

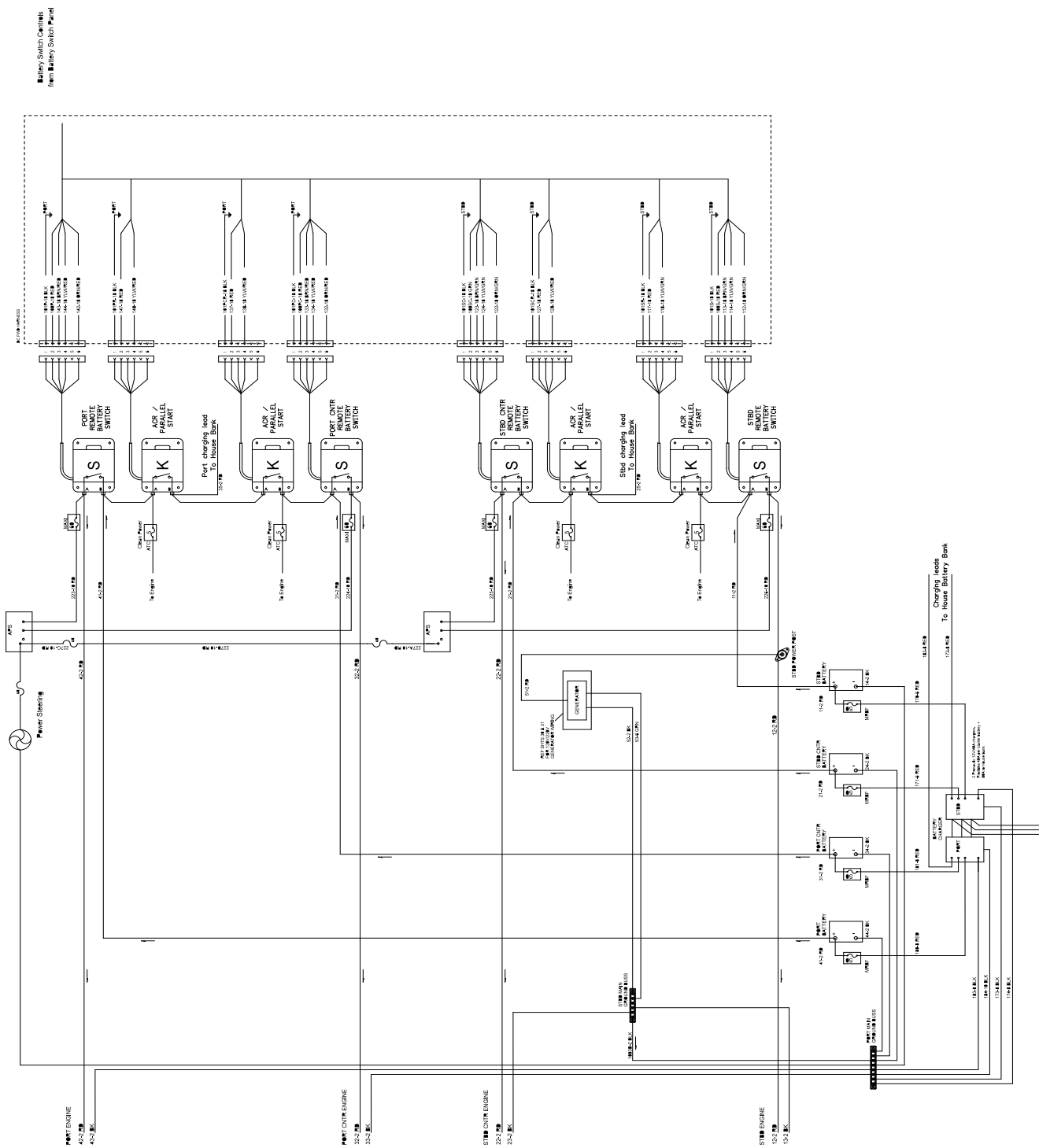
C-Zone Network (Cont'd)  
Fig. 4.36.1



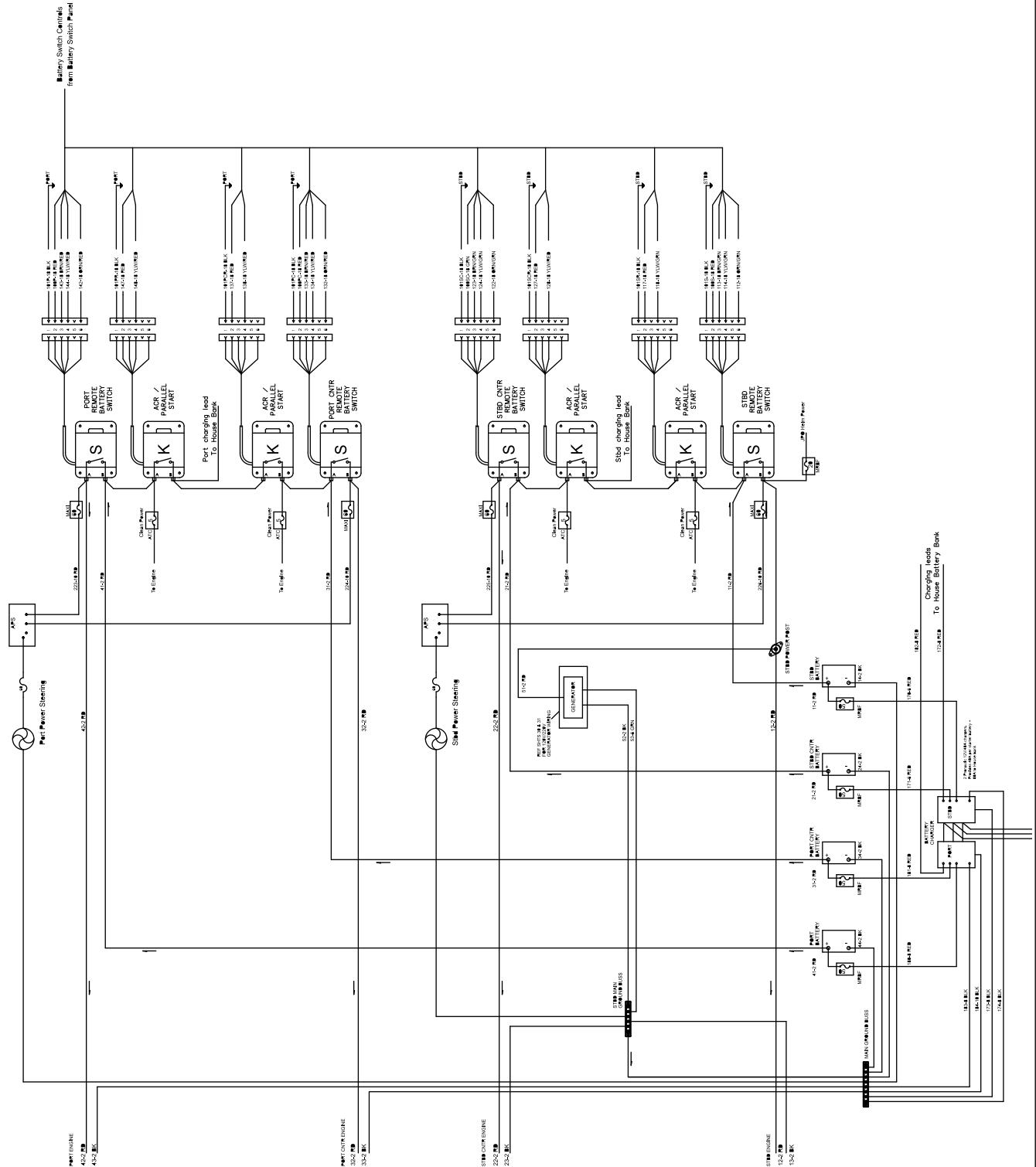
C-Zone Network (Cont'd)  
Fig. 4.37.1



Starter Battery Arrangement - Std Steering  
Fig. 4.38.1

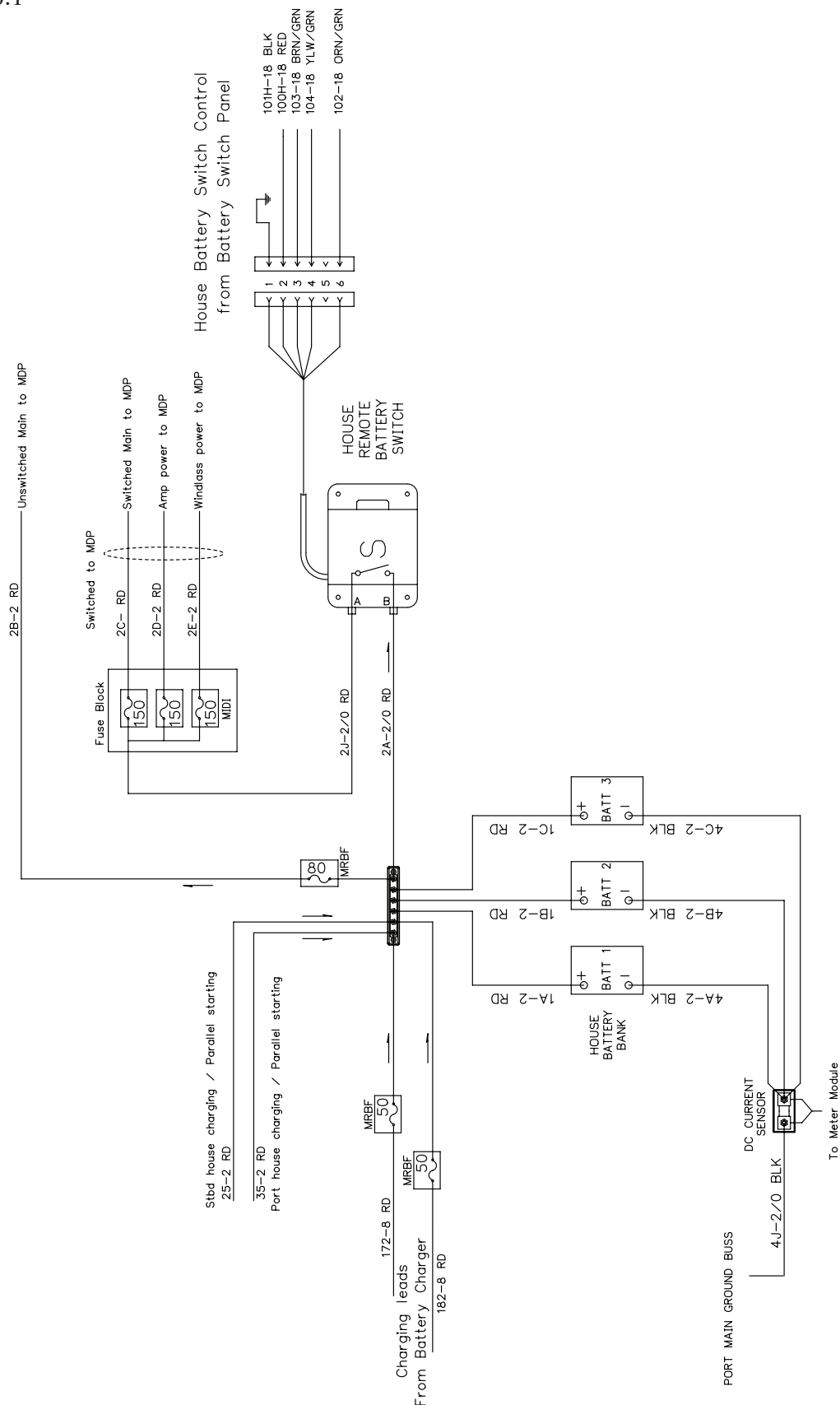


Starter Battery Arrangement Joystick Steering  
Fig. 4.39.1



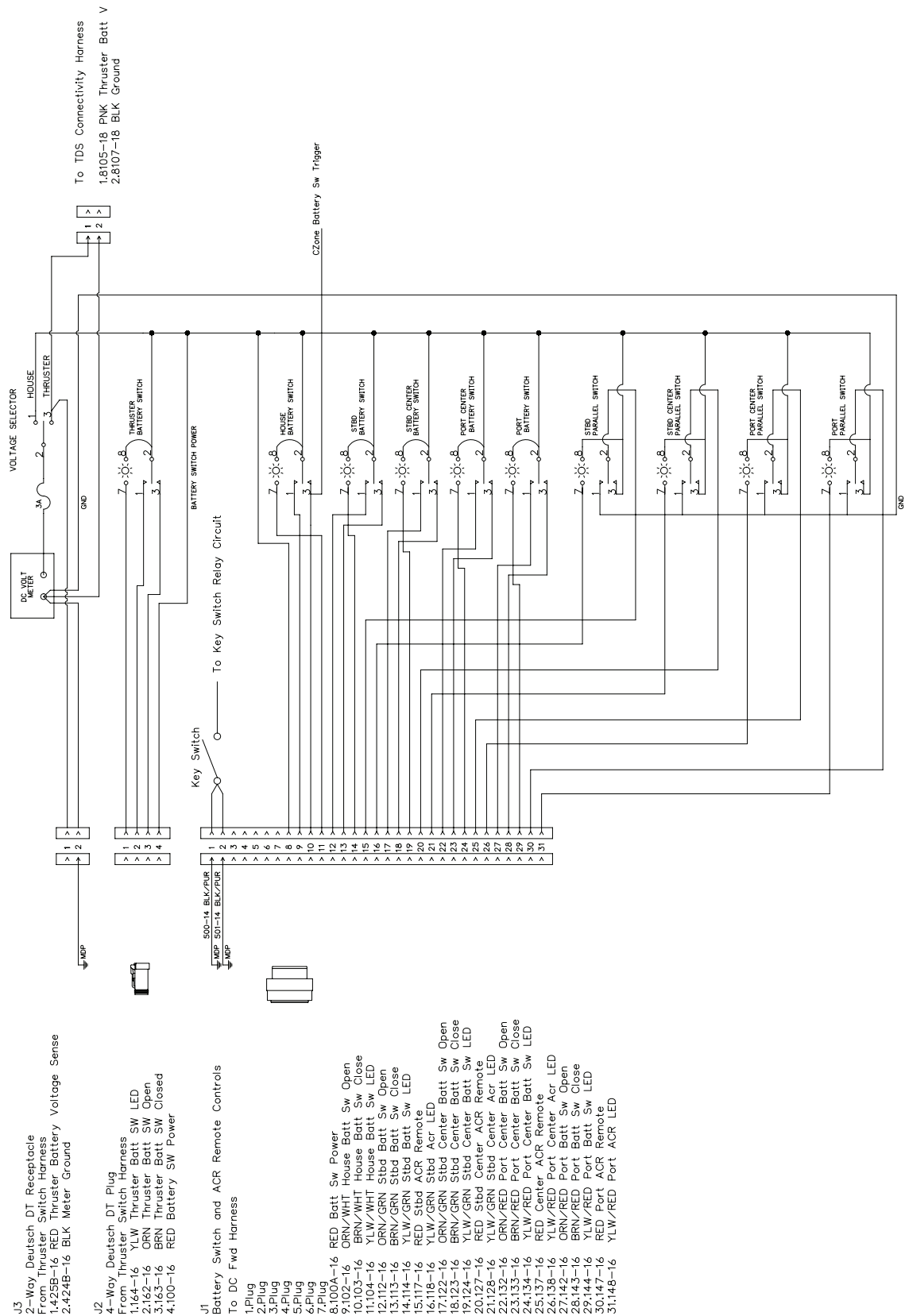
## Starter Battery Arrangement

Fig. 4.40.1

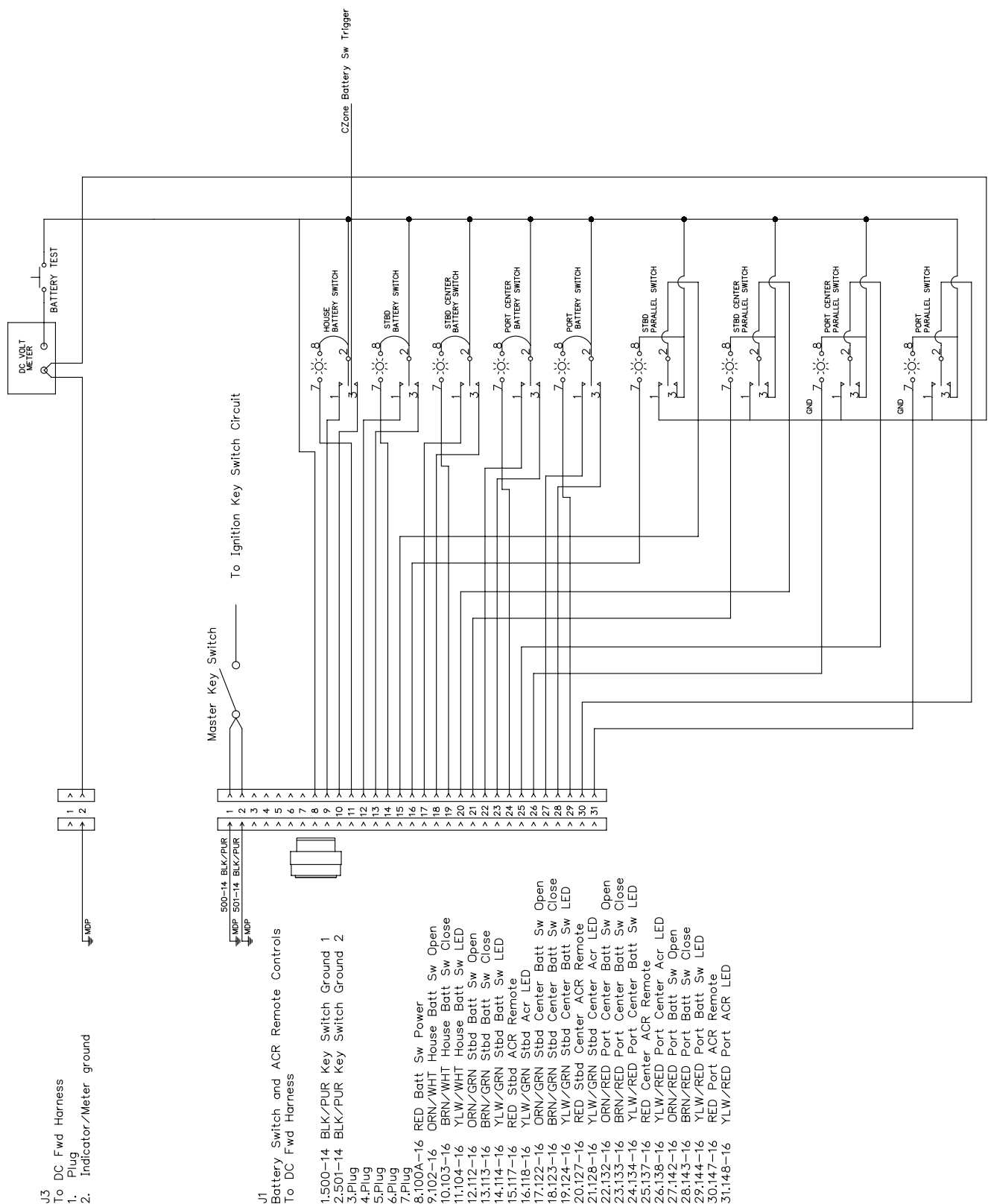




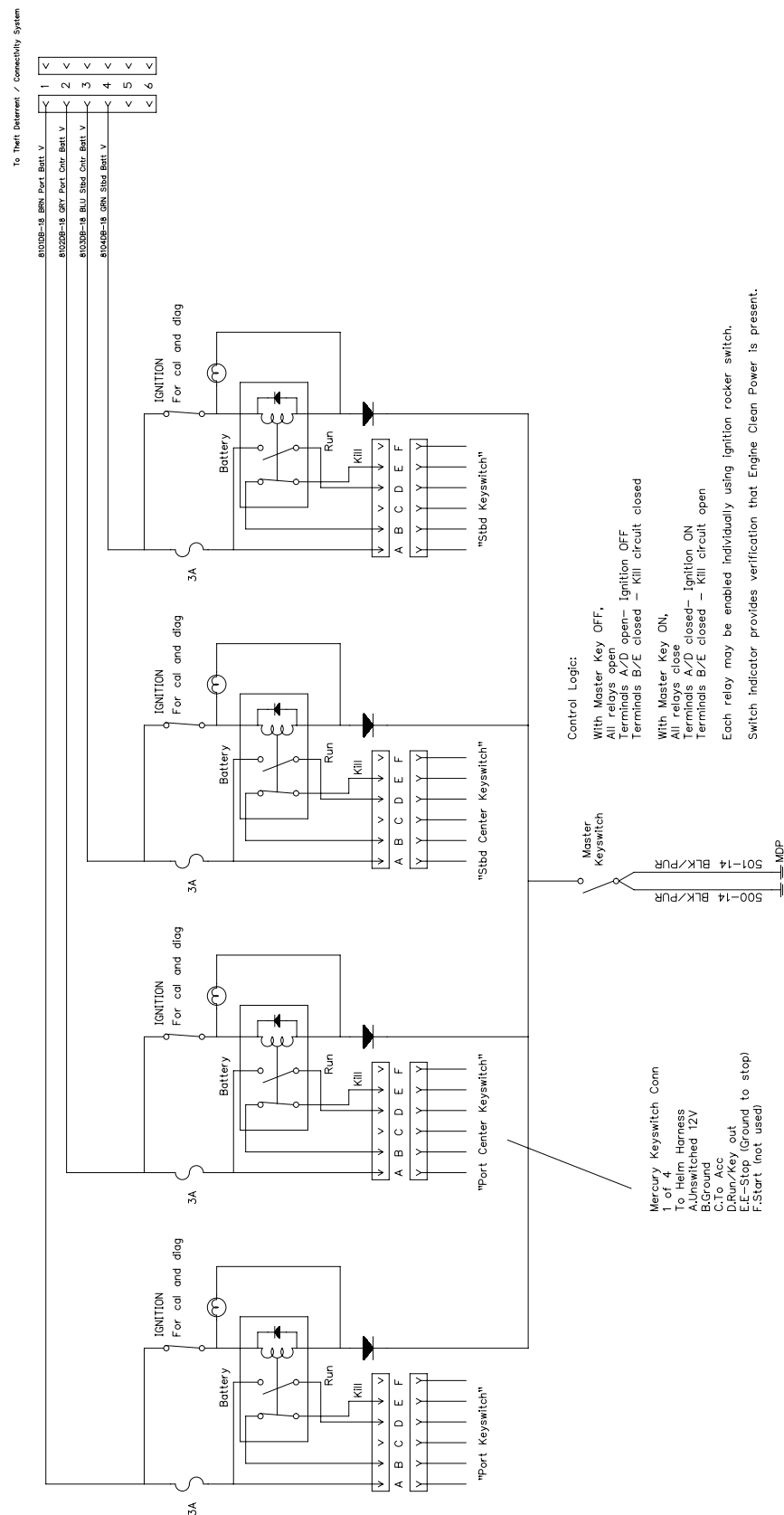
Battery Switch Control - Standard Steering  
Fig. 4.41.1



