

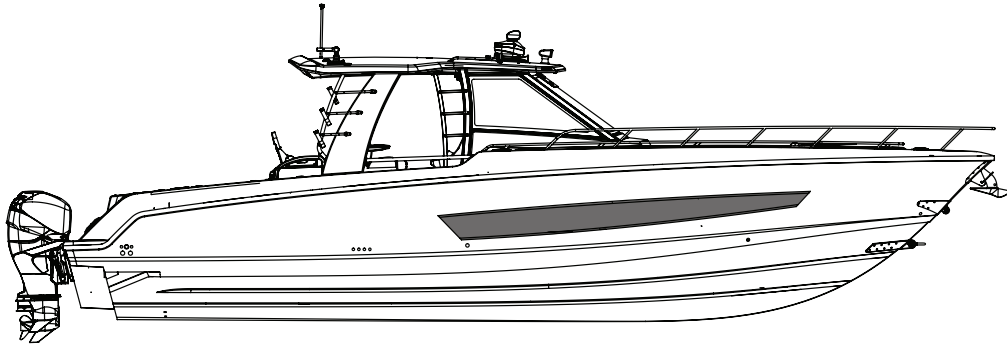
# 420 Outrage

*Owner's Manual*



THE UNSINKABLE LEGEND

# 420 Outrage



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





## **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).



T H E U N S I N K A B L E L E G E N D™

Welcome to the Boston Whaler family and congratulations on your purchase!

For over six decades, Boston Whaler has engineered the most reliable and forward-thinking boats on the water. Every chapter of our history starts with a belief in pushing the limits of what's possible, and this heritage is cause for both reflection and celebration.

Standing behind every Whaler is an extremely qualified network of dealers to provide you with a truly exceptional boating experience. Information and assistance is also available at [bostonwhaler.com](http://bostonwhaler.com), where you will find customer resources including how-to videos, maintenance tips, and other technical content. While there, don't forget to sign up to receive future issues of Boston Whaler's lifestyle magazine, Whaler.

Since Boston Whaler's inception in 1958, we are committed to providing customers with the safest, highest-quality, most durable boats in the world. We are confident that as a Whaler owner you will love the quality and pride that is built into every boat.

From all of us here at Whaler, thank you for selecting one of our a legendary and innovative boats. May that choice bring you a lifetime of boating enjoyment.

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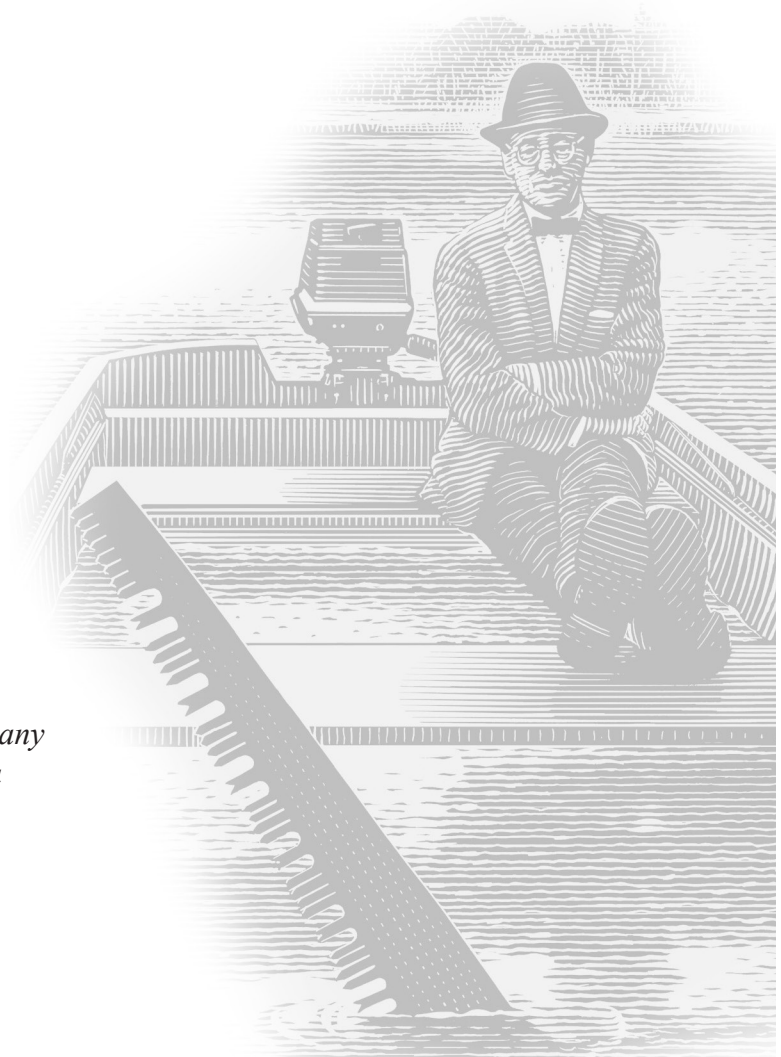
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## History

Boston Whaler has conceived and built peerless designs that meet boaters' diverse and changing needs. It all began in Braintree, Massachusetts with founder Richard Fisher's inspired new construction method featuring two significant innovations: first, a twin-sponson hull design that resulted in superior stability and a remarkably dry ride, and second, a unique foam-core construction that made the boat not only durable, but unsinkable as well. So for people whose livelihood and lives depend on their boat, Boston Whaler is the right choice because of our seaworthiness, dependability, and the inherent safety of a hull that won't sink even if severely damaged. Plain and simple, Boston Whaler boats are built to last.

In 1961, Fisher's demonstration of that unsinkability was captured by *Life* magazine in photos showing a Whaler boat being sawed in half and Fisher then motoring away in the remaining half. True to Fisher's vision, Boston Whaler's world-class team has consistently pushed the envelope, furthering advances in manufacturing, design, navigation, and propulsion technologies.

On September 26, 1996, Richard Fisher was posthumously inducted into the National Marine Manufacturer's Association (NMMA) hall of fame for accomplishments made in marine engineering and construction.



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





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## Preface

**READ AND RETAIN this manual. If the boat is sold, ensure all documentation is transferred to the new owner.**

Information in this publication is based on the latest product specifications available at the time of printing. Boston Whaler reserves the right to make changes at any time without prior notice. Boston Whaler is not responsible for specification changes to parts or accessories manufactured by other companies.

*NOTE: Equipment may vary depending on options selected.*

If needed in connection with selling your boat, service history or warranty records on vessels should be requested from the original selling dealer, the servicing dealer and/or the previous owner (where applicable). Information regarding open safety recalls is maintained by the United States Coast Guard, and can be obtained by visiting [uscgboating.org](http://uscgboating.org).

Brunswick Corporation registered trademarks: Mercury Marine, Mercury Racing, Optimax, Nautic-On, Skyhook, SmartCraft, Verado, Vantage, VesselView, VesselView Mobile.

Boston Whaler, Inc. registered trademarks: Boston Whaler, Boston Whaler with harpoon and hull logo, Conquest, Dauntless, Montauk, Outrage, Realm, Unibond, Whaler.

All other trademarks listed in this publication are the property of their respective owners.

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## **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 2024 model year Boats, if purchased from an authorized Boston Whaler Dealer and operated under normal, non-commercial use, 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 delivery to the first retail purchaser, 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 2024 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 delivery to the first retail purchaser. 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 delivery to the first retail purchaser.
- 5. 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) Expenses for hauling out or transportation to and from the dealer or 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 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 that is not an authorized dealer, accidents, or 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, or improper boat lift or sling.
  - 10) Damages due to failure to properly tow the Boat. For those Boats for which Boston Whaler offers a yacht tender package, damages due to towing when the package has not been installed.
  - 11) Any Boston Whaler Boat used for commercial purposes, which includes, but is not limited to, any for-profit or other revenue-generating uses.
  - 12) Any representation or implication relating to speed, range, fuel consumption or estimated performance characteristics.
  - 13) Any failure or defect caused by an act of nature resulting in damage, cost, or expense.
  - 14) Any failure or defect arising from a previous repair made by a non-authorized service provider.
  - 15) Any item exceeding the expressed coverage limits specified in any Boston Whaler Limited Manufacturer Warranty.
  - 16) Failure of the owner to use, maintain, or store an Accessory in reasonable fashion; and any other failure to provide reasonable care and maintenance.
  - 17) Any accessory which has been altered or modified from Boston Whaler factory specifications.
  - 18) 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).
  - 19) Any accessory used for commercial purposes, which includes but is not limited to, any for-profit or other revenue generating uses.
  - 20) 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.



## **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. 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. The owner must provide Boston Whaler with a reasonable opportunity to repair, and reasonable access to the Boston Whaler Boat for warranty service and the owner shall pay for all related transportation charges and/or travel time. 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. 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 submit the online Boston Whaler warranty transfer form, accessible from [www.bostonwhaler.com](http://www.bostonwhaler.com). A copy of the bill of sale will be required to submit with the form. The warranty transfer must be completed within 30 days of purchase. Notwithstanding anything in this Limited Manufacturer Warranty to the contrary, Boston Whaler reserves the right to reject any warranty transfer request for a Boston Whaler Boat that has been damaged, neglected, or otherwise previously excluded from warranty.

#### **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.

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**100 Whaler Way, Edgewater, FL 32141**  
**(386) 428-0057**  
**[bostonwhaler.com](http://bostonwhaler.com)**

## **BOSTON WHALER LIMITED MANUFACTURER WARRANTY (Outside the U.S. or Canada)**

Boston Whaler, Inc. (“Boston Whaler”) provides the following Limited Manufacturer Warranty to the original retail owner of its 2024 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 2024 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. 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.

### 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) 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) Damages due to failure to properly tow the Boat. For those Boats for which Boston Whaler offers a yacht tender package, damage due to towing when the package has not been installed.
- 9) 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.
- 10) Damage resulting from use of improper trailer, improperly placed supporting bunks or slings, incorrect bunks placement and improper Boat lift or sling.
- 11) Any Boston Whaler Boat used for commercial purposes, which includes, but is not limited to, any for-profit or other revenue-generating uses.
- 12) Any representation or implication relating to speed, range, fuel consumption or estimated performance characteristics.
- 13) Any failure or defect caused by an act of nature resulting in damage, cost, or expense;
- 14) Any failure or defect arising from a previous repair made by a non-authorized service provider.
- 15) Any item exceeding the expressed coverage limits specified in any Boston Whaler Limited Manufacturer Warranty.
- 16) Failure of the owner to use, maintain, or store an Accessory in reasonable fashion; and any other failure to provide reasonable care and maintenance.
- 17) Any Accessory which has been altered or modified from Boston Whaler factory specifications.
- 18) 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).

19) Any Accessory used for commercial purposes, which includes but is not limited to, any for-profit or other revenue generating uses.

20) 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.

#### **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.

#### **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 submit the online Boston Whaler warranty transfer form, accessible from [www.bostonwhaler.com](http://www.bostonwhaler.com). A copy of the bill of sale will be required to submit with the form. The warranty transfer must be completed within 30 days of purchase. Notwithstanding anything in this Limited Manufacturer Warranty to the contrary, Boston Whaler reserves the right to reject any warranty transfer request for a Boston Whaler Boat that has been damaged, neglected, or otherwise previously excluded from warranty.

#### **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 EMEA CONSUMERS ONLY**

Boston Whaler Boats come with guarantees that cannot be excluded under EU and/or local Consumer Law. For the avoidance of doubt, the Boston Whaler Limited Manufacturer Warranty does not in any way adversely affect any possible right and/or protection the retail owner may have under said applicable legislation.

#### **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**  
**011 1 (386) 428-0057**  
**[bostonwhaler.com](http://bostonwhaler.com)**

**CALIFORNIA EVAPORATIVE EMISSIONS  
CONTROL SYSTEM WARRANTY STATEMENT**

**YOUR WARRANTY RIGHTS AND OBLIGATIONS**

The California Air Resources Board and Boston Whaler, Inc. are pleased to explain the evaporative emission control system's warranty on your 2024 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, Inc. 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, Inc.

**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, Inc. cannot deny warranty solely for the lack of receipts.
- As the SIMW owner, you should however be aware that the Boston Whaler, Inc. 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, Inc. 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, Inc. 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.

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## 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 Policy 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 you request information about our companies and from surveys, promotions, contests, correspondence, your e-mails, telephone inquiries, web forms, and other communications. **How We Use and 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, Rollick Company, 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: Rollick Company, 1078 Headquarters Park Drive, Fenton, MO, 63026; phone: (636) 343-9988, fax: (636) 326-3282. 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 for your business. We hope you have many years of wonderful boating experiences!



## Owner's Packet

The owner's packet is a large, zippered bag that contains all the manuals and instructional information for non-Boston Whaler equipment and systems on your boat. Read and retain this information.

## Owner's Manual

The contents of this manual:

• Provides basic boating safety information	• Details the boat's features and equipment
• Outlines the fundamentals of boat use	• Contains maintenance information

You must learn to operate this boat as well as read, understand and use this manual. This manual does not give you 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 motor vehicle.

## Your Responsibilities

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

• Take a boating safety course	• Understand and follow the <i>rules of the road</i>
• Get instruction in proper boat handling	• Learn how to navigate

## Contact Us

### Boston Whaler, Inc.

877-294-5645

www.bostonwhaler.com

## Warranties

In addition to the Boston Whaler® Limited Warranty, each component and/or system on your boat has its own warranty that can be found with the specific information and manual for that component. These are included with your owner's information packet. Please locate, read, and retain the individual warranties.

## Boating Information\*

A comprehensive background in boating can be found in the book, *Chapman Piloting: Seamanship & Small Boat Handling*, by Elbert Maloney. For boating courses in North America, contact one of the following organizations:

Organization	Website	Phone
BoatU.S. Foundation	boat.us.org	800-336-2628
U.S. Coast Guard	uscgboating.org	—
U.S. Coast Guard Auxiliary	cgaux.org	877-875-6296
US Power Squadron	usps.org	888 367-8777
Canadian Coast Guard	cgc-gcc.gc.ca	800-267-6687
Canadian Power and Sail Squadrons	cps-eps.ca	888-277-2628
Red Cross	redcross.org	800-733-2767

State boating offices

Yacht clubs

\*Outside of North America, contact your dealer or your governmental boating agency for assistance.



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## 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.

### **ATTENTION**

Denotes information found in the owner's manual to call attention to the safe operation or certain features of this vessel.

## 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: [boatus.com/foundation](http://boatus.com/foundation))
- 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"**: Use one third of the fuel for the trip outbound, one third for the return trip, and keep one third for reserve.

## 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 or time of day, use navigational lights to ensure other boats can see you. In addition, if high bow angle causes reduced visibility, slow down to allow sufficient time to react if an emergency occurs.

## 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.

## Operator's Responsibility

Your degree of enjoyment on the water depends on you, your equipment and other people who, like yourself boat responsibly. As a boat operator you should:

- Make sure that all occupants always wear a U.S. Coast Guard-approved life jacket while on the water.
- All boat operators should complete a boating safety course (a requirement in many states).
- All boat operators must become familiar with the proper operation of all vessel features prior to departure.
- Always maintain a safe speed.
- Be aware of conditions in every direction always when underway.
- Mind your wake. It can capsize a small boat or damage moored boats or other property. You are responsible for damage caused by your wake.
- Reduce speed and post a lookout to identify hazards when:
  - Visibility is impaired
  - In rough water
  - In congested waterways
- Display navigation lights between sunset and sunrise and during periods of restricted visibility, such as rain, fog, etc.

### 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

If there is no fixed fire extinguishing system installed, two size 5-B or one 20-B portable fire extinguisher(s) must be on board. If a fixed system is installed one 5-B portable fire extinguisher is required. The American Boat & Yacht Council (ABYC) recommends three 5-B type ABC portable fire extinguishers be on board and located within easy reach of helm, outside of engine compartment, and galley or passenger area.

The 420 Outrage includes storage cabinets located

midship under the port and starboard gunnel with attachments for type 5-B 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 serviceable 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**

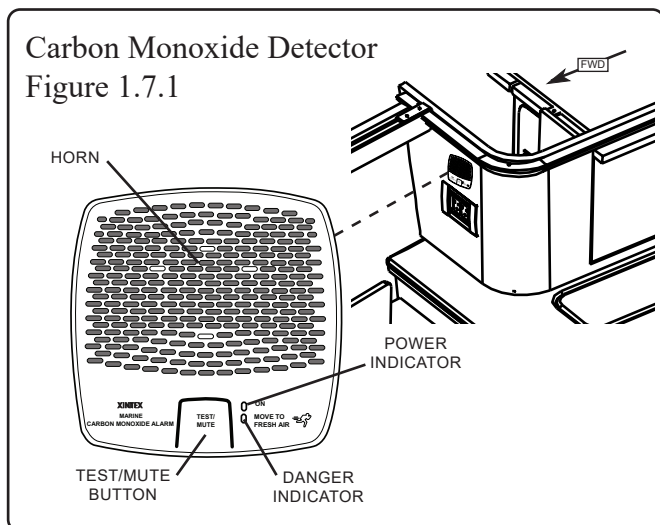
The Carbon Monoxide Detector (See Figure 1.7.1) located in the starboard cabin will sound an alarm when dangerous levels of CO are detected. The detector is very sensitive and will notify you before dangerous amounts of Carbon Monoxide can accumulate which will allow you to take measures to dissipate 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  
Figure 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:**

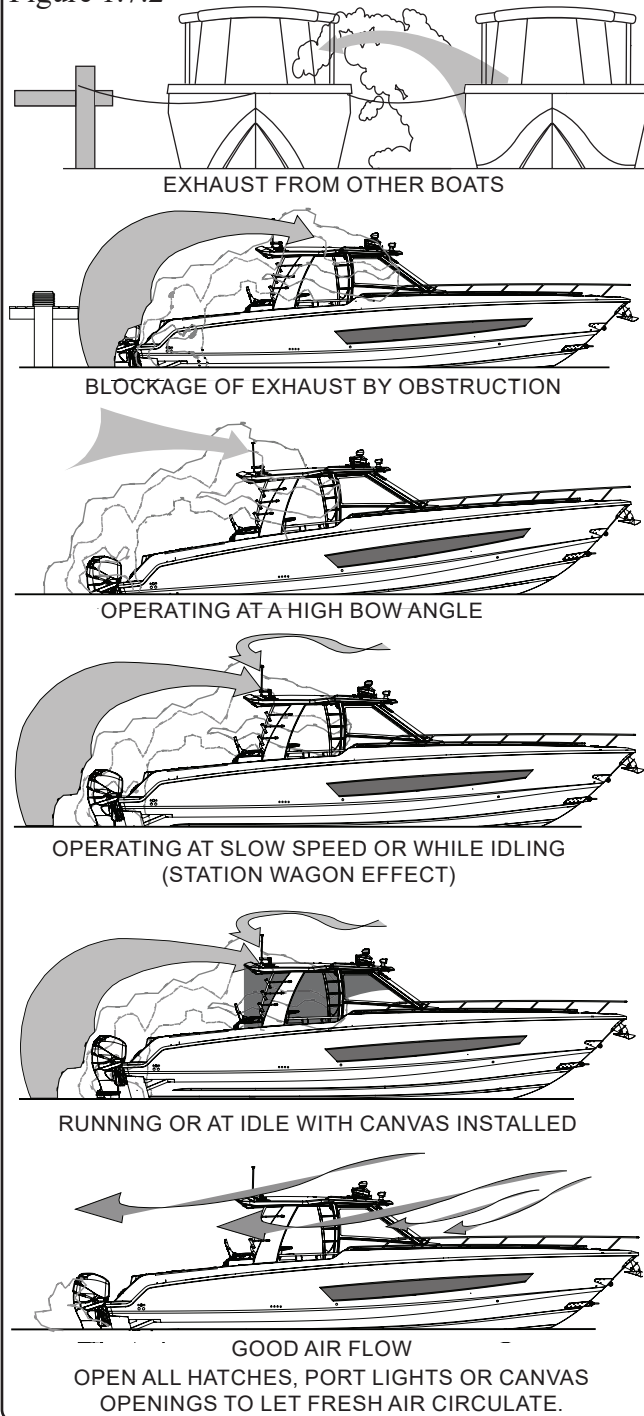
- Evacuate enclosed areas immediately.
- Shut OFF any fuel burning equipment or appliances.
- Open hatches, doors, port lights, etc. to improve ventilation.
- If making way, head boat into the wind.

**⚠ DANGER**  
Never ignore an alarm.

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

**Carbon Monoxide Accumulation Scenarios**

Examples of accumulation of Carbon Monoxide  
Figure 1.7.2



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

## Lifesaving Equipment

Even strong swimmers can tire quickly in the water and drown due to exhaustion, hypothermia, or both. The buoyancy 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.

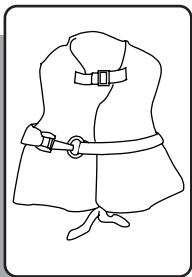
The law requires that PFD's must be readily accessible, if not worn. "Readily Accessible" means removed from storage bags and unbuckled. **Children and non-swimmers must wear PFD's at all times when aboard.**

### NOTICE

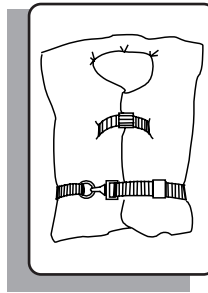
**Children and non-swimmers must wear a PFD at all times when aboard.** All passengers and crew should wear them since an unworn PFD is often useless. The law requires that PFDs, if not worn must be readily accessible, that is, removed from storage bags and unbuckled. Throwable devices must be readily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

### PFD Classifications

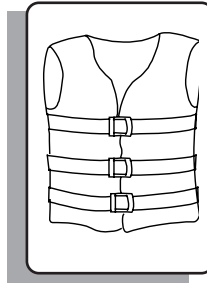
Listed below are the several different types of PFD's, each life jacket has different purposes, choose one that will suit your purpose.



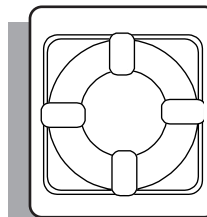
**Type I**, Off-shore Life Jacket is considered the most buoyant, it is designed to turn an unconscious person face up. Use in all types of waters where rescue may be slow, particularly in cold or rough water conditions.



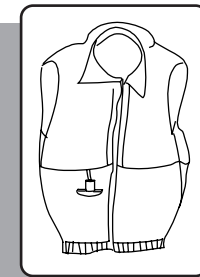
**Type II**, Near-shore Life Vest, "keyhole" vest with flotation filled head and neck support is also designed to turn a person face up, but the turning action is not as pronounced. Use in calm inland waters or where quick rescue is likely.



**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 buoys, ring buoys and buoyant 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 buoyancy 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.**

**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 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 ignition or pull on the Engine Emergency Stop 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 buoys 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)

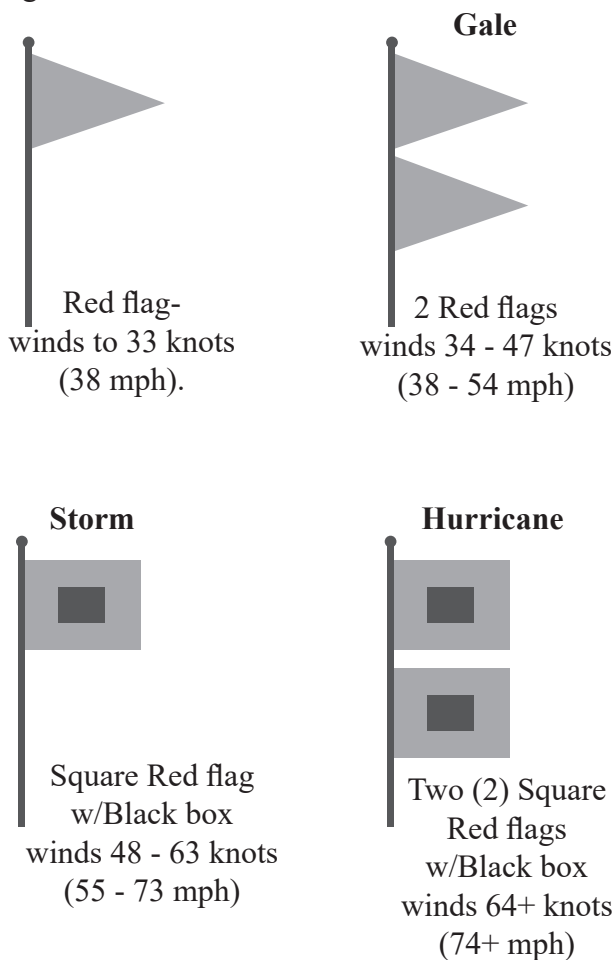
## ⚠ WARNING

**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 Pennants  
Figure 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 using the appropriate sound signal for your situation at intervals of not more than two minutes apart.
- 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. Lightning can strike several miles away from the storm itself. Be aware of the storm's location relative to your location and the direction the storm is moving).

### Swimming, Diving & Water Skiing

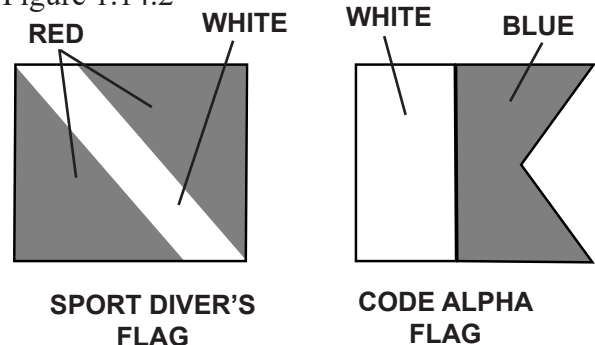
#### Swimming

- 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  
Figure 1.14.2



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

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

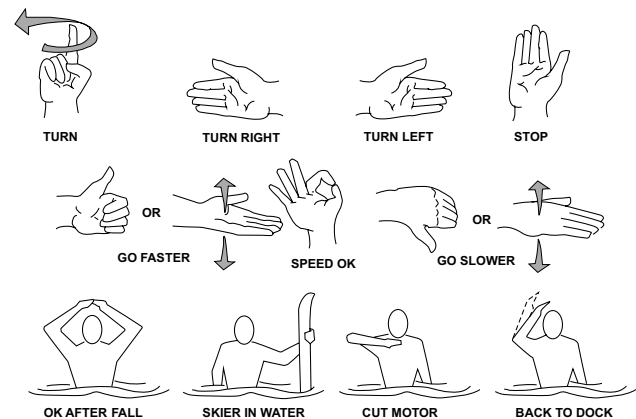


## Water Skiing

- 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  
Figure 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, seat backs, 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.

## Towed Inflatables

Towed inflatable types, aka tubes, produce tremendous stress on the tow point and rope, far greater than devices like water skis, kneeboards or wake boards. When pulling a tube use both stern eye strong points in combination with a proper tube harness and tow rope. Parasails and kites should never be used with a recreational boat.

### ATTENTION

#### Personal Injury/Equipment Damage

**Ski tow pylons/tower/hardtop/ski eye tow points are not designed for use with tubes. The added stress of the tube may cause a dangerous recoil or damage the equipment. Damage to the pylon/tower/hardtop/ski tow eye is not covered by the boat or equipment manufacturer's warranty. When towing inflatables/tubes, use both stern eye strong points with a tube tow harness to attach the tube tow rope.**

## Engine Emergency Stop 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**

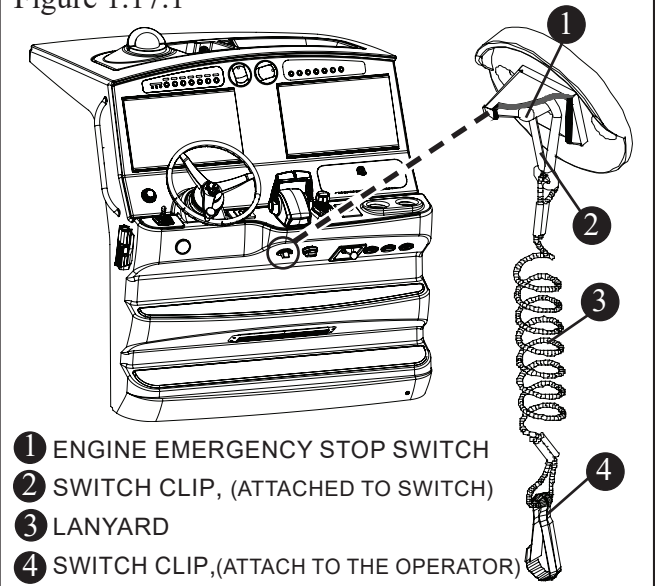
Your boat is equipped with an emergency engine stop switch. The switch is located on the console, below the shift/throttle control. The ignition shut down safety switch incorporates a shut-off switch, switch clip, lanyard and lanyard clip, which is clipped to the operator when running.

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 helm, either accidentally by falling into the boat, or by being ejected overboard. This would most likely occur as a result of poor operating practices.

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

Engine Emergency Stop Switch  
Figure 1.17.1



- ① ENGINE EMERGENCY STOP SWITCH
- ② SWITCH CLIP, (ATTACHED TO SWITCH)
- ③ LANYARD
- ④ SWITCH CLIP, (ATTACH TO THE OPERATOR)

### 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.**

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.

## 1<sup>st</sup> Mate™ Safety and Security System

The 1<sup>st</sup> Mate mobile app and wearable device integrate with Mercury systems to provide alerts, alarms, and distress communications designed to keep the captain and passengers safe. The system accommodates a captain and up to seven passengers. Features includes:

- Captain overboard event turns engine(s) off.
- Captain or passenger overboard event sounds alarm on the boat and via the app.

- Distress message capabilities to alert emergency contact(s) including location, heading, date and time of incident.
- Theft deterrent against boat-and-engine theft.

REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

## Joystick Piloting (Option)

### **WARNING**

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

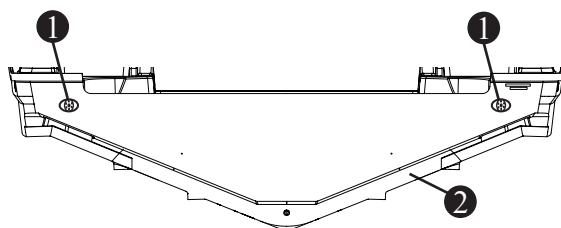
- **Check that no one is in the water.**
- **Inform passengers not to enter the water**

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  
Figure 1.18.1



- ① JOYSTICK WARNING LIGHTS
- ② TRANSOM

## 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.

### **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.**



## 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

#### **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.**

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.
- 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

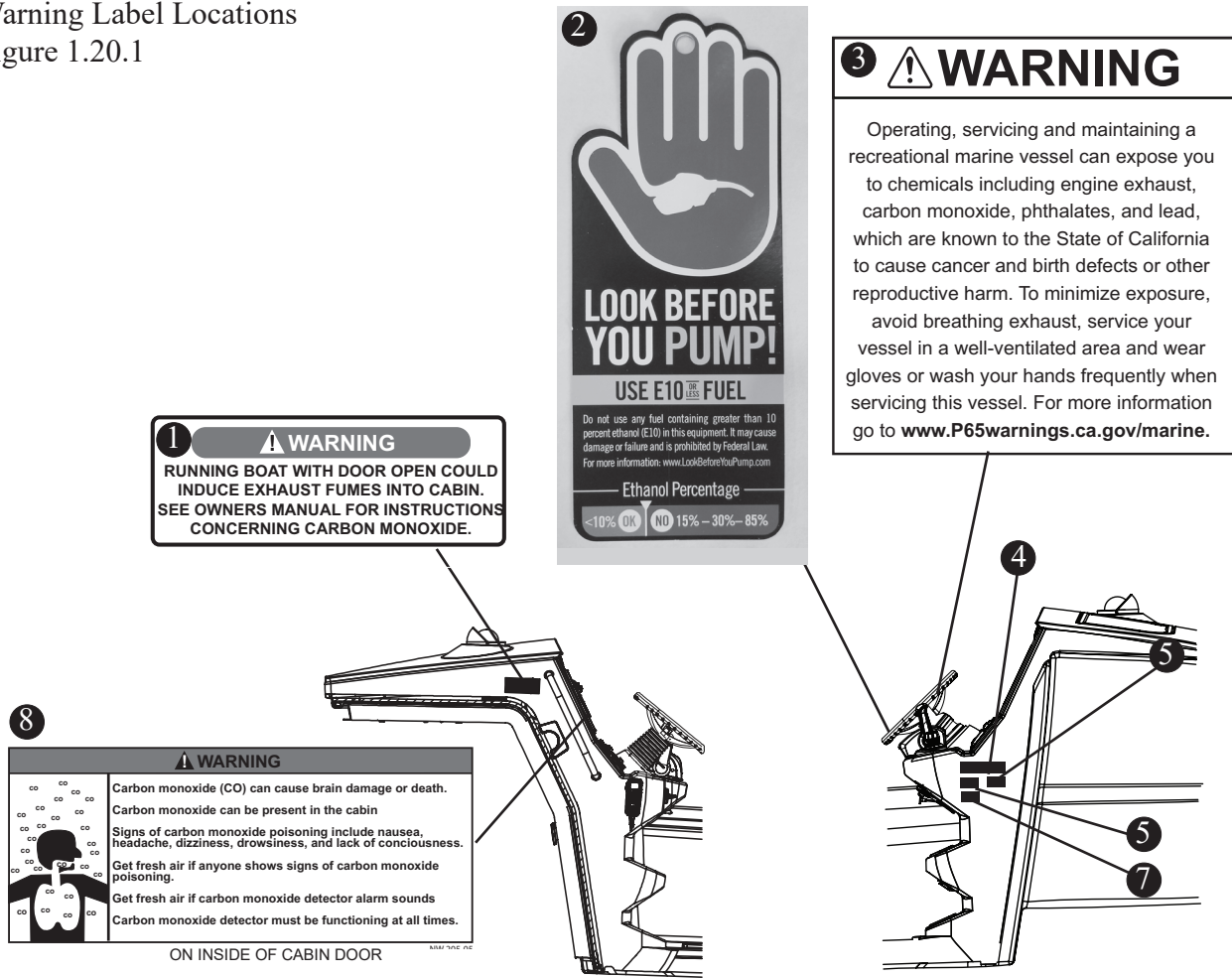
In March, 2005, the U.S. Coast Guard officially launched *America's Waterway Watch* to encourage the boating public to report suspicious activities in our nation's ports and waterways. *America's Waterway Watch* simply asks anyone who works, lives, or recreates on the water to keep an eye out for suspicious 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.

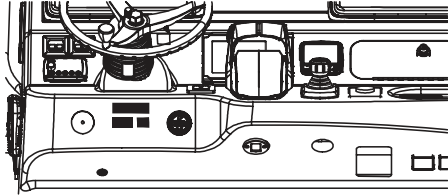
## Warning Label Locations

Warning Label Locations  
Figure 1.20.1



**NOTICE**

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



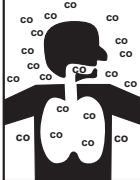
**Replacement Part No.**

<b>1</b>	WARNING, RUNNING BOAT W/DOOR OPEN .....	2028922
<b>2</b>	E10 FUEL WARNING HANG TAG .....	2304853
<b>3</b>	PROP 65 HANG TAG.....	1795087
<b>4</b>	LABEL, PATENT HAWSE PIPE/DRINK HOLDER .....	2063995
<b>5</b>	LABEL, PATENT CONFIG HULL PLANING SURF ....	2175365
<b>6</b>	LABEL, PATENT BOW THRUSTER.....	2063996
<b>7</b>	LABEL, PATENT HEADER.....	2088481
<b>8</b>	DANGER, CO CABIN .....	1812911

Warning Label Locations (Con't)  
Figure 1.21.1

**1**

**⚠ WARNING**



Carbon monoxide (CO) can cause brain damage or death.

Engine and generator exhaust contains odorless and colorless carbon monoxide gas.

Signs of carbon monoxide poisoning include nausea, headache, dizziness, drowsiness, and lack of consciousness.

Get fresh air if anyone shows signs of carbon monoxide poisoning.

See Owner's Manual for information regarding carbon monoxide poisoning.

**2**

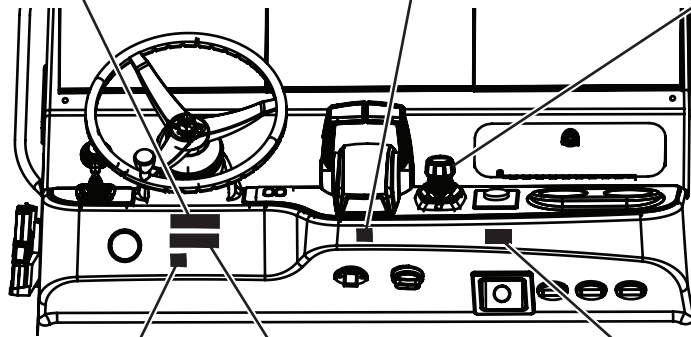
**ATTACH LANYARD**



**3**

- The joystick is for boat docking and low speed maneuvers.
- Use the joystick only when the ERC controls are in neutral.
- When the ERC controls are shifted into gear, the joystick disengages.
- To limit engine power during docking and maneuvering, engage the dock feature by pressing the DOCK button.
- To prevent the boat from being shifted into gear during operation and to disengage the joystick, engage the throttle-only feature by pressing the THROTTLE ONLY button.
- For complete details of features and operation, please refer to the operation, maintenance, and warranty manual.

80-879288287



**4**


**⚠ WARNING**

VISIBILITY FROM THE SEATED POSITION AT THIS HELM STATION IS LIMITED. AVOID SERIOUS INJURY OR DEATH FROM COLLISIONS. OPERATION FROM A STANDING POSITION MAY BE NECESSARY TO MAINTAIN LOOKOUT AS REQUIRED BY RULES OF THE ROAD. READ OWNERS MANUAL.

**5**

**⚠ DANGER**

- CONTACT WITH A SPINNING PROPELLER WILL CAUSE SERIOUS INJURY OR DEATH.
- SHUT OFF ENGINES while people are in the water near the boat, on the swim platform, or on the boarding ladder.
- NEVER OPERATE IN REVERSE TOWARD A PERSON in the water.



8M0034159

**6**

**⚠ WARNING**

**Before activating Skyhook:**

1. Check that no one is in the water.
2. Tell passengers not to enter water.

Skyhook makes the propellers spin. This can injure swimmers.

8M0034159

**NOTICE**

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

**Replacement Part No.**

- 1** DANGER, CO HELM ..... 1811368
- 2** WARNING WEAR YOUR LANYARD..... 2156485
- 3** HANG TAG W/JOYSTICK LABEL KIT (OPTION)..... 879288287
- 4** WARNING, LTD VISIBILITY FROM HELM ..... 2029123
- 5** WARNING, PROP DANGER..... 2417275
- 6** WARNING SKYHOOK (OPTION)..... 8M0034159

Warning Label Locations (Con't)  
Figure 1.22.1

**1**

**⚠ WARNING**

Avoid serious injury or death from fire or explosion resulting from leaking fuel. Inspect system for leaks at least once a year. Contents can be under pressure. Open slowly in well ventilated area. No smoking or open flames. The use of fuels containing ethanol higher than 10% (E-10) can damage your engine or fuel system and will void the warranty. Never use (E-85).

**2**

**⚠ CAUTION**

AVOID INJURY  
BOAT MOVEMENT MAY CAUSE LID TO FALL  
KEEP HANDS AND FEET CLEAR OF EDGES WHEN HATCH IS OPEN

MRP# 1836858

UNDERSIDE OF HATCH

**3**

**420OR BATTERY LOCATIONS**

BATTERY #1 IS FOR STBD ENGINE AND GENERATOR IF EQUIPPED. BATTERY #2 IS FOR STBD CENTER ENGINE.

BATTERY #3 IS FOR PORT ENGINE. BATTERY #4 IS FOR PORT CENTER ENGINE. BATTERIES #3&4 MUST BE IN PARALLEL, PROVIDING 12VDC POWER TO THE HOUSE LOAD.

FORWARD BATTERY ACCESS: BATTERIES #5 & #6 ARE IN SERIES, PROVIDING 24VDC POWER TO THE BOW THRUSTER LOAD.

SEE OWNERS MANUAL FOR BATTERY SPECIFICATIONS. SET BATTERY CHARGER TO BATTERY MANUFACTURERS RECOMMENDED SETTINGS.

2147023

**13**

**NOTICE**

**GASOLINE RECOMMENDATIONS**

Minimum octane rating of 91 in the U.S. and Canada, 96 outside the U.S. and Canada. Refer to engine owner's manual for additional information.

**4**

**420OR BATTERY LOCATIONS**

BATTERY #1 IS FOR STBD ENGINE AND GENERATOR IF EQUIPPED. BATTERY #2 IS FOR STBD CENTER ENGINE.

BATTERY #3 IS FOR PORT ENGINE. BATTERY #4 IS FOR PORT CENTER ENGINE. BATTERIES #3&4 MUST BE IN PARALLEL, PROVIDING 12VDC POWER TO THE HOUSE LOAD.

FORWARD BATTERY ACCESS: BATTERIES #5 & #6 ARE IN SERIES, PROVIDING 24VDC POWER TO THE BOW THRUSTER LOAD.

SEE OWNERS MANUAL FOR BATTERY SPECIFICATIONS. SET BATTERY CHARGER TO BATTERY MANUFACTURERS RECOMMENDED SETTINGS.

2147021

**12**

**DISCHARGE OF OIL PROHIBITED**

THE FEDERAL WATER POLLUTION CONTROL ACT PROHIBITS THE DISCHARGE OF OIL OR OILY WASTE INTO OR UPON THE NAVIGABLE WATERS OF THE UNITED STATES OR THE WATERS OF THE CONTIGUOUS ZONE IF SUCH DISCHARGE CAUSES A FILM OR SHEEN UPON OR A DISCOLORATION OF THE SURFACE OF THE WATER OR CAUSES A SLUDGE OR EMULSION BENEATH THE SURFACE OF THE WATER. VIOLATORS ARE SUBJECT TO A PENALTY OF \$5,000.

**11**

**⚠ WARNING**

DOOR MUST BE SECURED IN THE CLOSED POSITION WHILE VESSEL IS UNDERWAY.

**5**

**420OR SEACOCK LOCATIONS**

STARBOARD PORT

COCKPIT A/C PICKUP  
CABIN A/C PICKUP  
FREEZER PLUGS PICKUP

GENERATOR PICKUP

OVERBOARD DISCHARGE

FWD

AFT LIFEWELL & RAW WATER PICKUP

OPEN CLOSED

2145746

**6**

**SLING**

**6**

**SLING**

**7**

**⚠ WARNING**

DO NOT LEAVE TRANSOM DOOR/GATE OPEN WHILE UNDERWAY - SERIOUS INJURY MAY RESULT.

12-B123-00

**10**

**NOTICE**

THIS BOAT IS EQUIPPED WITH AN OPTIONAL DIRECT OVERBOARD DISCHARGE VALVE. DISCHARGING OF SEWAGE DIRECTLY OVERBOARD IS FOR USE WHERE APPROVED ONLY

**9**

**⚠ NOTICE**

Fixed fire extinguishing system must be suitable for gross compartment volume of 250 cu. ft.

**8**

**⚠ WARNING**

-DO NOT LEAVE BOAT UNATTENDED WITH THE DOCKSIDE WATER HOSE CONNECTED.  
-DOCKSIDE WATER SHOULD BE CONNECTED DURING PERIODS OF HEAVY WATER USE ONLY.

**Replacement Part No.**

<b>1</b>	WARNING, LEAKING FUEL .....	2096004
<b>2</b>	CAUTION, AVOID INJURY, BOAT MOVEMENT (P&S) ...	1836858
<b>3</b>	PLATE, BATTERY LOCATIONS .....	2147023
<b>4</b>	PLATE, BATTERY LOCATIONS, JOYSTICK (OPTION) ..	2147021
<b>5</b>	PLATE, SEACOCK LOCATIONS .....	2252642
<b>6</b>	SLING POSITION LABEL .....	2029124
<b>7</b>	DANGER, TRANSOM DOOR .....	2063385
<b>8</b>	WARNING, LEAVING DOCKSIDE WATER .....	2028931
<b>9</b>	NOTICE, FIRE EXT. SYSTEM .....	2028940
<b>10</b>	NOTICE, OVERBOARD DISCHARGE .....	1745156
<b>11</b>	WARNING, DOOR SECURED CLOSED .....	2063402
<b>12</b>	LABEL, DISCHARGE OF OIL PROHIBITED .....	2063375
<b>13</b>	NOTICE, RECOMMENDED FUEL .....	2038447

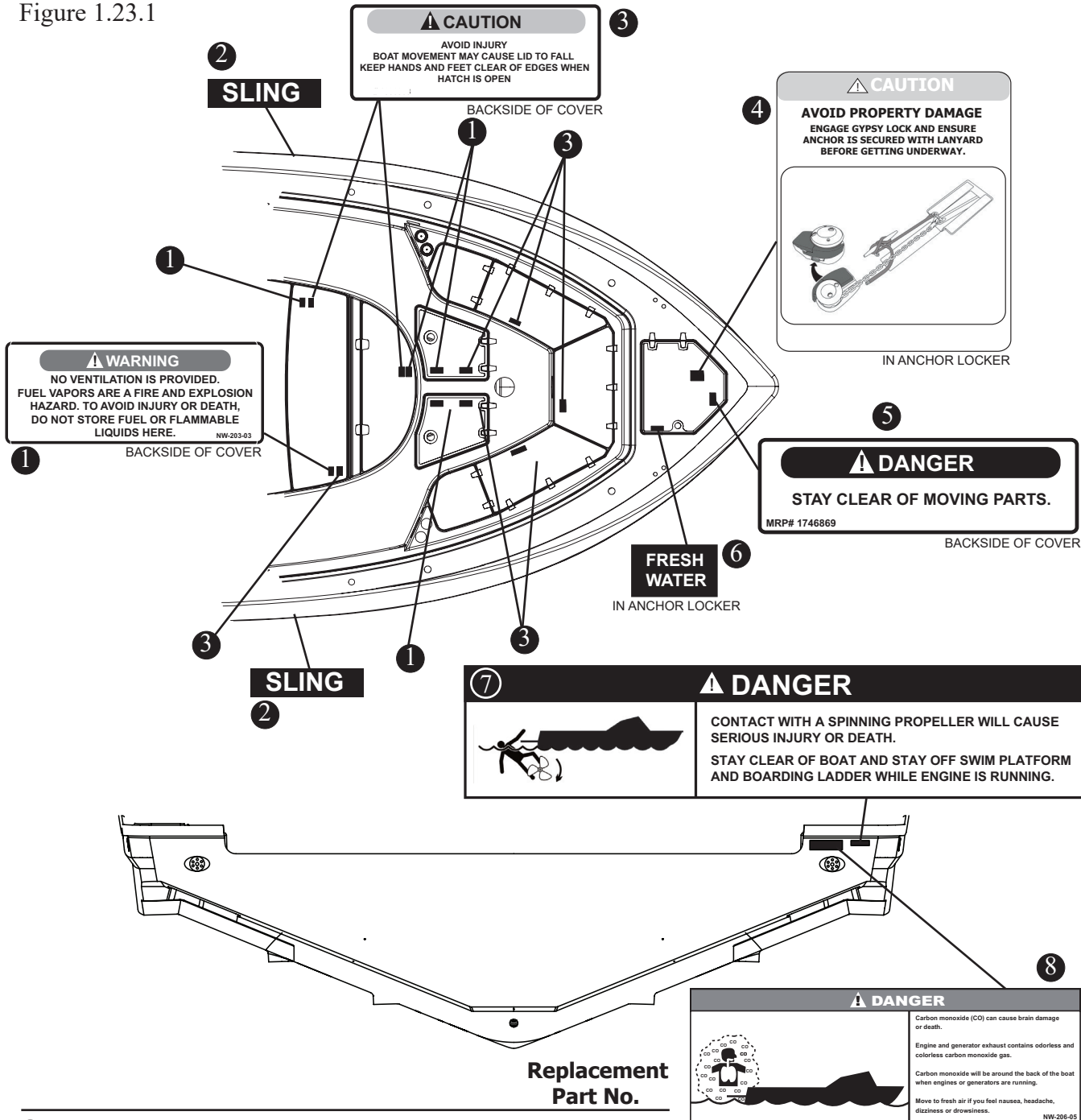
**NOTICE**

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



## Warning Label Locations (Con't)

Figure 1.23.1



### Replacement Part No.

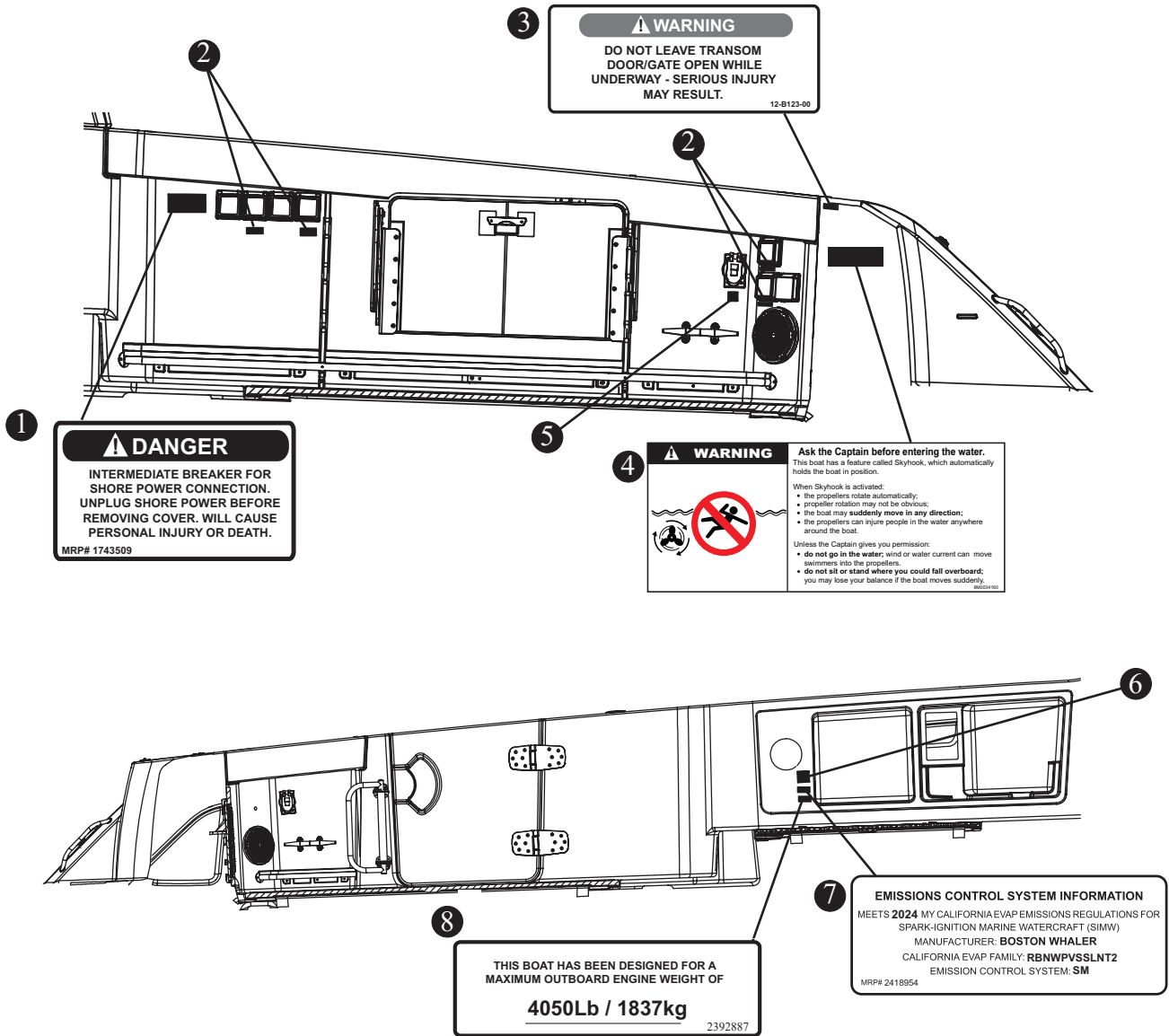
- ① WARNING, DO NOT STORE FUEL ..... 1691003
- ② SLING POSITION LABEL ..... 2029124
- ③ CAUTION, AVOID INJURY, BOAT MOVEMENT ..... 1836858
- ④ WARNING, ANCHOR, LANYARD..... 2147835
- ⑤ DANGER, STAY CLEAR OF MOVING PARTS..... 2028932
- ⑥ LABEL, FRESH WATER..... 2063265
- ⑦ WARNING, ROTATING PROP DANGER..... 2417276
- ⑧ 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)

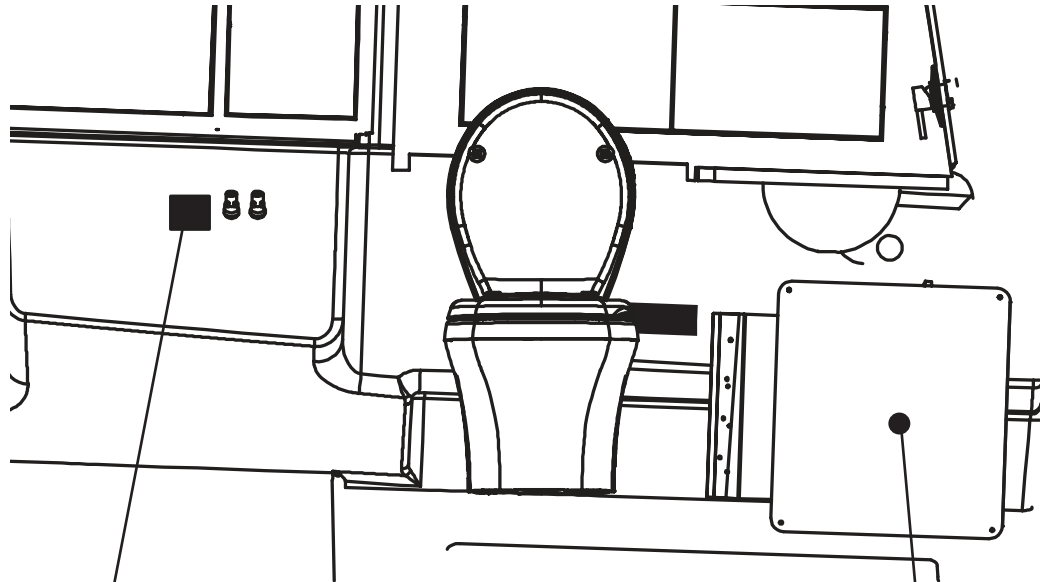
Figure 1.24.1



### Replacement Part No.

<b>1</b>	WARNING, INTERMEDIATE BREAKER .....	2029122
<b>2</b>	LABEL, "SHORE" .....	2063393
<b>3</b>	DANGER, TRANSOM DOOR .....	2063385
<b>4</b>	WARNING, W/JOYSTICK LABEL KIT (OPTION) .....	2121785
<b>5</b>	LABEL, SHORE POWER ISO SYMBOL .....	2067983
<b>6</b>	VESSEL CERTIFICATION PLATE .....	SEE FIGURE 2.2.1
<b>7</b>	LABEL, CALIFORNIA ARB COMPLIANCE .....	2418954
<b>8</b>	MAXIMUM ENGINE WEIGHT 3400 LBS/1542 KG .....	2149116

Warning Label Locations (Con't)  
Figure 1.25.1



**1**

**NOTICE**

THIS BOAT IS EQUIPPED WITH AN OPTIONAL DIRECT OVERBOARD DISCHARGE VALVE. DISCHARGING OF SEWAGE DIRECTLY OVERBOARD IS FOR USE WHERE APPROVED ONLY

MRP# 1745156

**2**

**Save Our Seas**

It is *illegal* to dump plastic trash anywhere into the ocean or navigable waters of the United States. Violation of these requirements may result in civil penalty up to \$25,000, a fine of \$50,000 and imprisonment for up to five years.