Battery Switch Control - Joystick Steering  
Fig. 4.42.1

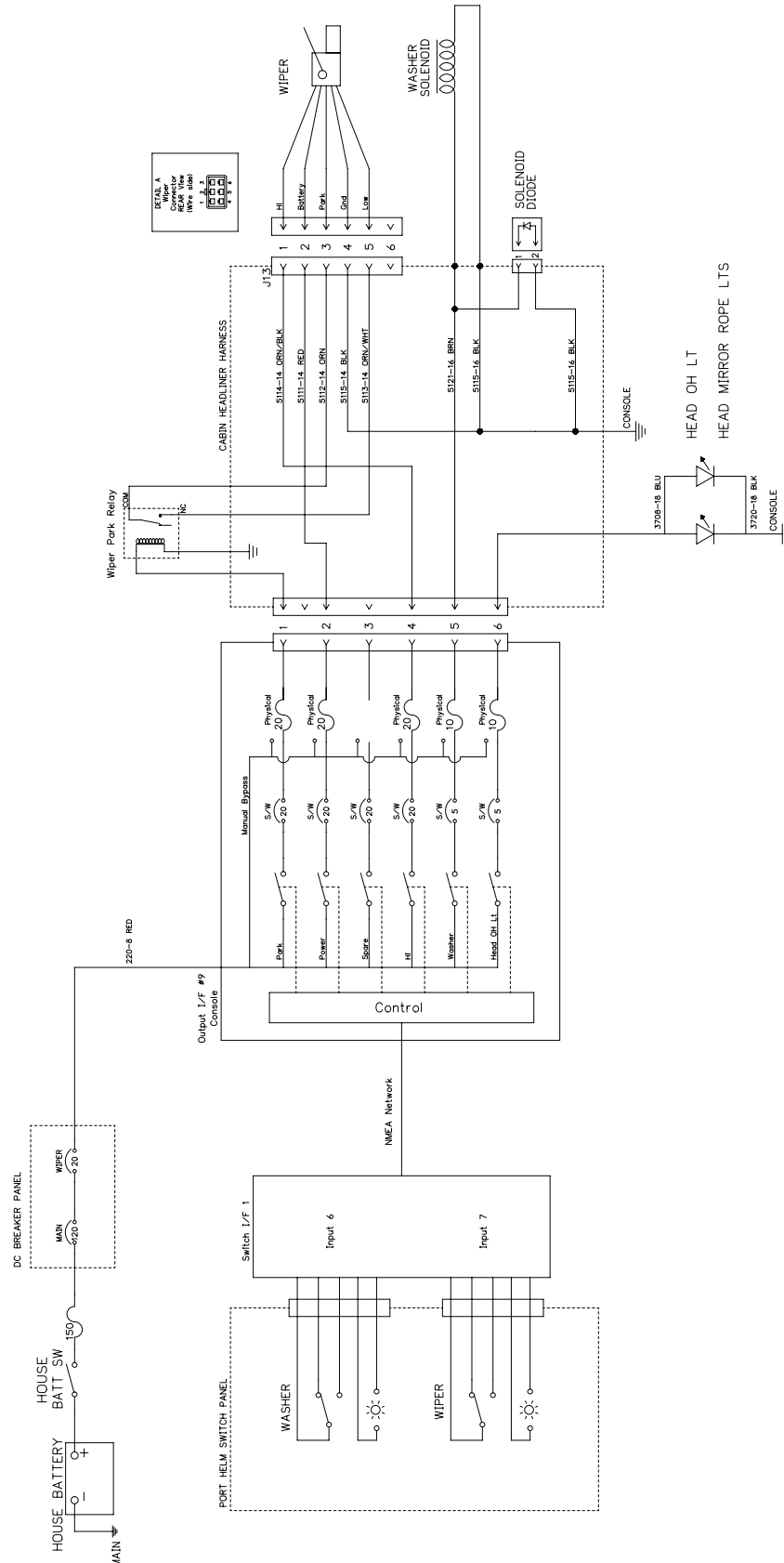


Master Ignition Key Switch  
Fig. 4.43.1

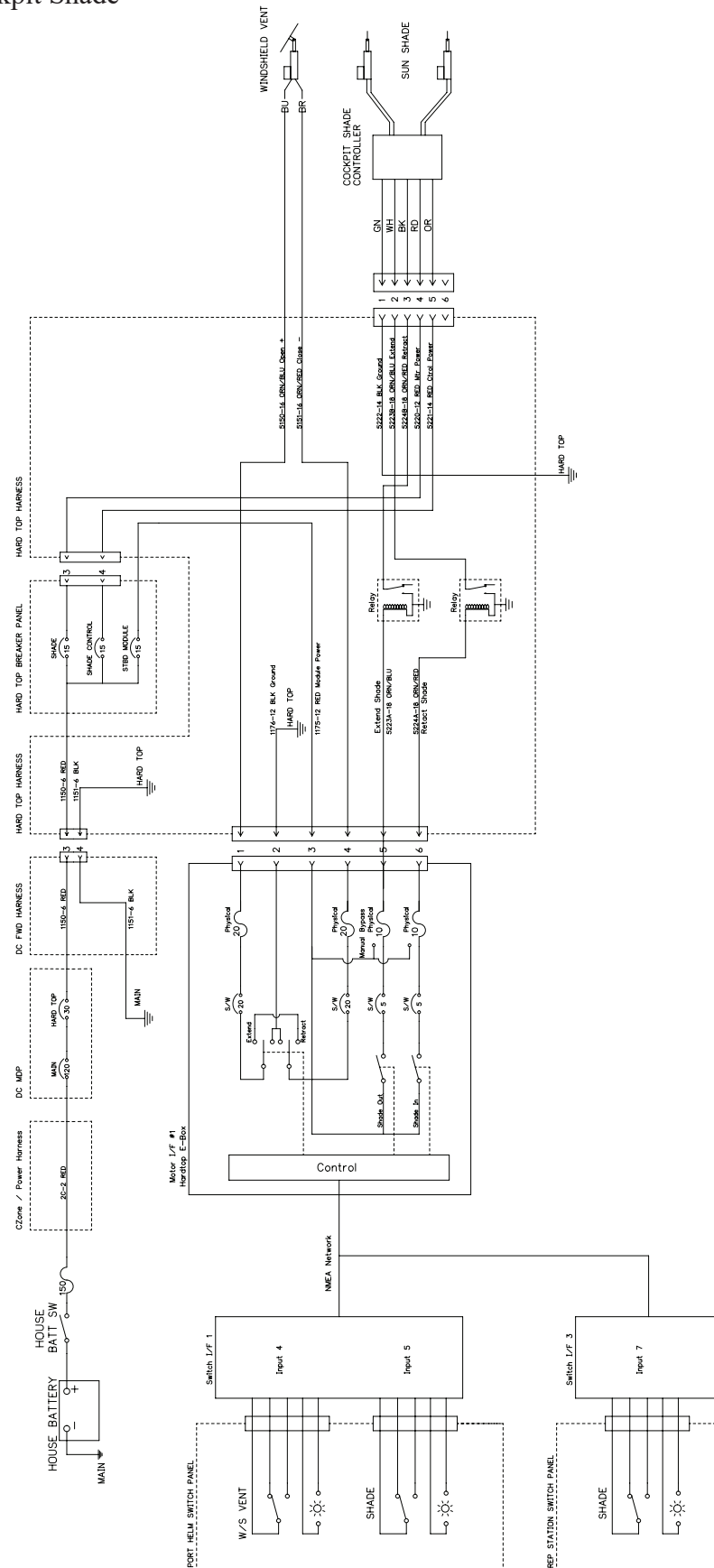


## Section 4 • Electrical System

Wiper and Washer  
Fig. 4.44.1



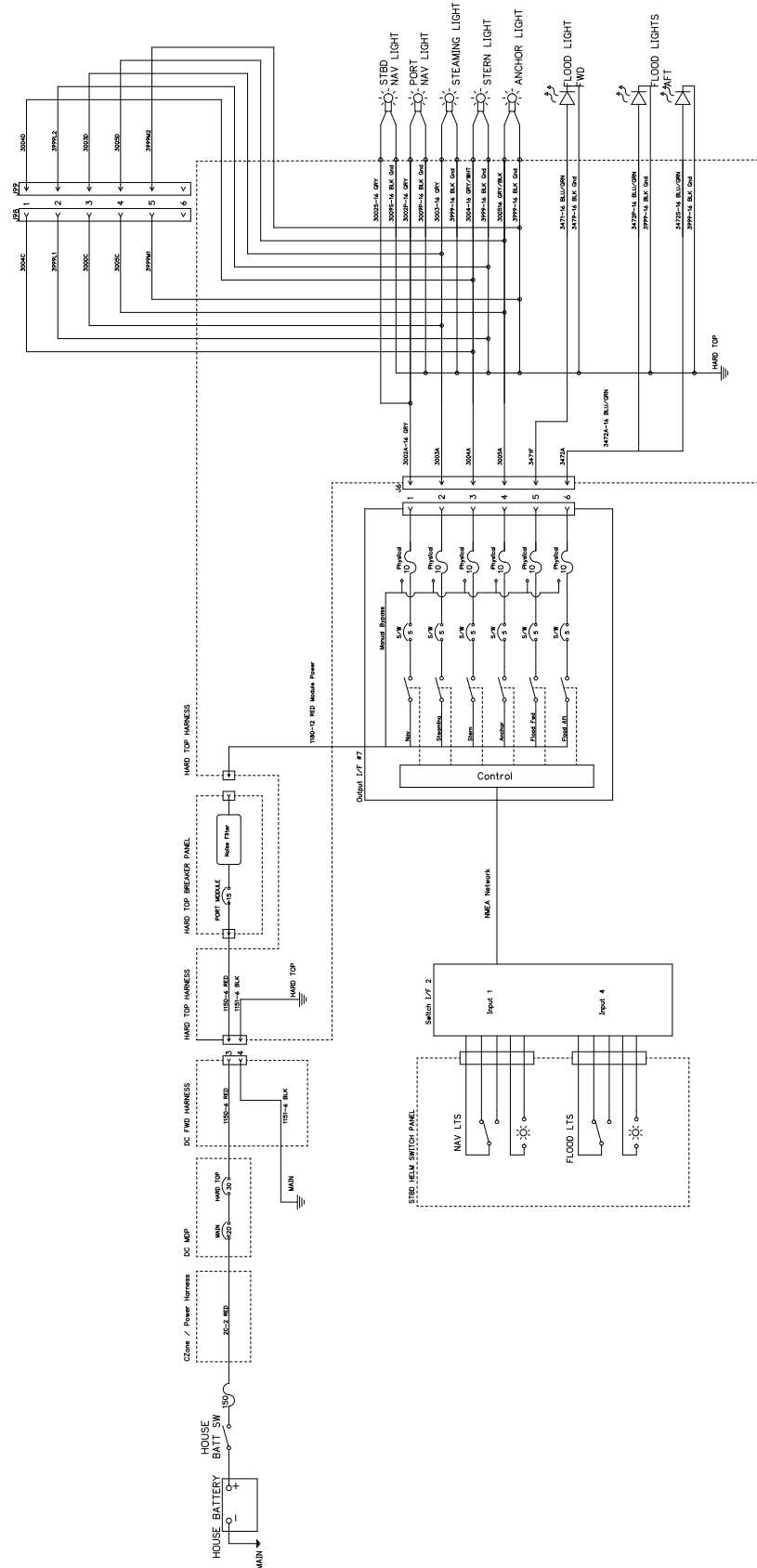
Windscreen Vent and Cockpit Shade  
Fig. 4.45.1