<p><b>PLASTIC</b> - Includes but is not limited to: plastic bags, styrofoam cups and lids, sixpack holders, straws, straws, milk jugs, egg cartons, synthetic fishing nets, ropes, lines, and bio or photo degradable plastics.</p> <p><b>GARBAGE</b> - Means paper, rags, glass, metal, crockery (generated in living spaces aboard the vessel-what we normally call trash), and all kinds of food, maintenance and cargo-associated waste. "Garbage" does not include fresh fish or fish parts, dishwasher, and gray water.</p>	<p><b>INSIDE 3 MILES</b> (and in U.S. Lakes, Rivers, Bays and Sounds)</p> <p><b>PLASTICS</b></p> <p><b>DUNNAGE, LINING AND PACKING MATERIALS THAT FLOAT</b></p> <p><b>ANY GARBAGE EXCEPT DISHWATER/GRAYWATER/FRESH FISH PARTS</b></p>	<p><b>DUNNAGE</b> - Material used to block and brace cargo, and is considered a cargo associated waste.</p> <p><b>DISHWATER</b> - Means the liquid residue from the manual or automatic washing of dishes and cooking utensils which, have been pre-cleaned to the extent that any food particles adhering to them would not normally interfere with the operation of automatic dishwashers.</p> <p><b>GRAYWATER</b> - Means drainage from a dishwasher, shower, laundry, bath, and washbasin, and does not include drainage from toilets, urinals, hospitals, and cargo spaces.</p>
	<p><b>3 TO 12 MILES</b></p> <p><b>PLASTICS</b></p> <p><b>DUNNAGE, LINING AND PACKING MATERIALS THAT FLOAT</b></p> <p><b>ANY GARBAGE NOT GROUND TO LESS THAN ONE SQUARE INCH</b></p>	
	<p><b>12 TO 25 MILES</b></p> <p><b>PLASTICS</b></p> <p><b>DUNNAGE, LINING AND PACKING MATERIALS THAT FLOAT</b></p>	
	<p><b>12 TO 25 MILES</b></p> <p><b>PLASTICS</b></p>	

ON BACKSIDE OF DOOR

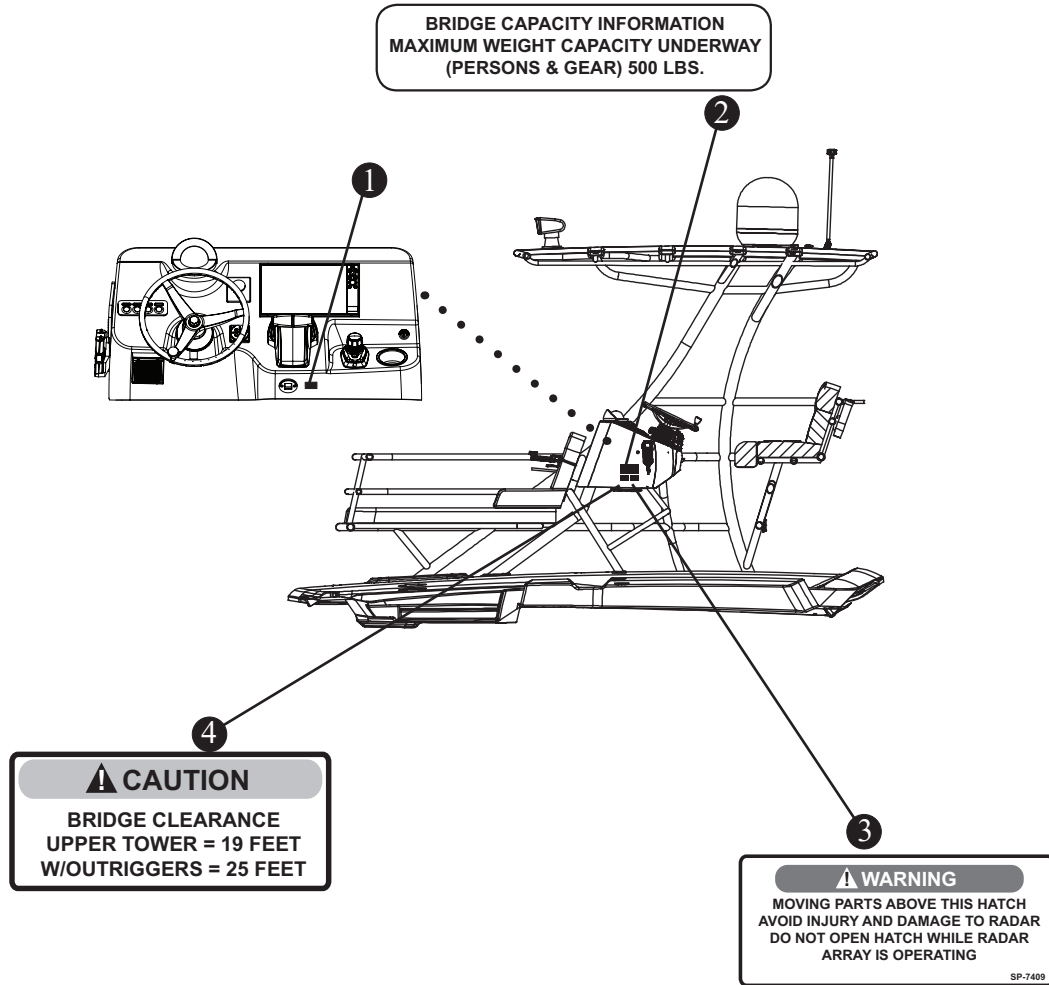
**NOTICE**

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)  
Figure 1.26.1



## NOTICE

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

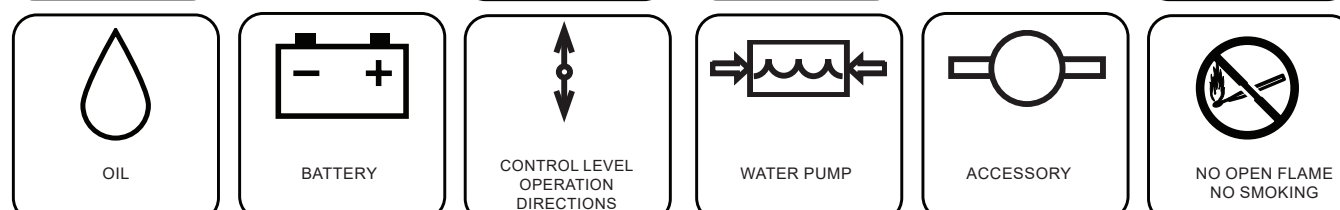
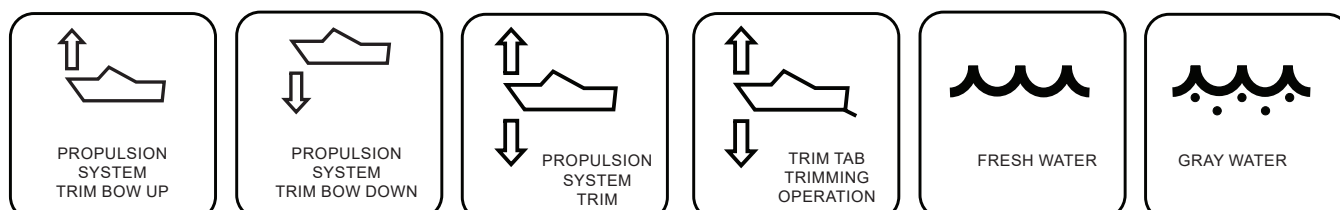
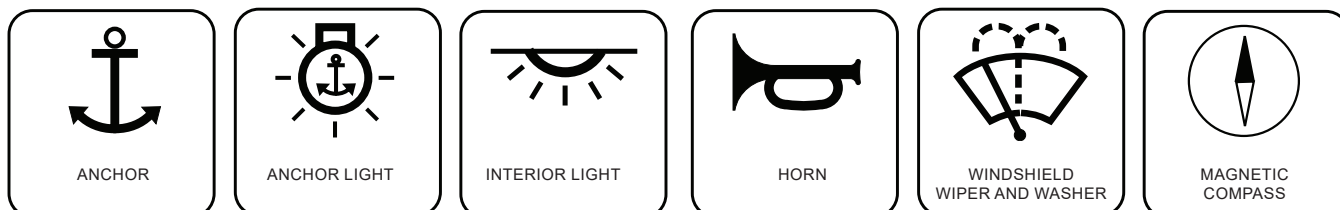
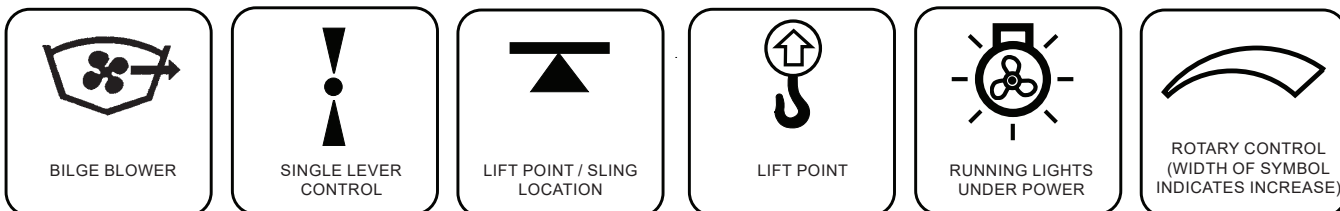
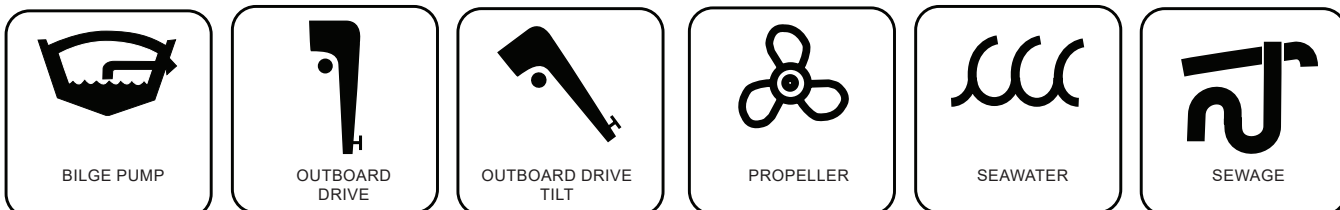
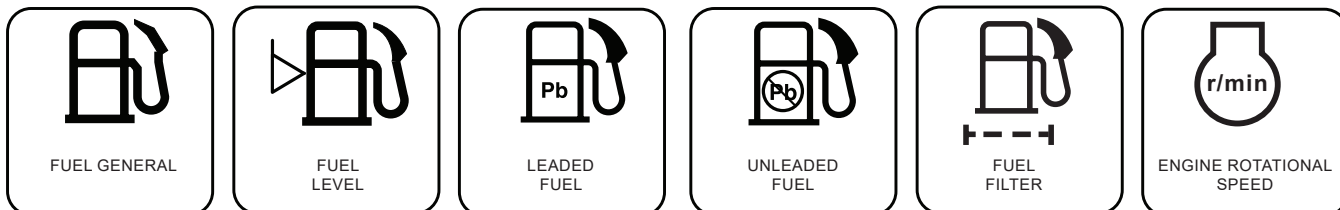
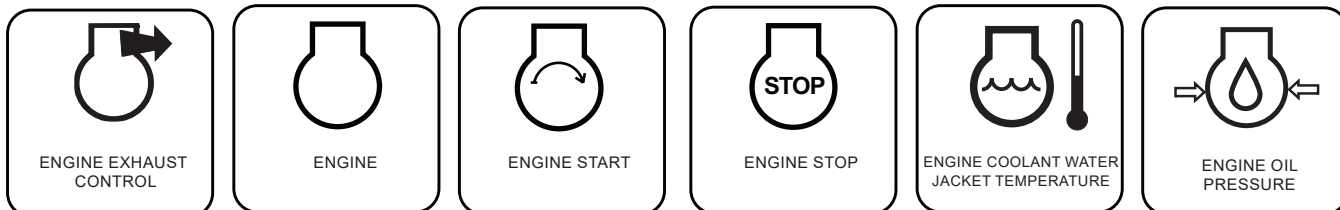
### Replacement Part No.

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 this vessel. This page is to help you understand what the symbols mean.



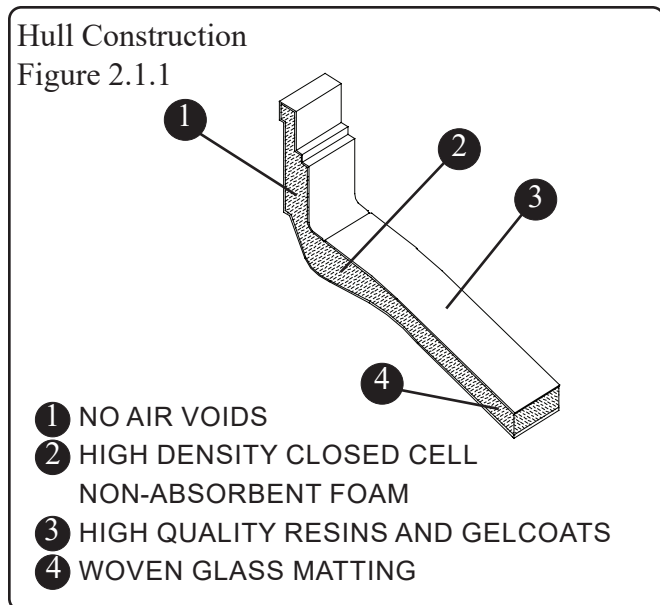
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## Construction Standards

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.



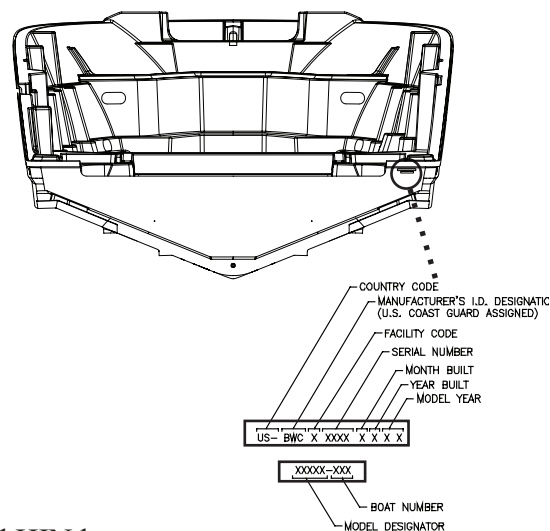
## Hull Identification Number

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)

Figure 2.1.2



Record 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: 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 *Specifications and Dimensions* table, listed later in this chapter, indicates the maximum weight, number of persons, and maximum horsepower this vessel is rated to handle. Do not exceed these specifications. The information on the certification plate does not relieve the operator of responsibility. Use common sense and sound judgement when placing equipment and/or passengers in this vessel. Do not load to capacity in poor weather/rough water. The number of seats does not indicate passenger capacity in poor weather/rough water. At speeds above idle, all passengers should be seated on the seats provided.

**DANGER**

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

### Certification Plates

*NOTE: The type of capacity plate will vary dependent on the local governing authority.*

#### NMMA Plate

An NMMA Certification indicates that your boat has been verified by the National Marine Manufacturers Association (NMMA) to be in compliance with applicable federal regulations and American Boat and Yacht Council (ABYC) standards. Recreational vessels up to 20 feet (6.1 meters) have passenger and cargo weight capacities compliant with USCG regulations. Vessels 26 feet (7.9 meters) and under have passenger and cargo weight capacities compliant with ABYC standards. Vessels over 26 feet have NMMA yacht certification.



#### Canadian Conformity Plate

A Canada Compliance Notice indicates that your boat has been certified to comply with construction standards for small vessels by Transport Canada (TC). Recreational vessels up to 6 meters (19.7 feet) have passenger and cargo weight capacities compliant with TC regulations. Vessels over 6 meters are also compliant with TC regulations, but do not state capacities on the plate.

**CANADIAN COMPLIANCE NOTICE**  
**AVIS DE CONFORMITE CAÑADIEN**

Boston Whaler (BWC) Edgewater, FL, USA
MODEL / MODLÈ: 420 OUTRAGE
DESIGN CATEGORY: B
<p style="font-size: small; margin: 0;">THE MANUFACTURER DECLARES THAT THIS VESSEL COMPLIES WITH THE PLEASURE CRAFT CONSTRUCTION REQUIREMENTS OF THE SMALL VESSEL REGULATIONS, AS THEY READ ON THE DAY ON WHICH THE CONSTRUCTION OF THE VESSEL WAS STARTED OR ON THE DAY ON WHICH THE VESSEL WAS IMPORTED.</p> <p style="font-size: small; margin: 0;">LE FABRICANT ATTESTE QUE CE BÂTIMENT EST CONFORME AUX EXIGENCES DE CONSTRUCTION DES EMBARCATIONS DE PLAISANCE DU RÉGLEMENT SUR LES PETITS BÂTIMENTS, EN VIGUEUR À LA DATE DU DÉBUT DE SA CONSTRUCTION OU À LA DATE DE SON IMPORTATION.</p>

2152856



## Chapter 2 • General Information

### CE Mark Builder's Plate

A CE mark indicates that your boat has been certified for the EU and the passenger and cargo weight capacities comply with the International Organization for Standardization (ISO) regulations.

 <b>0609</b> 	<b>BOSTON WHALER, INC.</b> <b>EDGEWATER, FL, USA</b> 420OUT
	<b>MAXIMUM</b>
	<b>20</b> <b>+</b> <b>= 1836 kg</b>
<b>B</b>	<b>- 1343 kW</b>

2399402

### Australian Builder's Plate

An Australian Builder's Plate indicates that your boat has been certified and the passenger and cargo weight capacities comply with either the International Organization for Standardization (ISO) regulations or American Boat and Yacht Council (ABYC) standards as noted on the capacity plate.

#### Standard Boat

**AUSTRALIAN BUILDERS PLATE**  
 BUILT BY: BOSTON WHALER, INC.  
 MODEL: 420 OUTRAGE  
 INFORMATION DETERMINED: ISO

**MAX OUTBOARD: 1343 kW 1837 kg**  
**MAX PERSONS: 20 or not exceeding 1500 kg**  
**MAX LOAD: 3394 kg**

**⚠ WARNING**  
 Alteration to the boat's hull or permanent fittings  
 may invalidate the particulars on this plate

The maximum persons and maximum load should be reduced in bad  
 weather, or when the boat is operated in adverse conditions.

2393956

#### Standard Boat, Upper Station

**AUSTRALIAN BUILDERS PLATE**  
 BUILT BY: BOSTON WHALER, INC.  
 MODEL: 420 OUTRAGE  
 INFORMATION DETERMINED: ISO

**MAX OUTBOARD: 1343 kW 1837 kg**  
**MAX PERSONS: 20 or not exceeding 1500 kg**  
**MAX LOAD: 3394 kg**

**⚠ WARNING**  
 Alteration to the boat's hull or permanent fittings  
 may invalidate the particulars on this plate

The maximum persons and maximum load should be reduced in bad  
 weather, or when the boat is operated in adverse conditions.

The maximum persons to be carried on the flybridge at  
 any time should not exceed 300 kg (4 persons).

2393957

### Emission Control System Plate

An Emissions Control System Information plate indicates that your boat is compliant with California emissions regulations.

**EMISSIONS CONTROL SYSTEM INFORMATION**

MEETS **2024** MY CALIFORNIA EVAP EMISSIONS REGULATIONS FOR  
 SPARK-IGNITION MARINE WATERCRAFT (SIMW)  
 MANUFACTURER: **BOSTON WHALER**  
 CALIFORNIA EVAP FAMILY: **RBNWPVSSLNT2**  
 EMISSION CONTROL SYSTEM: **SM**

2418954

### 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.

### 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 engines on the 420 Outrage have 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 4050 LBS (1837 kg).**

### WARNING

**Do not exceed the maximum engine power rating for your boat.**

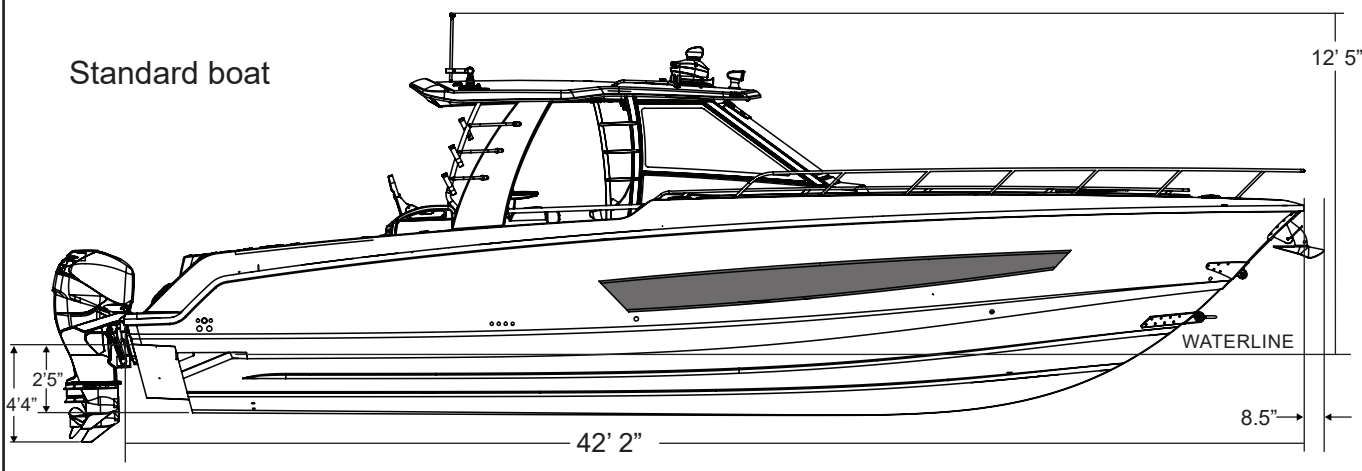
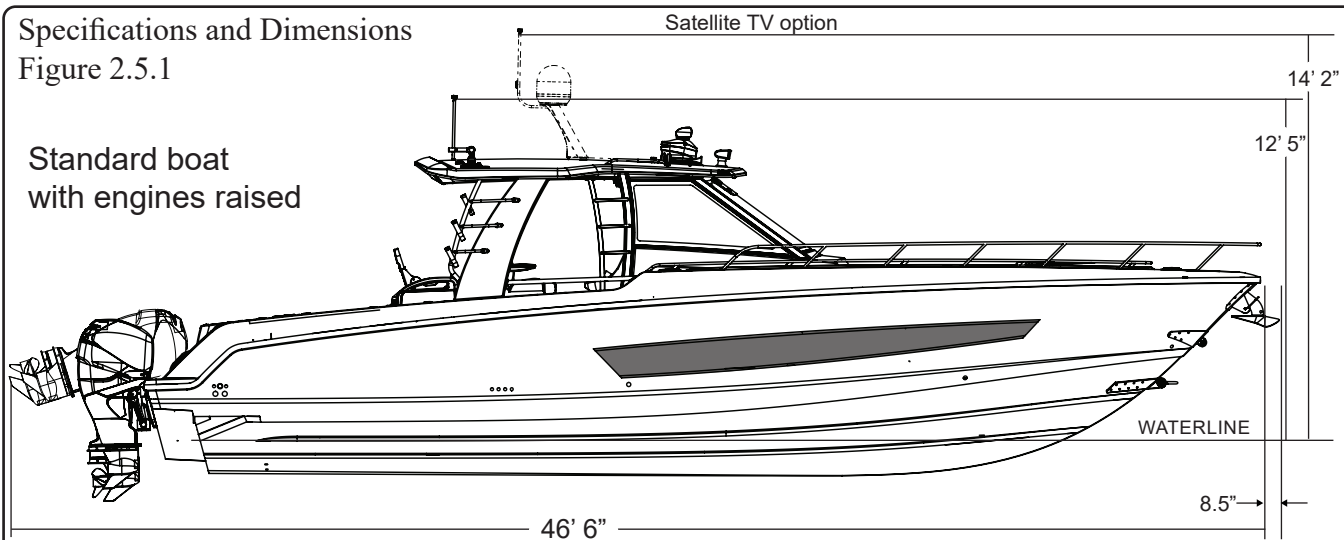
**Use caution while accelerating. Ensure passengers are safely seated in designated areas of the boat and all gear is stowed securely.**

### NOTICE

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

## Chapter 2 • General Information

Specifications and Dimensions  
Figure 2.5.1



### Specifications and Dimensions (measurements are approximate and subject to variance)

Hull Length (bow to transom)	42' 2"	12.9 m	Weight (w/engines, fuel, water)	30,115 lbs.	13660 kg
Overall length (engine up)	46' 6"	14.2 m	Swamped Capacity	4,000 lbs	1814 kg
Overall length V12 (engine up)	47' 9"	14.6 m	Maximum Engine Weight	4,050 lbs.	1837 kg
Overall length (engine down)	44' 10"	13.7 m	Maximum Weight,	7,482 lbs	3394 kg
Overall length V12 (engine down)	46' 1"	14.0 m	(passengers, engines, gear <sup>2</sup> )		
Draft <sup>1</sup>	2' 10"	.86 m	Persons	20	
Draft <sup>1</sup> with V12 (engine down)	4' 4"	1.3 m	Maximum Horsepower	1,800 HP	1343 kw
Bridge Clearance			Minimum Horsepower	1,200 HP	895 kw
- with hardtop	12' 5"	3.81 m	Gasoline Fuel Capacity:	700 gal.	2650 L
- with optional satellite TV	14' 2"	4.32 m	Diesel Fuel Capacity	35 gal	132 L
- with optional upper station	18' 6"	5.64 m	Waste Capacity	20 gal.	76 L
Beam	13'	3.96 m	Water Capacity	60 gal.	227 L
Weight (dry, no engine)	22,000 lbs	9979 kg			

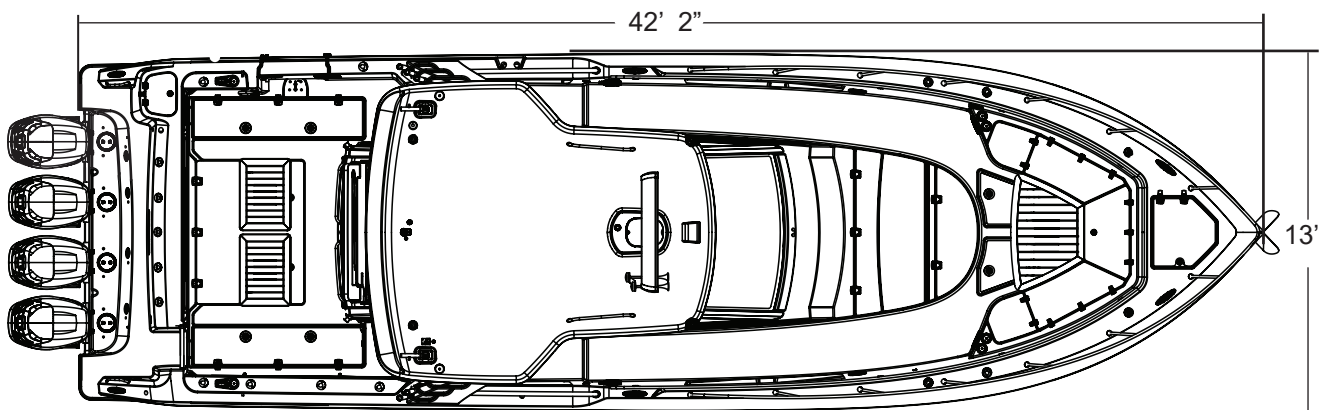
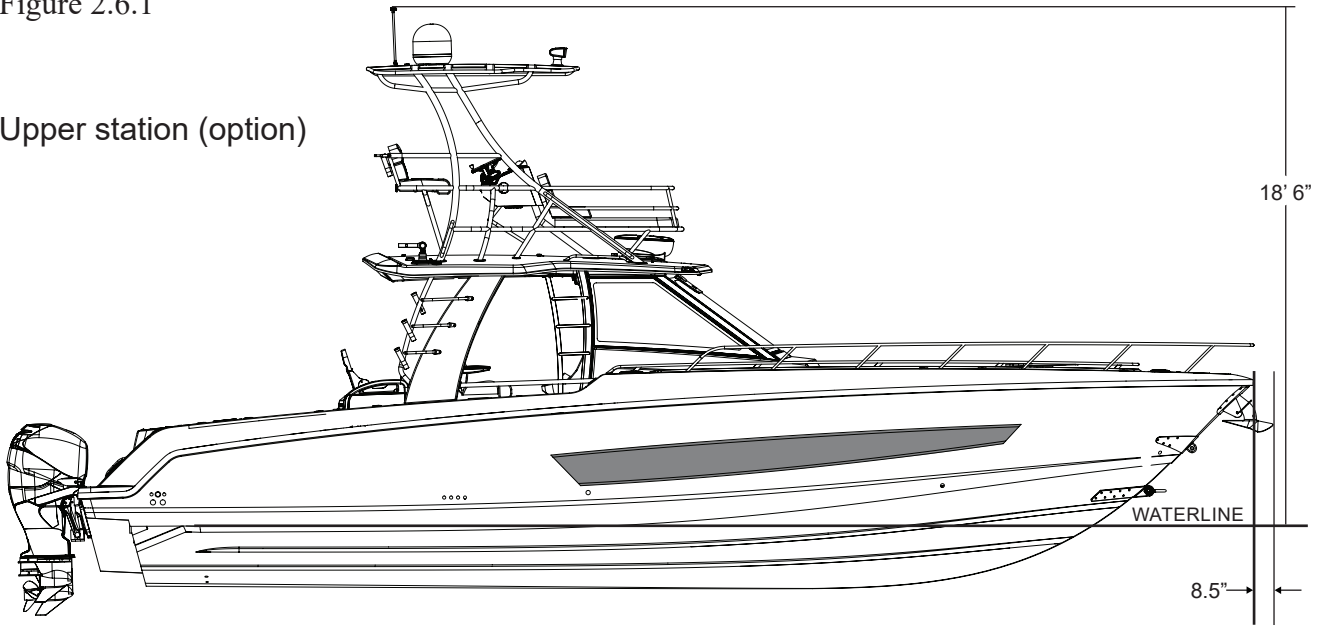
<sup>1</sup> Optional equipment and loading of the boat will affect the draft measurements. Follow the recommendations regarding the maximum amount of weight your boat can safely carry.

## Chapter 2 • General Information

### Specifications and Dimensions

Figure 2.6.1

Upper station (option)




*NOTE: Equipment may vary depending on options selected.*





## Passenger Areas

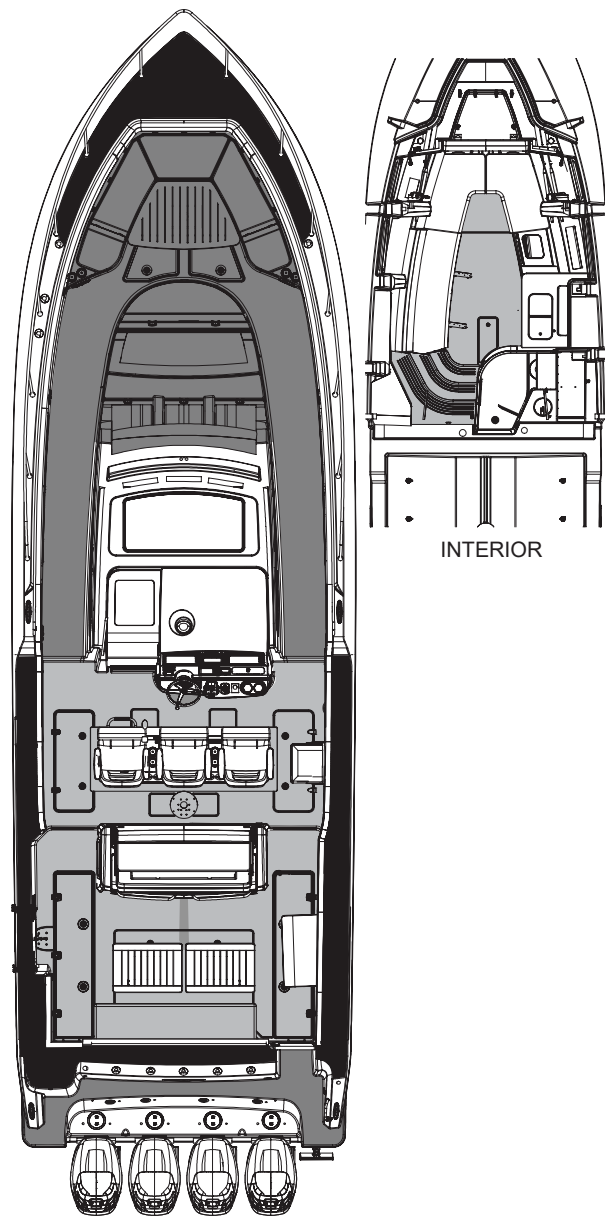
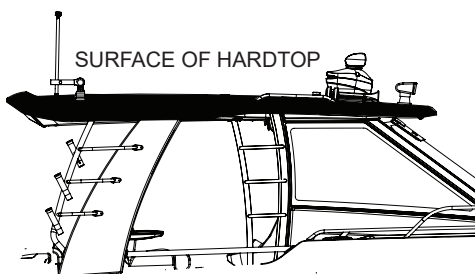
### Deck Occupancy

Figure 2.7.1

 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 reboarding 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**

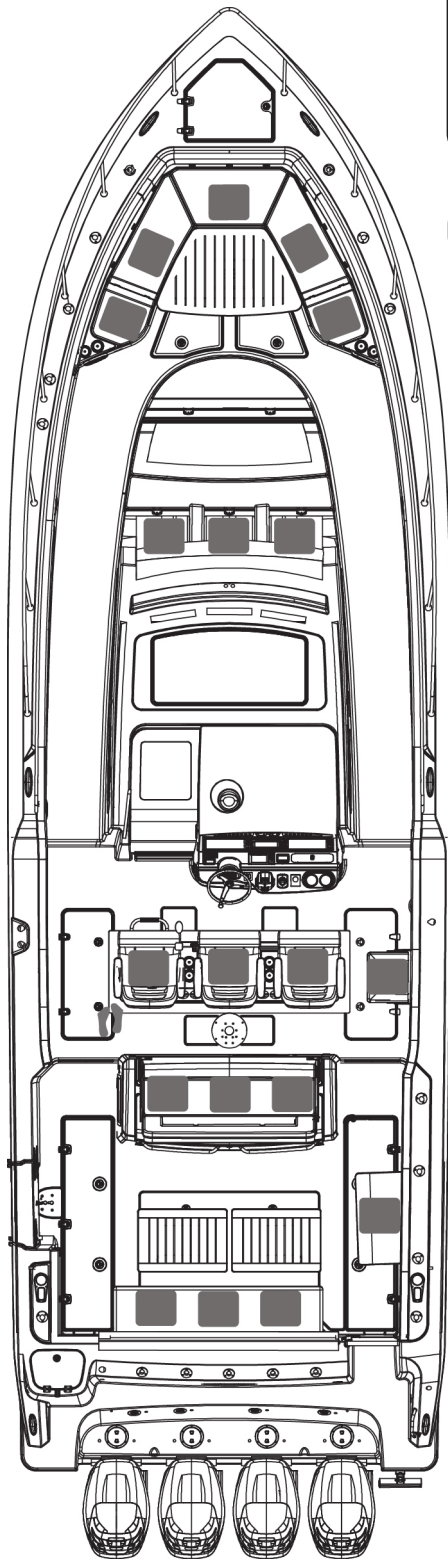
**To avoid risk of injury or death, shut off engines when near swimmers or prior to using reboarding ladder.**

### **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 Occupant Locations

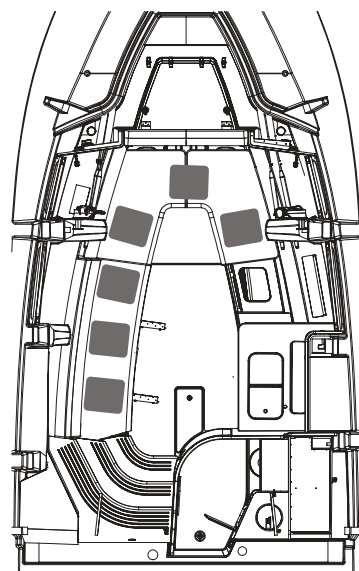
Seating Locations  
Figure 2.8.1



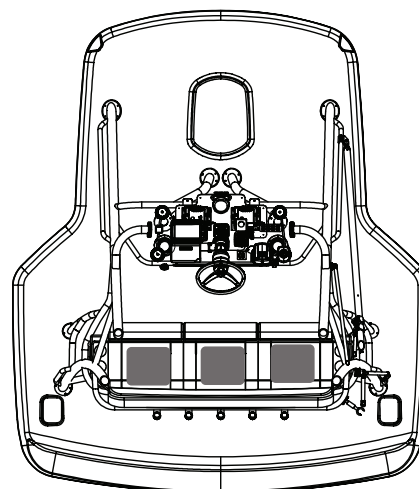
NOTE: Hardtop removed for clarity

**⚠ 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.

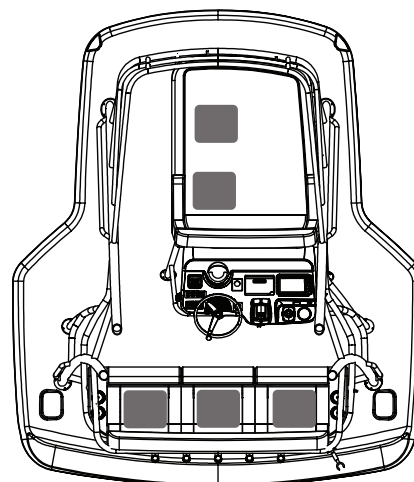
**NOTICE**  
Your boat is rated for 20 persons ONLY. The interior, upper station and flybridge illustrate optional seating, NOT additional seating.



INTERIOR (OPTIONAL SEATING)



UPPER STATION (OPTIONAL SEATING)

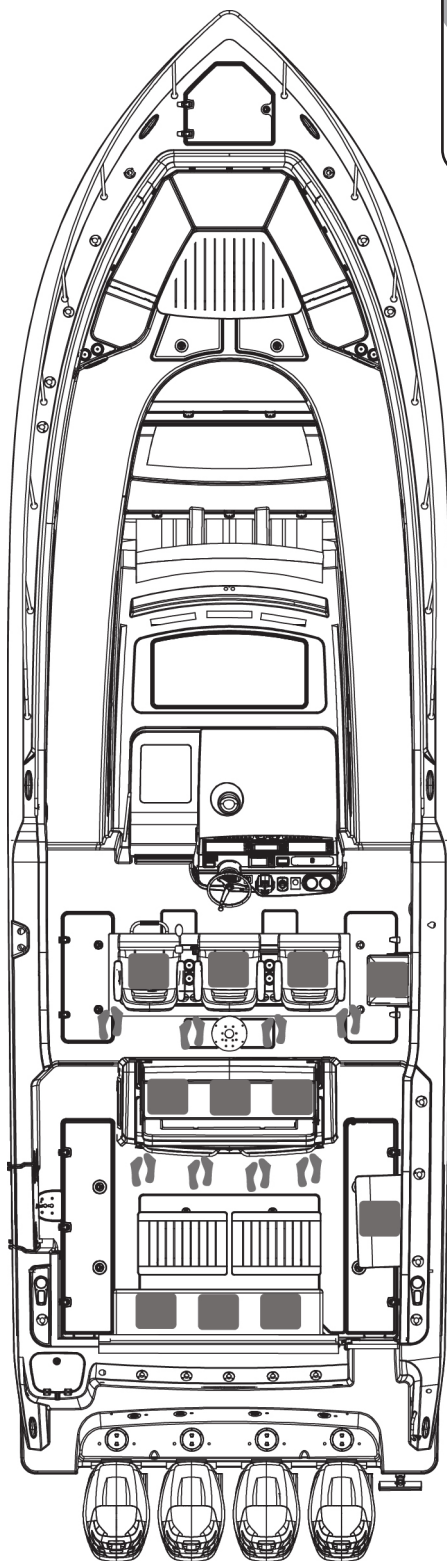


UPPER STATION (OPTIONAL SEATING)

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

## Recommended Occupant Locations

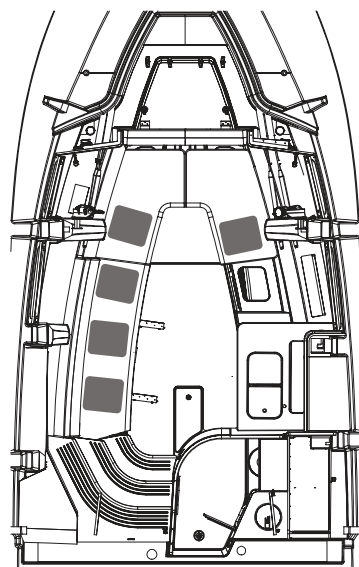
On-Plane Seating Locations  
Figure 2.9.1



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.

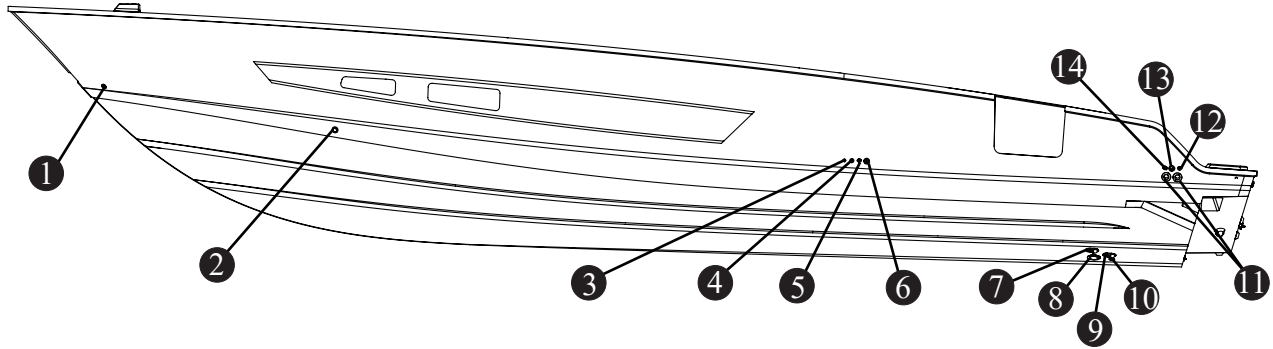
**NOTICE**  
Your boat is rated for 20 persons ONLY. The interior illustrates optional seating, NOT additional seating.



INTERIOR (OPTIONAL SEATING)

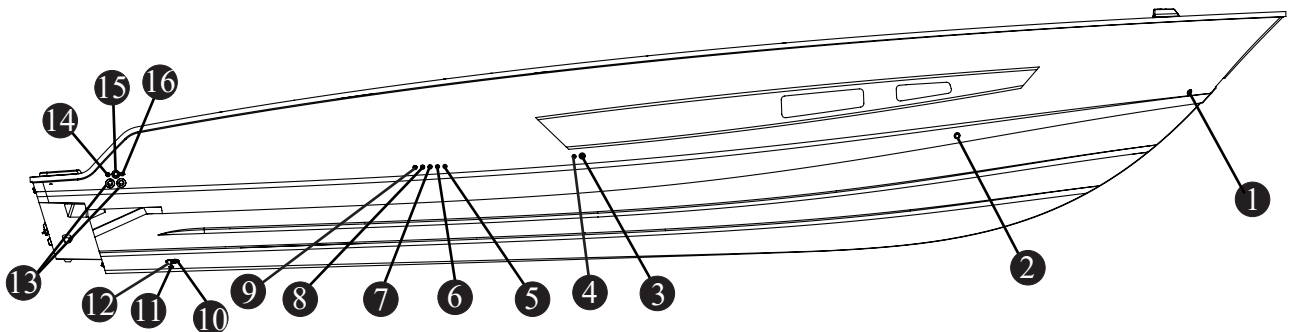
## Thru-Hull Fittings

Thru-Hull Fittings, Port  
Figure 2.10.1



- |                                 |                                |
|---------------------------------|--------------------------------|
| 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         |

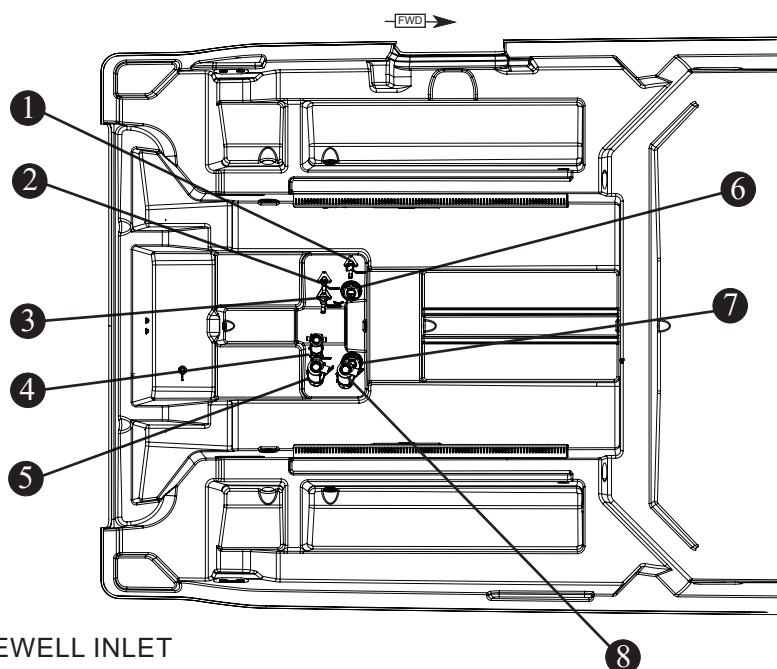
Thru-Hull Fittings, Starboard  
Figure 2.10.2



- |  |   |
|--|---|
| 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 GYROSCOPIC 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  
Figure 2.11.1



- 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 GYROSCOPIC STABILIZER INTAKE (OPTION)

### NOTICE

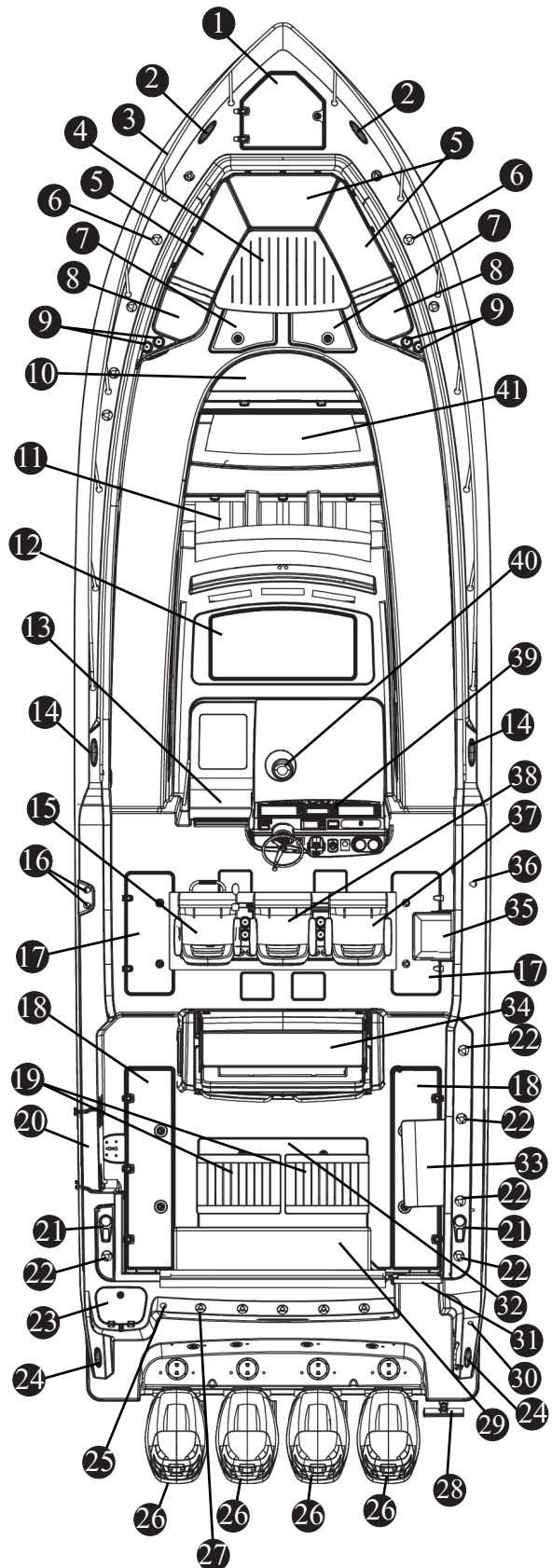
- **The deck drain provides self-bailing capabilities while the boat is static in the water and no passengers on board. This feature prevents the accumulation of water in the cockpit. The drain plug must be in place when underway.**
- **Depending on the type of boat you have, you may have underwater 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

Exterior (Hardtop removed)

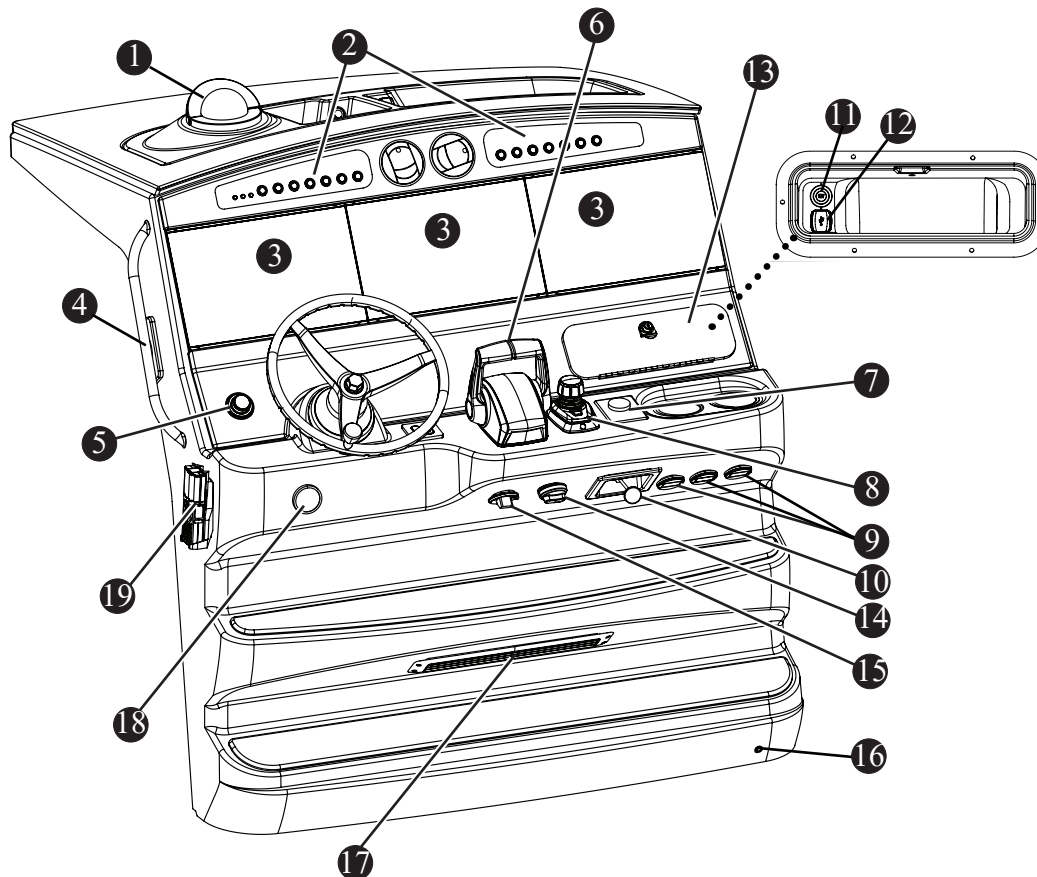
Figure 2.12.1

- ① ANCHOR LOCKER
- ② BOW CLEATS
- ③ BOW RAIL
- ④ BOW TABLE
- ⑤ FORWARD STORAGE
- ⑥ FORWARD GUNWALE MOUNTED ROD HOLDERS
- ⑦ FORWARD IN-DECK STORAGE
- ⑧ FORWARD SEATING W/FOLDING BACKREST
- ⑨ FORWARD CUP HOLDERS
- ⑩ FORWARD LOUNGE STORAGE
- ⑪ FORWARD LOUNGE
- ⑫ SKYLIGHT W/INTEGRATED SHADE
- ⑬ CABIN ENTRY DOOR
- ⑭ MID SHIP CLEAT
- ⑮ PORT HELM COMPANION SEAT
- ⑯ FUEL FILL DECK PLATES
- ⑰ MID IN-DECK STORAGE
- ⑱ IN-DECK FISHBOX WITH PUMPOUT
- ⑲ STOWABLE COCKPIT TABLES
- ⑳ DIVE/BOARDING DOOR W/REMOVABLE LADDER
- ㉑ HAWSE PIPE WITH CUP HOLDER
- ㉒ COCKPIT GUNWALE MOUNTED ROD HOLDERS
- ㉓ 24 GAL. (90.85 L) LIVEWELL
- ㉔ STERN CLEATS
- ㉕ WASTE PUMPOUT DECK PLATE
- ㉖ ENGINE (QUAD ENGINES SHOWN)
- ㉗ TRANSOM MOUNTED ROD HOLDERS
- ㉘ REBOARDING 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 FRESHWATER FILL DECK PLATE
- ㊲ STARBOARD HELM COMPANION SEAT
- ㊳ HELM CHAIR
- ㊴ HELM
- ㊵ COMPASS
- ㊶ FLIP-UP BACKREST



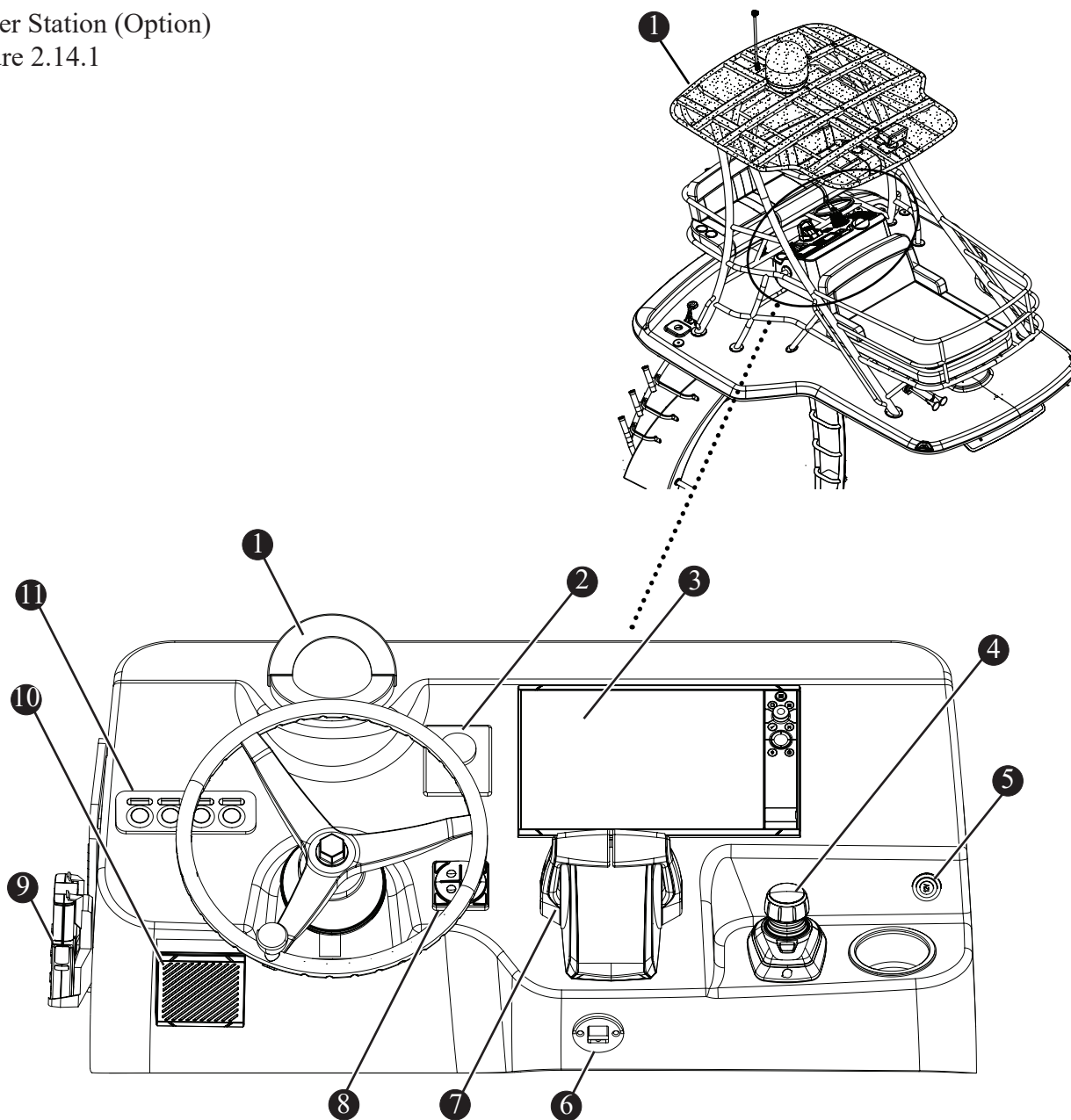
### General Layout (Cont'd)

Helm  
Figure 2.13.1



- |    |                               |    |                                  |
|----|-------------------------------|----|----------------------------------|
| 1  | COMPASS                       | 11 | 12V OUTLET                       |
| 2  | HELM SWITCH PANELS            | 12 | USB OUTLET                       |
| 3  | HELM DISPLAY                  | 13 | LOCKABLE GLOVE BOX               |
| 4  | GRAB RAIL                     | 14 | ENGINE DIAGNOSTIC PORT (OPTION)  |
| 5  | STEREO CONTROL                | 15 | ENGINE EMERGENCY STOP SWITCH     |
| 6  | THROTTLE & SHIFT CONTROL      | 16 | HELM DRAIN                       |
| 7  | SPOTLIGHT REMOTE (OPTION)     | 17 | A/C VENT                         |
| 8  | JOYSTICK PILOTING             | 18 | FIRE SUPPRESSION INDICATOR LIGHT |
| 9  | CARD PORT                     | 19 | VHF RADIO                        |
| 10 | WINDSHIELD DEFOG VENT CONTROL |    |                                  |

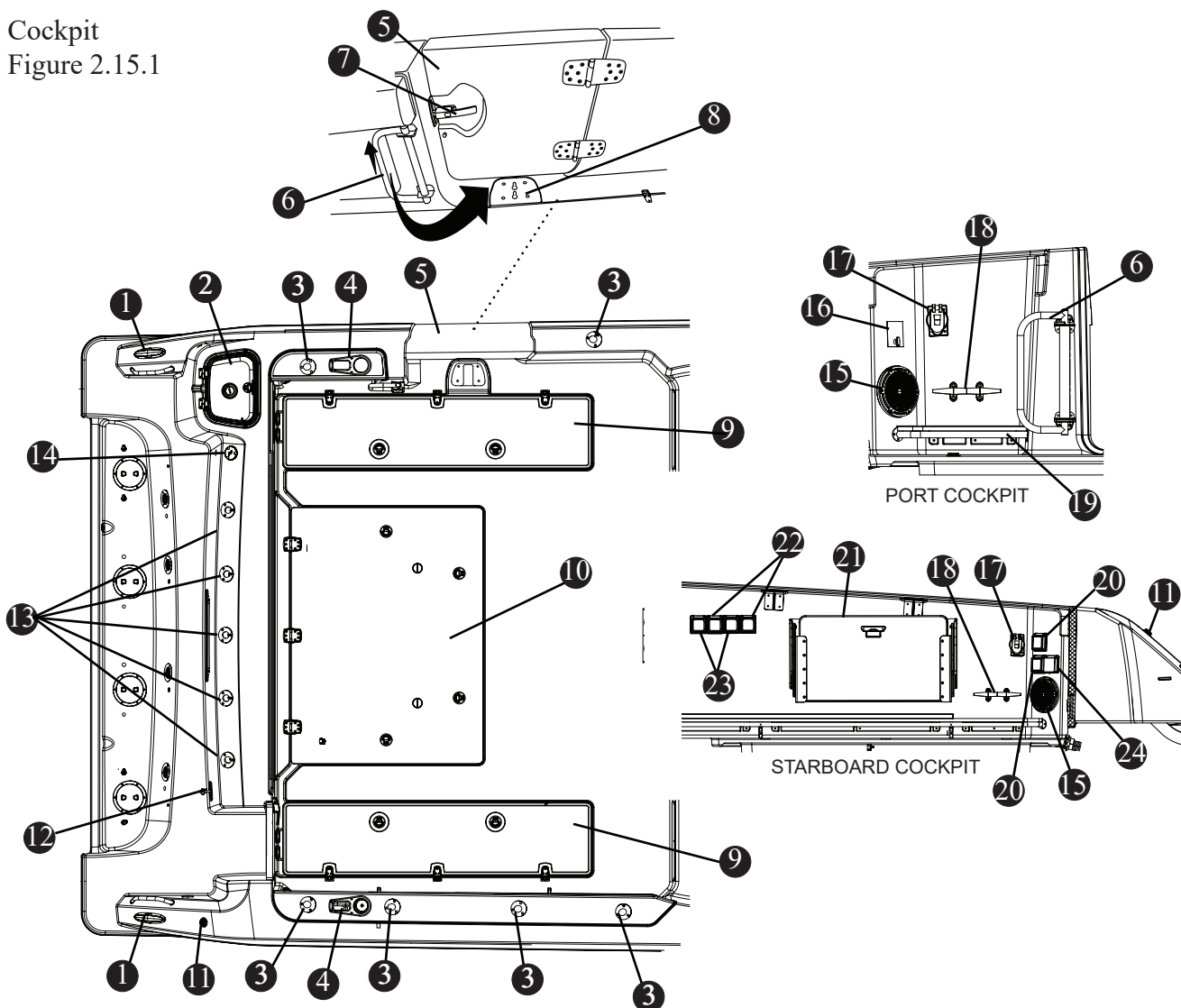
Upper Station (Option)  
Figure 2.14.1



- |                                |                            |
|--------------------------------|----------------------------|
| 1 COMPASS                      | 7 THROTTLE & SHIFT CONTROL |
| 2 SPOTLIGHT REMOTE (OPTION)    | 8 AUTOGLIDE (OPTION)       |
| 3 UPPER HELM DISPLAY           | 9 VHF RADIO                |
| 4 JOYSTICK PILOTING            | 10 VHF RADIO SPEAKER       |
| 5 12V OUTLET                   | 11 UPPER HELM SWITCH PANEL |
| 6 ENGINE EMERGENCY STOP SWITCH |                            |