## Section 4 • Electrical System

### Navigation and Flood Lights

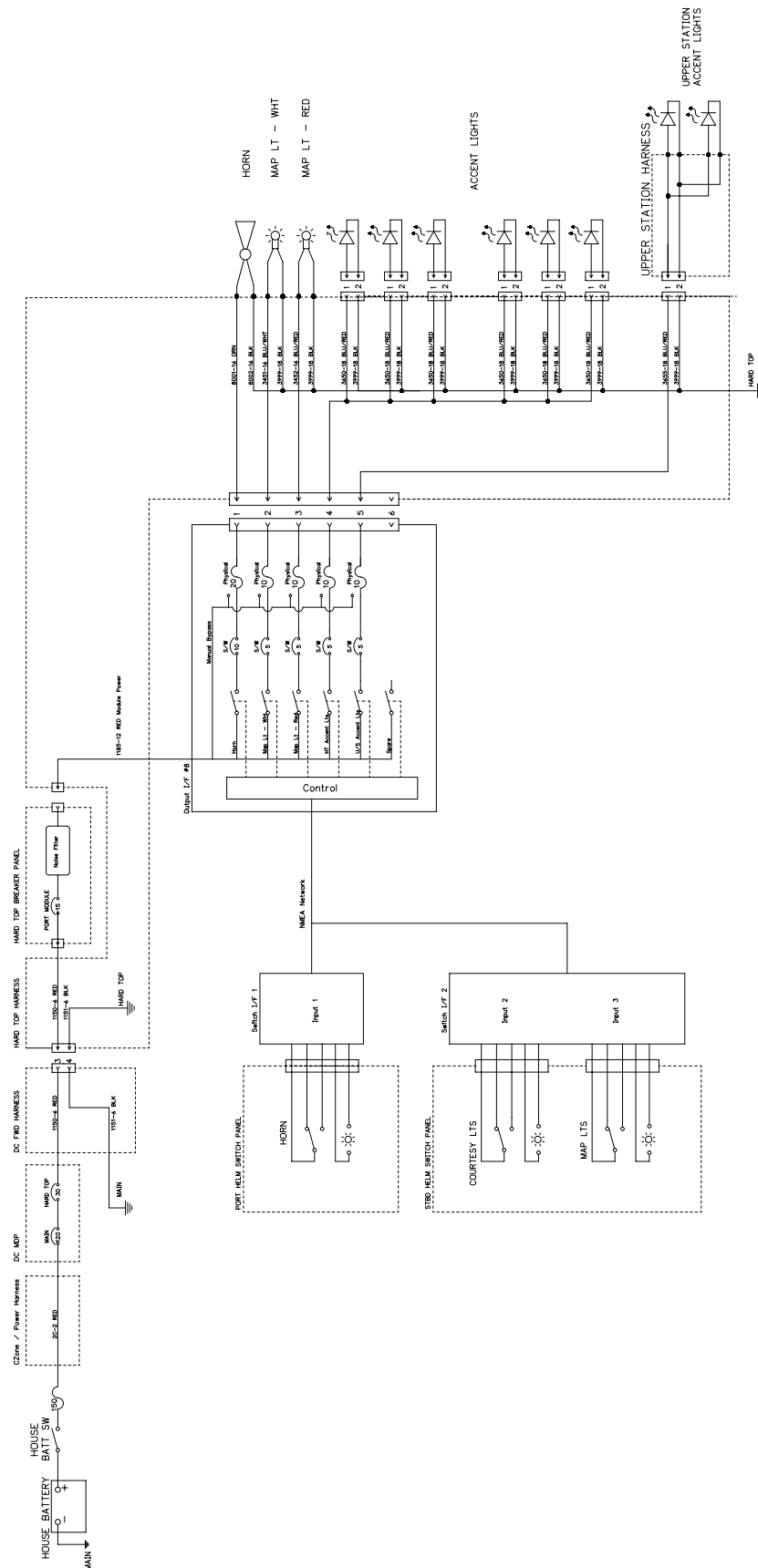
Fig. 4.46.1





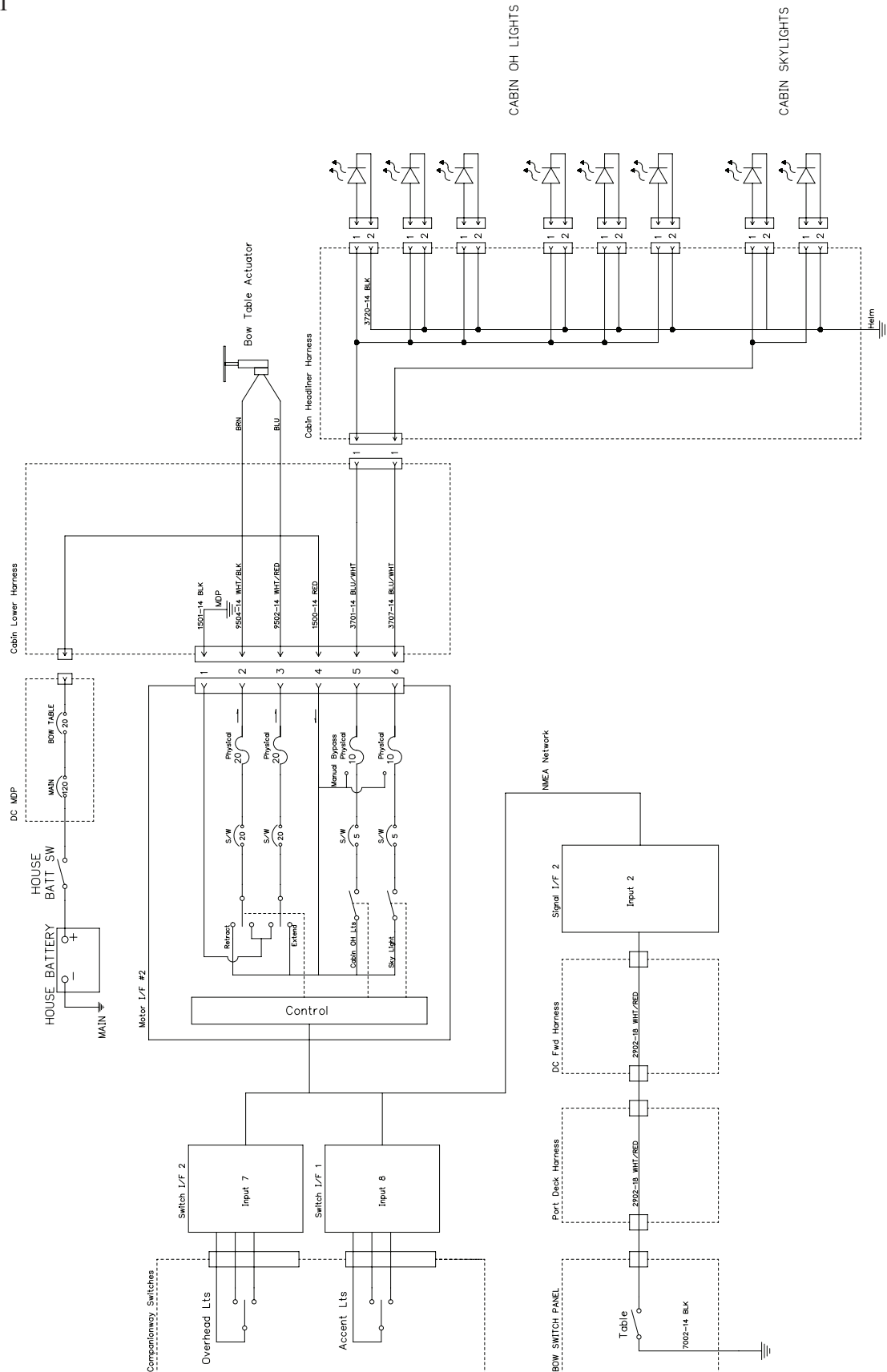
## Section 4 • Electrical System

Horn, Map, HT Accent Lighting  
Fig. 4.47.1



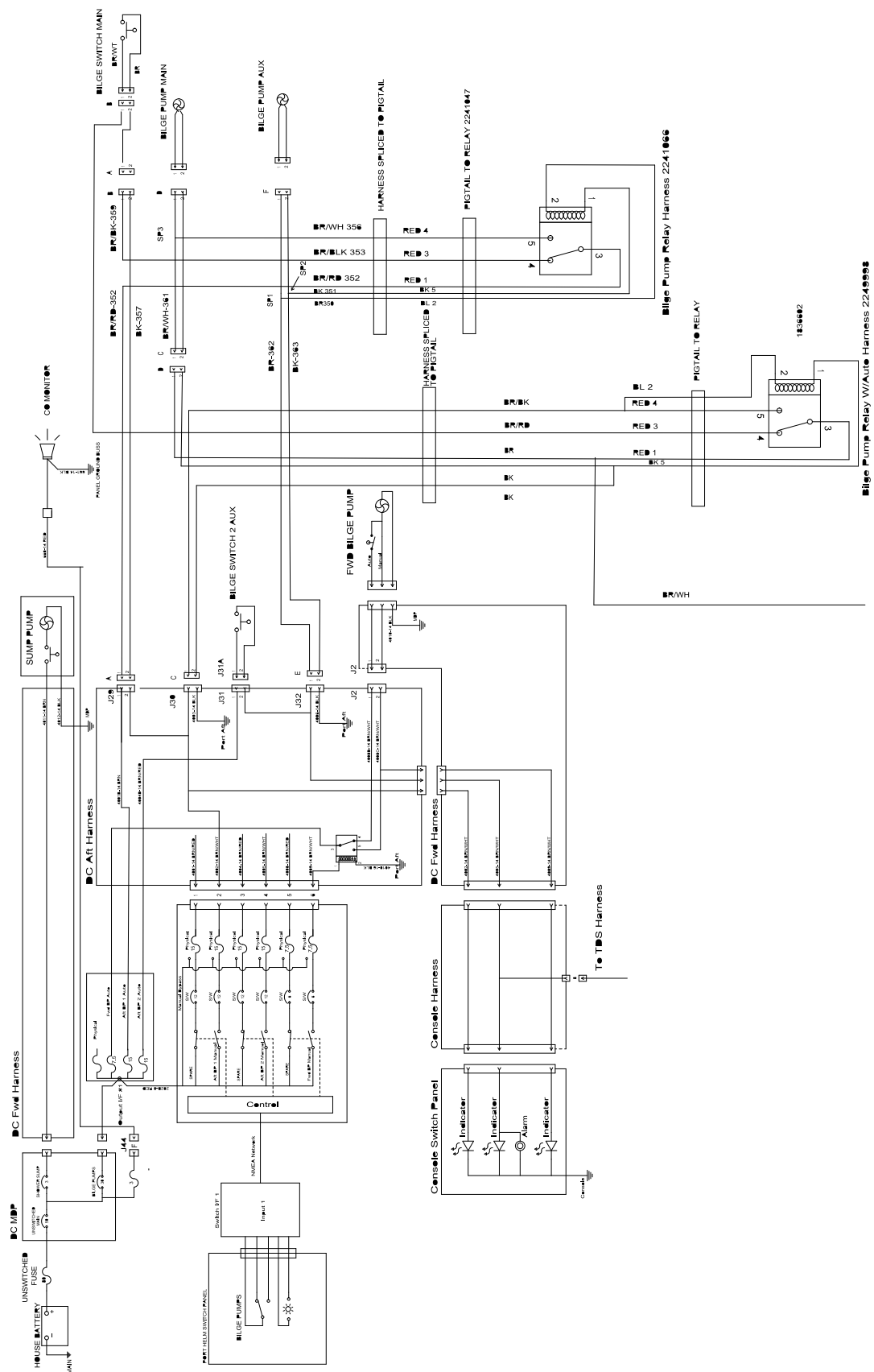
## Section 4 • Electrical System

Cabin Overhead and Skylights, Bow Table  
Fig. 4.48.1



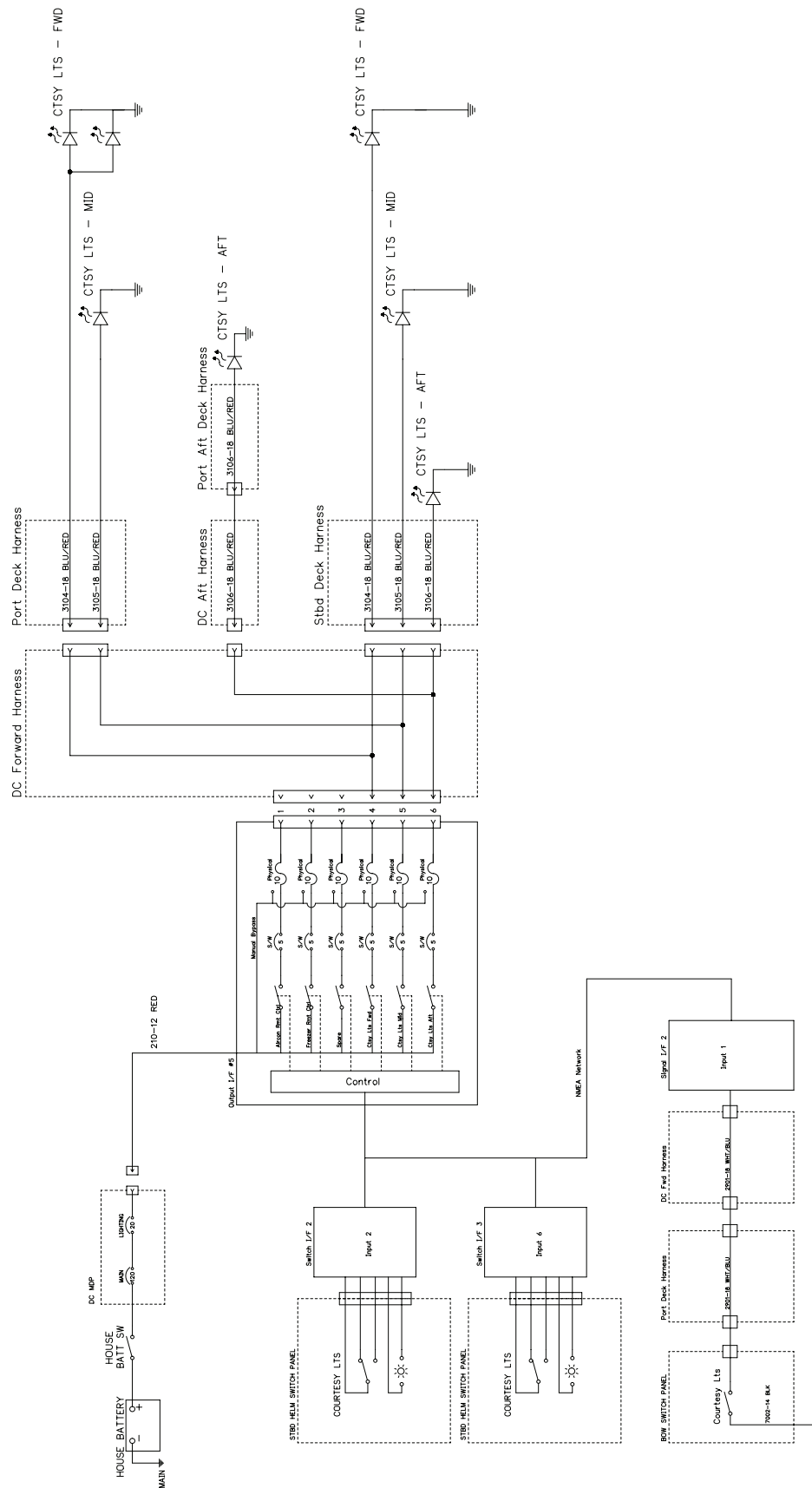
## Section 4 • Electrical System

Bilge Pumps / Sump Pump  
Fig. 4.49.1



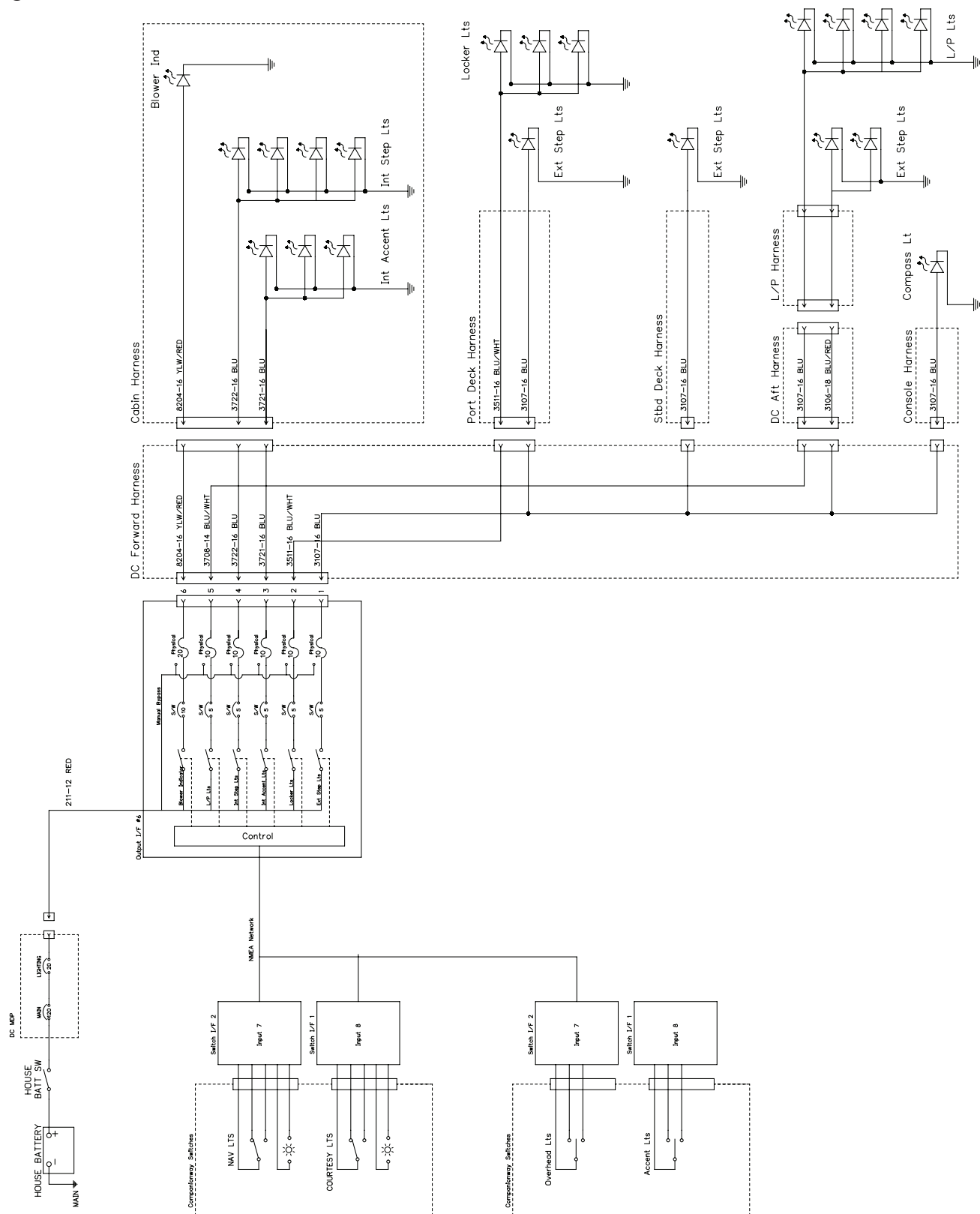
## Section 4 • Electrical System

Deck Courtesy Lights  
Fig. 4.50.1

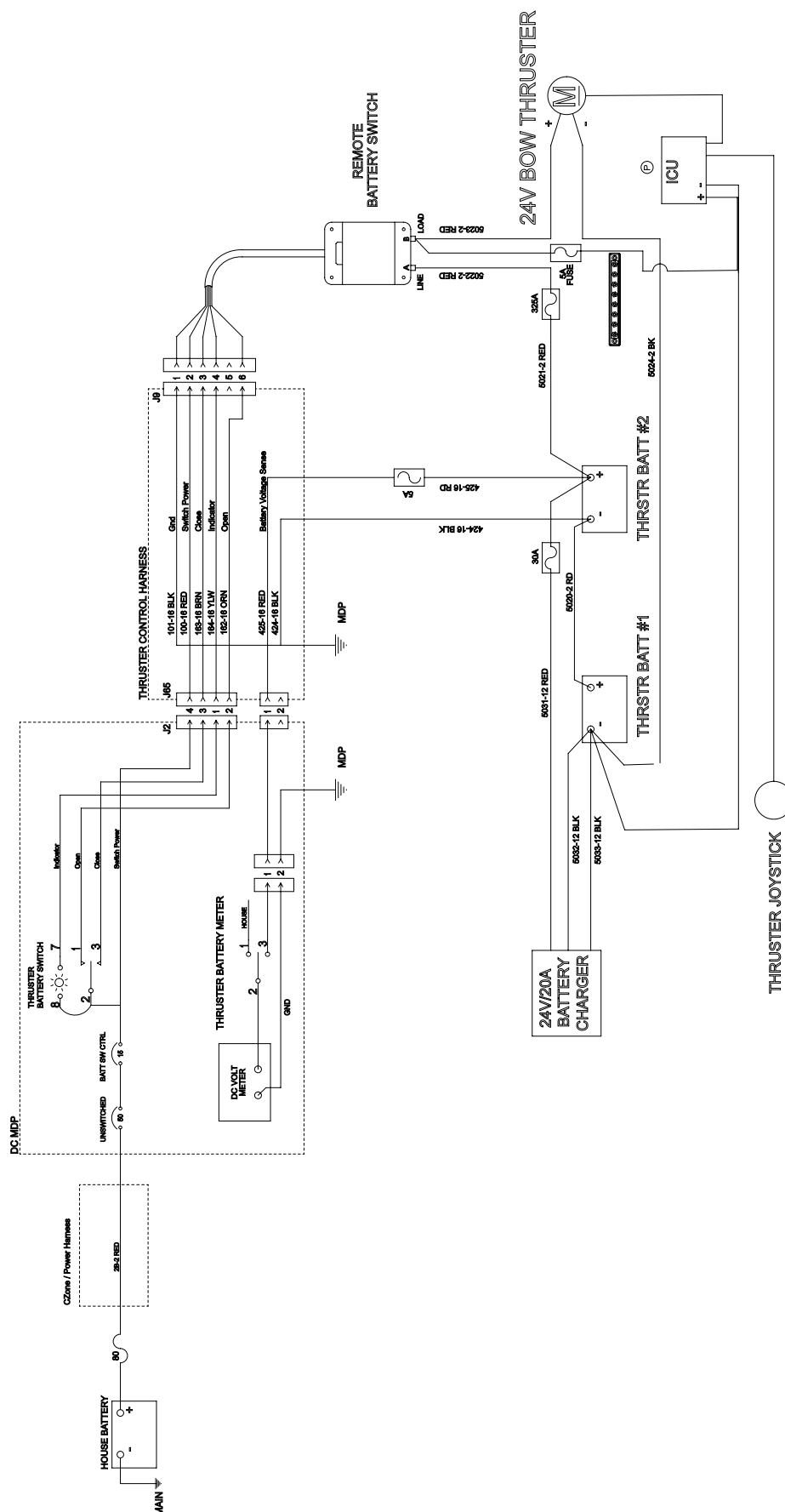


### Miscellaneous Lighting

Fig. 4.51.1

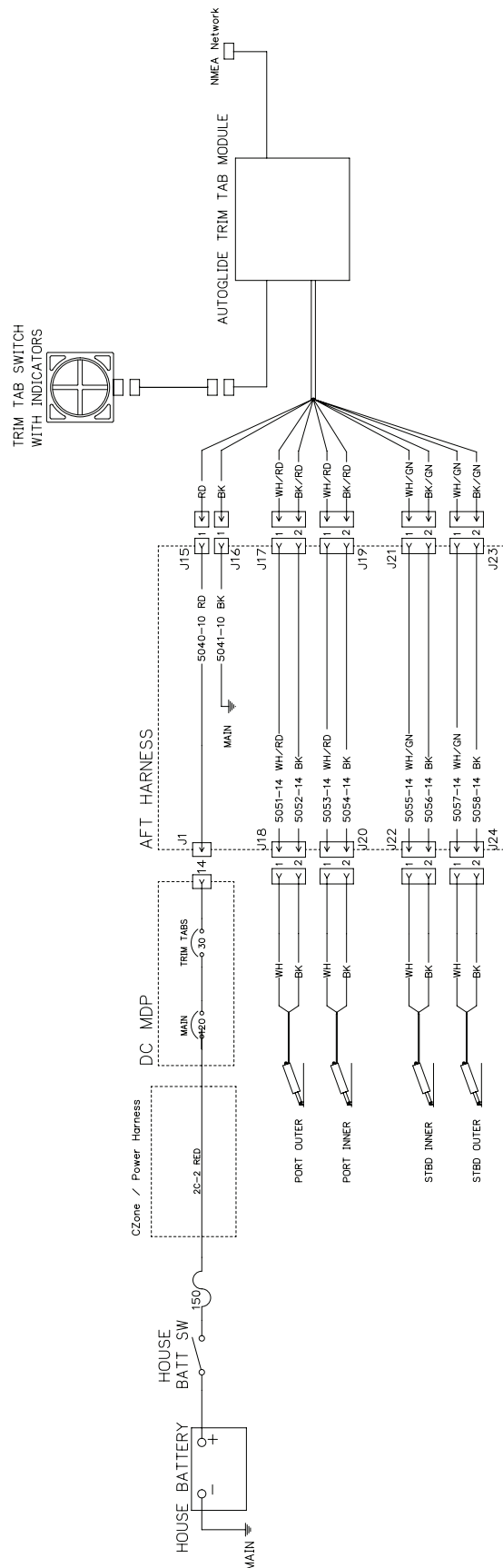


Bow Thruster  
Fig. 4.52.1

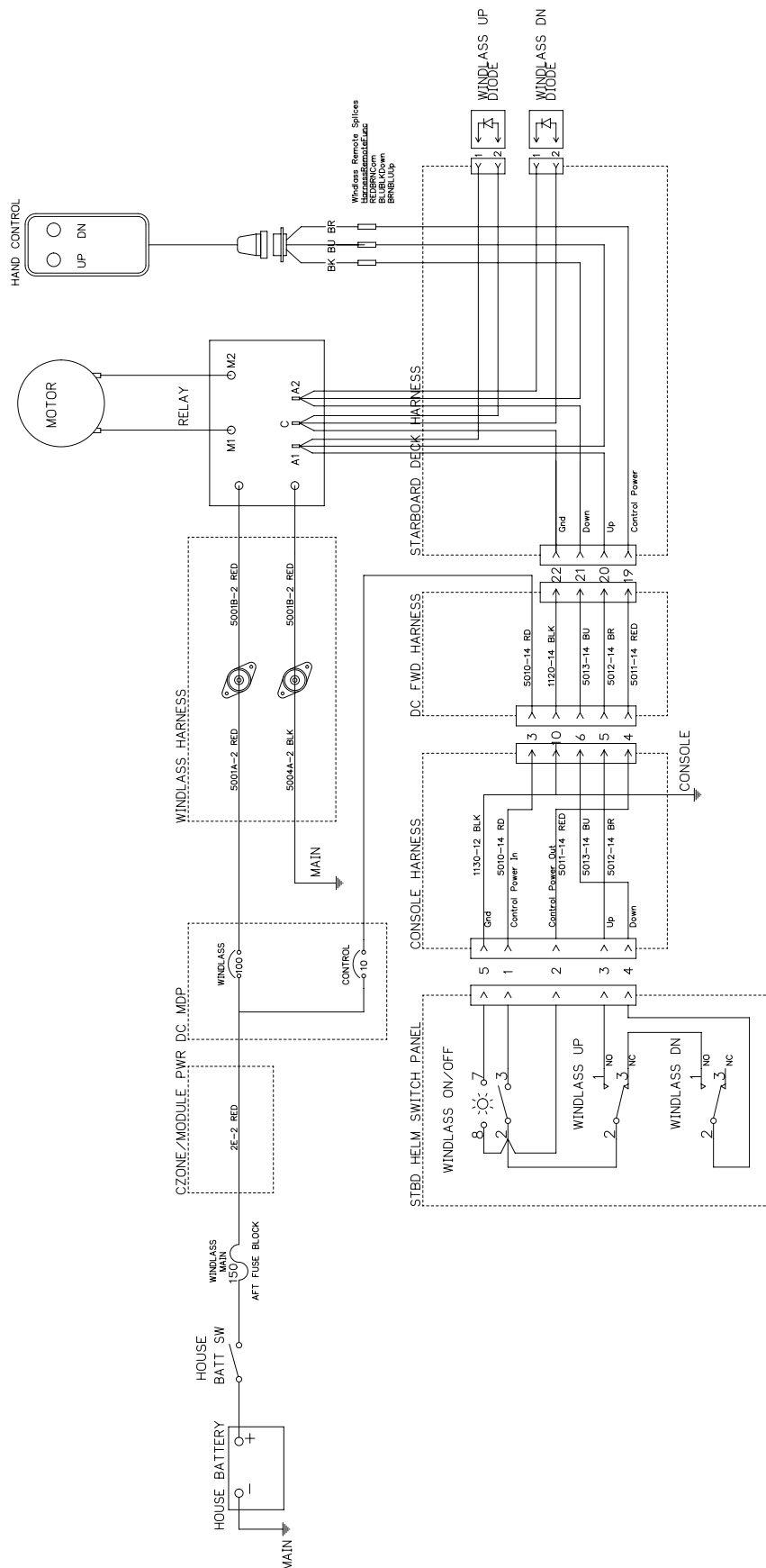




Trim Tabs  
Fig. 4.53.1



Windlass  
Fig. 4.54.1

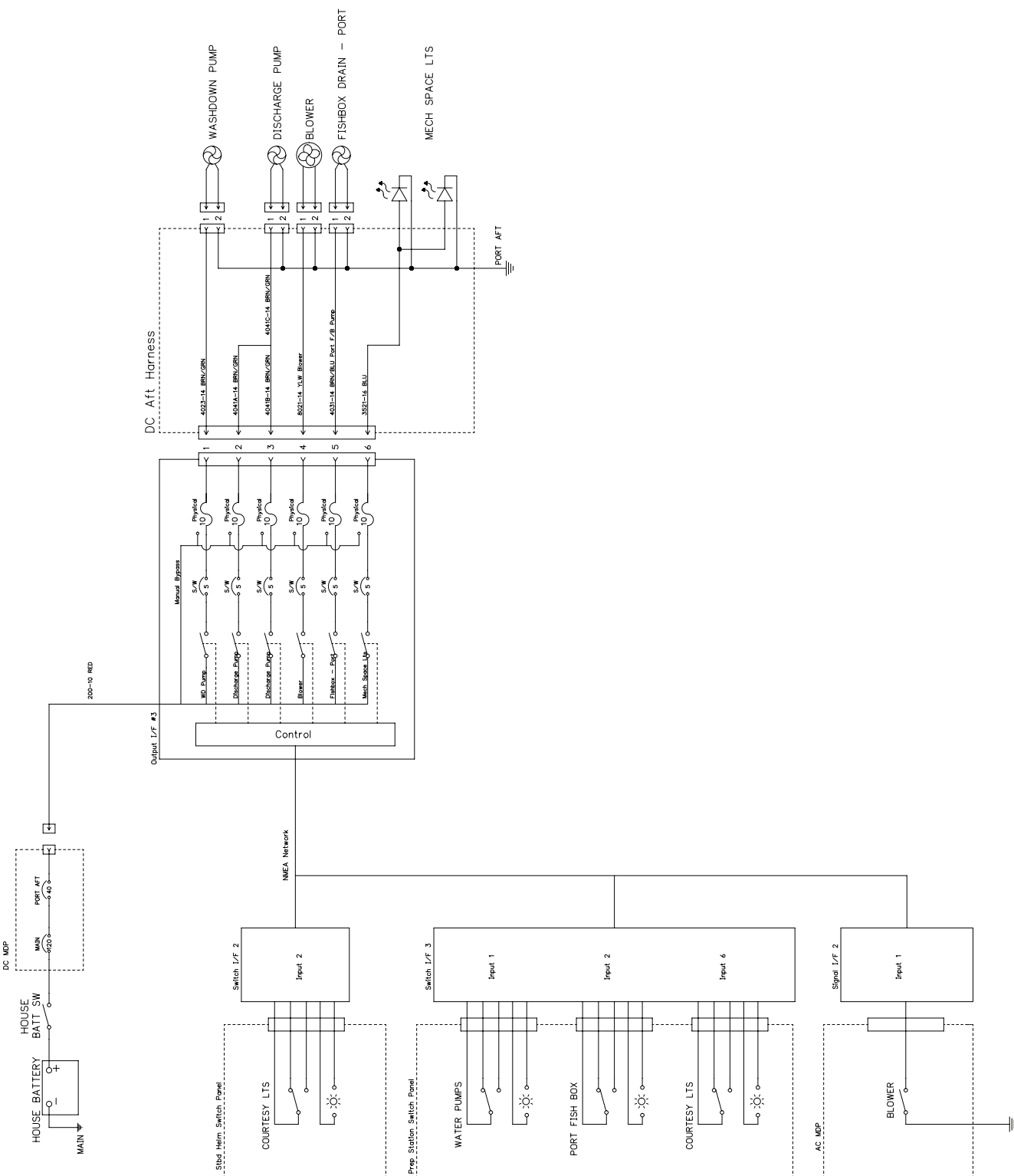


## Section 4 • Electrical System

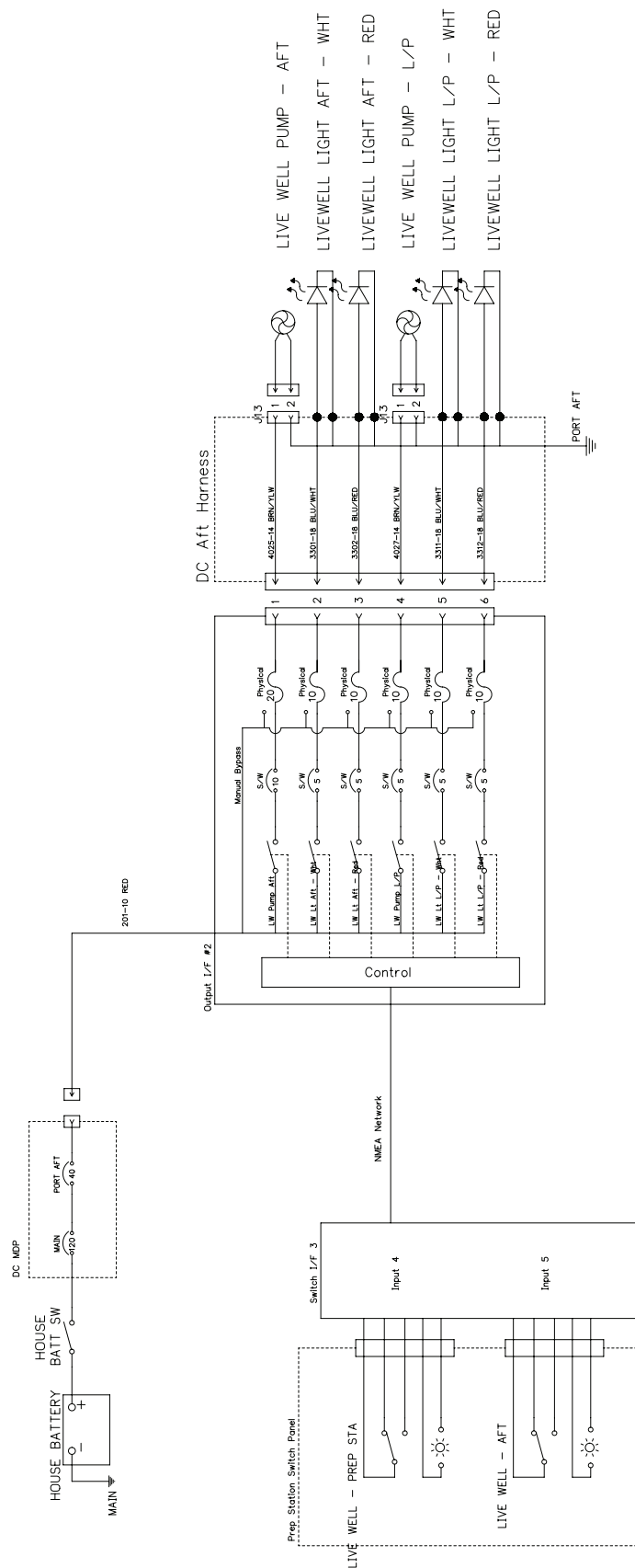
## 420 Outrage



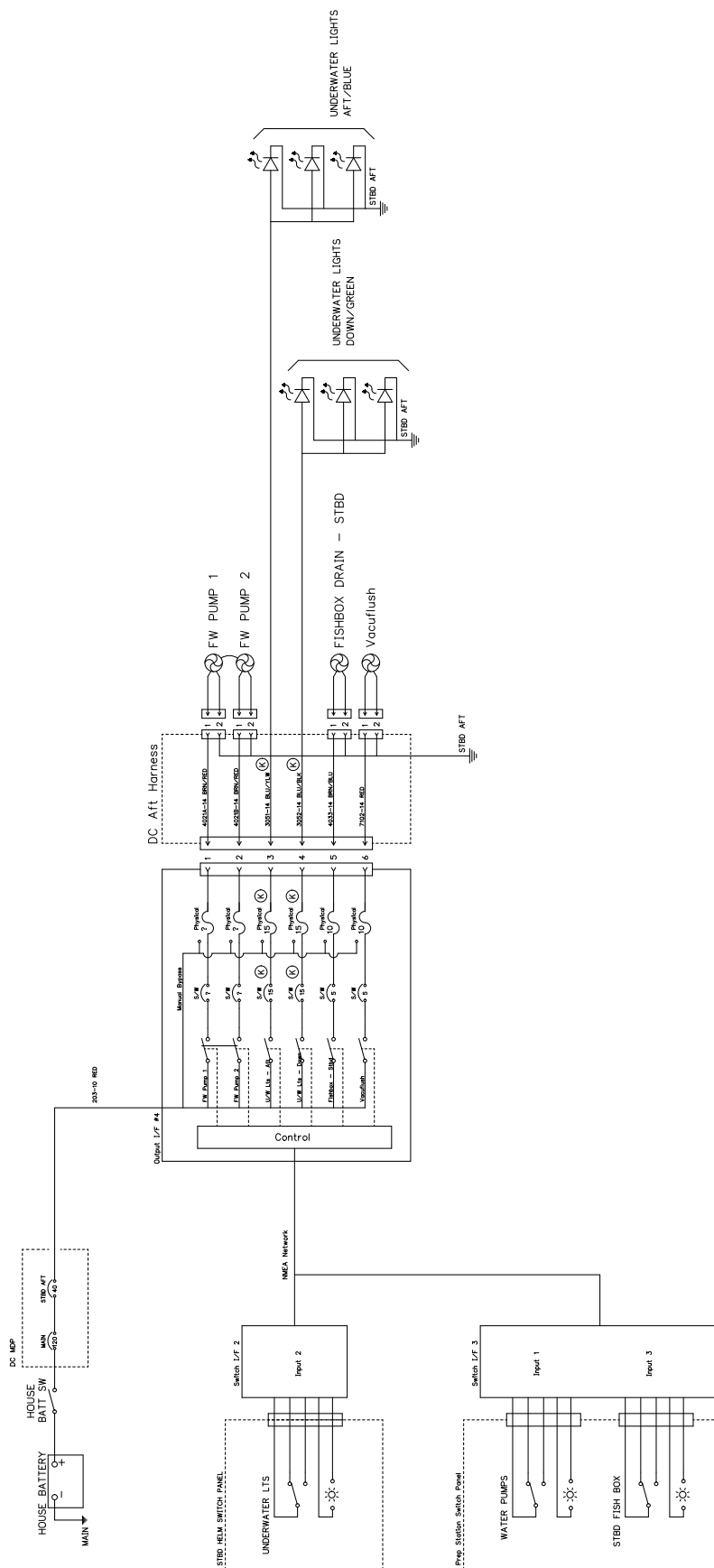
Pumps 1, Mech Space Lights  
Fig. 4.56.1