### General Layout (Cont'd)

Cockpit  
Figure 2.15.1

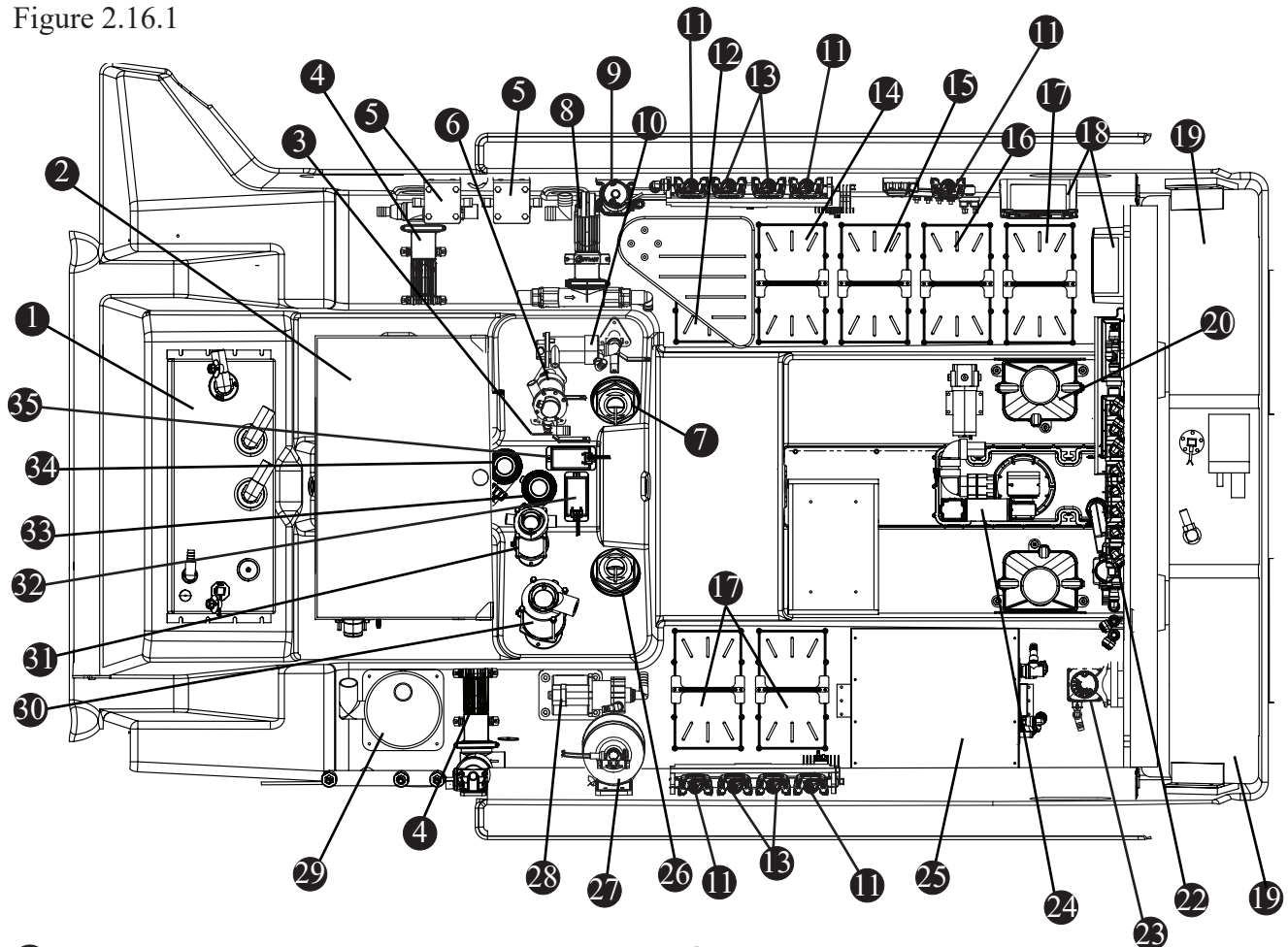


- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>① STERN CLEAT (P&amp;S)</li> <li>② LIVEWELL</li> <li>③ GUNWALE MOUNTED ROD HOLDERS (P&amp;S)</li> <li>④ HAWSE PIPE W/CUP HOLDER (P&amp;S)</li> <li>⑤ DIVE/BOARDING DOOR</li> <li>⑥ DEPLOYABLE GRAB RAIL FOR DIVE DOOR</li> <li>⑦ STAINLESS STEEL LATCH</li> <li>⑧ DIVE LADDER BRACKET</li> <li>⑨ INSULATED FISHBOX WITH PUMPOUT (P&amp;S)</li> <li>⑩ MECHANICAL HATCH</li> <li>⑪ TRANSOM FRESHWATER SHOWER</li> <li>⑫ DOCKSIDE FRESHWATER HOSE CONNECTION</li> <li>⑬ TRANSOM ROD HOLDERS</li> <li>⑭ WASTE PUMPOUT DECK PLATE</li> <li>⑮ STEREO SPEAKER</li> </ul> | <ul style="list-style-type: none"> <li>⑯ AUTOMATIC FIRE SYSTEM MANUAL OVERRIDE</li> <li>⑰ 125V/30AMP SHORE POWER REC'PT.* FOR ELECTRIC REELS AND/OR DOWNRIGGERS (P&amp;S) (OPTION)</li> <li>⑱ AFT COCKPIT CLEAT (P&amp;S)</li> <li>⑲ DOWNRIGGER WEIGHT HOLDER (P&amp;S)</li> <li>⑳ 125V/30AMP SHORE POWER*</li> <li>㉑ COCKPIT FOLDOUT SIDE TROLLING SEAT (OPTION)</li> <li>㉒ ELCI (EQUIPMENT LEAKAGE CIRCUIT INTERRUPTER)</li> <li>㉓ SHORE POWER MAIN BREAKERS</li> <li>㉔ DOCKSIDE TV INLET</li> </ul> |
|--|--|



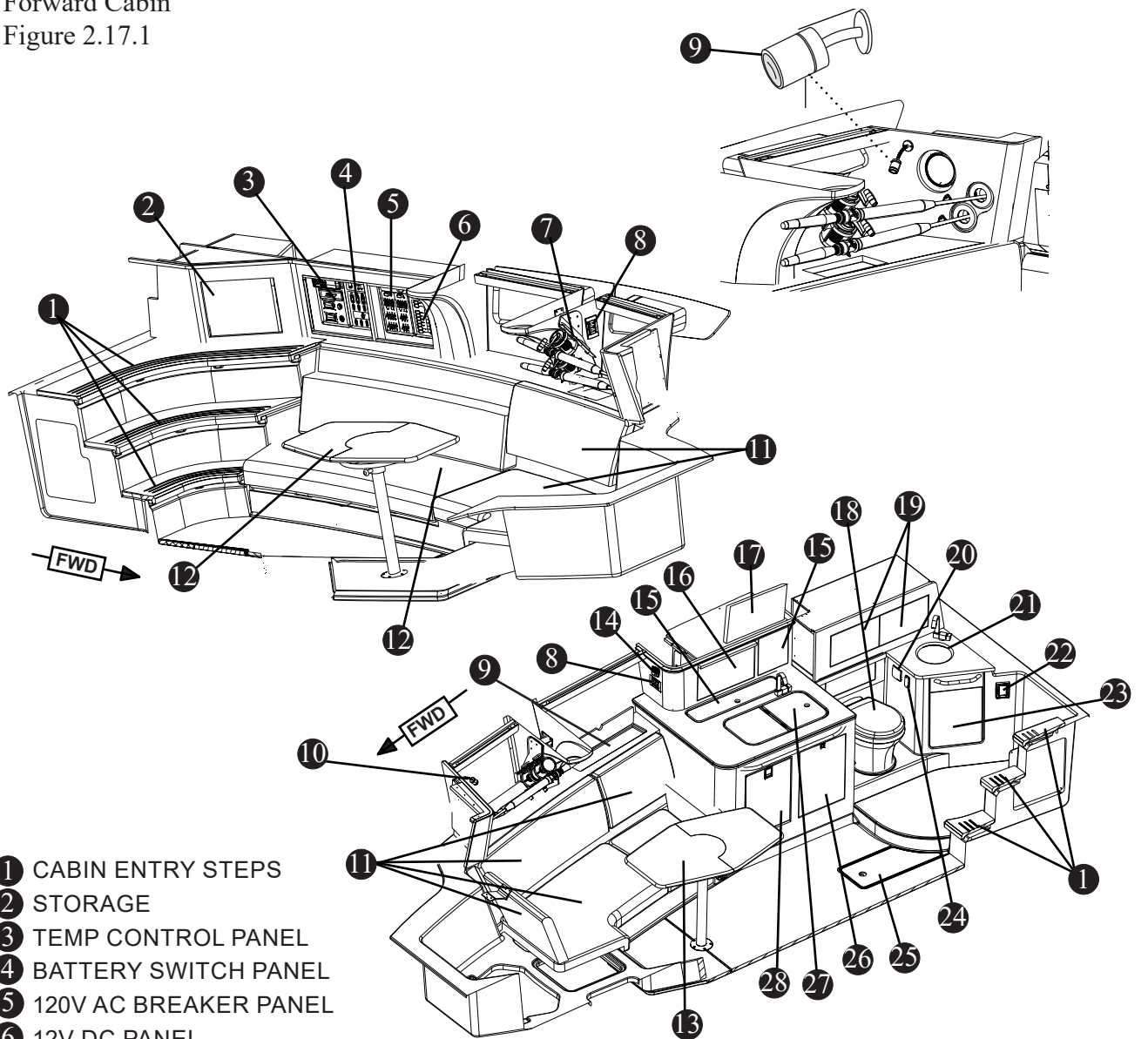
### General Layout (Cont'd)

Bilge  
Figure 2.16.1



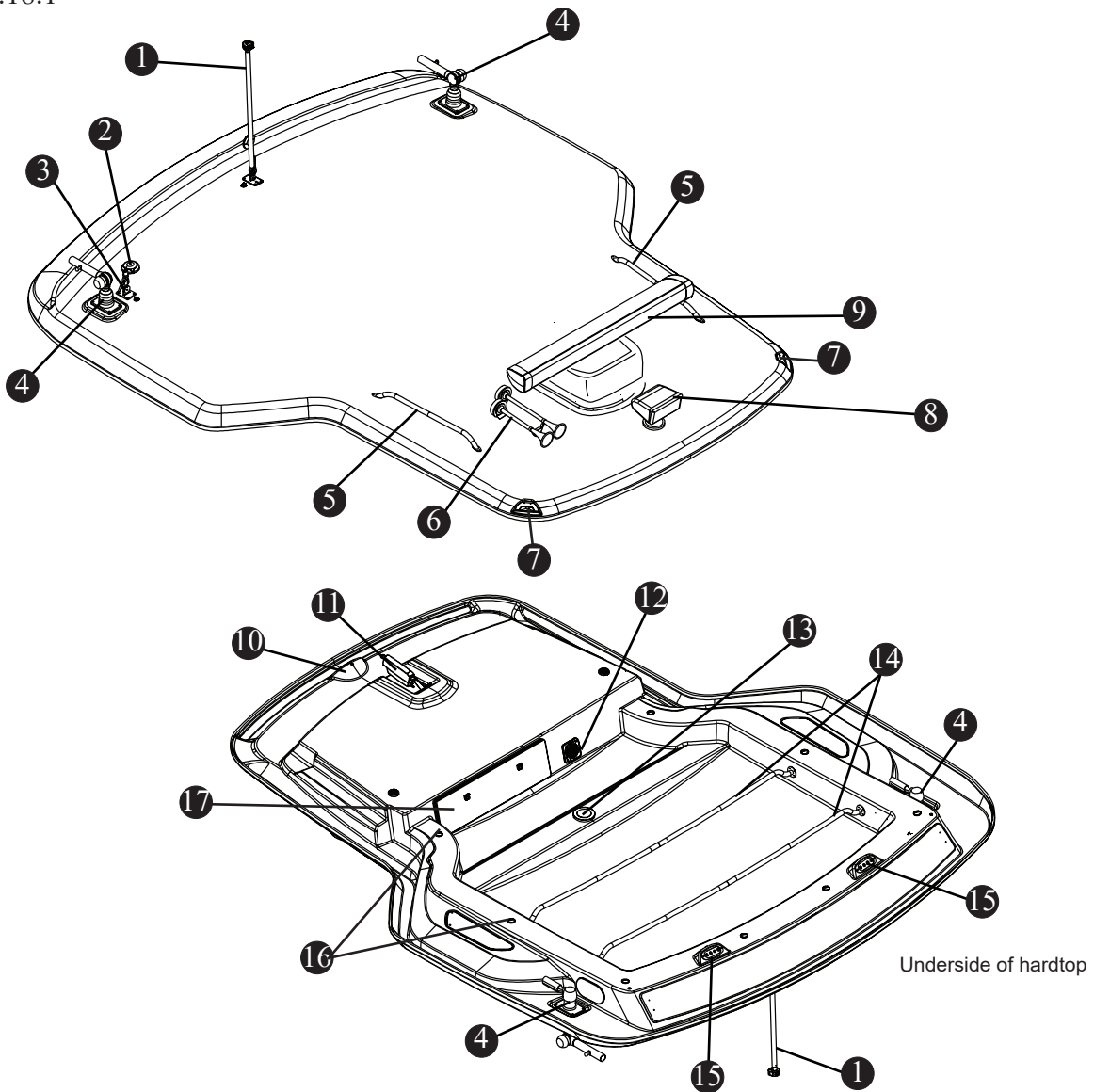
- |  |   |
|--|---|
| ① WASTE HOLDING TANK                           | ⑲ FUEL TANK   |
| ② 10KW GENERATOR                               | ⑳ POWER STEERING PUMP<br>(JOYSTICK OPTION)                                      |
| ③ OVERBOARD DISCHARGE SEACOCK                  | ㉑ POWER STEERING PUMP (STANDARD)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

Forward Cabin  
Figure 2.17.1



- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>① CABIN ENTRY STEPS</li> <li>② STORAGE</li> <li>③ TEMP CONTROL PANEL</li> <li>④ BATTERY SWITCH PANEL</li> <li>⑤ 120V AC BREAKER PANEL</li> <li>⑥ 12V DC PANEL</li> <li>⑦ ROD RACK</li> <li>⑧ 120V OUTLET</li> <li>⑨ VACUUM STORAGE</li> <li>⑩ CABIN TASK LIGHT</li> <li>⑪ REMOVABLE CUSHIONS</li> <li>⑫ CONVERTIBLE SETTEE</li> <li>⑬ ADJUSTABLE/REMOVABLE TABLE</li> <li>⑭ CO MONITOR</li> <li>⑮ GALLEY STORAGE</li> <li>⑯ MICROWAVE</li> <li>⑰ TV</li> <li>⑱ ELECTRIC VACUFLUSH TOILET</li> </ul> | <ul style="list-style-type: none"> <li>⑲ HEAD CABINETS</li> <li>⑳ ELECTRIC FLUSH PANEL</li> <li>㉑ HEAD SINK</li> <li>㉒ 120V GFI RECEPTACLE</li> <li>㉓ UNDER SINK STORAGE</li> <li>㉔ VACUFLUSH ACTIVATION SWITCH</li> <li>㉕ FLOOR ACCESS TO SHOWER SUMP</li> <li>㉖ STORAGE (TRASH RECEPTACLE)</li> <li>㉗ GALLEY SINK W/HOT &amp; COLD WATER FAUCET</li> <li>㉘ 12V/120V REFRIGERATOR/FREEZER</li> </ul> |
|--|---|

Hardtop  
Figure 2.18.1



- |                                    |                              |
|------------------------------------|------------------------------|
| ① ANCHOR LIGHT                     | ⑩ BOW FLOOD LIGHT            |
| ② 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              |
| ⑧ SPOTLIGHT WITH REMOTE (OPTION)   | ⑰ HARDTOP STORAGE            |
| ⑨ OPEN ARRAY RADAR (OPTION)        |                              |

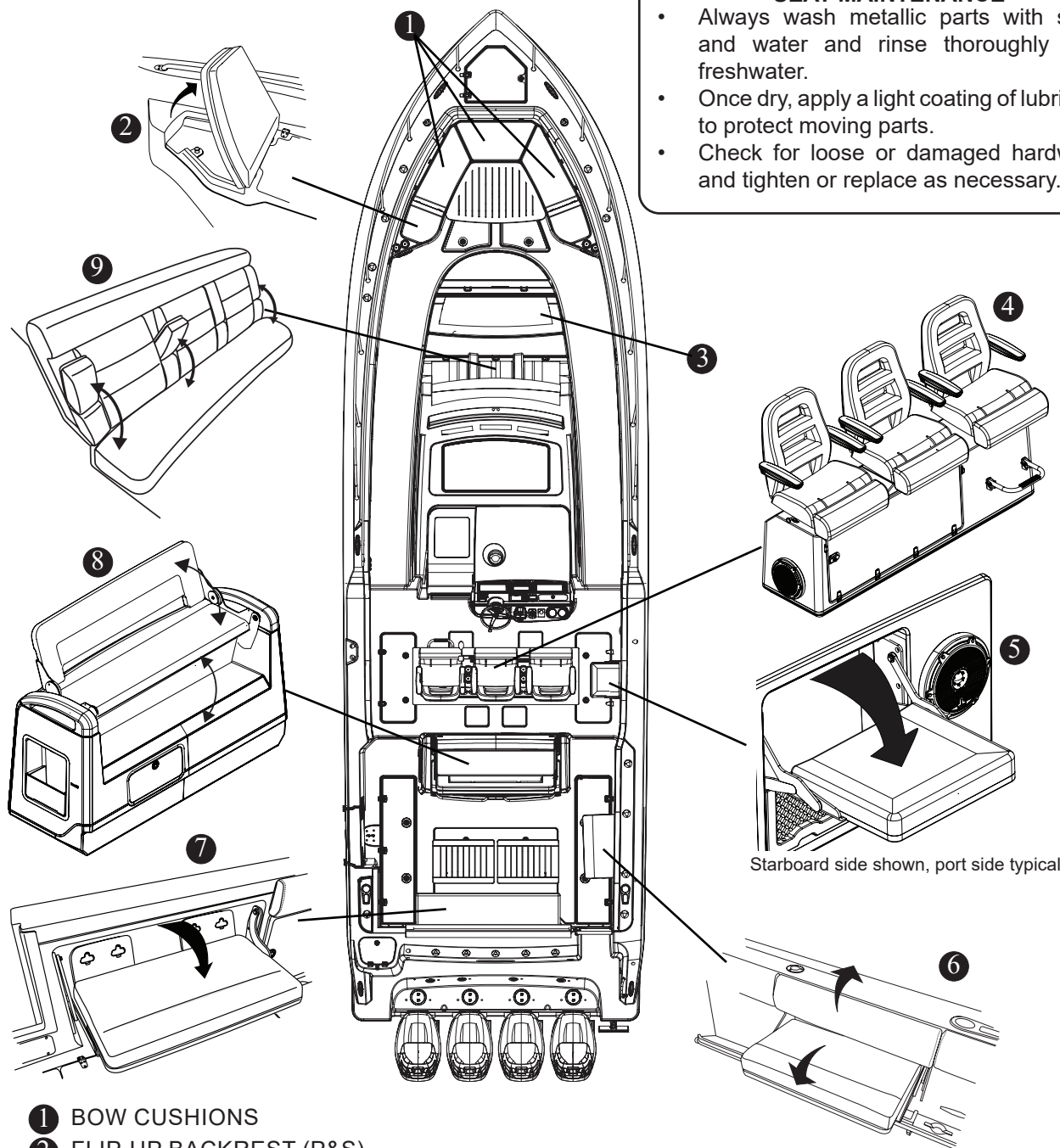
## Seating

Seating  
Figure 2.19.1

**NOTICE**

**SEAT MAINTENANCE**

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



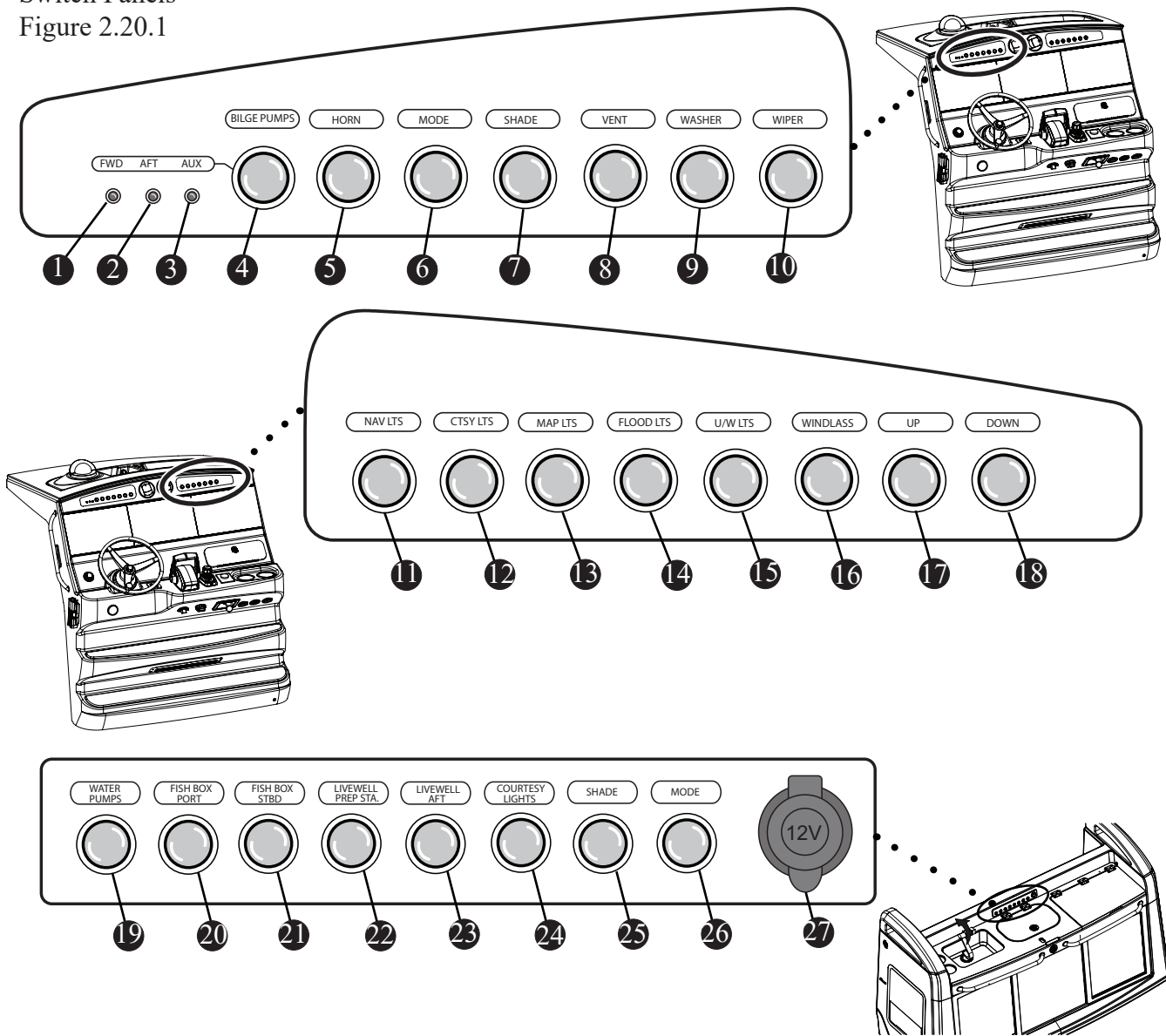
Starboard side shown, port side typical

- 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
- 9 FORWARD LOUNGE 3-PERSON SEATING

\* Not available with gunwale rod rack

## Helm Switch Panels

Switch Panels  
Figure 2.20.1

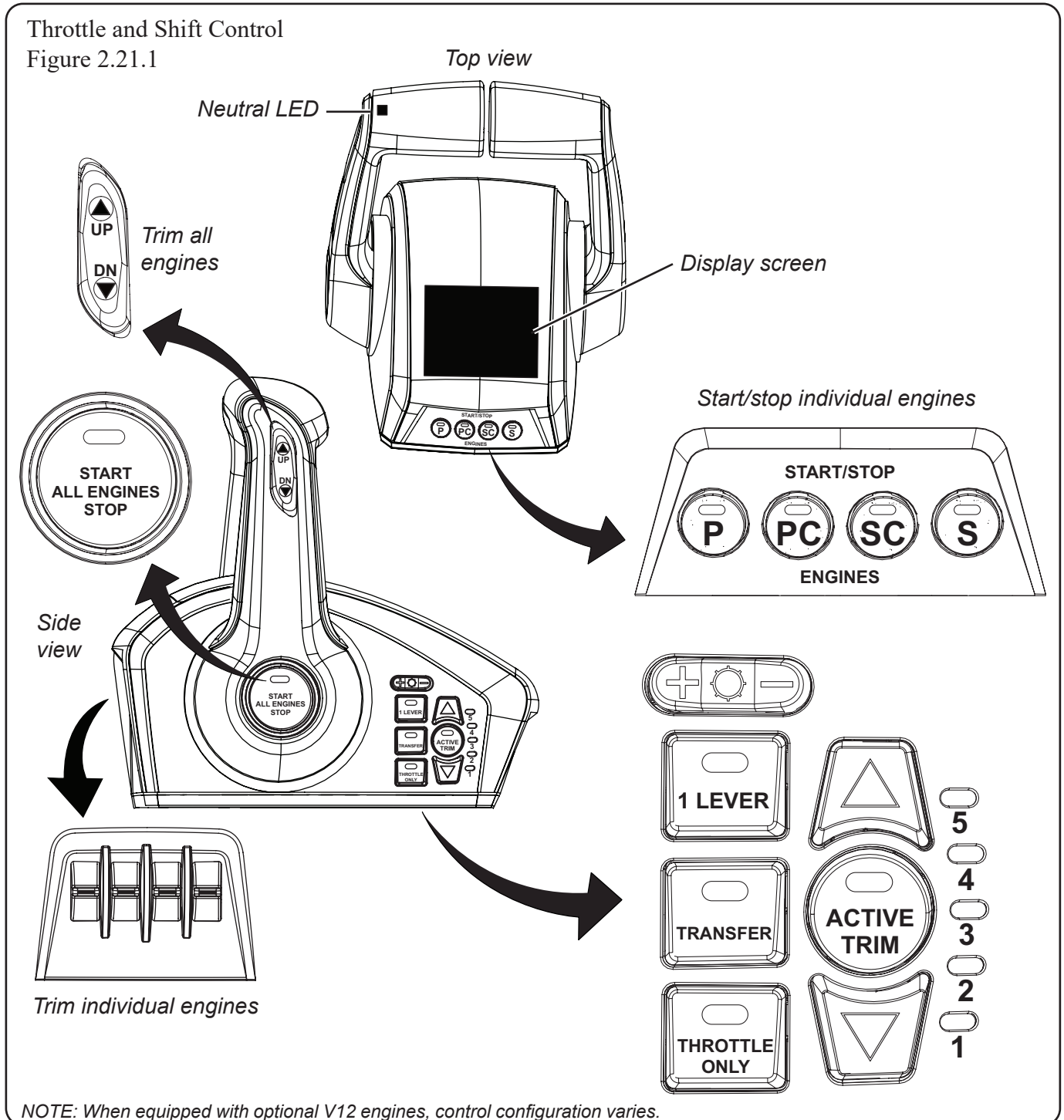


- |                                |                                  |
|--------------------------------|----------------------------------|
| ① FORWARD BILGE PUMP INDICATOR | ⑮ UNDERWATER LIGHTS (OPTION)     |
| ② AFT BILGE PUMP INDICATOR     | ⑯ WINDLASS ON/OFF                |
| ③ AUX BILGE PUMP INDICATOR     | ⑰ WINDLASS UP                    |
| ④ BILGE PUMPS                  | ⑱ WINDLASS DOWN                  |
| ⑤ HORN                         | ⑲ WATER PUMPS                    |
| ⑥ MODE 1 (PROGRAMMABLE)        | ⑳ PORT FISHBOX PUMPOUT           |
| ⑦ TELESCOPING COCKPIT SUNSHADE | ㉑ STARBOARD FISHBOX PUMPOUT      |
| ⑧ WINDSHIELD VENT              | ㉒ PREP STATION LIVEWELL (OPTION) |
| ⑨ WINDSHIELD WASHER            | ㉓ PORT AFT LIVEWELL              |
| ⑩ WINDSHIELD WIPER             | ㉔ COURTESY LIGHTS                |
| ⑪ NAVIGATION LIGHTS            | ㉕ TELESCOPING COCKPIT SUNSHADE   |
| ⑫ COURTESY LIGHTS              | ㉖ MODE (PROGRAMMABLE)            |
| ⑬ MAP LIGHTS                   | ㉗ 12V ACCESSORY RECEPTACLE       |
| ⑭ FLOOD LIGHTS                 |                                  |



## Throttle and Shift Control

The throttle and shift control is used to manage both the shifting mechanism and the throttle (see Figure 2.21.1). This control regulates engine RPMs, which controls the speed of the boat. Moving the levers forward shifts the engine into forward gear. Continuing to move the lever forward progressively increases the forward speed of the boat. Moving the lever backwards shifts the engine into reverse gear, and continuing to move the lever back progressively increases the reverse speed of the boat. The levers must be in the neutral position to start the engine(s). When in neutral, otherwise known as the idle position, the propeller is not engaged. A green neutral LED is illuminated atop the throttle and shift lever when in neutral.



### Buttons and Switches

Basic button/switch use on the throttle and shift control are detailed below (see Figure 2.21.1).

#### Neutral LED

Illuminates when engines are in neutral gear position.

#### Trim All Engines

Raises and lowers all engines.

#### Start/Stop All Engines

Starts or stops all engines sequentially from port to starboard.

#### Start/Stop Individual Engines

Starts or stops an individual engine.

#### Display Screen (Optional)

Shows pop-ups for advanced features as well as system information and faults.

#### Trim Individual engines

Raises and lowers individual engines.

#### Brightness

Increases and decreases brightness on control unit.

#### 1 Lever

Enables throttle and shift functions of all engines to be controlled by the port lever.

#### Transfer

Transfer boat control to a different helm.

#### Throttle Only

Increase engine RPMs without shifting into gear.

#### Active Trim

Turns the Active Trim feature on or off.

#### Profile

Changes the selected Active Trim profile.

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

### 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 this vessel responds while in motion. Understanding this vessel and its reactions at speed will make boating safer and more enjoyable.**

### 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 to avoid possible ejection due to boat spinout. Do not attempt to turn boat when the engine is trimmed extremely down, under or in.**

### VesselView

This vessel is equipped with VesselView software which can be accessed via the helm display *Engine App*. VesselView allows the operator to receive critical operational information, displayed clearly and instantly. The system continuously monitors and reports information ranging from basic operating data to detailed vessel environmental information.

### System Calibration

Boston Whaler or your dealer has calibrated VesselView to the boat's equipment. If equipment is added, the system must be recalibrated.

FOR RECALIBRATING OR MANUFACTURER INFORMATION, REFER TO OWNER'S PACKET. FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### VesselView Mobile (Option)

If equipped, VesselView Mobile connects the data network to your iPhone or android mobile device. With VesselView Mobile you can connect on your mobile device with all the digital data your engine supports plus new features such as maintenance reminders, mapping, performance summary, and fault code diagnostics.

### Navigation Lighting

Your boat comes equipped with navigation lighting for your safety. Regulations state that all boats must display navigation lights between sunset and sunrise and during periods of restricted visibility, such as rain, fog, haze, etc. If operating in reduced visibility or between sunset and sunrise it is necessary to maintain a safe speed and post a lookout.

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 and not obstructed in its intended arc of visibility. Do not modify navigation lights. This vessel's navigation lights

may include an expiration date on the housing. If one is located, replace light before expiration date, even if light is functional, as lighting quality may be compromised.

Do not add lights that interfere with required navigation lights. Some lights, such as blue colored lights, may be illegal to display on a boat. It is the owner's responsibility to ensure that displayed lights are also compliant with local regulations.

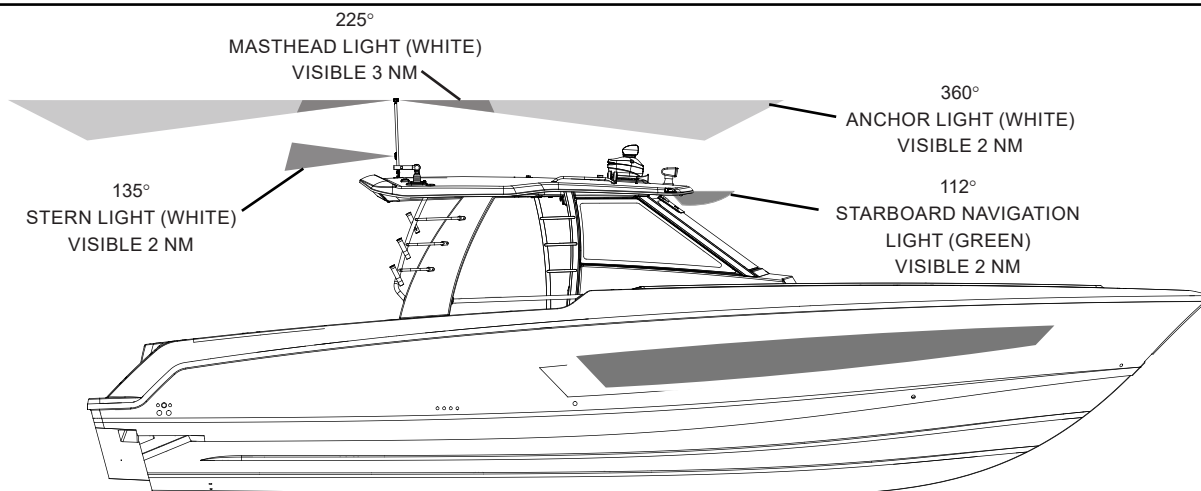
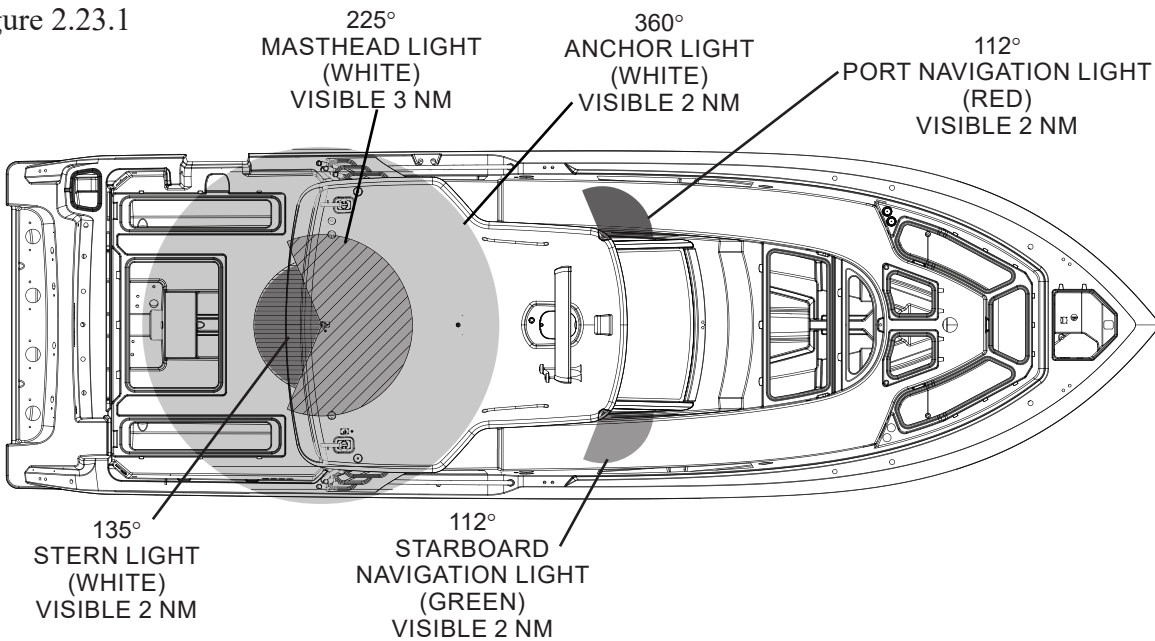


### CAUTION

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

#### Navigation/Anchor Lighting

Figure 2.23.1



## Chapter 2 • General Information

### Operating the Navigation Lighting

A three-position switch, located on the helm switch panel marked “NAV LIGHTS” controls the navigation and anchor lighting.

- **First press:** Port (red) and starboard (green), masthead (white forward) and stern (white aft) lights are ON.

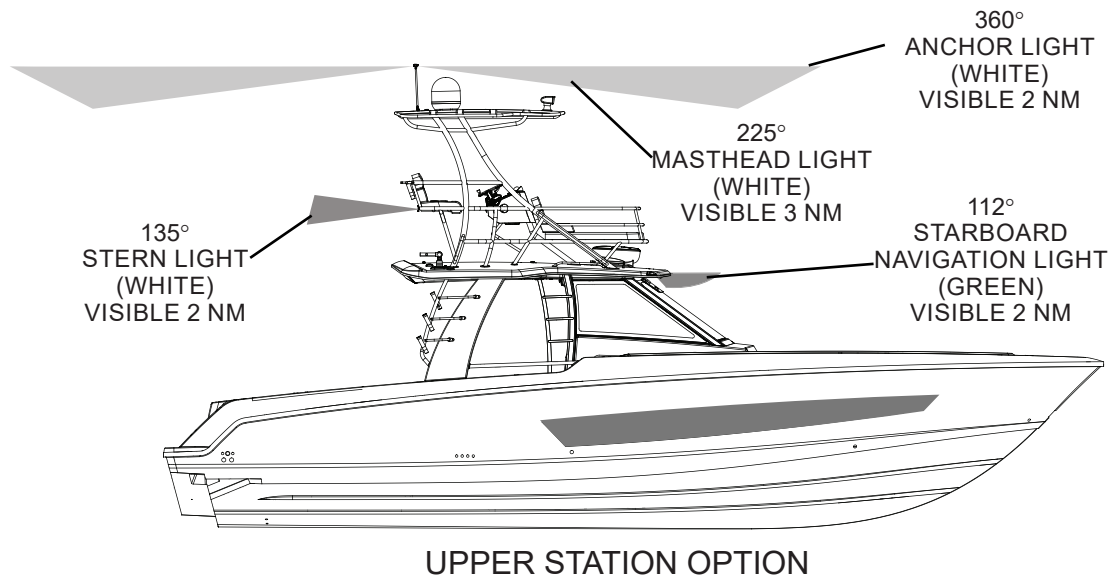
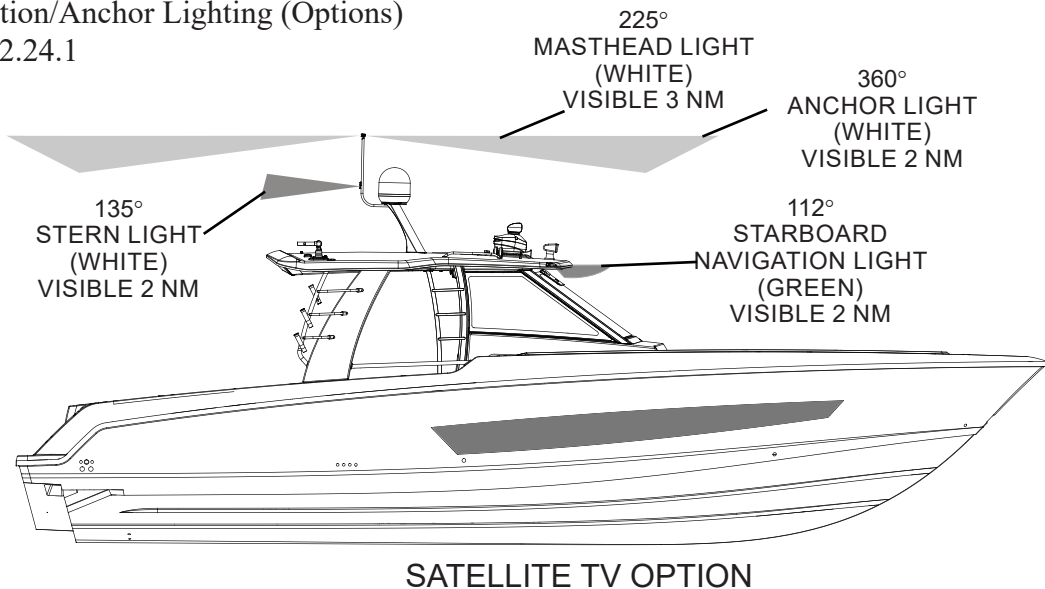
- **Second press:** All around (anchor Light) is ON.

- **Third press:** All around (anchor Light) is OFF.

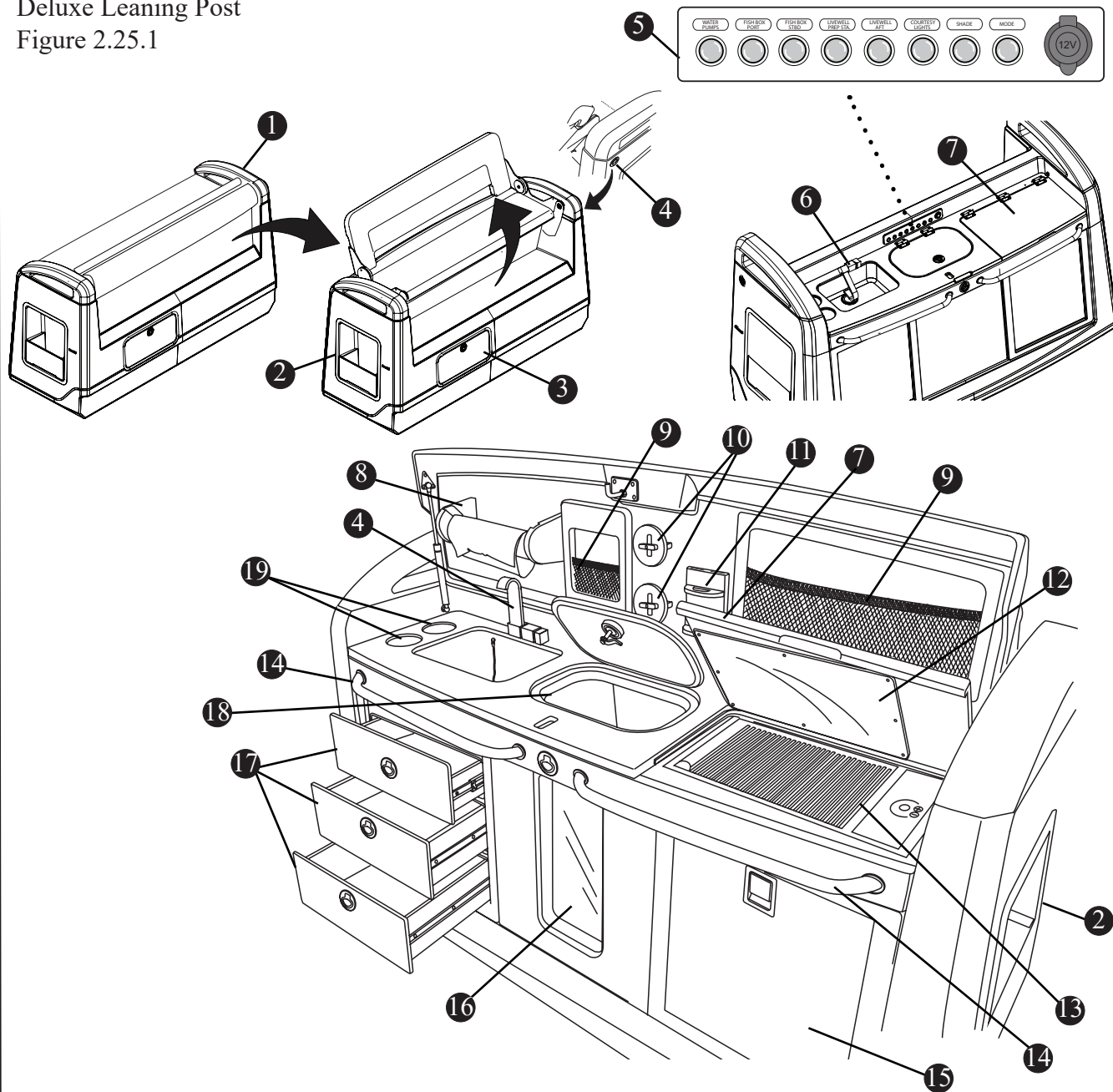
When anchor or navigation lights are on, the small LED step lights are also illuminated.

### Navigation/Anchor Lighting (Options)

Figure 2.24.1



Deluxe Leaning Post  
Figure 2.25.1



- ① DELUXE LEANING POST/BAIT PREP STATION
- ② SIDE POCKET STORAGE W/120V RECEPTACLE (P&S)
- ③ ACCESS TO BREAKER PANEL & LIVEWELL FLOW VALVE
- ④ BENCH SEAT RELEASE LATCH
- ⑤ SWITCH PANEL W/12V ACCESSORY RECEPTACLE
- ⑥ FRESHWATER FAUCET W/HOT & COLD WATER
- ⑦ HINGED GRILL LID/COUNTER SURFACE
- ⑧ PAPER TOWEL HOLDER
- ⑨ NET STORAGE
- ⑩ LEADER HOLDERS

- ⑪ TOOL HOLDER
- ⑫ GRILL HEAT SHIELD
- ⑬ ELECTRIC GRILL
- ⑭ GRAB RAIL
- ⑮ 12V/120V (2.3 CF)  
REFRIGERATOR/FREEZER
- ⑯ LIVEWELL VIEWING WINDOW
- ⑰ TACKLE STORAGE DRAWERS
- ⑱ LIVEWELL/STORAGE
- ⑲ CUP HOLDERS



### 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.

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 reusable 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 grill's owner's manual located in your owner's packet.

To remove the grease pan (Figure 2.26.1):

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

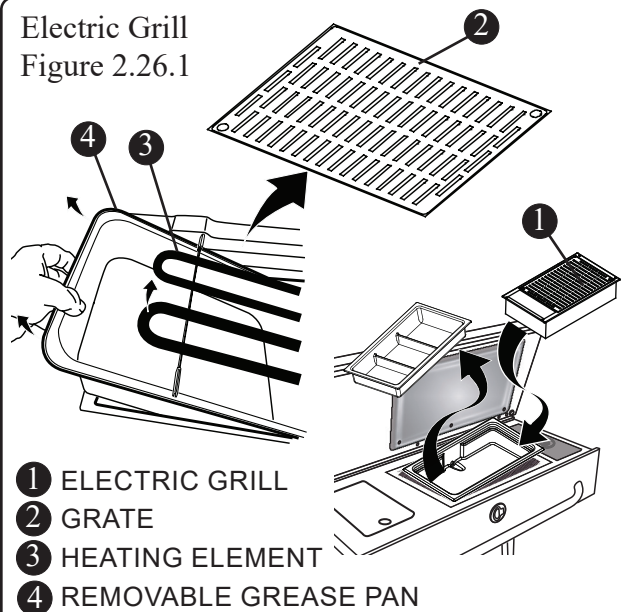
When replacing the pan, assure that it is completely contained within the grill and that the side of the pan does not extend outside of the grill sides.

### 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  
Figure 2.26.1



- 1 ELECTRIC GRILL
- 2 GRATE
- 3 HEATING ELEMENT
- 4 REMOVABLE GREASE PAN

#### 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 OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### 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.

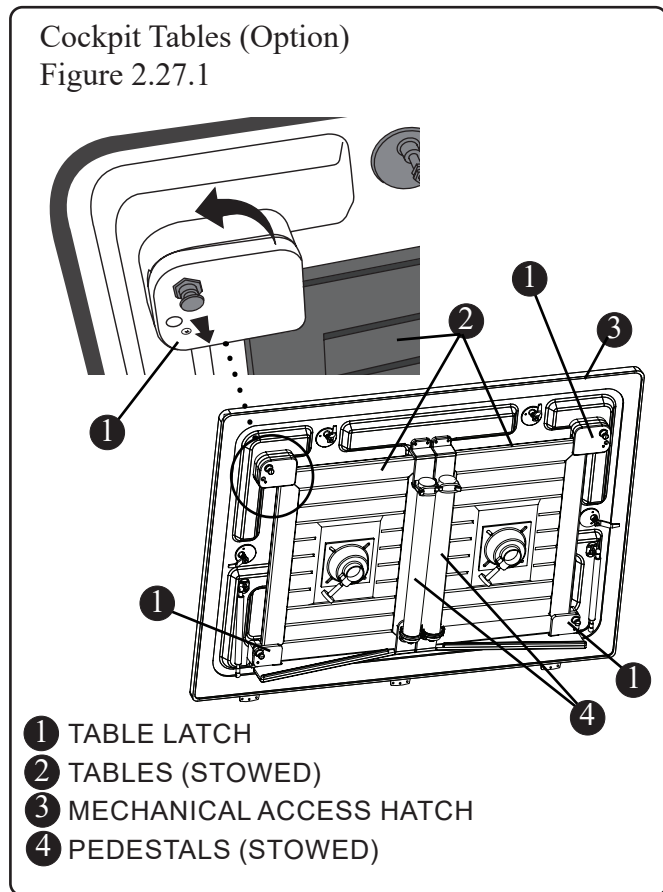
REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### 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.



- 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 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 in-line 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 the Wood Location Diagram for proper mounting.

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

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

#### **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.**

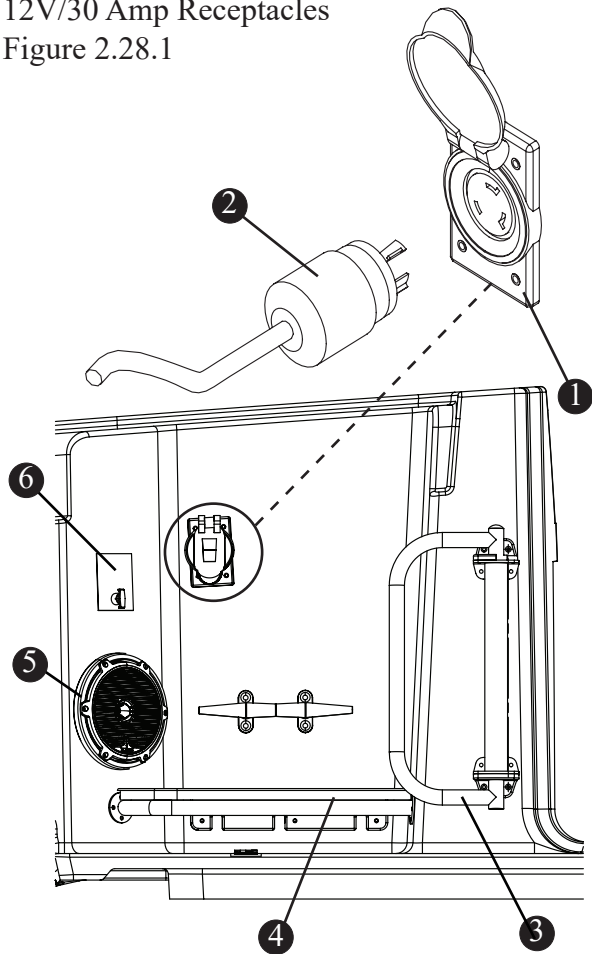
**There are a variety of downrigger mounting base plates that can be used, it is important that you consult with your salesperson to find the mounting base that will best suit your application.**

### NOTICE

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

REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

12V/30 Amp Receptacles  
Figure 2.28.1



- ① 12V/30A RECEPTACLE (P&S)
- ② PLUG (SUPPLIED)
- ③ DEPLOYABLE GRAB RAIL FOR DIVE DOOR
- ④ DOWNRIGGER WEIGHT HOLDER
- 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**

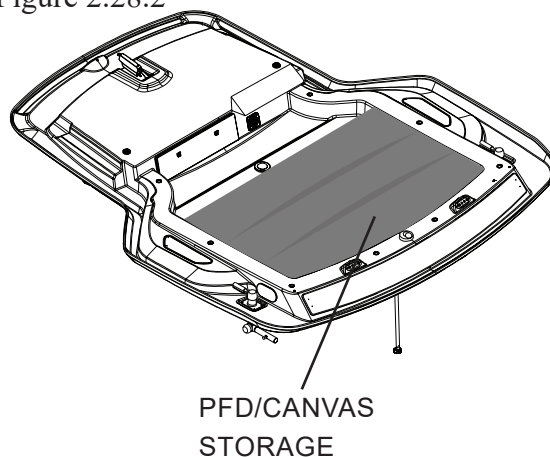
Your canvas set will keep its appearance and maintain proper working order provided you follow a few simple steps for cleaning and maintenance (See “Canvas Care & Maintenance”, section 5 of this manual).

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

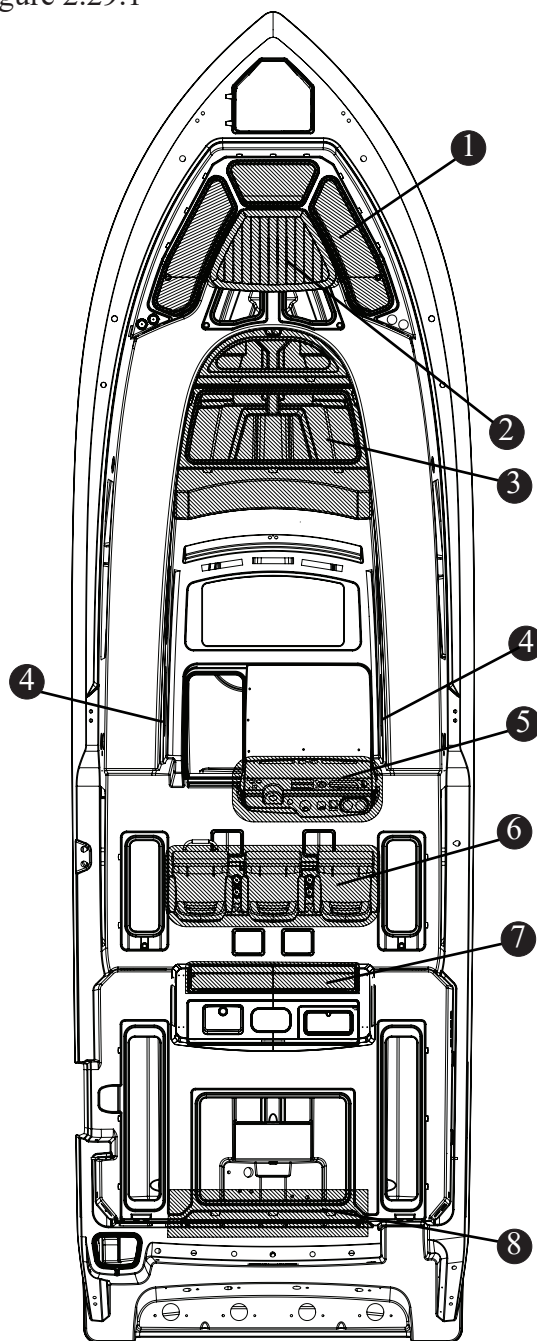
Removing or installing canvas on the open water can be difficult since rough water or wakes can cause you or your passengers to lose their balance while attempting to install or remove canvas panels.

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/Personal Flotation Device (PFD) Storage  
Figure 2.28.2



Canvas (Option)  
Figure 2.29.1



- ① FORWARD CUSHIONS COVER (P&S)
- ② BOW TABLE COVER
- ③ FORWARD LOUNGE COVER
- ④ WING CURTAINS (P&S)
- ⑤ HELM 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

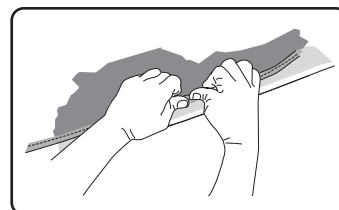
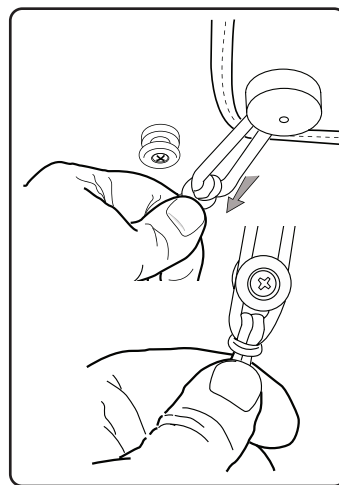
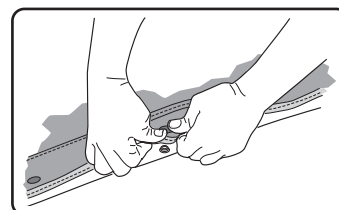
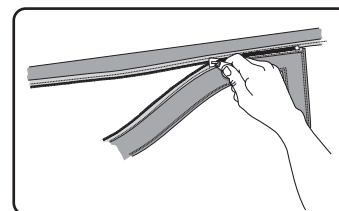
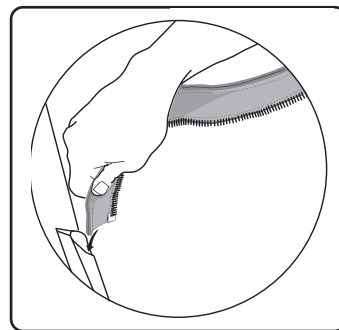
Zip the canvas panel section(s) to the zipper track to secure the canvas panel. Zip only partially (approx. 4") at first.