Livewell Pumps and Lights  
Fig. 4.57.1

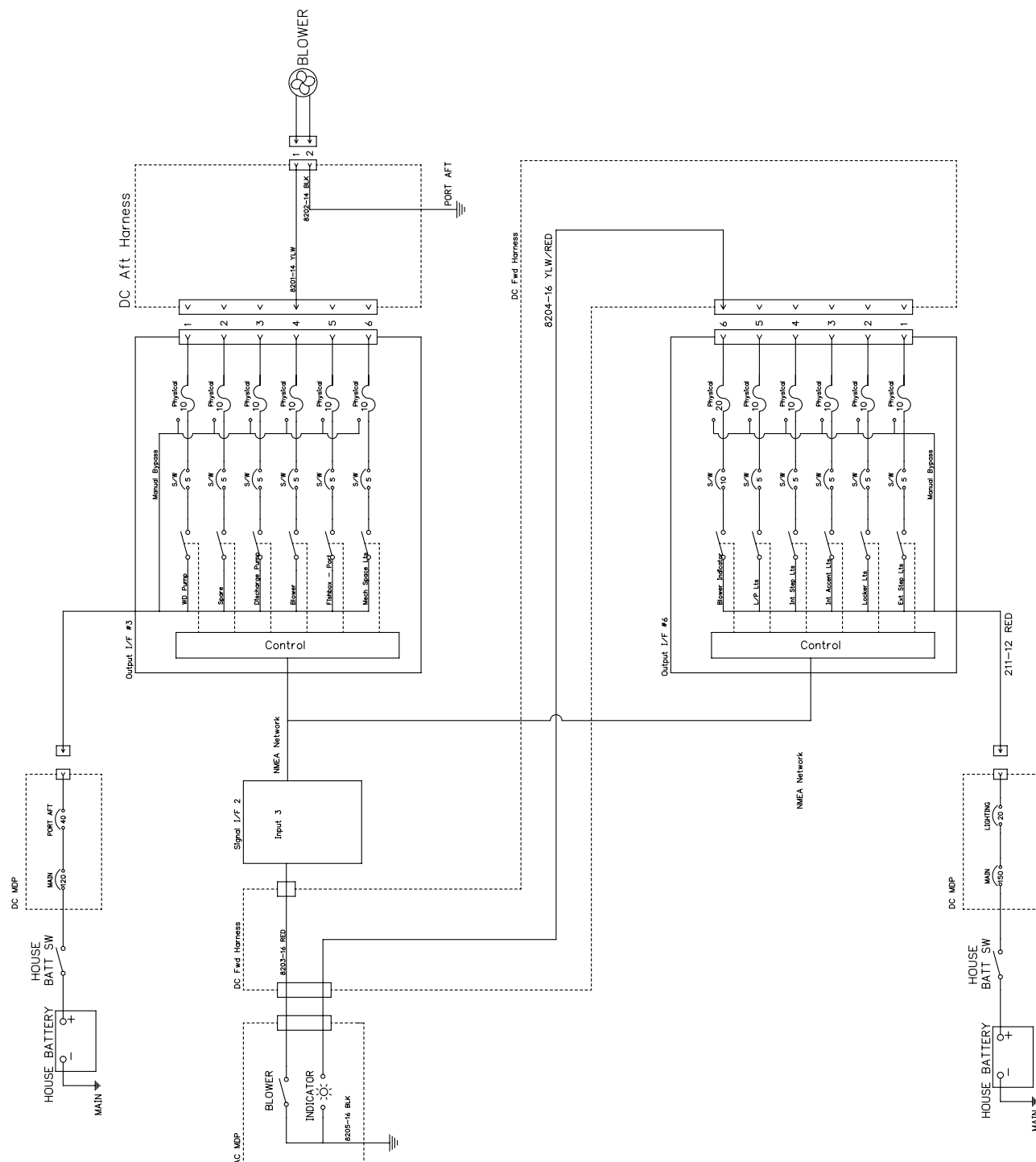


Starboard Pumps, Underwater Lights  
Fig. 4.58.1



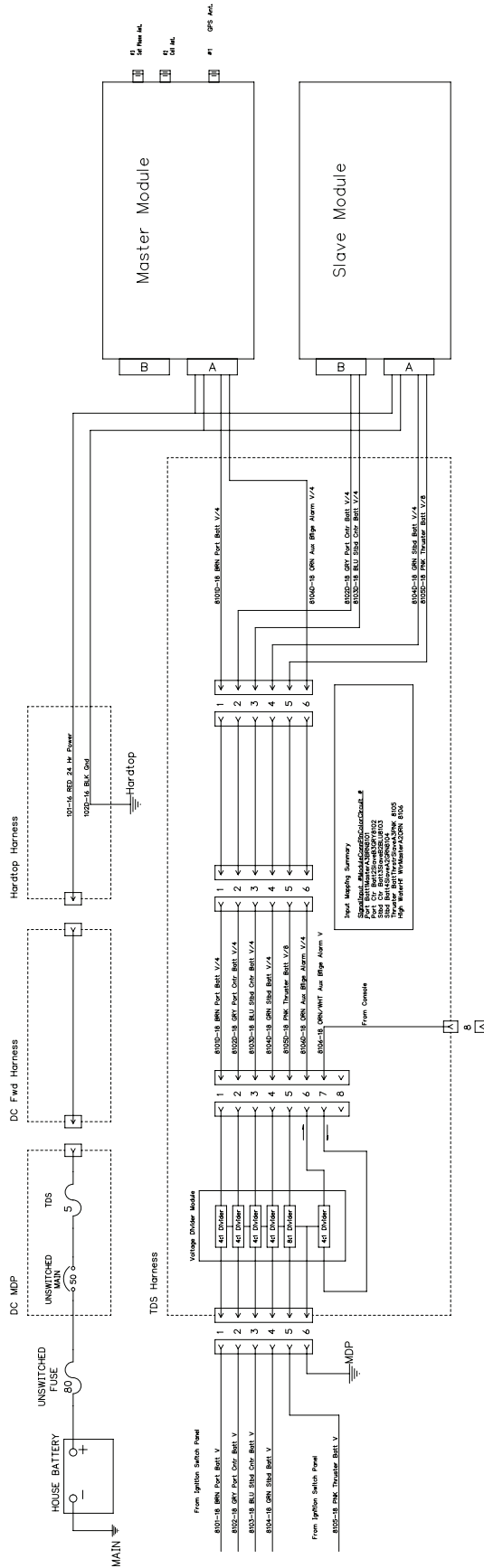


Blower  
Fig. 4.59.1

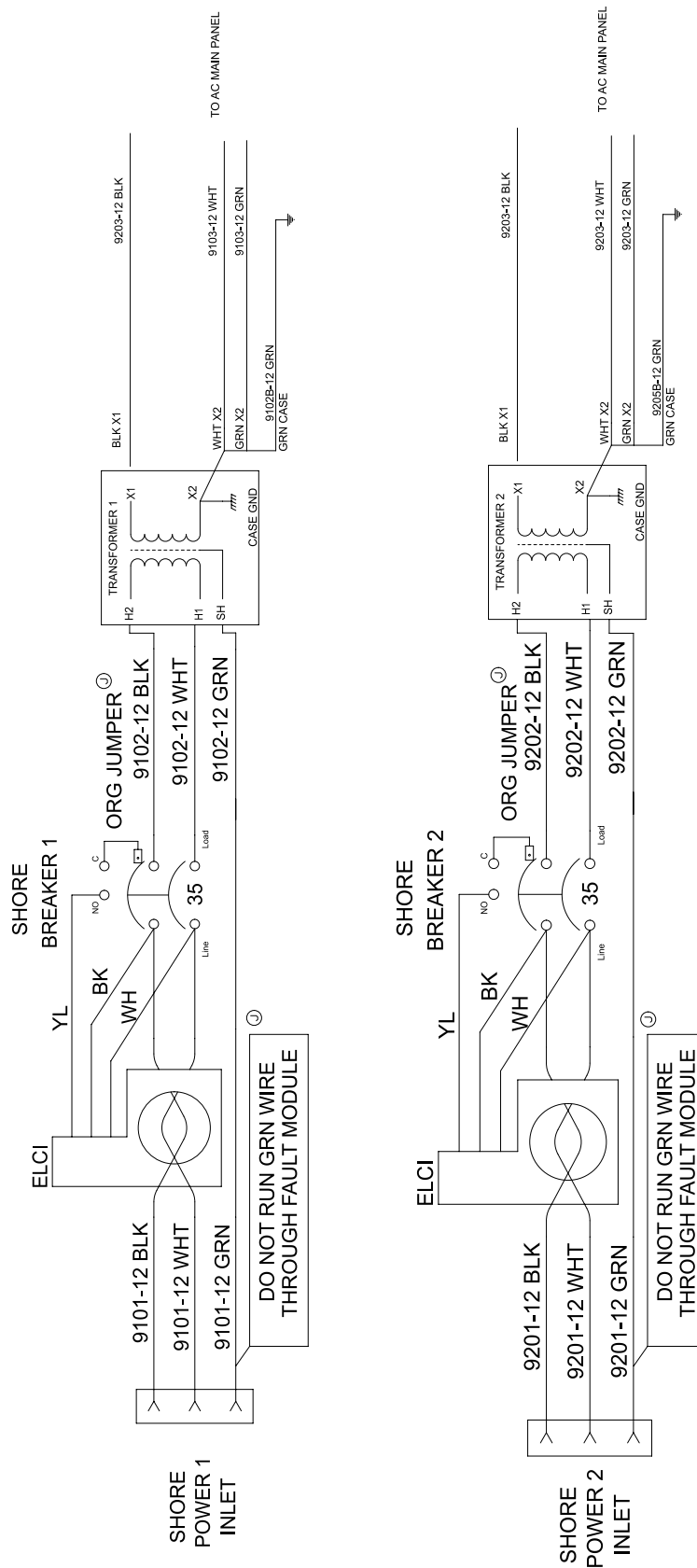


## Section 4 • Electrical System

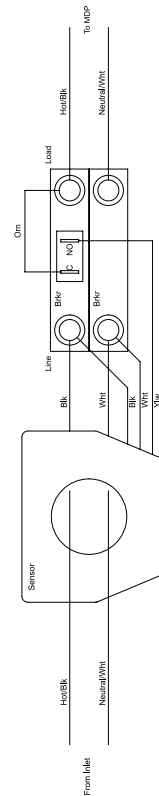
TDS Stage 3 with Remote Monitoring  
Fig. 4.60.1



Shore Power Inlets (120V/60hz) / ELCI Wiring Detail  
Fig. 4.61.1



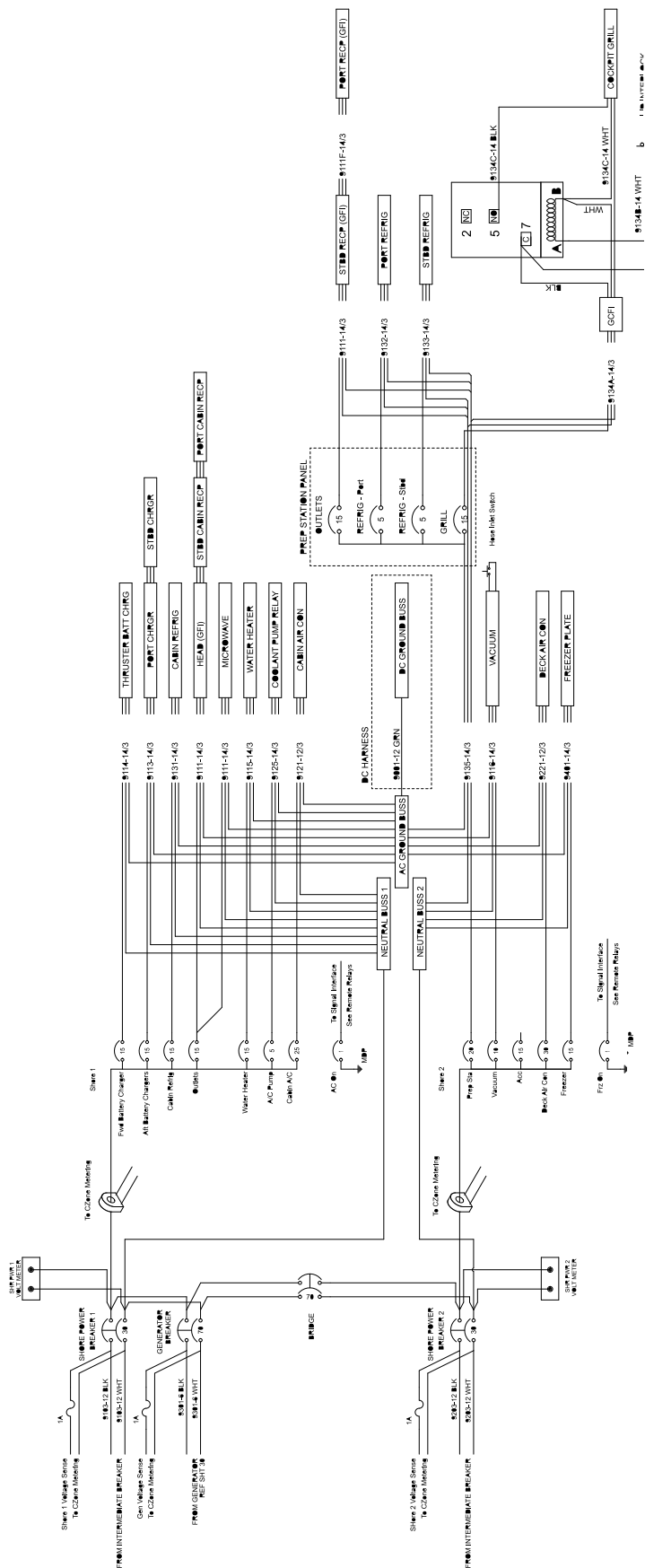
ELCI Wiring Detail



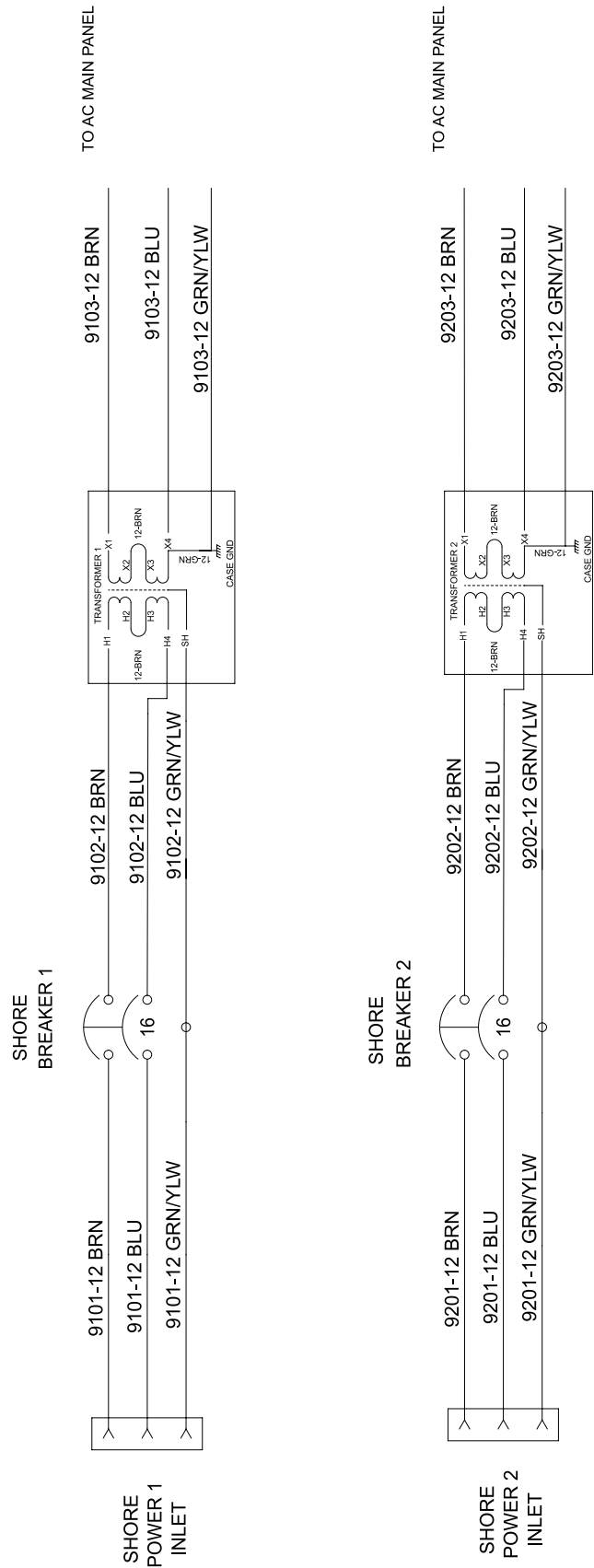
## Section 4 • Electrical System

AC Power (120V/60hz)

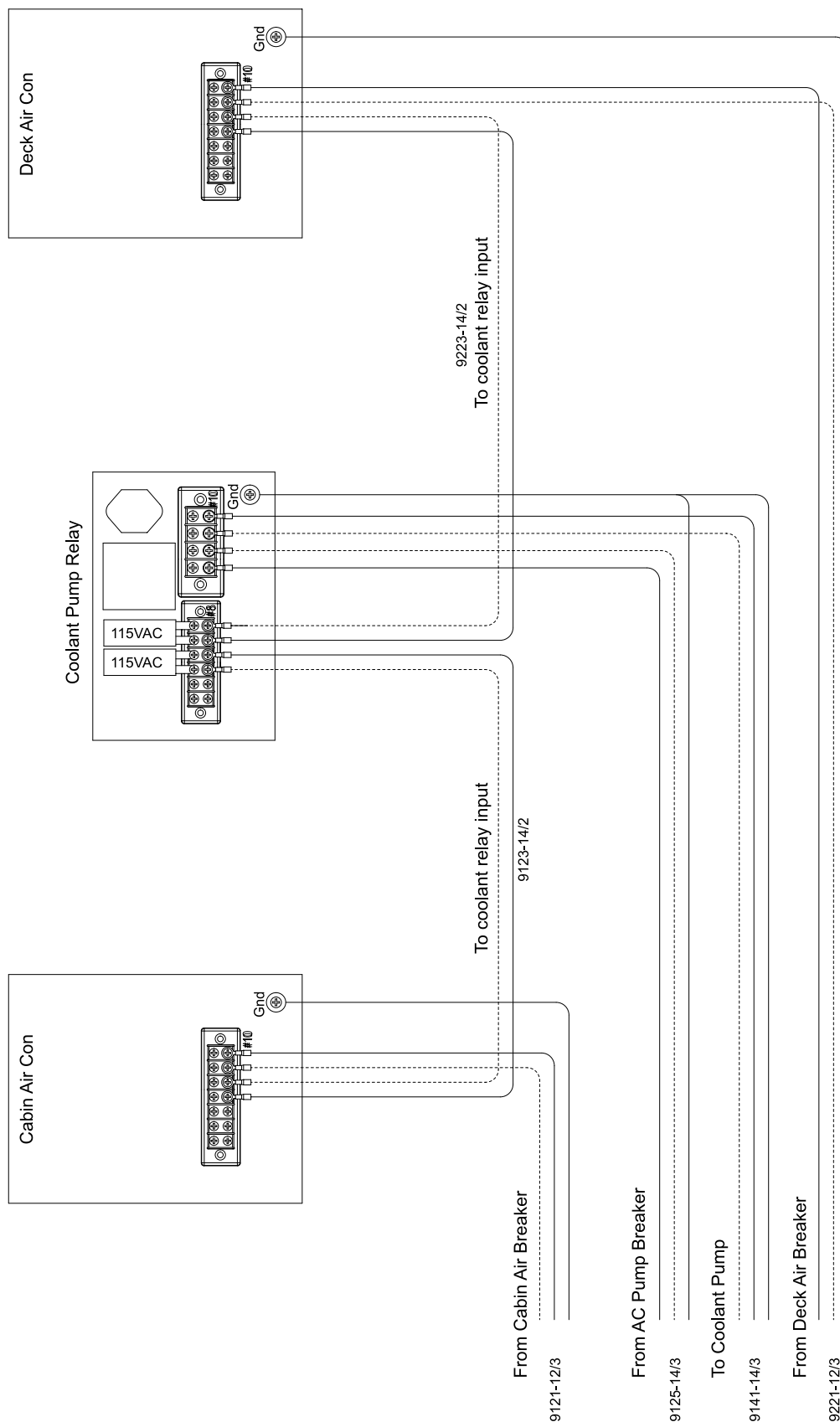
Fig. 4.62.1



Shore Power Inlets (230V/50hz)  
Fig. 4.63.1



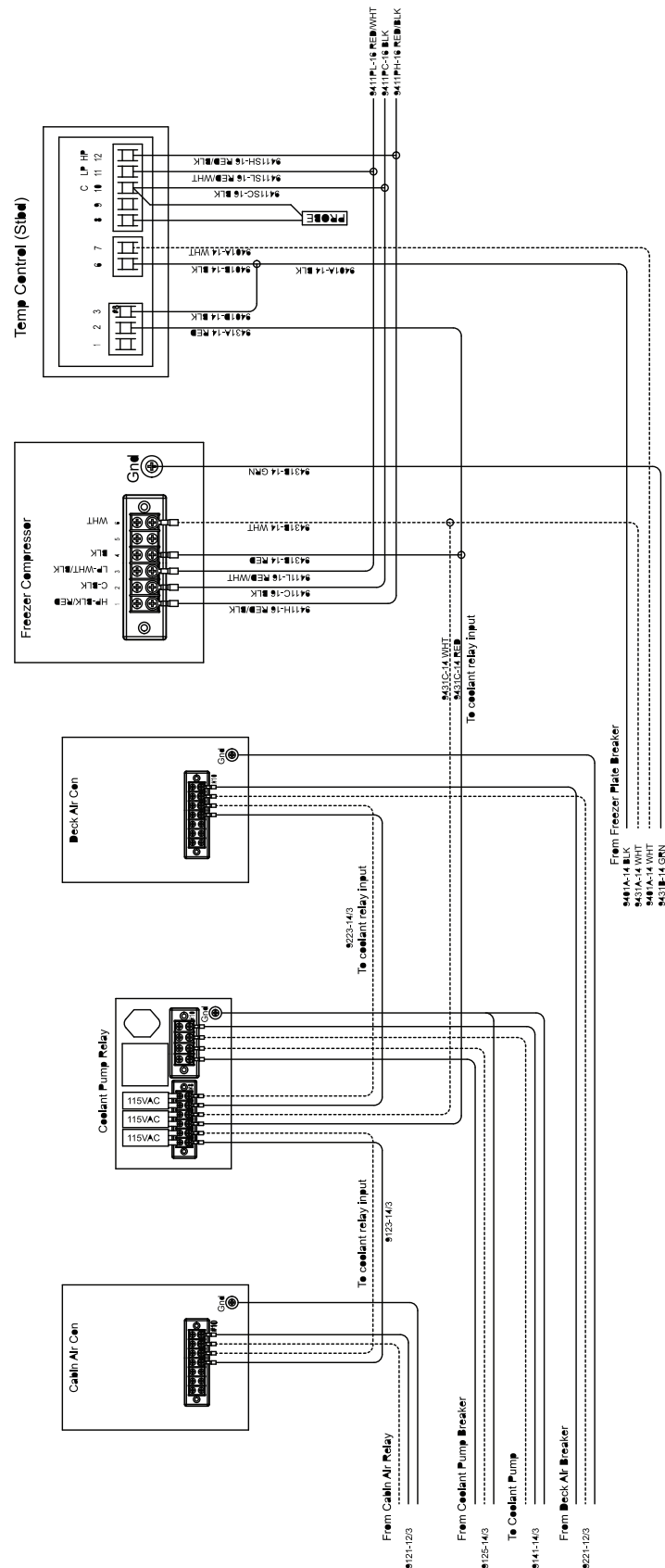
Cabin and Deck Air Conditioning  
Fig. 4.64.1





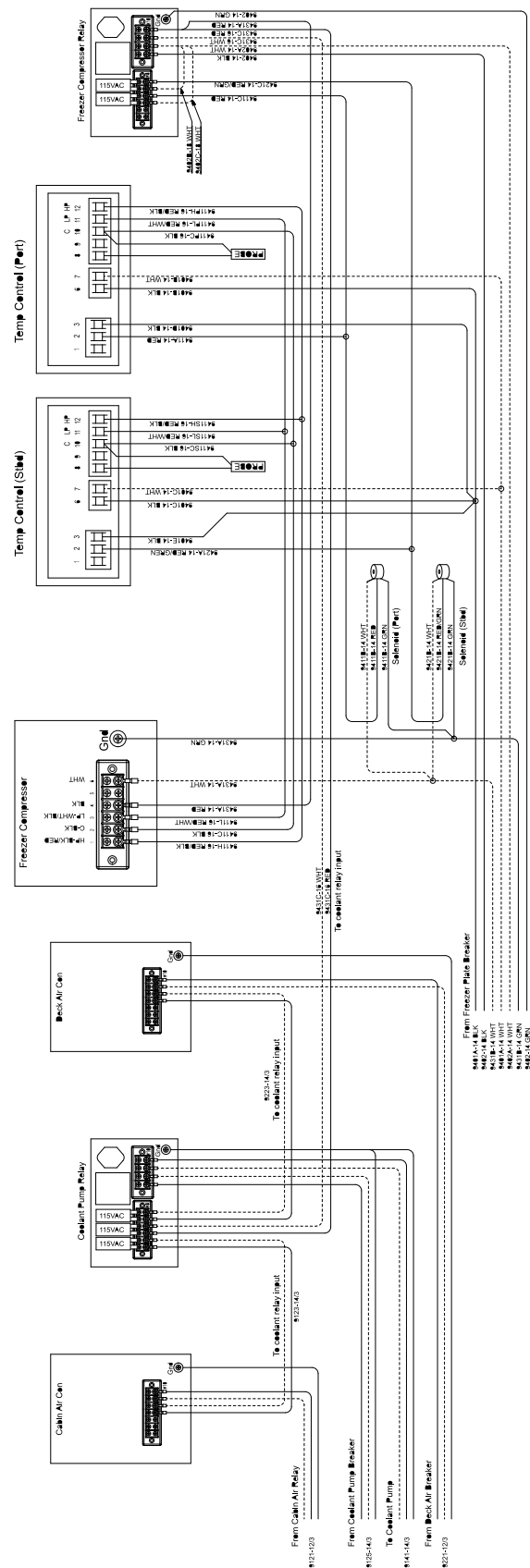
## Section 4 • Electrical System

Cabin and Deck Air Conditioning with Single Freezer Plate  
Fig. 4.65.1

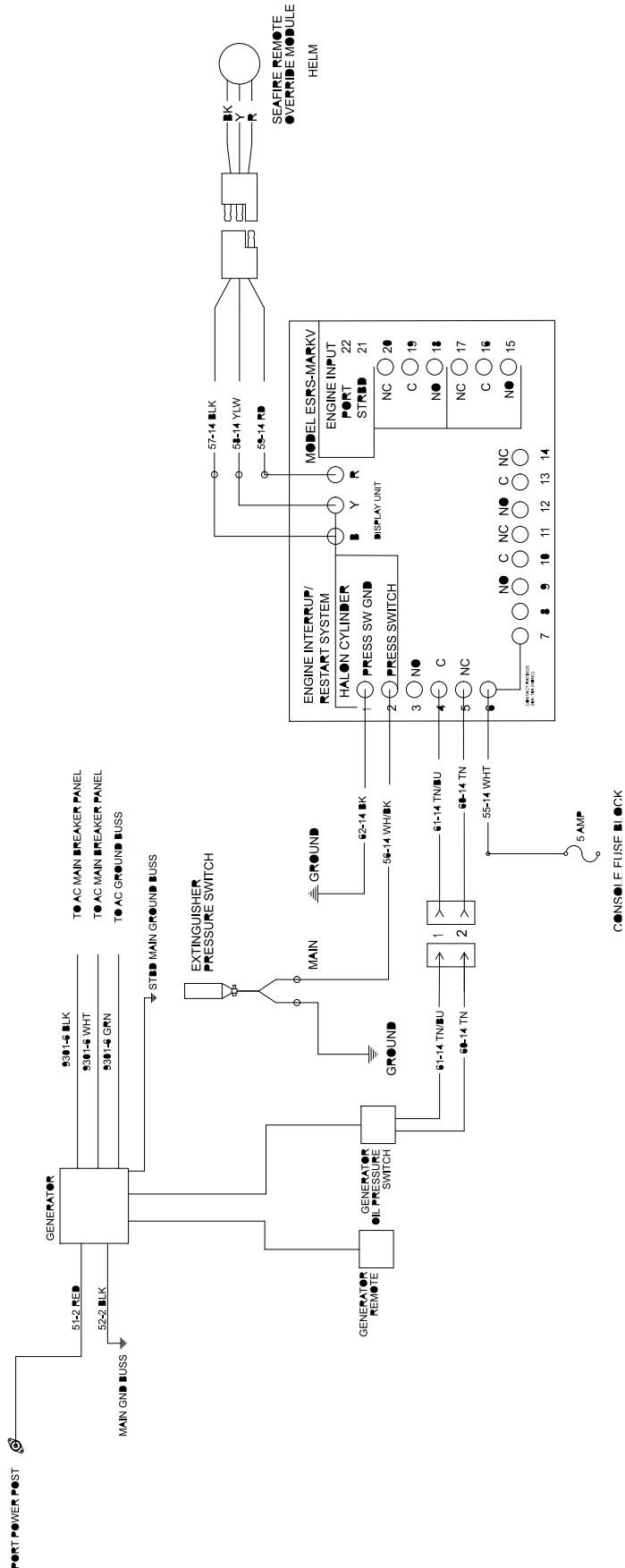


## Section 4 • Electrical System

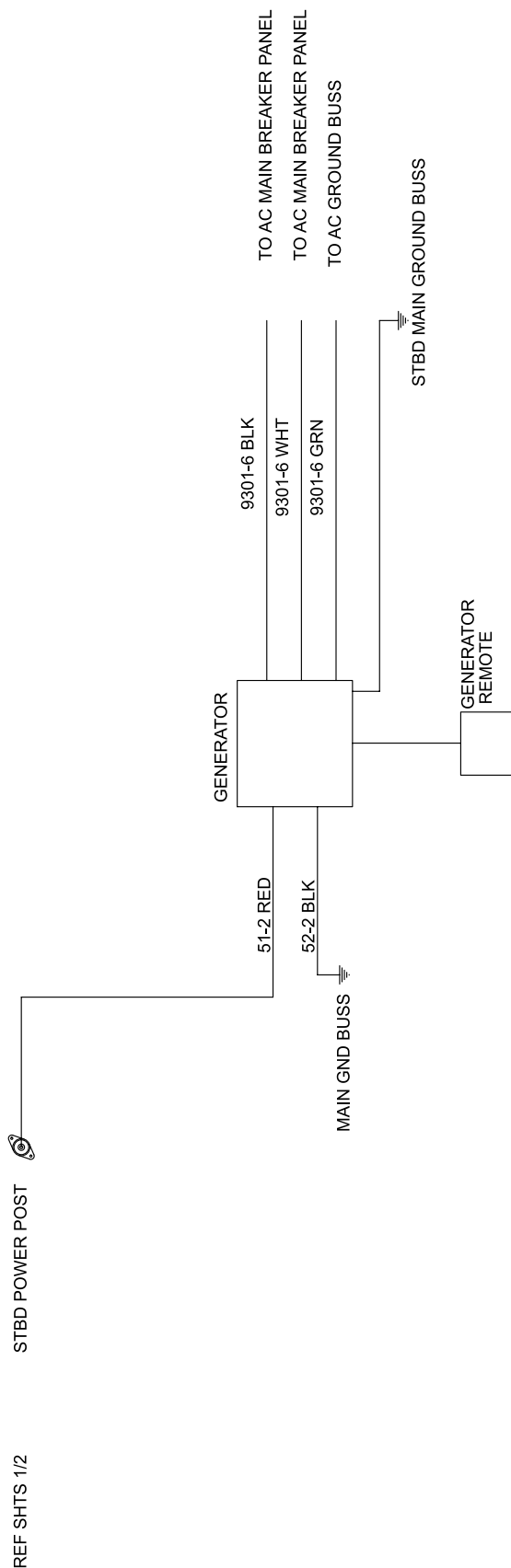
Cabin and Deck Air Conditioning with Dual Freezer Plate  
Fig. 4.66.1



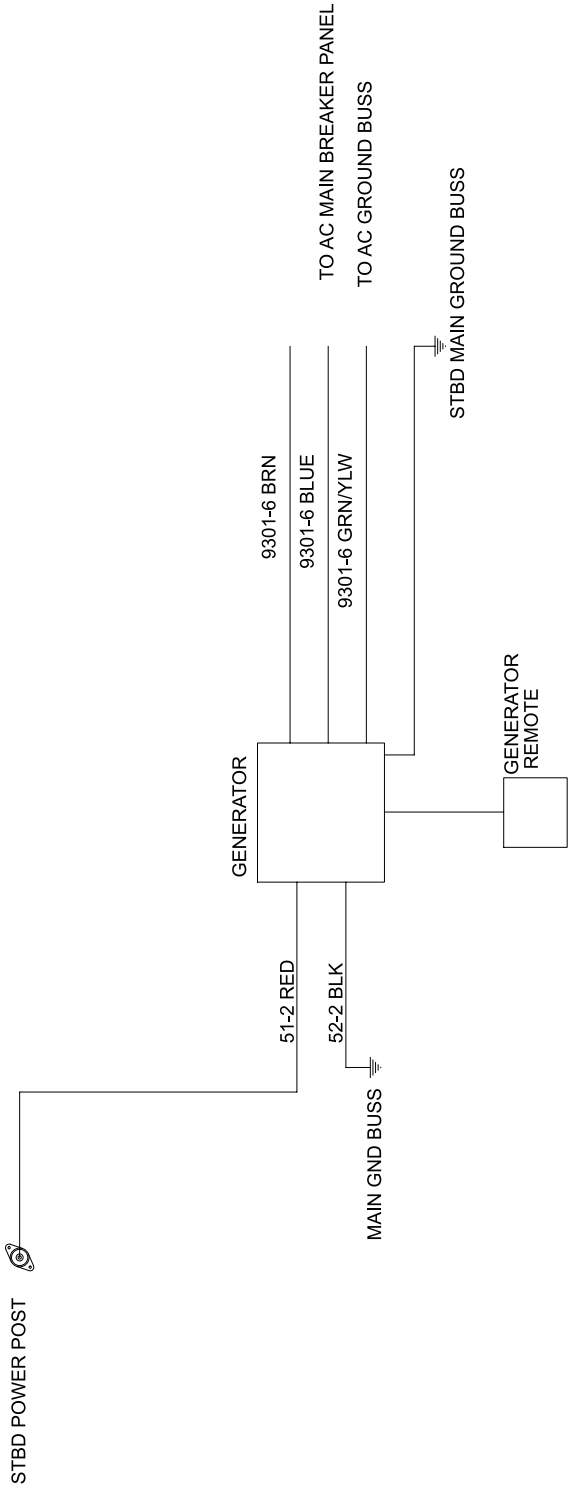
Diesel Generator Automatic Shutdown  
Fig. 4.67.1



Generator - 120V/60hz  
Fig. 4.68.1

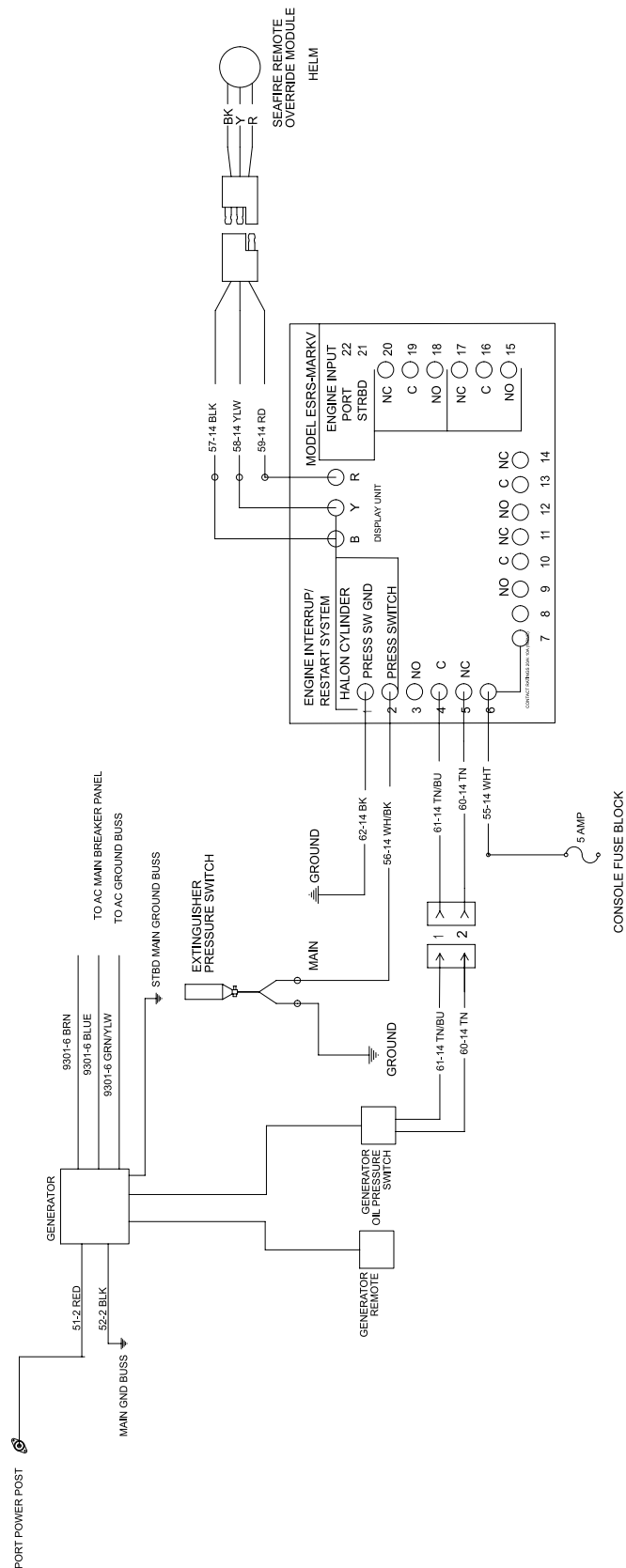


Generator - 230V/50hz  
Fig. 4.69.1



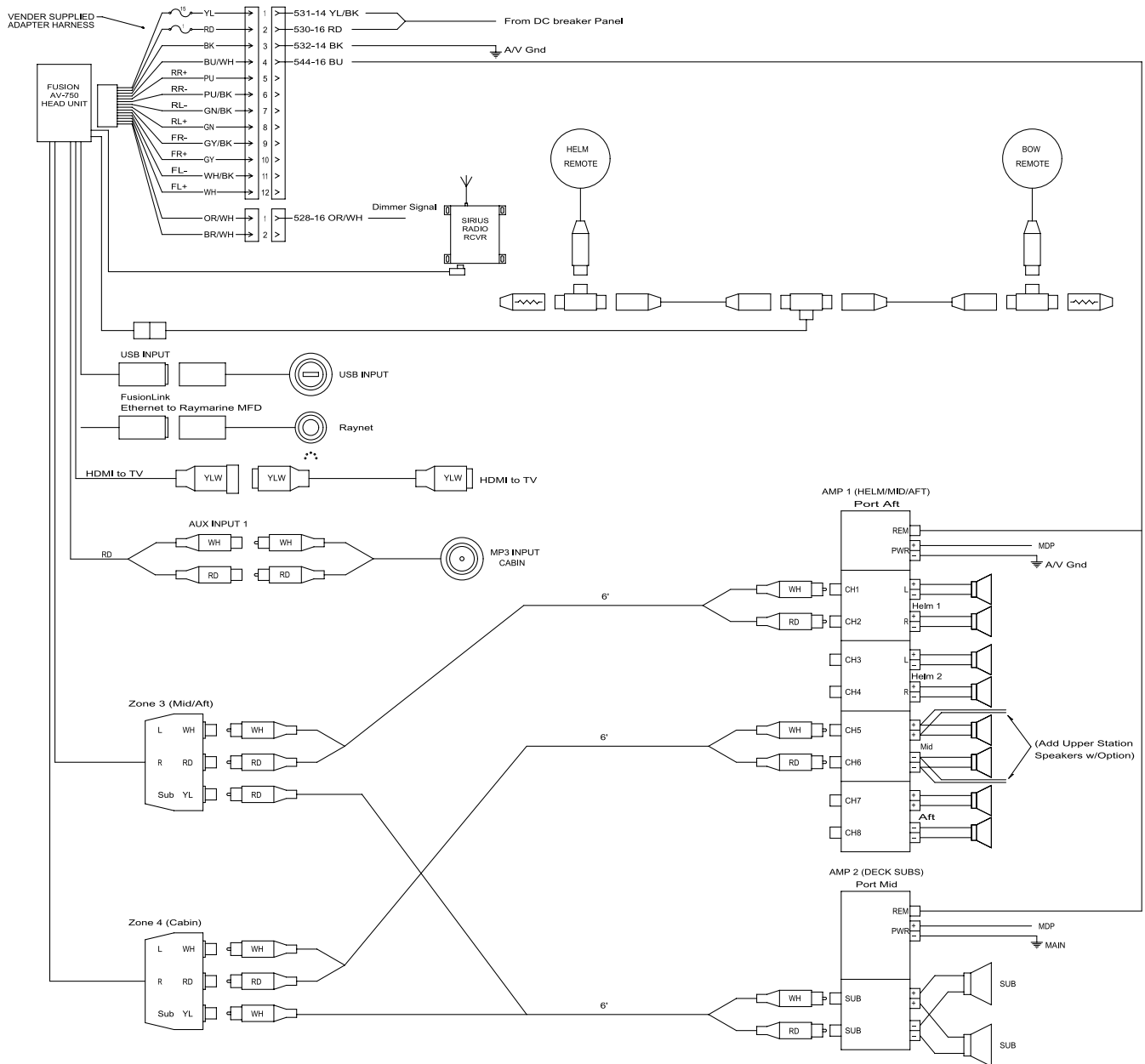
## Section 4 • Electrical System

Diesel Generator - 230V/60hz  
Fig. 4.70.1





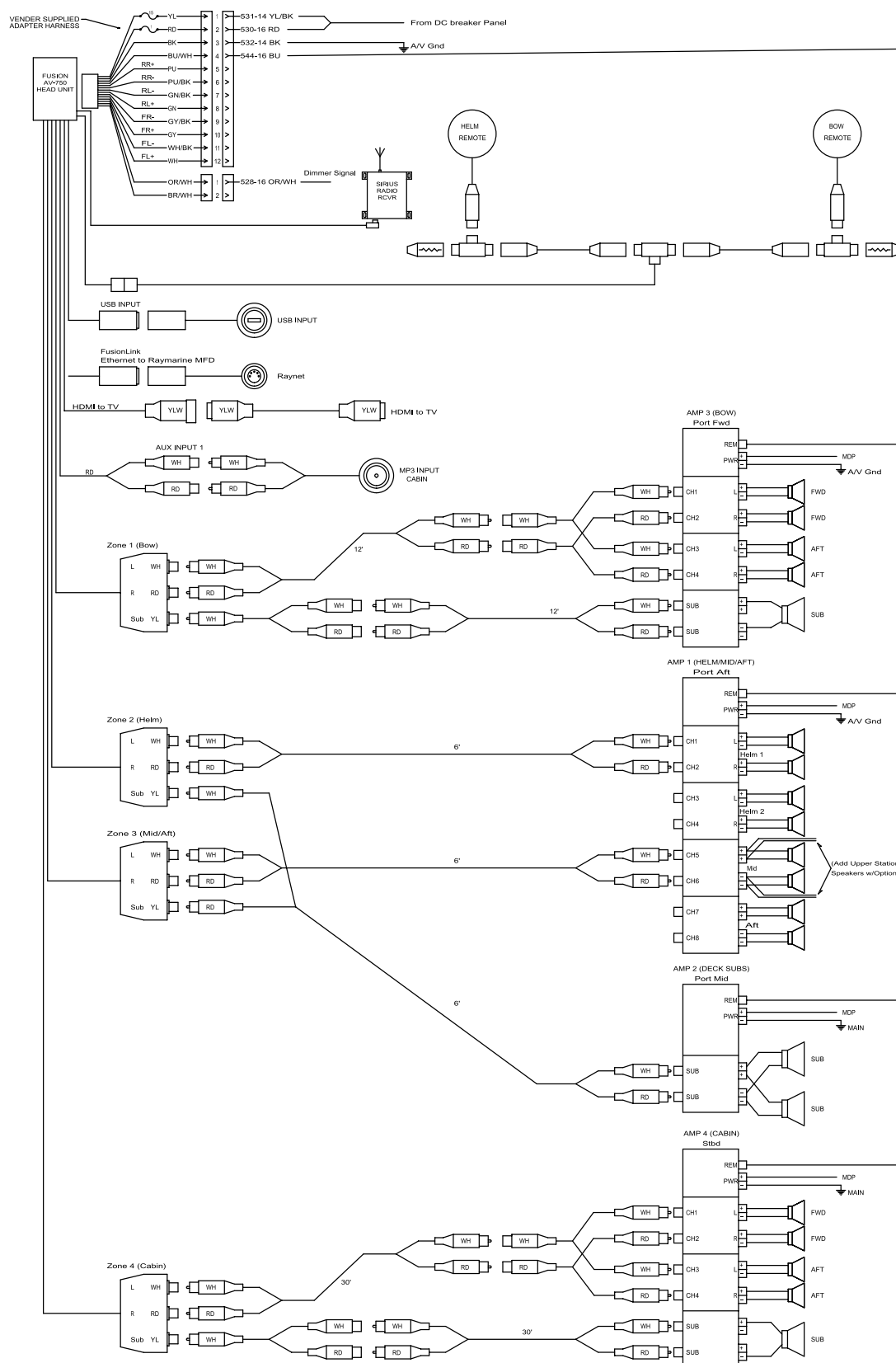
Standard Audio with Fusion  
Fig. 4.71.1



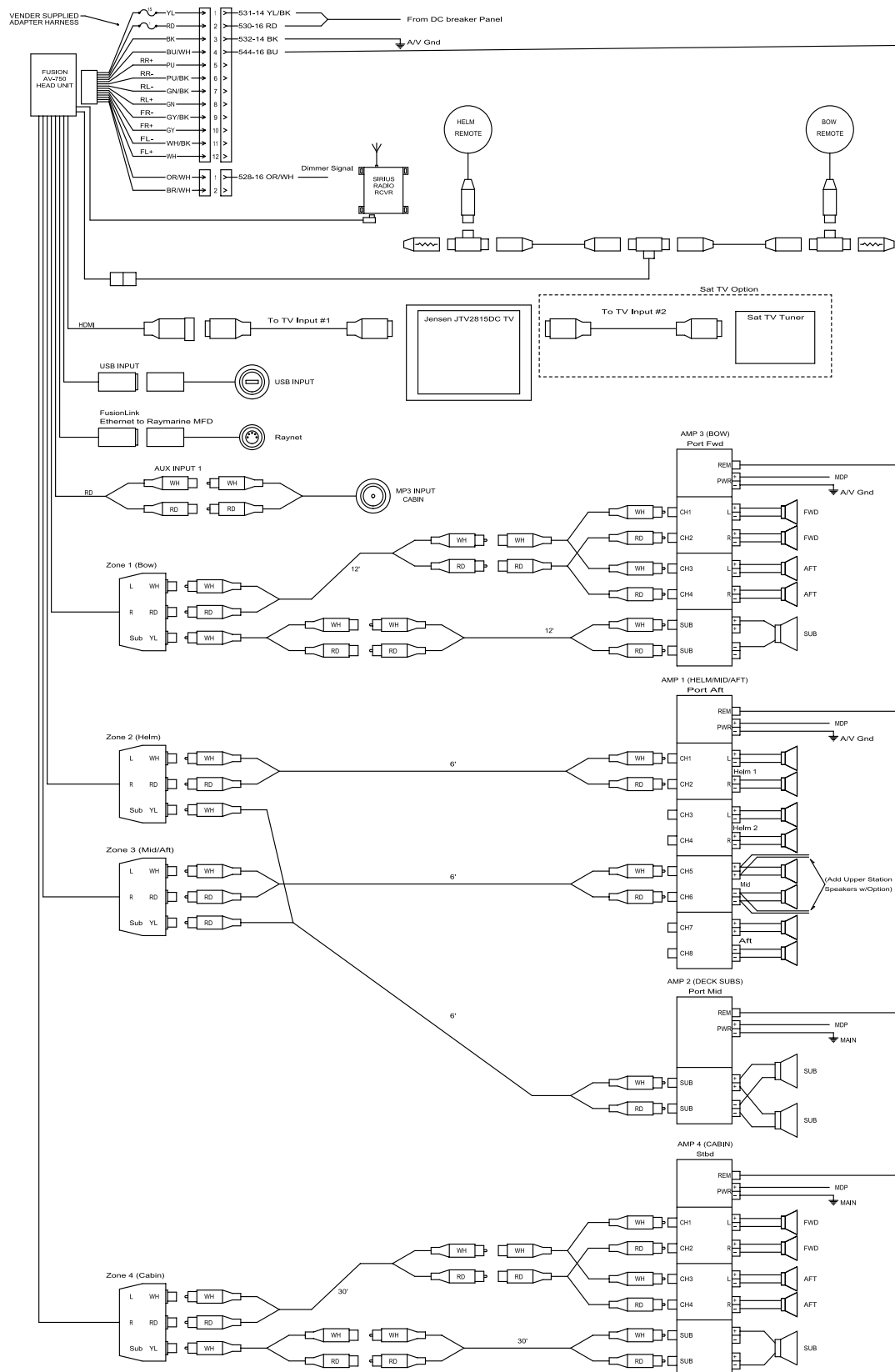
# Section 4 • Electrical System

## Premium Audio Fusion

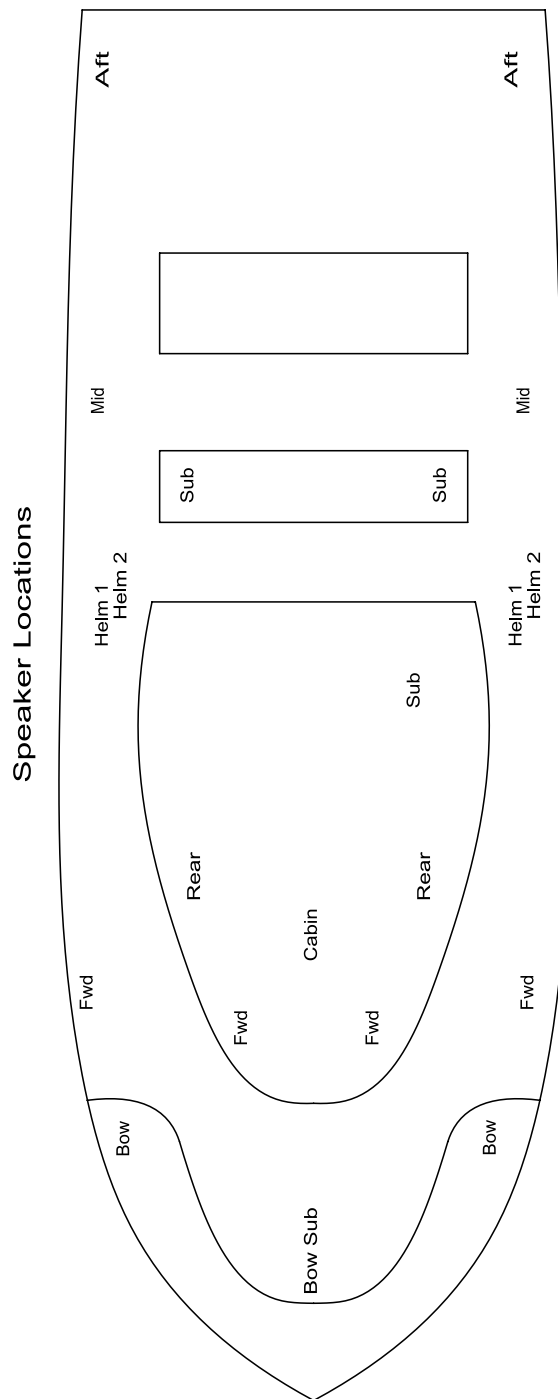
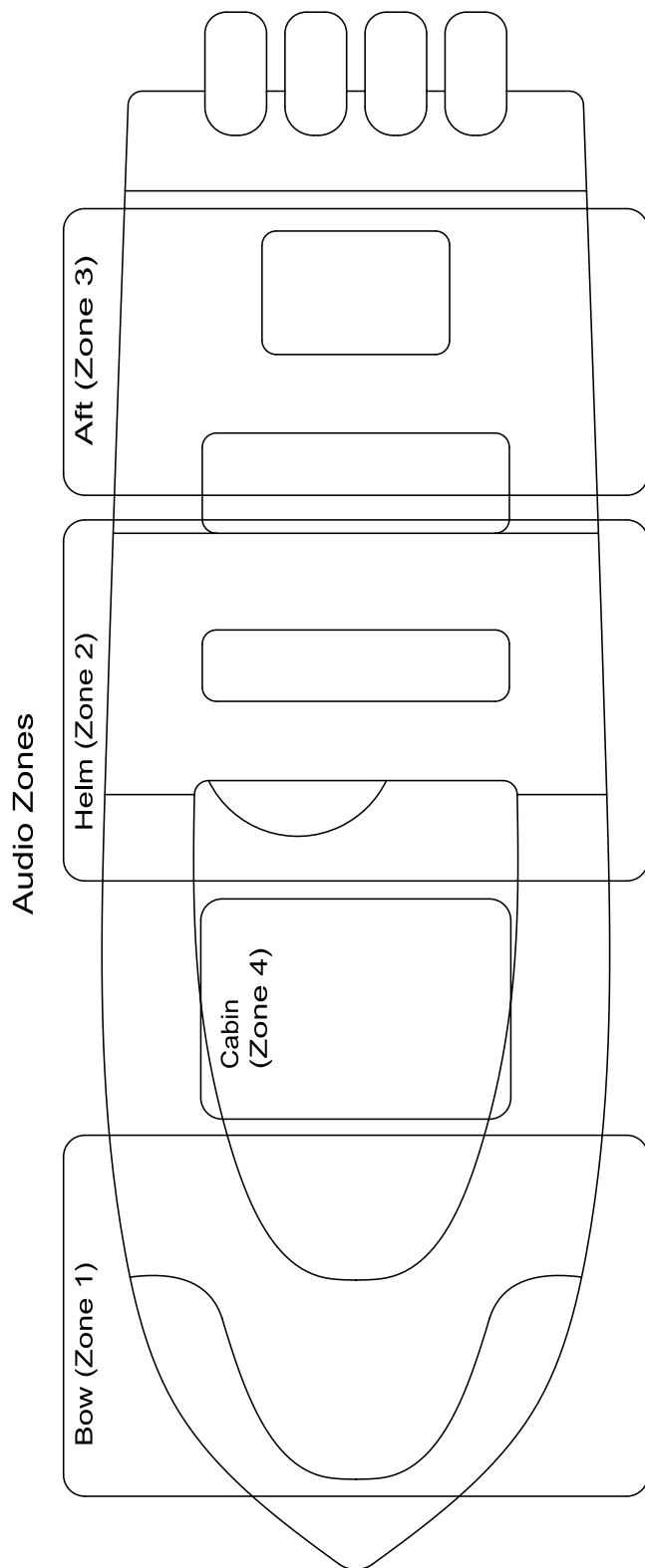
Fig. 4.72.1



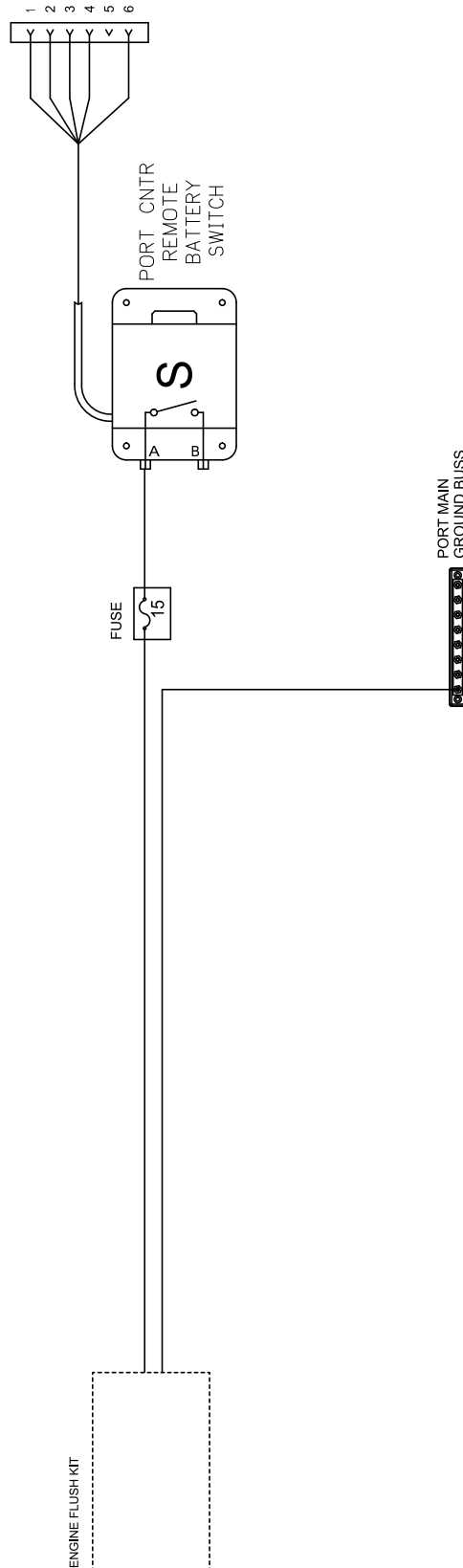
Premium Audio with Fusion w/ Satellite  
Fig. 4.73.1



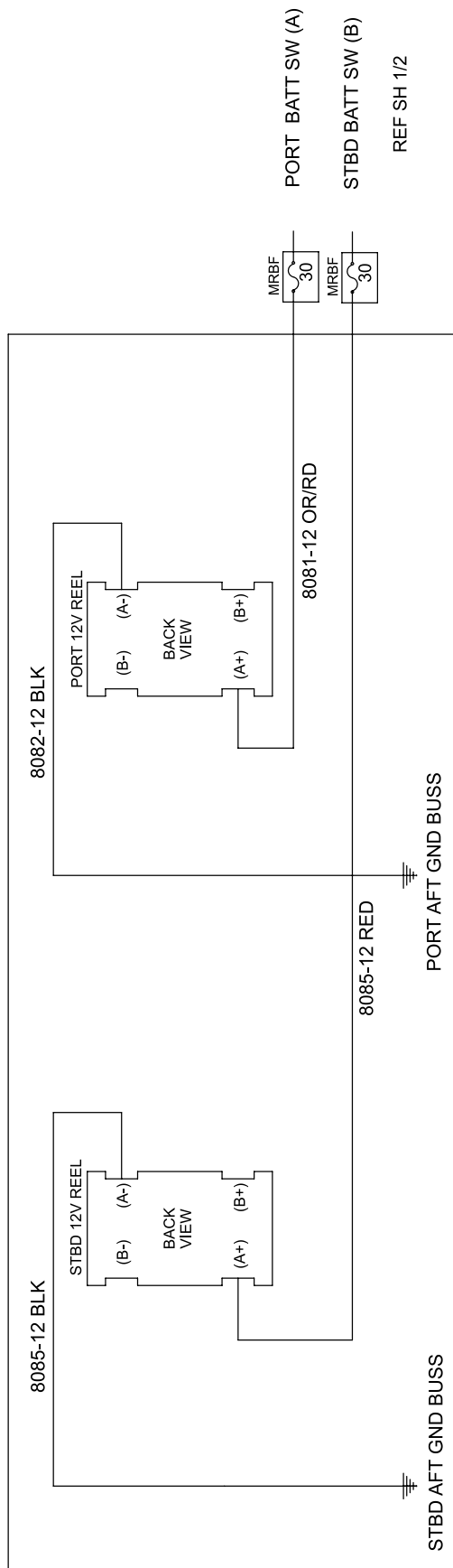
Audio Zones, Speaker Locations  
Fig. 4.74.1



Engine Flush System  
Fig. 4.75.1

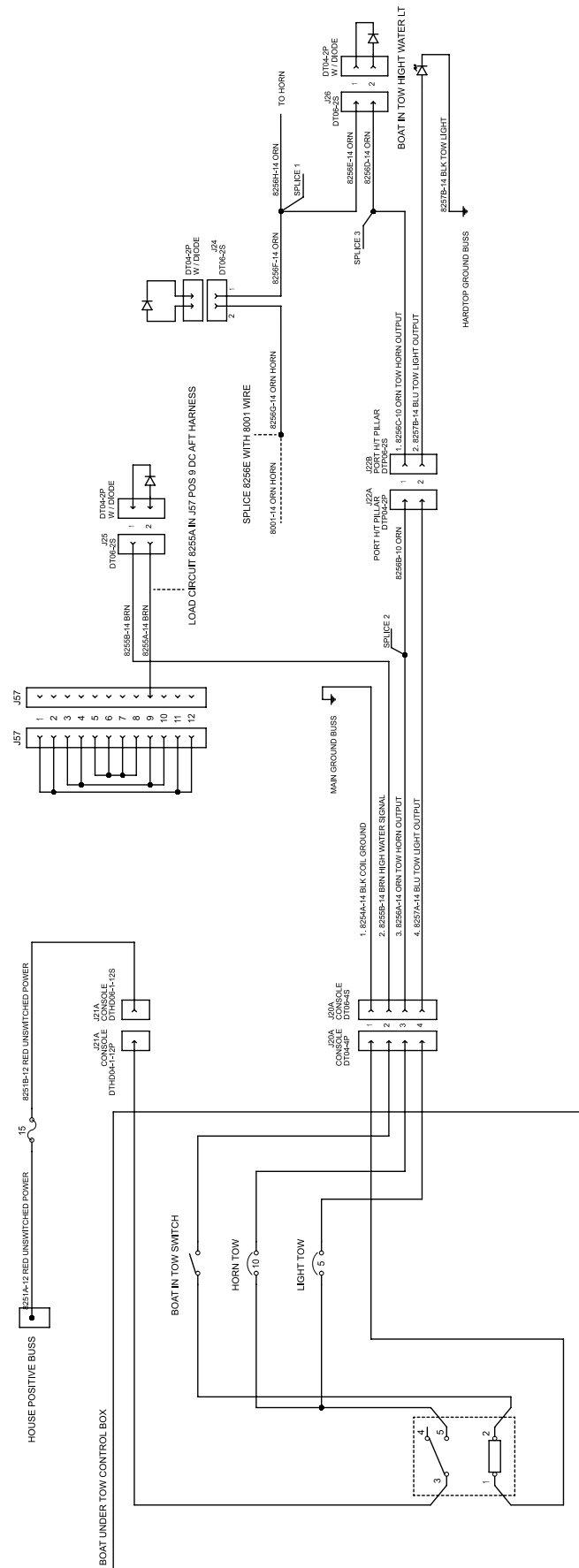


Electric Reels/Down Rigger  
Fig. 4.76.1





Tow Package  
Fig. 4.77.1



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## Routine Care & Maintenance

### NOTICE

**Refer to the individual manufacturers' manuals for important information regarding service, care and maintenance of your boat, equipment and components. Failure to do so may in some cases void the warranty.**

**Owner's Manuals for your boat and each of the various components and equipment can be found in your Owner's Manual Packet.**

### ! DANGER

**When using solvents read all information from the solvent manufacturer regarding safety and handling of the material.**

**Wear proper protective equipment to ensure your personal safety.**

**Only use solvents in a well ventilated area and keep all solvents away from open flame and any other forms of ignition.**

Routine inspection, service and maintenance of your boat, boat systems and components are vital to assure your safety, as well as prolonging the life of your boat. You should develop regular routines for inspecting and servicing your boat.

### ! WARNING IMPORTANT

**Regularly inspect & test hardware, fittings, windshields, hatches, seams, etc. for proper seal. Reseal and/or readjust/tighten fittings, latches, etc. as needed.**

The interval between necessary service or maintenance is highly variable, depending on the environment in which your boat will be used. For example, corrosion of boat parts and components will occur far more rapidly in a salt water environment than on a boat which is used in fresh water. This section provides **only general guidelines** for the care and cleaning of your boat. It is **your responsibility** to determine whether maintenance and care intervals need to be accelerated due to your boat usage and/or operating environment.

## Hull

Fresh water, saltwater and water temperature can all affect the types of growth that you will find on your boat's hull.

Any growth will affect the boat's performance and overall look. If it has been a while between inspections you might notice algae or slime growth on the hull. This can be cleaned with a coarse towel or soft bristle brush. The growth should be cleaned immediately after the boat has been removed from the water. If the growth is allowed to dry it will be much harder to remove.

Compounding may be necessary to remove more stubborn stains and chalking from the surface of your boat. If compounding is necessary it must be done after a thorough washing and prior to waxing.

If the growth is more severe, you may need to enlist the services of a professional hull cleaning company.

Check with your Boston Whaler® dealer for recommendations on a compatible rubbing compound for your boat or a professional hull cleaning company in your area.

## Waxing the Gel Coat Surfaces

Waxing is necessary to provide added protection to the gel coat. A periodic good cleaning and waxing will also ensure that your boat will be protected and look good longer.

### NOTICE

**Waxing of the exterior surfaces is recommended to be done at least twice a year to protect the gel coat of your boat.**

**Do not wax over dirt.** Make sure the surface of your boat has received a thorough washing and rinsing and is clean before waxing. If a rubbing compound has been necessary, make sure that any minor scratches or surface pitting is cleaned of compound residue. Use a good quality carnauba wax or a high quality wax designed for marine gel coat. Apply several coats.

### Hull Maintenance

If using a pressure washer to clean the hull and deck surfaces of your boat it is important that you use the wide fan nozzle only and move the spray head in a continuous motion. Do not concentrate the high pressure on a small area of the boat surface and **NEVER** use the fine pinpoint nozzle as the concentrated stream can cause damage to the surface of your boat.

It is also recommended that you refrain from pressure washing the console as high pressure may compromise the integrity of the electronics and gauges as well as other equipment installed on your boat. Also avoid pressure washing all caulk seams.

When staining from build-up does occur, use only cleaning agents that are recommended for marine gel coat for use on those stubborn stains.

**NEVER** use an abrasive cleaner to wash your boat's hull.

**NEVER** use an abrasive pad to attempt to remove stubborn stains.

**NEVER** use strong solvents to clean.

**NEVER** apply tape or any other type of adhesives directly to the painted surfaces on your boat.

Use care when covering your boat's painted surfaces as tarps and other such covers can trap dirt and cause chafing. It is best to use a frame of either aluminum or wood to keep the cover up and allow air to circulate.

### Hull Blistering

Due to the quality of the materials used in the hulls of Boston Whalers, blistering is rarely ever seen. Blistering is caused by water soluble materials in the hull laminate. The fiberglass and resin structure of your boat is porous. However, intrusion of water into the gel coat will take some time. The effect of osmotic pressure allows water to impregnate below the gel coat and substrate thus forming a blister.

There have been extensive university studies funded by the United States Coast Guard regarding the cause and effect of blistering in the gel coat of fiberglass boats. Fiberglass blisters can form anywhere from near-surface layers of the gel coat to very deep into the fiberglass structure. The damage can range from cosmetic to catastrophic, (although the latter is a very rare occurrence). The studies seemed to point toward long term immersion of the hull in warm water as a primary cause of hull blisters. Stress cracks on the hull below the waterline also contribute to the formation of hull blisters.

### Prevention

There are a variety of ways to prevent the formation of hull blistering. Epoxy coatings can be applied to the hull, followed by hull painting. An alkyd-urethane-silicone marine paint can also be used to aid in the prevention of hull blisters.

Reducing the amount of time that your boat stays in the water also helps prevent hull blisters from forming. Use of a trailer or boat lift will reduce the likelihood of hull blisters forming. Be sure to use a bunk type lift or trailer for storage of the boat out of water.

Contact your Boston Whaler® dealer for more information on the prevention and treatment of hull blisters.

### Bottom Painting

#### **DANGER**

**There are risks and dangers inherent with the use of paints and solvents. Dispose properly of all rags, rollers and trays used for painting. Follow all the precautions and regulations listed by the manufacturer before and after painting your boats hull.**

#### **NOTICE**

**If blisters are present in the hull, they need to be properly cleaned and dried out before any barrier protection can be applied.**



### CAUTION

**Some bottom paints contain metals that can cause corrosion of the outboard engine. Leave a minimum of 3/4" unpainted around all engine parts. Use only a paint specifically designed for aluminum engines as anti fouling protection.**

If your boat will spend most of its time in the water, painting the bottom of your boat's hull is a good way to slow the formation of hull blisters and to keep bottom growth (fouling) under control.

If you will be trailering the boat to and from the water, you might want to forgo the painting.

Following is an abbreviated section on painting your hull bottom. Your Boston Whaler® dealer should have information on properly painting your boat's hull or recommendations on businesses that will paint your hull for you.

### Zinc Anodes

Sacrificial anodes (zinc) are installed on the transom, trim tabs, and engines of your boat to protect underwater hardware. Zinc, being less noble than copper based alloys and aluminum used in underwater fittings, will deteriorate first and protect the underwater fittings from deterioration.

**Zinc anodes cannot perform their function unless they are exposed. Putting paint on an anode smothers it, rendering it useless.**



### CAUTION

**DO NOT paint over zinc plates. This action will render them useless and lead to deterioration of the underwater metal parts of your boat.**

### Bottom Painting a Bare Hull

Since the boat has never been painted preparation is the key to successful hull painting. Take extra care and time in preparation before proceeding to paint.

Begin by scrubbing the surface thoroughly with a stiff brush using an all-purpose marine soap and water to remove loose dirt and contamination. Flush with fresh water to remove all soap residue.



### WARNING

**Proper ventilation and capture of the dust created by sanding is essential. The dust created by sanding is toxic and should not be breathed. A proper fitting respirator must be used.**

**DO NOT use a paper filter mask.**

The gelcoat will have to be dewaxed of mold release wax before sanding can begin, otherwise the wax will be dragged into the scratches and will reduce the adhesion properties of the paint.

Remove any mold release wax that may be present using fiberglass surface prep solvent and a scrub pad. Scrub only a few square feet at a time. Flush with fresh water. If the water beads up or separates, continue scrubbing the surface. When the water sheets off, the wax contaminate has been removed.

After the dewaxing is complete, application of a primer coat is recommended. Pay close attention to scratches, nicks and dings in the surface. If necessary, fill any repair areas with a watertite epoxy filler. After filler is cured, sand with 80 grit paper until smooth. Remove the sanding residue using a fiberglass solvent wash.

The paint can be applied after sanding and cleaning is complete. Follow the paint manufacturer's recommendations for application.

### Bottom Painting a Pre-Painted Hull



### WARNING

**Bottom paint is designed to resist algae growth which means it has chemicals embedded in the paint that are harmful if ingested. Take all necessary precautions required before painting or repainting your boat's hull.**

If the hull bottom is already painted, you must be sure to test the paint's adhesion to the already painted surface. If the paints are incompatible, the new paint will not adhere to the hull bottom or the paint will "lift" the old paint. **NEVER** apply paint without first

### NOTICE

**Painting your boat's hull will adversely affect the boat's speed and performance and may require re-propping if the maximum engine RPMs drop below the engine model/mfg recommended operating range.**

preparing the old painted surface following the paint manufacturer's recommendations.

Follow the paint manufacturer's recommendation for applying the paint. Humidity and weather will play a role in how and when the paint is applied. Several thin layers are better than one thick layer.

To determine the waterline, you will need to place the boat in water with a full load of fuel and gear. Mark the waterline and measure above the marked line 1 to 3 inches for placement of the tape line.

Make sure that there is enough paint left to cover areas that were not accessible, (slings, jack stands etc.) and paint accordingly. Follow the paint manufacturer's recommendation for do's and don'ts after the painting is complete.

### NOTICE

**Masking tape is NOT recommended for the types of paint you will be using.**

### Rubrail Care

The rubrail on your boat is constructed of an injected high density PVC vinyl material which laboratory tests have proven to be highly resistant to staining, fading and cracking.

As resilient as this material is, you still need to follow some basic maintenance precautions.

General maintenance requires a thorough cleaning with mild soap & water. **DO NOT** use any cleaning agents which contain chemicals.

Although the outer shell is tough and durable, there is a chance that it can be breached. Use care when docking or exposing the rubrail to conditions which may cause damage such as docking against heavily barnacle-encrusted pilings.

Some tears (cleanly sliced) can be repaired with a "Super Glue" type product.

Thoroughly clean and dry the affected area. Apply glue and hold the surfaces together. Areas which have been torn or are affected by heavy abrasion will have to have the damaged section replaced. Please see your Boston Whaler® dealer for this type of repair.

### Cleaning Fiberglass & Non-Skid

To protect your deck and non-skid areas from the deteriorating affects of the sun, oxidation, water spots and pollution, use a good quality "fiberglass and non-skid deck" wax every two to three months.

When applied to your deck and non-skid areas, as recommended by the manufacturer, the wax forms a protective non-slick surface which will keep debris from sticking. Dirt, soot, bird droppings, and even fish blood will rinse right off.

### NOTICE

**NEVER** use abrasive cleaners, detergents or soft scrub type cleaners to wash your boats surfaces.

**NEVER** use abrasive pads, brushes or sponges to attempt to remove stubborn stains.

**NEVER** use strong solvents or detergents which contain chlorine.

### Stainless Steel Care

**The cleaner your stainless trim and fittings can be kept, the greater the assurance of optimum corrosion resistance. Without proper care even the best stainless steel will corrode.**

Stainless steel is strong and corrosion resistant, but still requires maintenance to keep its appearance. Frequent routine cleaning of stainless steel with a mild soap and water solution and coating with a good grade cleaning wax will help maintain the finish.

- Wash with mild soap and cold or lukewarm water.
- Dry THOROUGHLY.
- Apply cleaning wax with a soft, dry cloth.
- Allow wax to dry, then polish and buff.



Even the finest cleaning powders can scratch or burnish a mill-rolled surface. On polished finishes, rubbing or wiping should be done in the direction of the polish lines, NOT across them.

Crevice corrosion, a brownish coloring which occurs where two pieces of stainless hardware meet is caused by impurities in water and air. It can be easily cleaned with a good grade marine polish using a sponge, cloth or small bristled brush (for nooks and crannies).

### NOTICE

NEVER use abrasive cleaners, detergents or soft scrub type cleaners to wash your boats surfaces.

NEVER use abrasive pads, brushes or sponges to attempt to remove stubborn stains.

NEVER use strong solvents or detergents which contain chlorine.

NEVER use silver cleaners.

### Seats (Mechanical Parts)

Always wash metallic parts with soap and water and rinse thoroughly with fresh water. Once dry, apply a light coating of lubricant to protect moving parts.

Check for loose or damaged hardware and tighten or replace as necessary.

### Aluminum Care

Preventative maintenance is essential to life of the metals on your boat. The presence of salt particles and moisture is the major cause of white spots, pitting and corrosion.

The use of harsh chemicals can also cause deterioration. Manufacturers and applicators of protective coatings will not warrant protective coatings on metals in the marine environment. Proper owner maintenance is required to reduce deterioration which will result in most cases by failure to wash down and wipe dry after each use and/or the use of abrasive, acidic or other improper cleaners.

Wash completely using a soft cloth and mild detergent to remove salt particles. Hosing alone will not dislodge all particles. **DO NOT** allow soap to dry as it may cause stains on coated surfaces. Make sure to wash and dry the full circumference of aluminum parts. Apply an aluminum protectant at least twice each year, more frequently as conditions warrant. Neglect will cause pitting of the surface which cannot be reversed.

Inspect and repair or replace all damaged nylon bushings, washers or other hardware designed to prevent contact with dissimilar metals.

Whenever electrical or electronic changes are made to the boat, a qualified marine technician should check aluminum parts for stray currents. Make sure all electronic equipment is properly grounded with adequate sized wire.

### Cushions

Saltwater, salt residue, dirt, ultra-violet rays etc. will take their toll on vinyl products causing them to lose their luster and texture.

The cushions on your boat are made of a durable vinyl material called OMNOVA which is protected by a finish called PreFixx®. PreFixx® will keep your cushions looking new far longer than most other vinyl upholstery.

### To Clean Your Cushions



### CAUTION

**Solvents are flammable. Exercise proper care. Wear rubber gloves during all cleaning activity.**

**Use caution when cleaning around buttons, stitching and wooden or decorative trim; solvents could seriously damage such areas.**

- Remove ordinary dirt and smudges with a mild soap and water solution. Dry with a soft, lint-free cloth or towel.
- More difficult stains can be cleaned using rubbing alcohol (isopropyl alcohol). Rinse cleaned area with fresh water and dry with a clean, soft, lint-free cloth or towel.

- **Seemingly permanent stains** like ballpoint ink can be cleaned with active solvents such as nail polish remover when applied with a soft cloth or damp sponge and rubbed. Rinse cleaned area with fresh water and dry with a clean, soft, lint-free cloth or towel.

The vinyl material and superior finish has been tested to resist heavy abrasion. Complete cleaning instructions are included in the owner's packet. Read all information provided by the cushion manufacturer regarding the proper cleaning and maintenance.

**Your cushions are not waterproof.** They are constructed of open-cell foam and will absorb and hold water. The foam is wrapped with a plastic barrier which helps to keep water from being absorbed into the foam but also will not allow water to dissipate once the foam is soaked. **Do not leave the cushions in standing water or exposed to heavy, prolonged rain.**

If, in the event your cushions become waterlogged, remove the foam from the cushion, press as much water as you can from the foam and allow to air dry. Make sure the plastic wrap is dry before wrapping the foam and inserting it back into the cushion.

To prevent mildew, keep the vinyl dry and make sure that moisture does not accumulate between the cushions.

### Cleaning Your Instrument Gauges

When gauges are exposed to a saltwater environment, salt crystals may form on the bezel and plastic covers. Remove the salt crystals with a soft damp cloth. Clean with a mild household detergent or plastic cleaner.

Never use abrasives or rough, dirty cloths to clean plastic parts. A mild household detergent or plastic cleaner should be used. Wipe clean with a damp chamois.

FOR MORE INFORMATION, CONTACT MERCURY MARINE CUSTOMER SERVICE AT 920-929-5040

### Canvas Care and Maintenance

#### NOTICE

**DO NOT use detergents, bleach or solvents to clean your canvas.**

To keep your canvas and metal parts in good working condition and in good appearance, you will need to keep them clean.

The fabric should be cleaned regularly before substances such as dirt, pollen, etc. are allowed to accumulate on and become embedded in the fabric. The canvas can be cleaned without being removed from the installation.

Chafing, fiber wear from dirt and grit and deterioration from ultraviolet light can cause your canvas to degrade over time.

### Maintaining a good appearance

- After each use, especially if used in salt water areas, rinse the canvas completely with fresh cold water.

#### On a regular basis

- Brush off any loose dirt, pollen, etc.
- Hose down with fresh cold water and clean with a mild solution of a natural soap in lukewarm water (maximum 100°F / 38°C).
- Allow the canvas to soak. **DO NOT ALLOW THE SOAP TO DRY.**
- Rinse thoroughly with fresh water.
- Let the canvas dry completely. **DO NOT** store any of the canvas pieces while wet.

The effects of ultraviolet light can sometimes be reduced by chemical treatment of canvas items.

Consult your Boston Whaler® dealer or check your canvas manufacturer's manual **BEFORE** using any chemical treatments on your canvas.

### Cleaning Stubborn Stains

Soak fabric for approximately twenty minutes in a mild solution consisting of no more than 1/2 cup (4 oz.) of bleach and 1/4 cup (2 oz.) of natural soap per gallon of lukewarm water (not to exceed 100° F / 38° C).

**Rinse thoroughly** in cold water several times. Allow the fabric to air dry completely.

#### NOTICE

**Failure to remove all of the soap solution can cause deterioration of seams and prevent fabric from proper retreating.**

Retreat the fabric using an air curing product such as 303 High Tech Fabric Guard to ensure water and stain repellency.

All canvas should be stored flat or rolled in a clean, dry space.

### Maintaining Zippers and Hardware

Lubricate zippers and fasteners periodically with a clear silicone spray. In the absence of silicone spray, a wax candle can be used to lubricate the zipper track.

Replace any missing fasteners or any fasteners showing signs of corrosion.

#### NOTICE

**DO NOT use petroleum based products, such as petroleum jelly, on the zippers or fasteners.**

### Clear Vinyl (Acrylic)

To clean acrylic, first flood it with water to wash off as much dirt as possible. Next, use your bare hand with plenty of water, to feel and dislodge any caked dirt or mud. A soft grit-free cloth may then be used with a nonabrasive soap or detergent. A soft sponge, kept clean for this purpose, is excellent. Blot dry with a clean damp chamois.

The use of a vinyl protective cleaner/restorer is recommended to keep your acrylic scratch resistant, clean and minimize the deteriorating effects of sunlight.

### Storing Clear Vinyl

The clear vinyl should never be folded or creased as cracking will result. The recommended method of storage is to roll or lay the panels down flat. To protect the clear vinyl from rubbing against itself while rolled or stored flat, place a piece of very soft, nonabrasive cloth between the pieces.

#### NOTICE

**DO NOT use solvents such as acetone, silicone spray, benzene, carbon tetrachloride, fire extinguisher fluid, dry cleaning fluid, lacquer thinner, glass cleaning solution or harsh detergents on acrylic.**

**The above substances will attack the surface of the vinyl.**

#### NOTICE

**Never use a dry cloth or duster or glass cleaning solutions on acrylic.**

### Cleaning Tempered Glass Windshield

#### NOTICE

**DO NOT USE abrasives, harsh chemicals or metal scrapers on glass.**

#### NOTICE

**For windshields with aluminum frames refer to "Aluminum Care" in this section.**

Use commercially available glass cleaners or a mixture of fresh water and vinegar to clean your glass windows, windshield or portlights. Dry with a soft terry cloth towel or chamois.

### Hardwood Floor

The hardwood floor in the cabin can be kept clean and in good condition with routine cleaning.

- Sweep or vacuum regularly to rid your floor of dust and eliminate abrasives that can scratch the surface.
- Quickly wipe spills to protect wood from excess liquid.
- Use mats in areas where water spills, detergents, oils and other mishaps may occur.

#### DO NOT:

- Use wax, oil-based detergents or other household cleaning agents on your floors.

These products may dull or damage the finish, leave a greasy film, make maintenance more difficult and refinishing impossible without in-depth sanding and complete recoating.

- Expose to long periods of intense sunlight.

**FOR MORE INFORMATION, CONTACT BOSTON WHALER CUSTOMER SERVICE (1-877-294-5645)**

### Solid Surface Countertops

When properly cared for, your solid surface countertops will last a lifetime.

Routine cleaning with a damp cloth and one of the following cleaners will keep your countertop looking as good as the day it was installed.

- Household dishwashing detergent
- Soft Scrub or other non-abrasive cleaner
- MILD bleach solution
- Ammonia based window cleaner

#### DO NOT:

- Subject the surface to heat emitting appliances.

- Place hot items directly on the surface.
- Subject to sudden temperature changes (hot to cold, cold to hot).
- Cut on surface.
- Expose surface to household or industrial chemicals such as paint strippers, drain cleaners or solvents. Wipe immediately if accident occurs.

When cooking ensure that utensils do not overhang the stove and reflect heat to the countertop. Always use a hot pad or trivet when placing hot items on the countertop.

In the event that your countertop is damaged by burns, impact marks or scratches, repairs should be made by a trained solid surface fabricator.

**FOR MORE INFORMATION, CONTACT BOSTON WHALER CUSTOMER SERVICE (1-877-294-5645)**

### Cabin Steps

The cabin steps in your boat are constructed with natural wood and are sealed with a coating which requires virtually no maintenance beyond a frequent wipe down.

### Long Term Storage & Winterization

Long periods of storage, winter lay-up and/or non-use, common to boats, create unique problems. When preparing to store a boat for extended periods of two months or more it is best to make sure that the boat and its systems are properly conditioned for such extended periods of non-usage.

The guidelines presented on the following pages give basic instructions on “winterizing” your boat and boat systems. If inexperienced with the process of winterization it is best to hire the services of a professional.

In addition, always consult the owner’s manuals of the various systems and equipment on your boat for the manufacturer’s recommendations on winterizing and long term storage.

### Engine



#### CAUTION

**Never start or run your outboard (even momentarily) without having water circulating through the cooling water intake holes in the gear case. This will prevent damage to the water pump (running dry) or overheating of the engine.**

#### NOTICE

**Periodically check the zinc buttons (anodes) installed on the lower unit of your engines. Replace if half or more of the zinc is missing.**

Protecting your engine's vital moving parts from corrosion and rust caused by freezing of trapped water or excessive condensation due to climatic changes is very important. Freezing water in the engine can cause extensive damage to the internal moving parts. Internal engine parts can also be affected by rust due to lack of proper lubrication

- Replace the engine oil and filter, running the engine to drain out as much old oil as possible.
- Flush the engine with fresh water using flush muffs or a similar device attached to the raw water pickup.
- Let all water drain from the engine.
- Fog the engine while it is running. Spray until it stalls.
- Run fuel which has been treated with conditioner and stabilizer through the engine.
- Replace lower unit gear oil. Check for moisture in old oil, a sign of deteriorating seals.
- Remove the prop and grease the shaft and threads.
- Treat all grease fittings with the recommended lubricant.

- Lightly lubricate the exterior of the engine or polish with a good wax.
- Check engine mount bolts. Ensure that they are torqued to 55 ft/lbs.

In addition, be sure to follow all recommendations in your engine manufacturers operation manual.

### Fuel System

#### NOTICE

**Pay particular attention to the information provided in "Ethanol-Blended Fuel" in section 3 of this manual.**

Fill the tank completely (100% ) full and add fuel stabilizer and conditioner, following the manufacturer's recommendations, to provide fuel stability and corrosion protection.

Tank(s), hoses, and fuel pumps should be treated to help prevent the formation of varnish and gum.

Temperature extremes will cause condensation to accumulate in an empty or partially filled fuel tank leading to fuel contamination and/or premature wear of your system.

### Electrical System

- Check all connections and tighten if necessary.
- Spray all connections with an anti-corrosion spray.

### Battery

#### NOTICE

**Follow the manufacturer's recommendations for long term storage of your battery(s).**

Engine and house electrical systems on our boats have become increasingly more complex and are reliant on a good source of power. The house source of power typically comes from a battery bank comprised of two or three batteries in parallel. The



charging source for the batteries while away from the dock is the engines; or if equipped a generator a generator and the generator is on, battery chargers. As the engines/generator are providing a charge output to the house bank through the automatic charging relays (ACRs), keep in mind the following battery recommendations.

### Mixing fresh/new and used/dead batteries

The fresh battery will deliver current into a dead battery which has high resistance. This results in excessive heat in the used/dead battery, which can cause further damage, leakage, or rupture. A used battery will drain energy from the new one, reducing the total amount of battery power available.

### Mixing battery types

Different battery types are designed for different purposes. Mixing an AGM battery with a lead acid battery will not improve performance. This results in reduced performance, may damage your devices, or cause battery leakage or rupture.

### Mixing battery brands

Different battery brands may not have the same specifications like marine cranking amps (MCA) or cold cranking amps (CCA). This results in excessive heat, which may then cause damage, leakage or rupture in one of the batteries. We recommend using the same type of batteries throughout a boat.

## NOTICE

**Remove battery from boat and store in a cool, dry location. Periodically check the battery during storage.**

- Disconnect the battery cables (negative cable first).
- Remove the battery from the boat.
- Clean the terminal ends of the cables and battery terminals with a solution of baking soda and water. Rinse thoroughly with clean water.
- Apply a coat of grease on the terminal ends of the cables and the battery terminals.
- Store the battery in a cool, dry area.

- Use a trickle charger to keep the battery charged or charge the battery every 30-60 days.

## NOTICE

**Follow the manufacturer's recommendations for long term storage of your battery(s).**

### Livewell/Raw Water System

Drain the livewell. Ensure that all water is removed from the drain hose.

Remove the fill hose from the pump in the bilge and drain the water from the hose. Replace the hose on the pump and tighten the two clamps.

### Fresh Water System

If the water system will not be used for an extended amount of time it is recommended that it be drained.

- Energize the freshwater pump switch on the instrument panel.
- Open all faucets and wash-down connections. Activate any sprayers connected to the system.
- Run the system until the fresh water tank is completely empty.
- De-energize the freshwater pump switch on the instrument panel.
- Add a non-toxic antifreeze to the water tank per manufacturer's recommendations.
- Energize the freshwater pump switch on the instrument panel.
- Run the system until antifreeze is seen running out of all faucets, wash-down connections and sprayers.
- Close all faucets, wash-down connections and sprayers.
- De-energize the freshwater pump switch on the instrument panel.



If a water heater is a part of the system, isolate the tank by disconnecting the in and out hoses and connecting them together. Make sure that the tank contains a sufficient amount of non-toxic antifreeze to avoid freezing and causing damage.

### After Long Term Storage

Before you fill the freshwater system it is vital that it be properly disinfected.

The following procedure is recommended to disinfect the freshwater system:

- Flush the entire system thoroughly by allowing potable water to flow through it.
- Drain the system completely.
- Fill the entire system with an approved disinfecting solution (check with your dealer for recommendations) and follow the method prescribed by the manufacturer.
- After disinfecting, drain the entire system.
- Flush the entire system thoroughly several more times with potable water.
- Fill with potable water.

This should be done annually or before using the system if it has been laid up for an extended amount of time.

### Head System

- Pump out the holding tank at an approved facility.
- Add fresh water to the bowl and flush several times while the holding tank is being pumped.
- Use cleaning/sanitizing crystals or liquid, following manufacturer's recommendations, and let soak for a few minutes.
- Add fresh water and flush several times while pumping out holding tank again.
- Add antifreeze and flush/fill entire system.

### Air Handling System

Follow manufacturer's recommendations for winterization/long term storage. The manufacturer's owner's manual can be found in your owner's manual packet.

### Sump

Drain all water from sump. Remove the top and using a rag, clean up any residual water.

- Check all connections and tighten if necessary.
- Spray all connections with an anti-corrosion spray.

### Electrical System

- Check all connections and tighten if necessary.
- Spray all connections with an anti-corrosion spray.

### Deck

Clean the deck with soap, hot water and a stiff brush to clean up any oil spills.

### Drainage

It is important to raise the bow of the boat enough to allow for proper drainage of water from the deck and bilge area. Make sure all the drainage fittings are clear and free of debris and plugs are removed. Store the engine in an upright position to promote adequate drainage of water.

### Avoid Loss

Remove any valuables or anything that can be easily removed from the boat such as electronics, lines, PFDs, fenders, cushions, etc. and store at home.

### Cover

#### NOTICE

**DO NOT USE a bimini top in lieu of a cover. Damage and aging will occur while providing no protection for your boat.**

When covering your boat it is best to use a frame of either aluminum or wood to keep the cover up. This allows air to circulate and discourages water from pooling on the cover.

## Section 5 • Care & Maintenance

Vents along the entire length of the cover will allow condensation to escape. Placing a series of foam pads between the hull and cover will also aid in air circulation and reduce condensation.

### Trailer Storage

To help keep your boat dry and mildew free, consider placing commercial odor and moisture absorbing products in the boat under the cover.

Repeatedly immersing the trailer in water during boat launching can cause a variety of problems. Water seeping into the wheel hubs will cause the grease to emulsify and can prematurely corrode the bearings.

Check with the trailer manufacturer for scheduled maintenance of your trailer.

### Environment

Antifreeze and other winterizing fluids can be toxic to aquatic life and cause harmful effects to plant life.

Improper disposal of, or spillage of antifreeze and/or any winterization fluids can cause environmental problems when allowed to empty into waterways or on the ground. Furthermore, it is illegal, punishable

at minimum by fines.

Used antifreeze or any winterization fluids, should not be disposed of into sanitary sewers or publicly owned treatment plants.

Persons who have any questions regarding recycling antifreeze or other toxic fluids should write or call their state's EPA office.

### Reinforcement Locations

Your boat has been manufactured with reinforcement in various locations throughout the deck.

In the event you wish to add equipment to your boat which requires you to penetrate the deck with fasteners, the diagrams on the following pages illustrate the size, location and type of the reinforcement available. The chart below provides a description of the material and recommended fasteners to secure your equipment.



### CAUTION

**DO NOT attempt to secure equipment in any location other than those that are illustrated.**

Reinforcement	Construction	Equipment weight	Fastener Type*
Plywood	Standard boatbuilding material	Light	Self-tapping screws
Trevira	Thick spunbound polyester fabric	Light	Sheet Metal screws
Sparalloy	High density plastic	Medium	Self-tapping screws
Phenolic**	Fiberglass reinforced composite board	Heavy	Drill & Tap

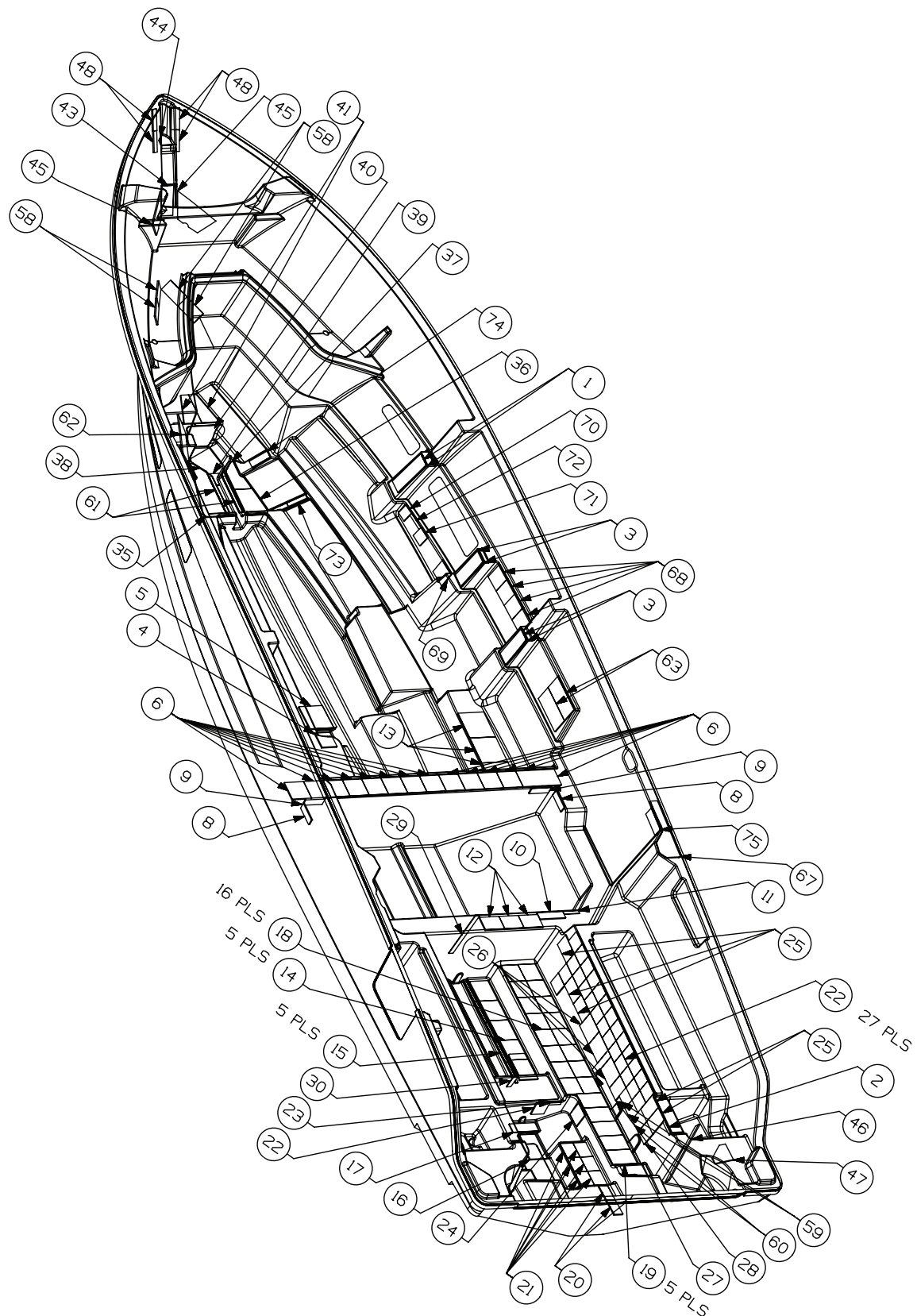
\* In all cases it is recommended to drill and countersink a pilot hole to prevent damage to the gelcoat surface.

\*\*Also known as Whaleboard

## Reinforcement Location Diagram

HULL -Port Side View

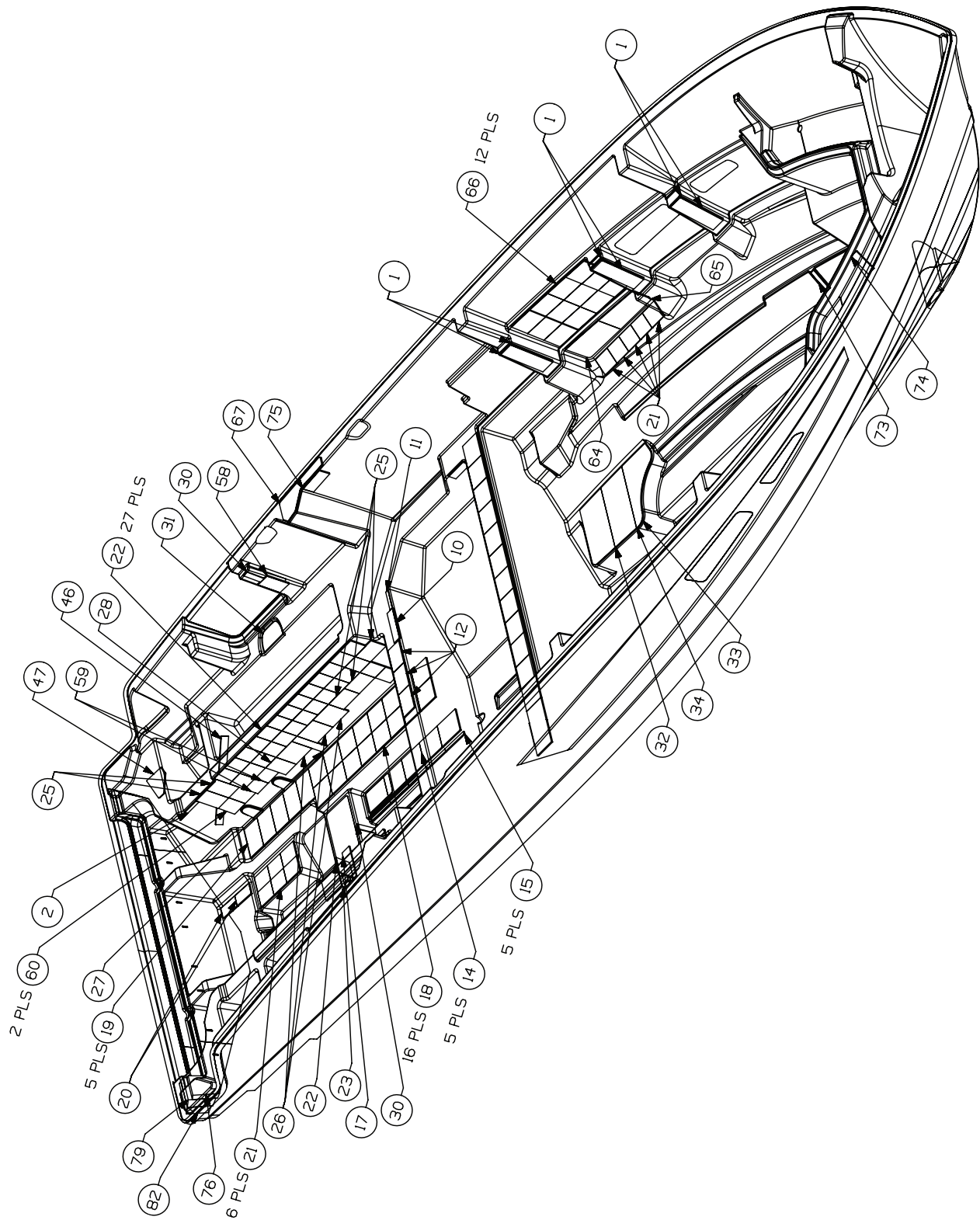
Fig.5.13.1



## Reinforcement Location Diagram (Con't)

HULL -Starboard Side View

Fig.5.14.1



### Reinforcement Location Diagram (Con't)

HULL

Fig.5.15.1

PARTS LIST		
FIND NO	DESCRIPTION	QTY REQD
1	PHENOLIC 5.5X17, 5.5X17	8
2	PLYWOOD 1.25X6.375, DM1199	2
3	PHENOLIC 5.5X15, DM1284	4
4	AQUA PLAS 7X7, DM0403	1
5	AQUA PLAS 11X11, DM1283	1
6	PHENOLIC 8X9, DM0176	14
7	BRACKET, ALUM BW420-15 FUEL TANK PORT	1
8	PHENOLIC 3X8, DM0150	2
9	PHENOLIC 3X9, DM0151	2
10	PHENOLIC 3X12, DM1319	2
11	PLYWOOD 1.25X7.25, DM0979	2
12	PHENOLIC 6X9, DM0169	6
13	PLYWOOD 12X12, DM0611	3
14	PLYWOOD 8.5X9.75, DM1286	10
15	PLYWOOD 1X10, DM1287	10
16	AQUA PLAS 8X12, DM1288	1
17	AQUA PLAS 4X12, DM1289	1
18	PLYWOOD 8X8, DM0483	32
19	PLYWOOD 7X11.5, DM1290	10
20	PLYWOOD 4X7.25, DM1291	4
21	PLYWOOD 6X7, DM0475	17
22	PLYWOOD 6X6, DM0474	55
23	PLYWOOD 1.25X5.5, DM1163	1
24	PLYWOOD 6X6.75, DM1292	1
25	PLYWOOD 6X9, DM0477	10
26	PLYWOOD 8X9, DM0484	6
27	PLYWOOD 3X12, DM0701	2
28	PLYWOOD 6X8, DM0476	2
29	PLYWOOD 2X23.5, DM1296	1
30	PLYWOOD 2X7, DM0187	2
31	PHENOLIC 6.5X10.5, 6015-P111	1
32	PLYWOOD 12.25X24.125, 6015-P112	1
33	PLYWOOD 14.875X25, 6015-P114	1
34	PLYWOOD 12X25, 6015-P113	1
35	PLYWOOD 10.375X12.125, 6015-P116	1
36	PLYWOOD 10.375X12.125, 6015-P118	1
37	PLYWOOD 8X13.375, 6015-P119	1
38	PLYWOOD 8X13.375, 6015-P120	1
39	PHENOLIC 5.375X7.375, 6015-P121	1
40	PHENOLIC 8.25X13, 6015-P122	1
41	PLYWOOD 8.125X13.5, 6015-P123	1
42	PLYWOOD 8.125X13.5, 6015-P124	1
43	PHENOLIC 5.5X11.5, DM1297	1
44	PHENOLIC 5X5, 6015-P125	1

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## Reinforcement Location Diagram (Con't)

HULL

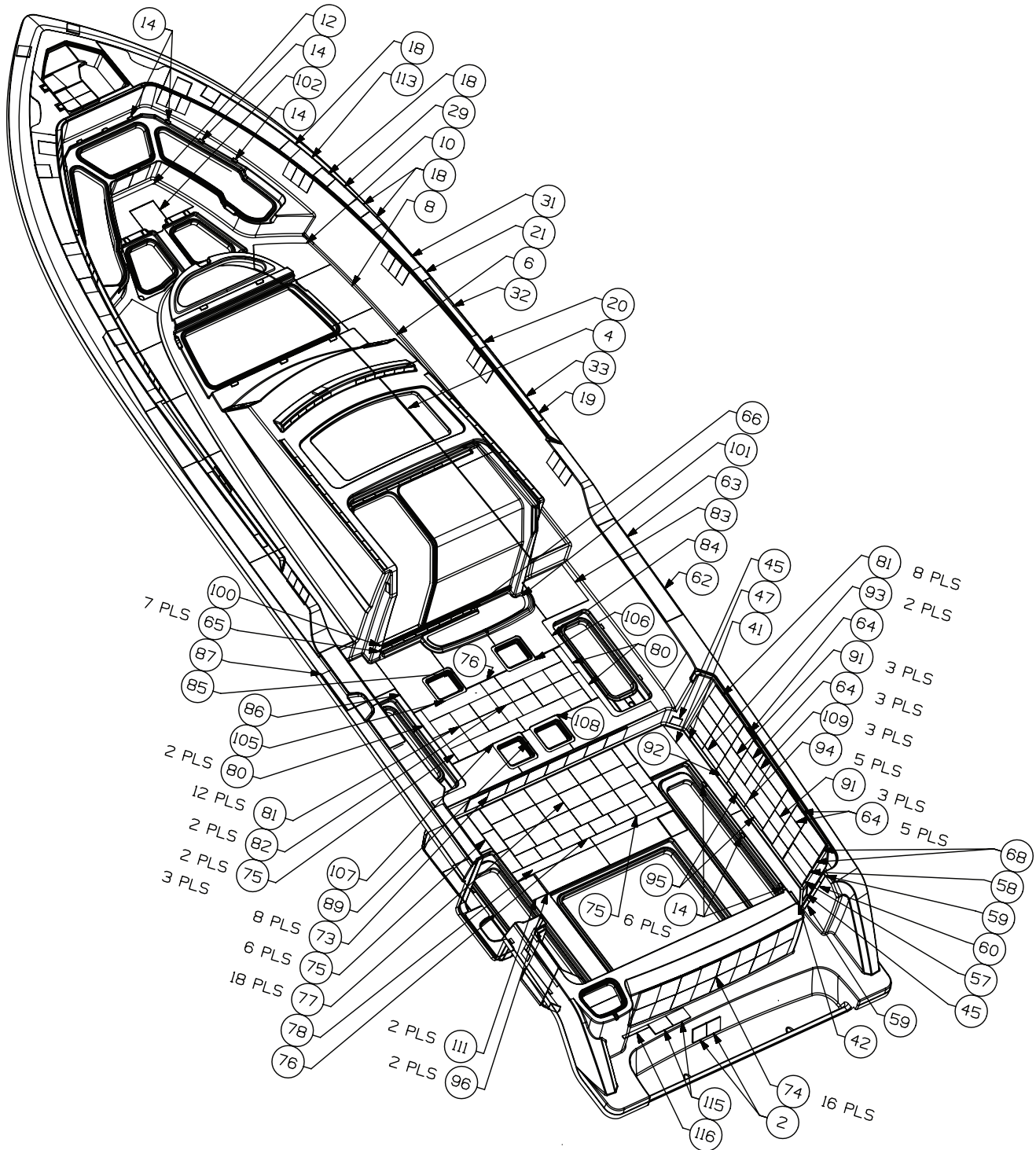
Fig.5.16.1

PARTS LIST		
FIND NO	DESCRIPTION	QTY REQD
45	PHENOLIC 8.125X18.625, 6015-P126	2
46	PHENOLIC 2.5X29, DM1298	2
47	PHENOLIC 7.125X7.75, 6015-P129	2
48	PHENOLIC 3.25X8.25,	4
49	GUNNEL FOAM, 6015-P132	1
50	PIPE 5, 6015-P174	1
51	PIPE 6, 6015-P175	1
52	PIPE 4, 6015-P173	1
53	PIPE 7, 6015-P176	1
54	PIPE 1, 6015-P148	1
55	PIPE 2, 6015-P171	1
56	PIPE 3, 6015-P172	1
57	PIPE 8, 6015-P177	1
58	PHENOLIC 5X9, DM0164	5
59	PLYWOOD 5.25X6, DM1218	4
60	PLYWOOD 6X6.5, DM1318	4
61	PLYWOOD 1.25X17.25, DM1320	2
62	PLYWOOD 8.83X19.63, 6015-P188	1
63	PLYWOOD 7X16, DM1243	2
64	PLYWOOD 9.75X18.5, 6015-P191	1
65	PLYWOOD 9X19, 6015-P192	1
66	PLYWOOD 6.5X10,	12
67	PHENOLIC 8.31X25.75, 6015-P336	2
68	PLYWOOD 7X7.5, DM1332	4
69	PLYWOOD 7X7, DM0479	1
70	PLYWOOD 4X5, DM0446	1
71	PLYWOOD 5X5, DM0468	1
72	PLYWOOD 1.25X7, DM0723	1
73	PLYWOOD 2X8, DM0419	2
74	PLYWOOD 3X8, DM0438	2
75	PHENOLIC 4X10, DM0159	2
76	PLYWOOD 18X23.61, 6015-P178	1
77	PLYWOOD 23.84X78, 6015-P179	1
78	PLYWOOD 18X23.61, 6015-P180	1
79	PLYWOOD 24.29X38.64, 6015-P181	1
80	PLYWOOD 23.31X52, 6015-P182	1
81	PLYWOOD 24.29X38.64, 6015-P183	1
82	PLYWOOD 18.61X27.16, 6015-P184	1
83	PLYWOOD 26.88X78, 6015-P185	1
84	PLYWOOD 18.61X27.16, 6015-P186	1



## Reinforcement Location Diagram (Con't)

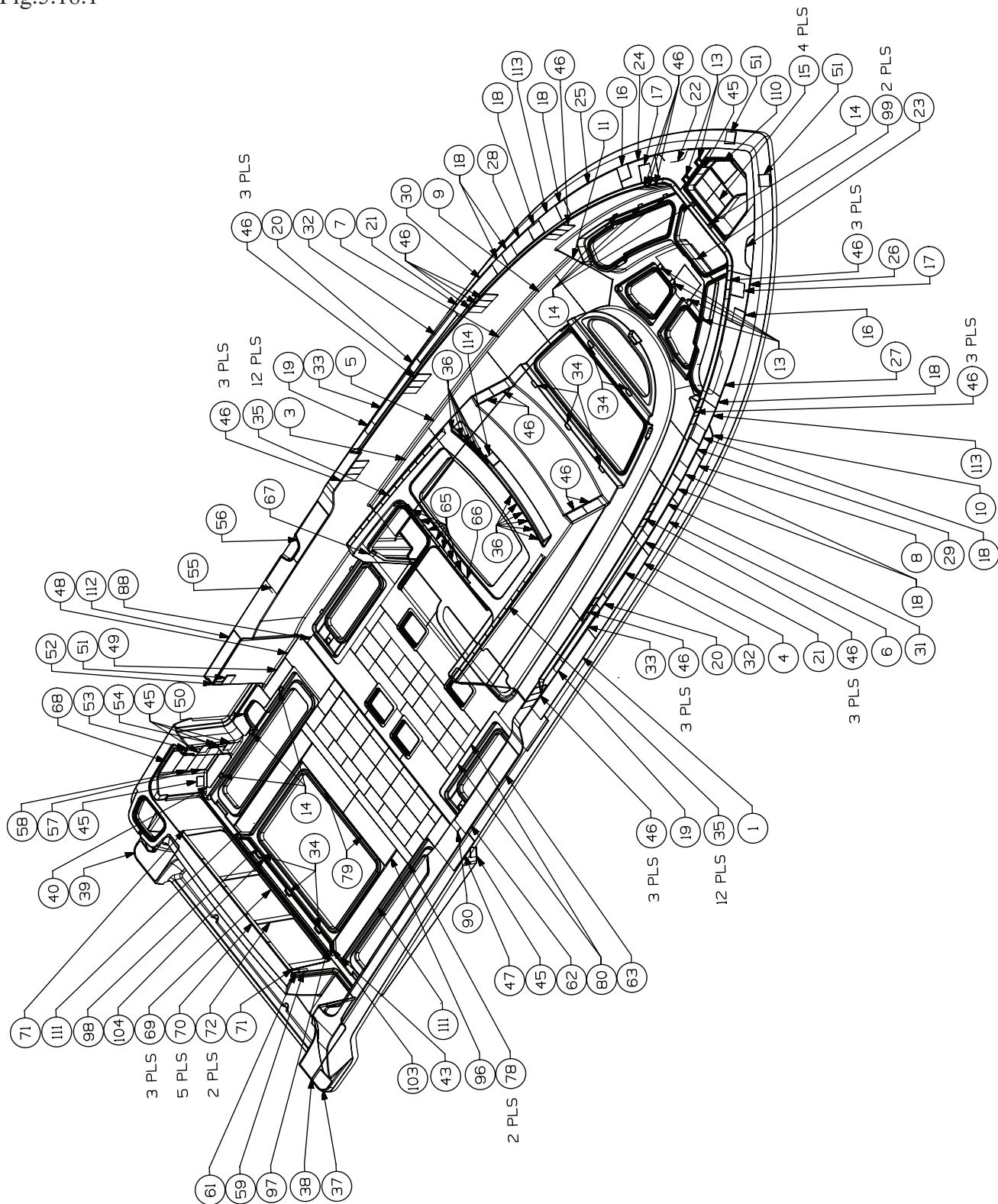
DECK -Port Side View  
Fig.5.17.1



## Reinforcement Location Diagram (Con't)

DECK -Starboard Side View

Fig.5.18.1



## Reinforcement Location Diagram (Con't)

DECK  
Fig.5.19.1

PARTS LIST		
FIND NO	DESCRIPTION	QTY REQD
1	BALSA 19.75X48, 6015-P033	1
2	PLYWOOD 6X7, DM0475	2
3	BALSA 19.75X48, 6015-P034	1
4	BALSA 22.42X48, 6015-P035	1
5	BALSA 22.42X48, 6015-P036	1
6	BALSA 24X28, 6015-P037	1
7	BALSA 24X28, 6015-P038	1
8	BALSA 24X24, 6015-P039	1
9	BALSA 24X24, 6015-P040	1
10	BALSA 24X37, 6015-P041	1
11	BALSA 24X37, 6015-P042	1
12	BALSA 17.25X41.75, 6015-P046	1
13	PHENOLIC 2X2, DM0001	6
14	PHENOLIC 1X2, DM0525	15
15	PLYWOOD 5X8.5, DM1250	4
16	PHENOLIC 6X6, DM0043	2
17	PHENOLIC 6X7, DM0045	2
18	PHENOLIC 5.5X7, DM0619	8
19	PHENOLIC 2.375 X 6,	2
20	PHENOLIC 3X6, DM0013	2
21	PHENOLIC 4.25X6, DM1251	2
22	PHENOLIC 19.38X29.5, 6015-P047	1
23	PHENOLIC 19.38X29.5, 6015-P048	1
24	BALSA 10X21, 6015-P049	1
25	BALSA 8.75X32.25, 6015-P051	1
26	BALSA 10X21, 6015-P050	1
27	BALSA 8.75X32.25, 6015-P052	1
28	BALSA 6.25X24.625, 6015-P053	1
29	BALSA 6.25X24.625, 6015-P054	1
30	BALSA 5X30.5, 6015-P055	1
31	BALSA 5X30.5, 6015-P056	1
32	PLYWOOD 2.25X30, DM1278	2
33	PLYWOOD 2.25X32, DM1277	2
34	PHENOLIC 1.25X3, DM1110	8
35	PHENOLIC 1.5X5,	24
36	PHENOLIC 1.5X4.5, DM1265	12
37	BALSA 8.75X9, 6015-P061	1
38	BALSA 21.125X42.875, 6015-P062	1
39	BALSA 22.5X23, 6015-P065	1
40	BALSA 5.25X20.75, 6015-P066	1
41	BALSA 5.625X45.5, 6015-P067	1
42	BALSA 5.625X45.5, 6015-P068	1
43	BALSA 7.75X47.375, 6015-P069	1
44	BALSA 7.75X47.375, 6015-P070	1

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## Reinforcement Location Diagram (Con't)

DECK

Fig.5.20.1

PARTS LIST		
FIND NO	DESCRIPTION	QTY REQD
45	PHENOLIC 4X4, DM0020	7
46	PHENOLIC 4X8, DM0025	34
47	BALSA 17.75X19.875, 6015-P071	1
48	BALSA 17.75X25.625, 6015-P072	1
49	BALSA 5.375X19.375, 6015-P073	1
50	BALSA 9X22.25, 6015-P074	1
51	PHENOLIC 5X5, DM0160	3
52	PLYWOOD 1.25X5, DM0867	1
53	PLYWOOD 1.25X8.875,	1
54	PLYWOOD 1.25X10.5, DM0745	1
55	BALSA 8.125X33.75, 6015-P076	1
56	BALSA 8.0X28.75, 6015-P077	1
57	PLYWOOD 6X13, DM1254	2
58	PHENOLIC 6X13, DM1255	2
59	PHENOLIC 1.25X5,	3
60	PLYWOOD 1.25X13, DM0716	1
61	PLYWOOD 1.25X4.5, DM0943	1
62	BALSA 8.25X48, 6015-P093	1
63	BALSA 8X17, 6015-P095	1
64	PHENOLIC 7X7, DM0171	9
65	PLYWOOD 1X6, DM1262	14
66	PLYWOOD 1X4, DM1263	2
67	PLYWOOD 2X4, DM0415	1
68	PLYWOOD 8X13, DM1267	4
69	PLYWOOD 1X25.75, DM1259	3
70	PLYWOOD 2X16.25, DM1260	5
71	PLYWOOD 2.75X22.75, 6015-P097	2
72	PLYWOOD 2X22.75, DM1261	2
73	PHENOLIC 7.75X10, DM1266	8
74	PLYWOOD 10X10, DM0502	16
75	PHENOLIC 6X10, DM0170	14
76	PHENOLIC 6X7.25, DM1268	2
77	PLYWOOD 8X11.125, DM1269	18
78	BALSA 4X39.645, 6015-P101	2
79	PLYWOOD 10X31, DM1304	2
80	PHENOLIC 3.5X13, DM1274	4
81	PLYWOOD 7X10, DM0482	20
82	PLYWOOD 7X7.25, DM1271	2
83	BALSA 21.32X22.25, 6015-P102	1
84	BALSA 20.5X26.75, 6015-P103	1
85	BALSA 22X26, 6015-P104	1
86	BALSA 24X26.125, 6015-P105	1
87	BALSA 23.80X30.88, 6015-P106	1
88	BALSA 15.29X42.57, 6015-P107	1

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### Reinforcement Location Diagram (Con't)

DECK

Fig.5.21.1

PARTS LIST		
FIND NO	DESCRIPTION	QTY REQD
89	BALSA 15.29X26, 6015-P108	1
90	BALSA 15.29X42.57, 6015-P109	1
91	PLYWOOD 7X7, DM0479	6
92	PLYWOOD 2.5X7, DM1314	1
93	PLYWOOD 3X10, DM0442	2
94	PLYWOOD 7X12, DM0568	5
95	PLYWOOD 1.75X12, DM1272	2
96	PLYWOOD 8X20.625, DM1305	3
97	PENSKE 2.375X33, 6015-P131	1
98	PENSKE 2.375X33, 6015-P133	1
99	PLYWOOD 8.5X8.5, DM1301	2
100	PHENOLIC 1.25X20, DM1303	1
101	BALSA 9.625X48, 6015-P140	1
102	PHENOLIC 11.75X13, 6015-P135	1
103	PLYWOOD 2.375X33, 6015-P141	1
104	PLYWOOD 2.375X33, 6015-P142	1
105	PHENOLIC 6X30, 6015-P144	1
106	PHENOLIC 6X30, 6015-P145	1
107	PHENOLIC 6X23.625, 6015-P146	1
108	PHENOLIC 6X23.625, 6015-P147	1
109	PLYWOOD 5X7, DM0470	3
110	PHENOLIC 8.125X9.75, 6015-P403	1
111	BALSA 7.75X9.5, 6015-P413	2
112	BALSA 9.25X41.875, 6015-P075	1
113	BALSA 6.875X11.375, 6015-P429	2
114	PLYWOOD 3.5X5, DM1302	1
115	PLYWOOD 5X9, DM0472	2
116	PLYWOOD 1.25X12.75, DM0741	1

## Section 5 • Care & Maintenance

Fill out the log below after scheduled service or maintenance is performed.

MAINTENANCE LOG			
DATE	ENGINE HOURS	SERVICED BY	MAINTENANCE PERFORMED

NOTES