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.



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 manufacturer's 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 *Safety* chapter in 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)

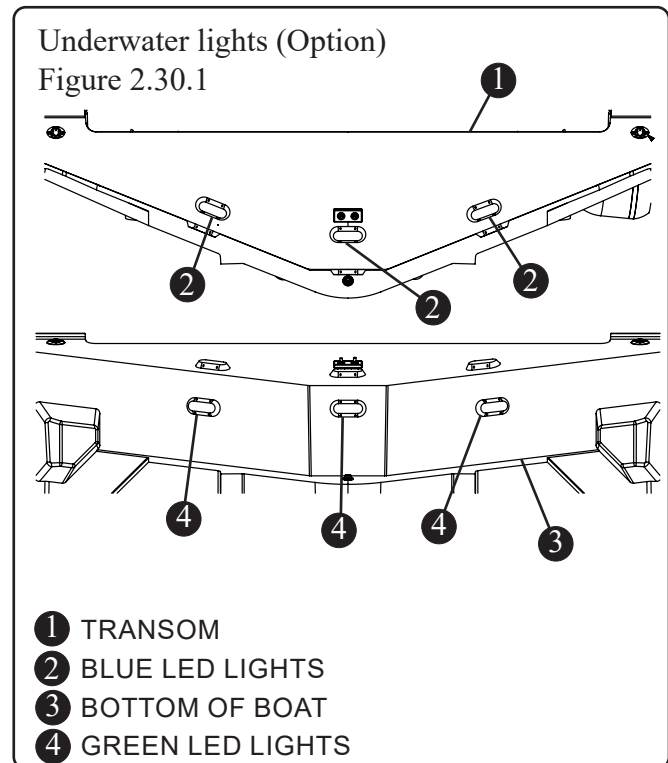
#### **▲ CAUTION**

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

If equipped, there are six underwater lights. Three located on the transom just below the surface of the

water and three green lights on the bottom of the hull (Figure 2.30.1). 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.



### Bow Thruster (Option)

#### **▲ 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.**

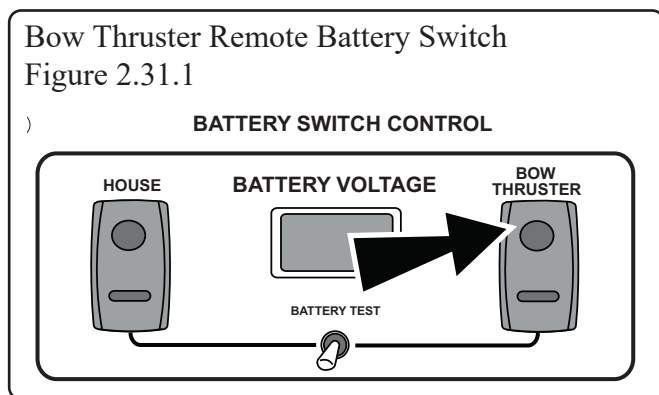
The bow thruster system includes a 24V/DC bow thruster, two 12V batteries, and a 24V battery charger which can be accessed through a hatch in the forward storage area in the cabin. A dedicated battery switch is located on the battery switch panel in the cabin. The bow thruster joystick gives the operator more maneuverability of the bow when docking or maneuvering the vessel in narrow channels or where space is at a premium.



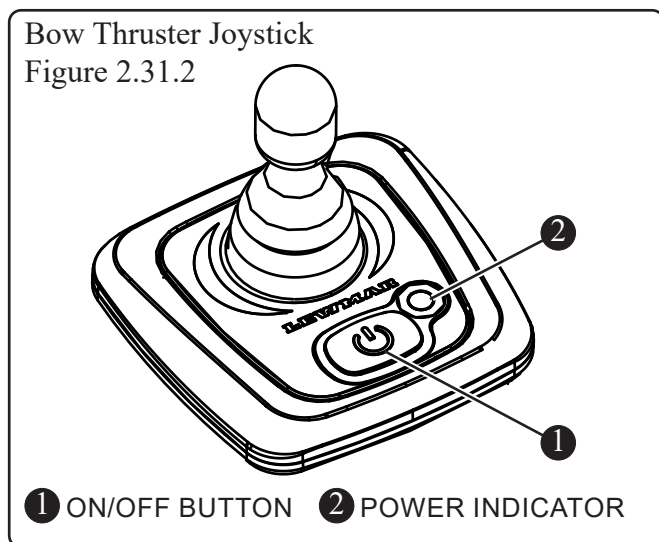
### Bow Thruster Operation

1. Turn on *BOW THRUSTER Remote Battery Switch* (see Figure 2.31.1).
2. Press and hold the on/off button for 1 second (see Figure 2.31.2). A green power indicator illuminates.
3. Push the joystick in the desired travel direction and release (see Figure 2.31.4).

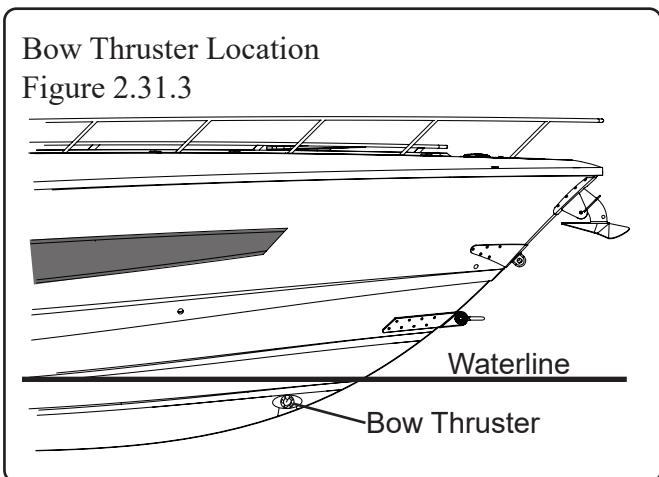
**Bow Thruster Remote Battery Switch**  
Figure 2.31.1



**Bow Thruster Joystick**  
Figure 2.31.2

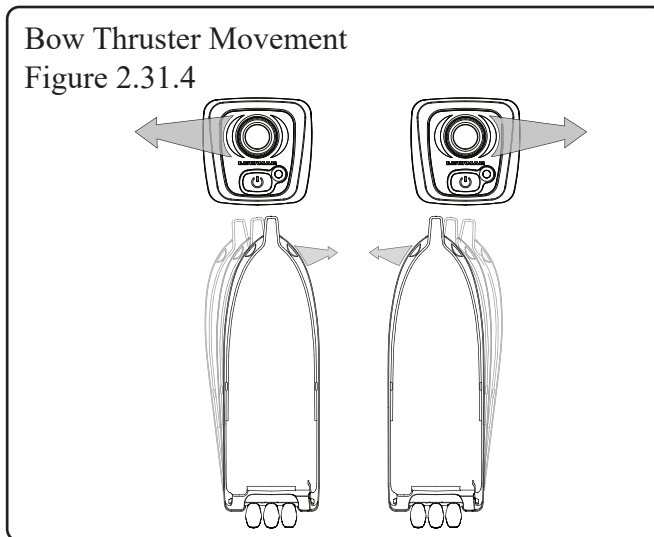


**Bow Thruster Location**  
Figure 2.31.3



When the desired boat movement has been achieved release the joystick. The bow thruster motor is equipped with an internal thermal breaker. If the thermal breaker trips allow the unit to cool down before continuing operation to avoid damage,

**Bow Thruster Movement**  
Figure 2.31.4



### ▲ DANGER

**Do not operate thruster out of water, even for a few seconds. The motor will over speed by 300%, causing damage to unit; propeller will also damage whatever it contacts. In addition, this action will void the warranty.**

REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### Joystick Piloting

If equipped, joystick piloting technology provides effortless maneuverability and replaces the traditional bow thruster set up. Joystick piloting provides 360 degrees of movement. It also allows the movement of the boat in any direction, including sideways, diagonally or spinning on its own axis with a push or twist of the joystick. The throttle, shifting and steering are controlled with one hand. The joystick working in conjunction with the independently steered engines move the boat in the desired direction. If equipped, the joystick is located at the helm. A second joystick is included with the optional upper station helm.

To use the joystick the active throttle and shift control levers must be in the neutral position.

REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### Helm to Upper Station Transfer

#### ! WARNING

**Avoid serious injury or death from loss of boat control. 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 is not recommended**

If equipped with an upper station, full helm control is transferred including the joystick. To transfer:

1. Ensure all the engine remote battery switches on *Battery Switch Control* panel, located inside cabin, are on.
2. Turn on Master Ignition switch.
3. Ensure helm and upper station shift and throttle control levers are in neutral.

NOTE: If control levers are not in neutral, the *Neutral LED* will flash (see Figure 2.32.2.)

4. On the active control press *TRANSFER* button once (see Figure 2.32.2.). The indicator on the transfer button will illuminate and a single audible sound confirming the impending transfer.
5. When both the transfer light and neutral light are on press the transfer button a second time. A second audible sound confirms the transfer is complete.

NOTE: Transfer will fail if not completed within ten seconds.

### Transfer Upper Station to Helm

The steps for transfer of control from the upper station back to the helm are the same as helm to upper station transfer.

REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### Skyhook® (Digital Anchor)

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 waiting to refuel at a marina, (see Figure

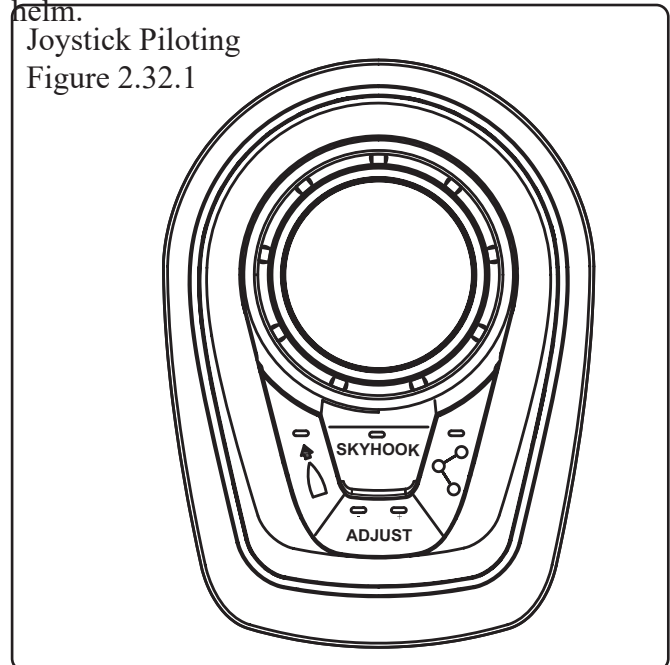
2.32.1).

### Integrated Autopilot

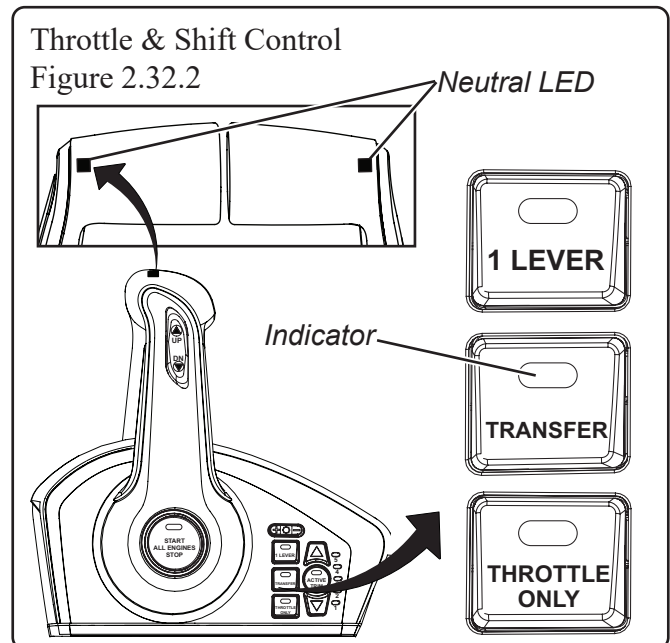
Auto heading and waypoint sequencing make navigating to a destination simple and efficient. A built-in digital compass set on auto heading maintains course and makes precise corrections with the touch of a finger. One-degree heading adjustments are made with a tap on the joystick. Plot trips with multiple stops between a starting point and a final destination with waypoint sequencing.

NOTE: Helm transfer disengages auto pilot. Any required inputs need to be entered at the active helm.

Joystick Piloting  
Figure 2.32.1



Throttle & Shift Control  
Figure 2.32.2



### Yacht Tender Package (Option)

If equipped, the yacht tender package consists of the following components (Figure 2.33.1):

- 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.

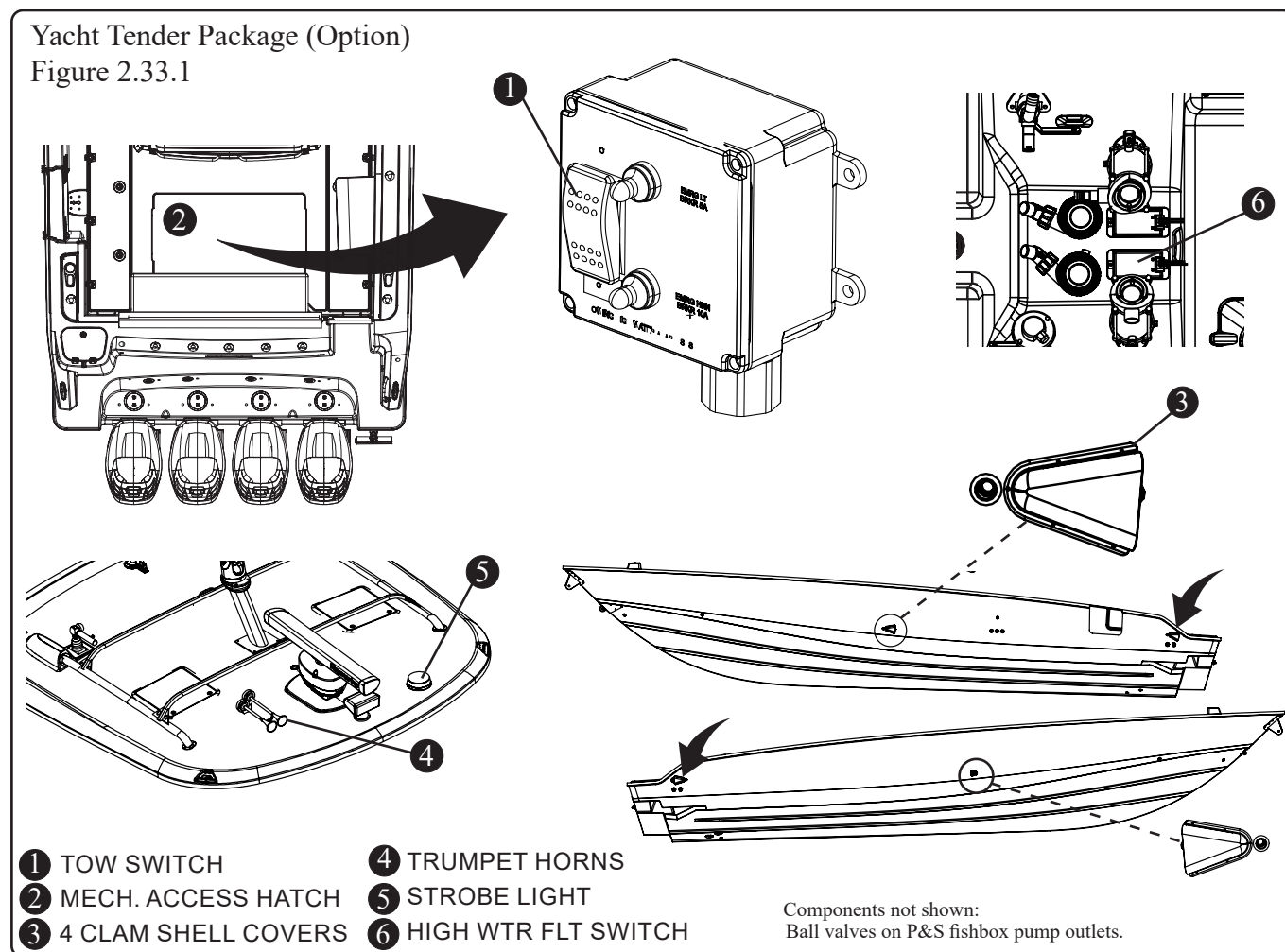
The system is activated by a switch located inside the mechanical access hatch (Figure 2.33.1).

### 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 2.33.1).
- 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 2.33.1).



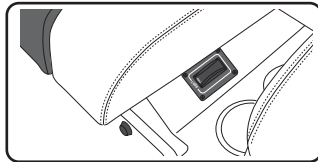
### Cockpit Area

#### 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

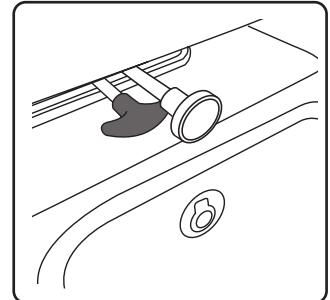
- Depress the switch on the port side of chair to achieve the desired forward or aft position.



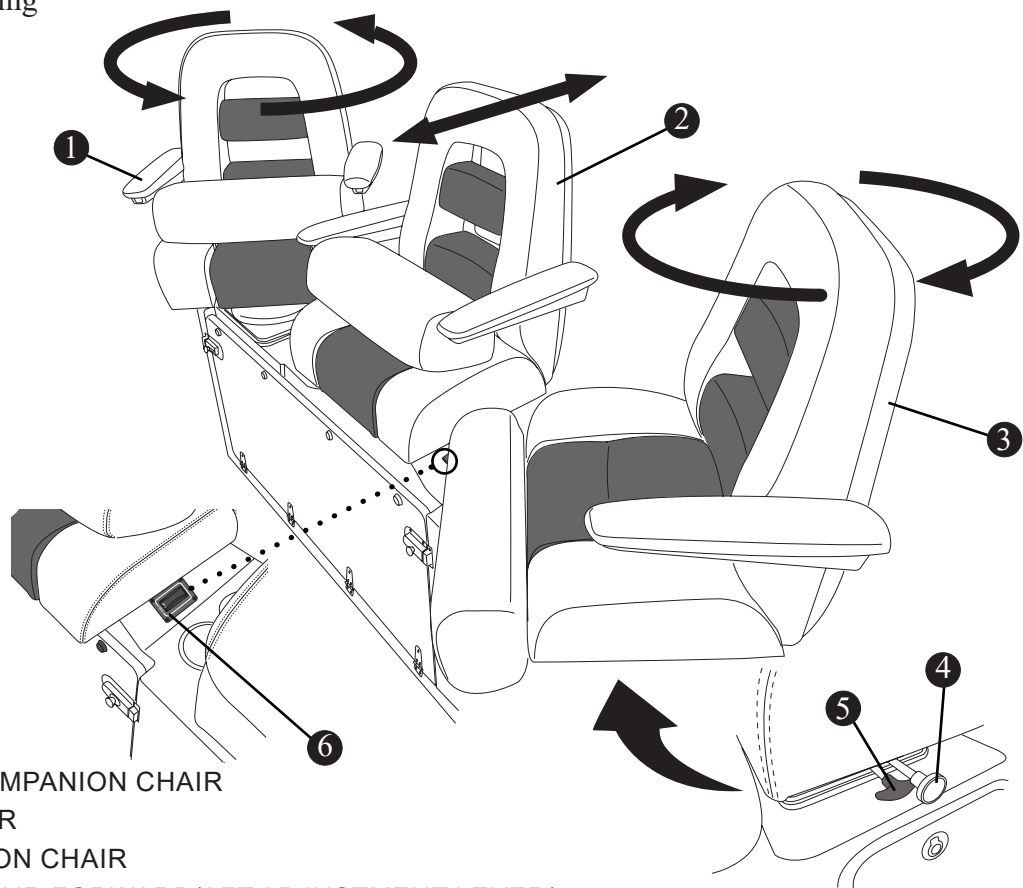
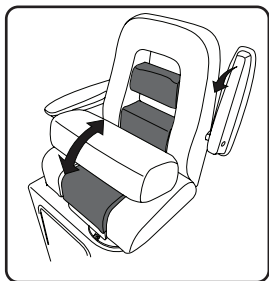
#### Companion Chairs

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  
Figure 2.34.1



- 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

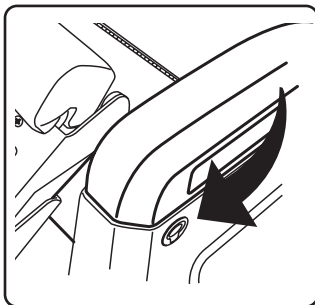
\*Port chair shown, starboard chair typical.

### Prep Station Foldaway Seating

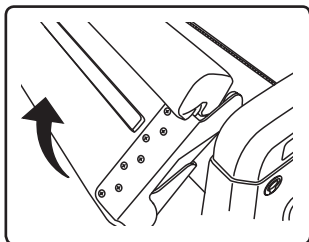
The custom prep station features a unique foldaway bench seat for your passengers comfort.

#### To Access the Bench Seat

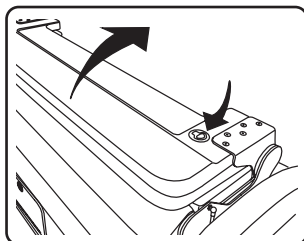
- Pull on the latch located on the port side of the prep station.



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

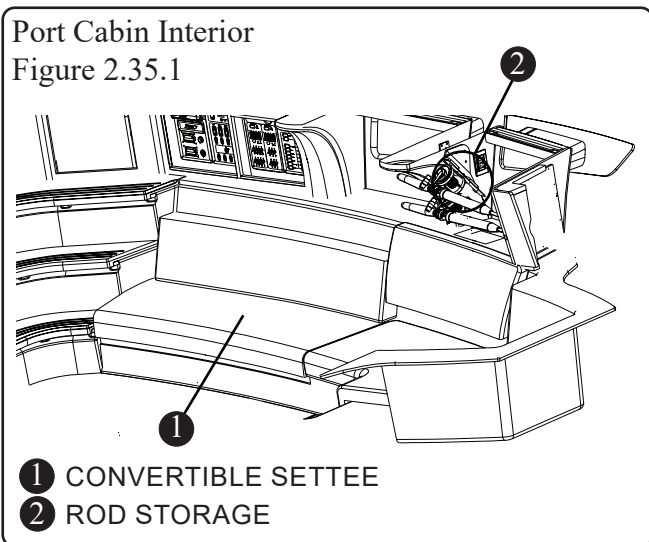


- Pull up on the latch at the port side of the bench and rotate the back of the bench into an upward position.



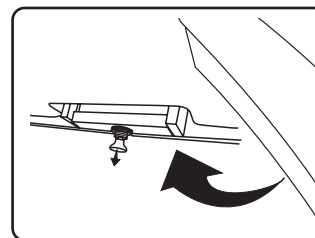
### Cabin Settee

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

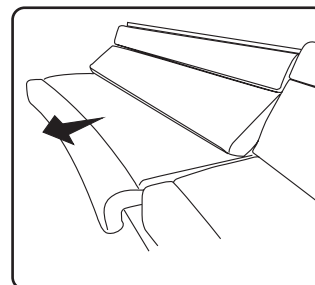


### To convert the settee:

- 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

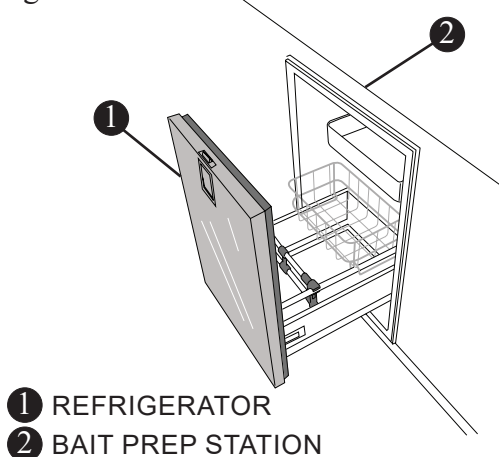
The refrigerator located on the starboard side of the bait prep station is a 12V/120V (2.3 cf) unit.

The “PREP STATION” breaker on the DC or AC breaker panel must be ON to operate the refrigerator. The unit is protected by a breaker on the bait prep station breaker panel which must also be ON to operate the unit.

## NOTICE

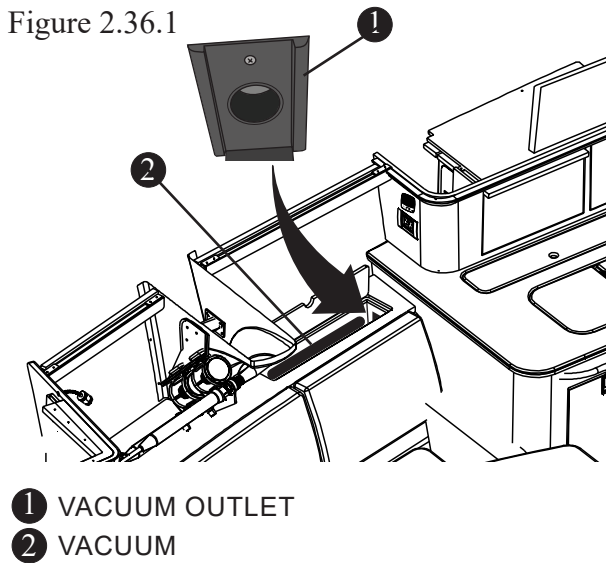
**The optional summer kitchen is equipped with a refrigerator on both the port and starboard side of the unit.**

Bait Prep Station Refrigerator  
Figure 2.35.2





Vacuum  
Figure 2.36.1



### Vacuum

The vacuum located in a storage cabinet on the starboard side of the cabin (Figure 2.36.1) is a 120V/220V unit.

The shore power 2 breaker on the AC breaker panel 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.

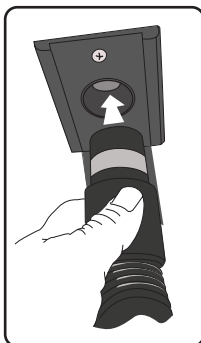
The power unit and dust bag are located behind a panel on the aft wall of the head vanity interior and can be accessed by removing the panel. It is important to periodically remove and clean the dust bag to ensure reliable operation of the vacuum.

### Vacuum Operation:

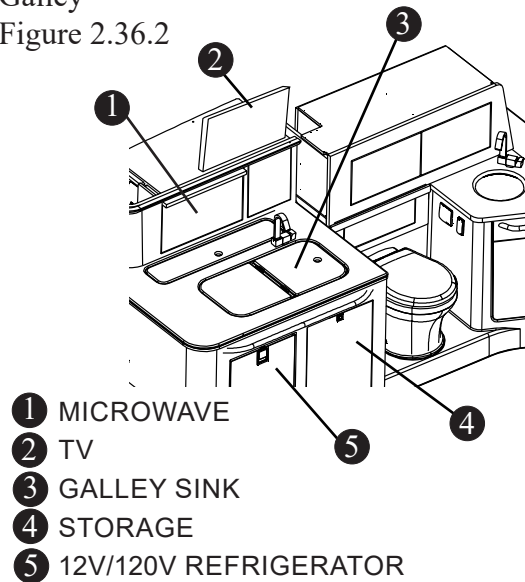
The vacuum comes with attachments and a flexible hose which is capable of reaching the entire interior cabin and head.

The vacuum switch is integrated into the outlet at the aft of the storage cabinet (Figure 2.36.1).

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  
Figure 2.36.2



### Cabin Refrigerator

The refrigerator located on the front of the galley (Figure 2.36.2) is a 12V/120V (2.3 cf) unit.

The “CABIN REFRIG” breaker on the AC breaker panel must be ON to operate the refrigerator from shore or generator power.

The “CABIN REFRIG” breaker on the 12V DC breaker panel must be ON to operate the refrigerator from house battery power. The unit is protected by a breaker on the 12V DC breaker panel.

REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### 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

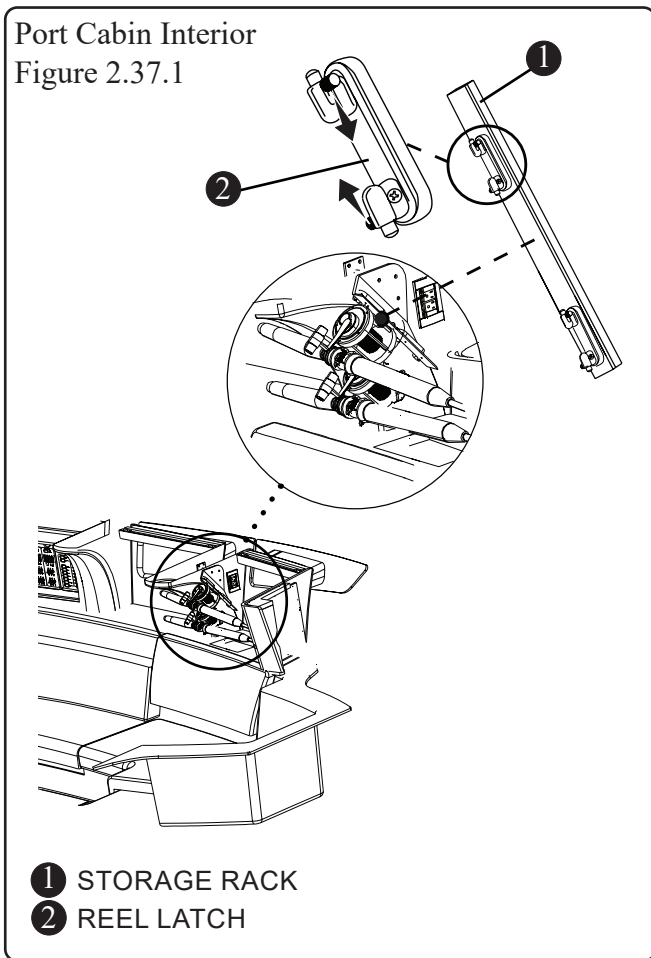
**Failure to store the microwave plate while underway may cause damage to the equipment, or injury to persons on board.**

REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### Rod Storage

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

Port Cabin Interior  
Figure 2.37.1



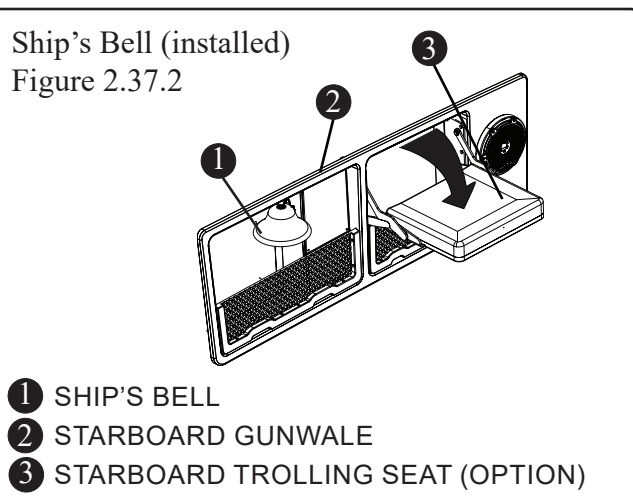
### Ship's Bell

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.

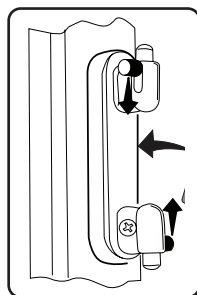
It is important that you familiarize yourself with the use of the ship's bell.

Ship's Bell (installed)  
Figure 2.37.2



### 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

#### TV

A TV with hand held remote is located on the starboard wall of the cabin above the galley sink. The TV can be connected to dockside cable where available.

#### Stereo

The AM/FM stereo is Sirius XM™ ready, iPhone and Android phone compatible, and includes a audio USB next to the stereo control inside the cabin. The stereo system is automatically provided power when the house battery switch is turned on.

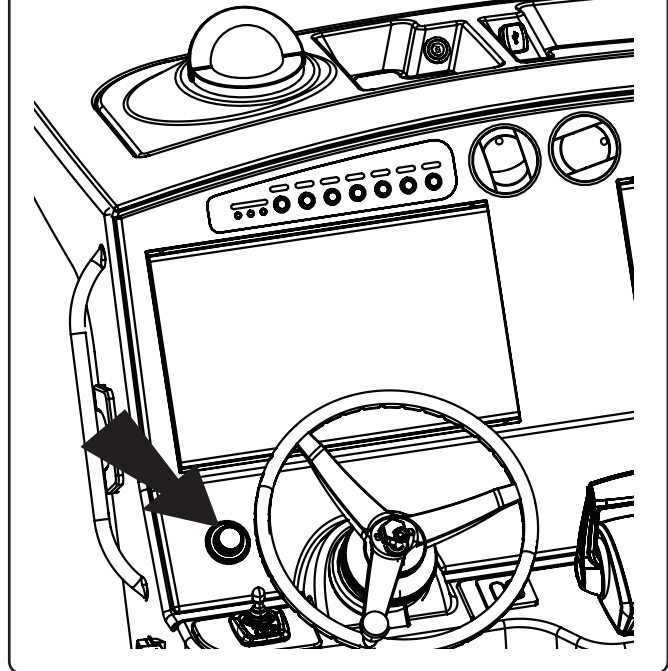
Provisions for controlling the stereo system:

- *MediaMaster* app on the helm display (see Figure 2.38.1).
- Volume/mute *Remote Control Knob* located on the console to the left of the helm (see Figure 2.38.2).
- *STEREO CONTROL* inside the cabin with *AUDIO USB* (see Figure 2.39.1).
- *Stereo Control Bow Port* located under the forward port gunwale (see Figure 2.39.2).
- There are three stereo remote controls. One located loose inside the owner's packet. One

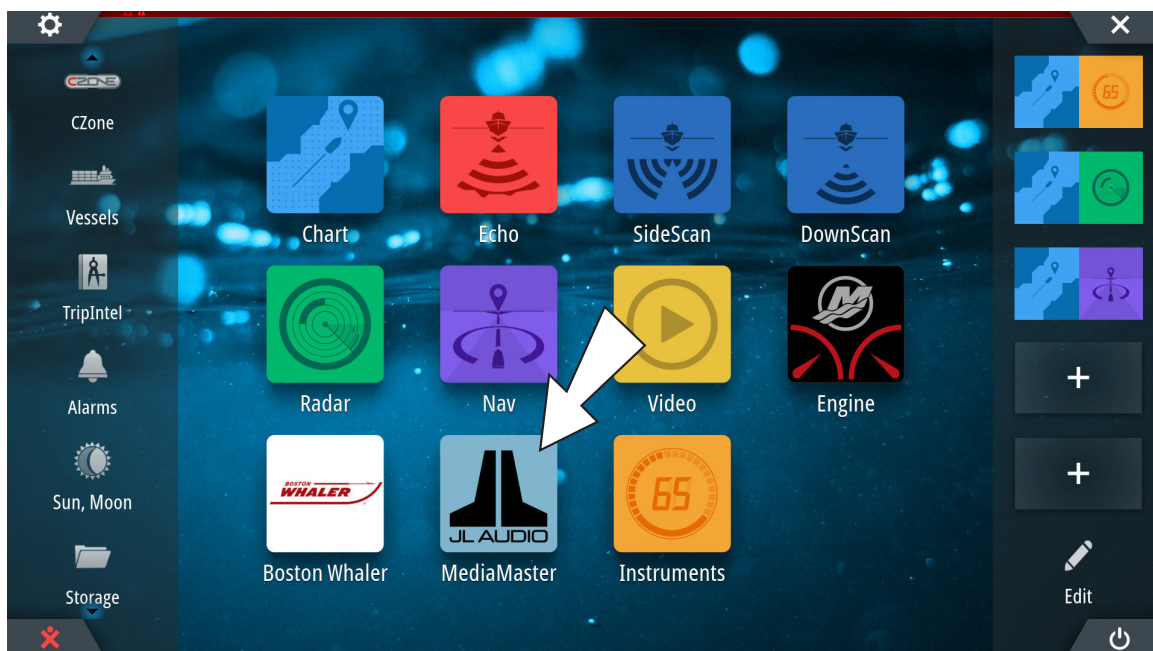
located under the forward starboard gunwale (see Figure 2.39.3). One located on the leaning post starboard side (see Figure 2.39.4).

REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

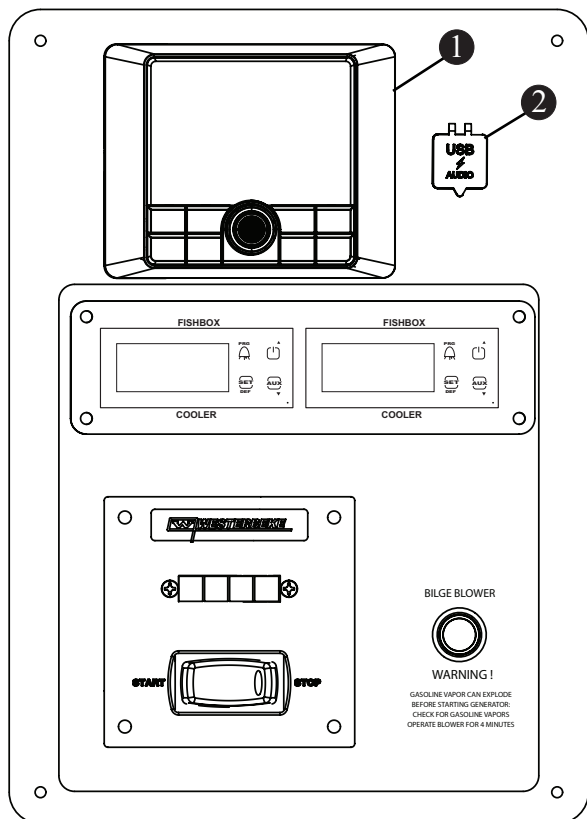
Stereo Remote Control Knob  
Figure 2.38.2



Helm Display  
Figure 2.38.1

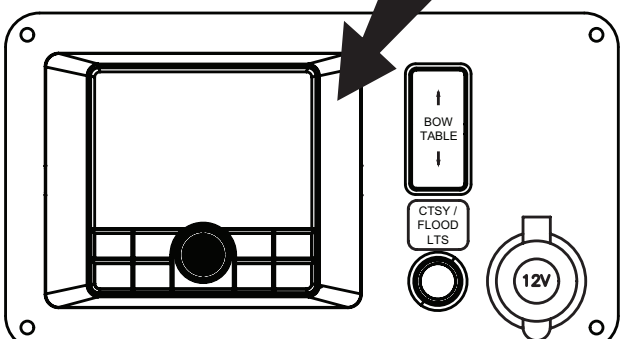


Stereo Control Cabin  
Figure 2.39.1



- 1 STEREO CONTROL
- 2 AUDIO USB

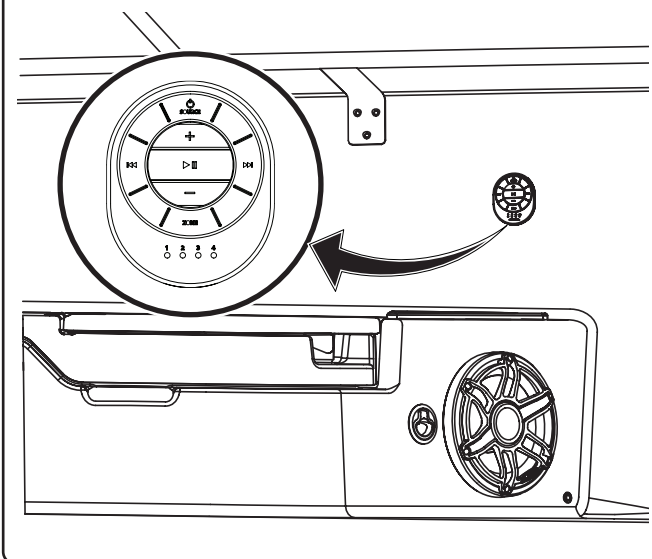
Stereo Control Bow Port  
Figure 2.39.2



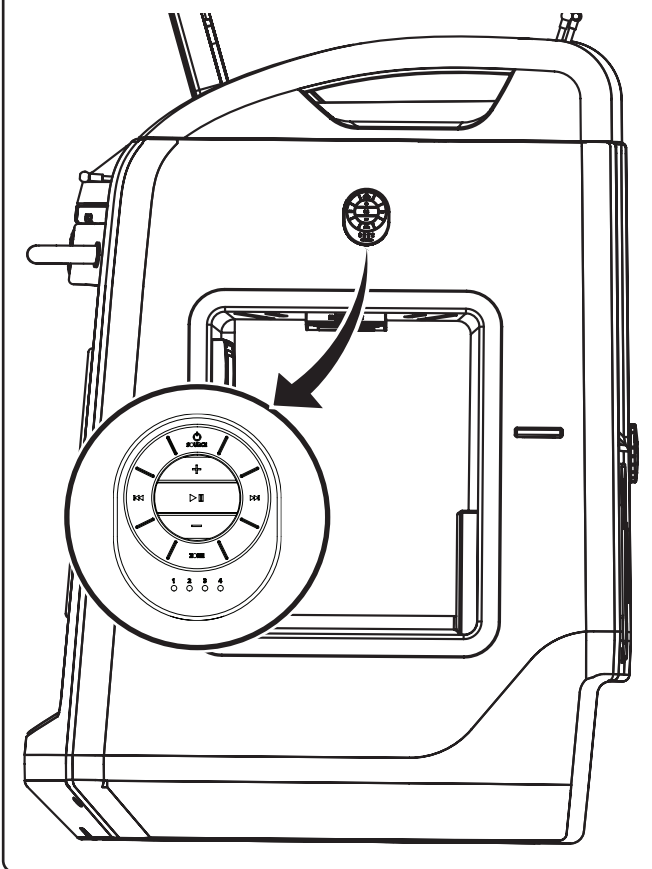
## NOTICE

The generator must be on or shore power connected in order for the TV to operate.

Stereo Remote Control Bow Starboard  
Figure 2.39.3



Stereo Remote Control Leaning Post Starboard  
Figure 2.39.4

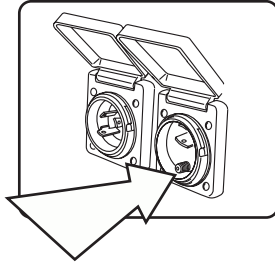


### TV Dockside Connection

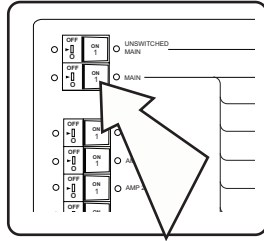
The TV can be connected to dockside cable where available.

#### To Connect Cable Television:

1. Plug the TV cable from the dock into the cable receptacle located under the gunwale on the aft starboard side of the cockpit.



2. Assure that *MAIN* breaker switch on the DC breaker panel is on.



REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### Satellite TV (Option)

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

REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### Satellite Radio (Option)

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

REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### Electric Sun Shade

The electric sun shade can be deployed or retracted by depressing the "SHADE" switch located on either the port helm switch panel.

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

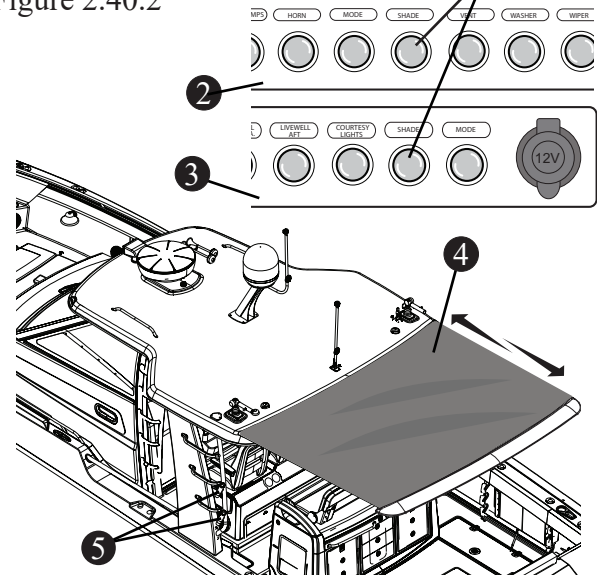
- The first press results in the shade extending OUT.
- The second press stops it if full extension is not desired. Otherwise it will stop in full extension.

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.

Sun Shade  
Figure 2.40.2



- 1 SUN SHADE SWITCH
- 2 PORT HELM SWITCH PANEL
- 3 PREP STATION SWITCH PANEL
- 4 ELECTRIC SUN SHADE
- 5 HARDTOP ROD HOLDERS (2 EA, P&S)



## Chapter 2 • General Information

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 helm.

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.

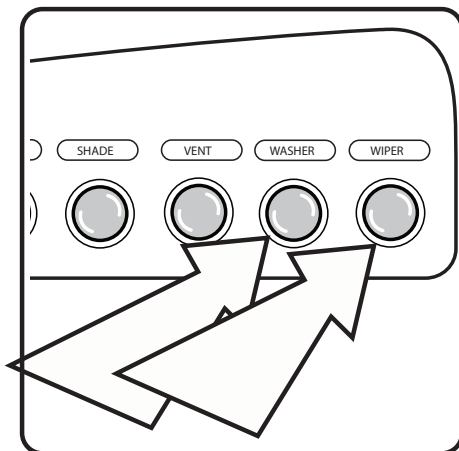
### ⚠ CAUTION

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 helm port switch panel. The switches are protected by 20 amp reset breakers located on the DC breaker panel on the port side of the cabin.

The washer is activated by momentarily pushing the switch.



### Docking, Lifting and Trailing

#### Docking

Your boat has nine cleats, one located in the anchor locker, two located at the bow, two located amidships, two located in the aft cockpit under the gunwale and two at the stern.

The cleats are used to secure the boat to the dock. While loading/unloading or mooring, please learn

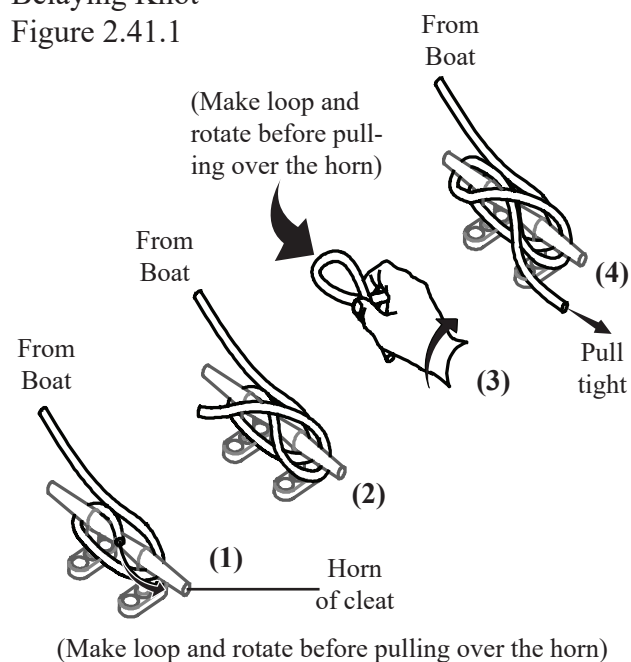
the proper way to secure the boat and how best to use the mooring points of your boat.

Figure 2.41.1 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

Figure 2.41.1

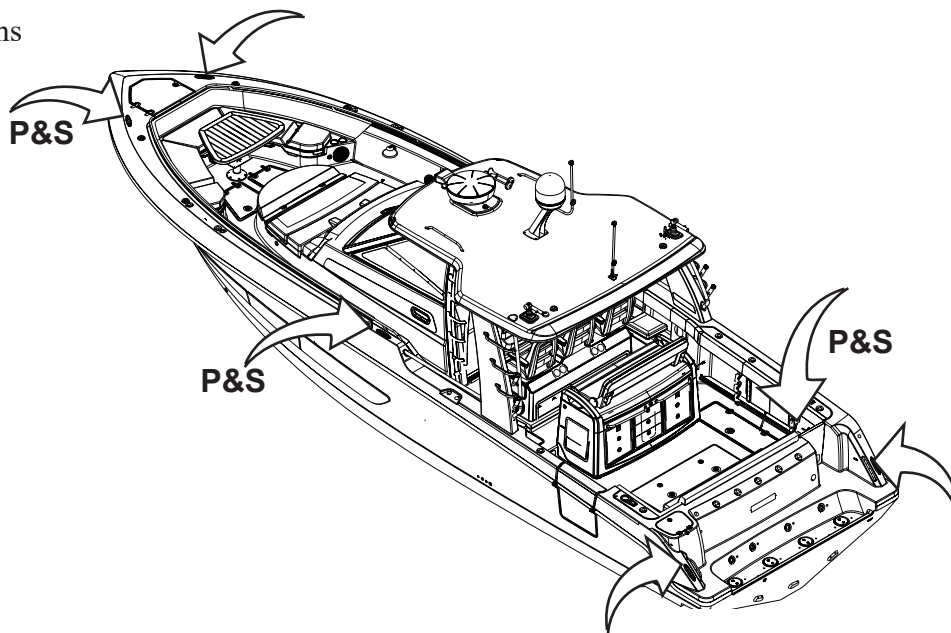


#### Lifting

### NOTICE

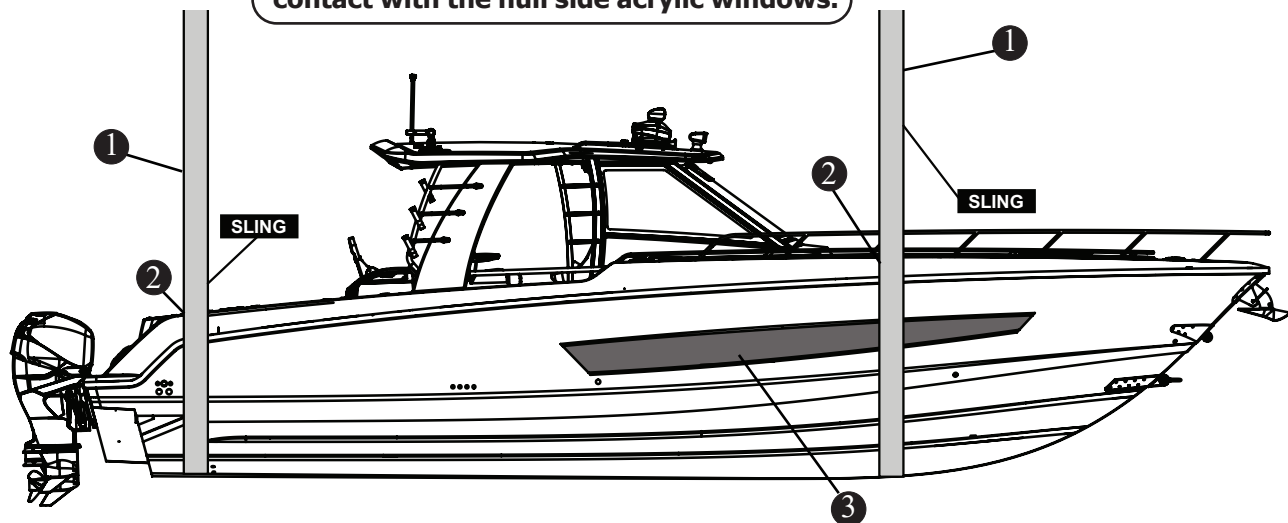
Before removing your boat from the water be sure to close the A/C seacock. Failure to do so will cause an air lock in the line when the boat is returned to the water. The A/C system will then have to be primed before it will operate properly.

Cleat Locations  
Figure 2.42.1



Proper Lifting  
Figure 2.42.2

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



- 1 WIDE, FLAT BELT SLING
- 2 "SLING" LABEL LOCATED ON HULL (P&S)

- 3 HULL SIDE ACRYLIC WINDOW

### **⚠ 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.

## Chapter 2 • General Information

- Ensure that fish boxes 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.

### 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 keel stands. In addition, by a minimum of six side stands, three placed at port and three placed at starboard.

### NOTICE

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



### CAUTION

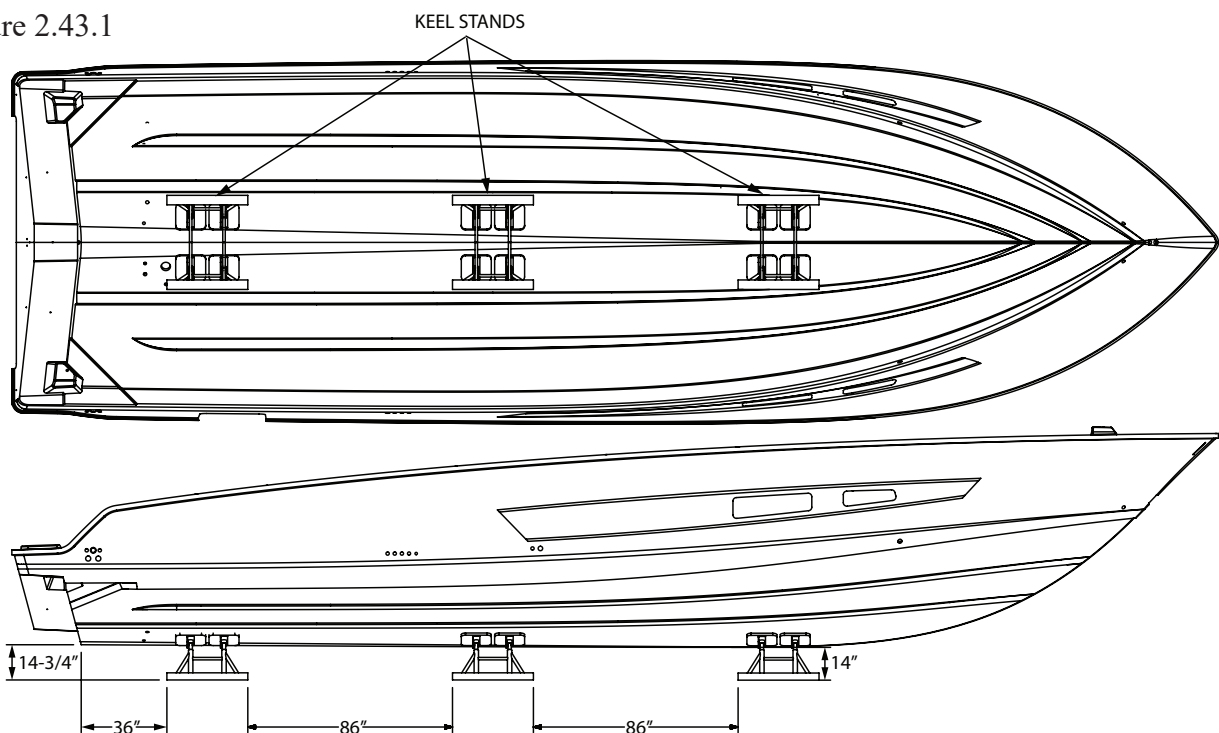
In addition to the three keel stands, use a minimum of six side stands, three placed at port and three placed at starboard. Use only the keel stands required by Boston Whaler for support of your boat out of water. Specifications for the keel stands can be obtained from your dealer or Boston Whaler.

Specifications for keel stands (Figure 2.43.1) 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 2.45.1 for recommended out of water support of your boat.

Keel Stands  
Figure 2.43.1



**CAUTION**

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

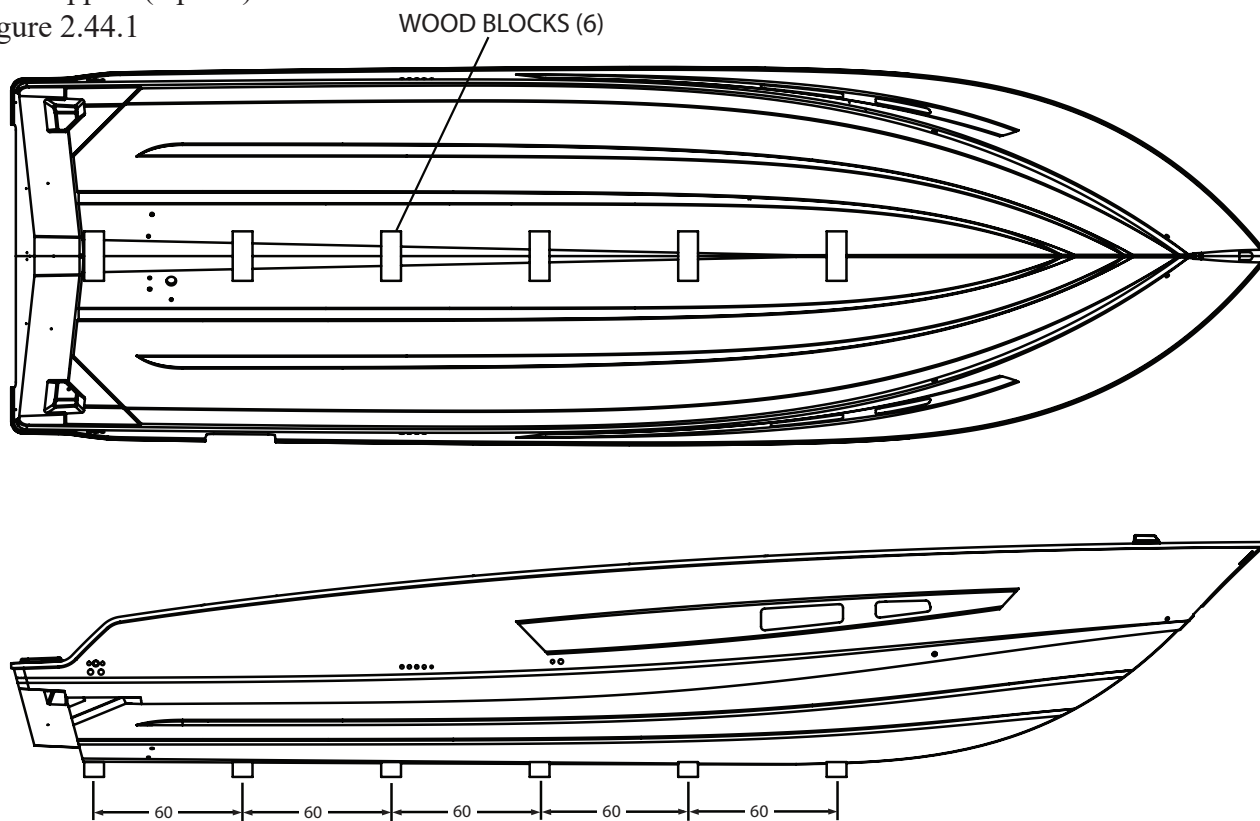
Each wood block must contact the hull for a minimum length of 8".

**NOTICE**

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

Hull Support (Option)

Figure 2.44.1



## Bilge Pumps

This vessel is equipped with three automatic bilge pumps, one forward, one aft and one high water emergency pump.

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

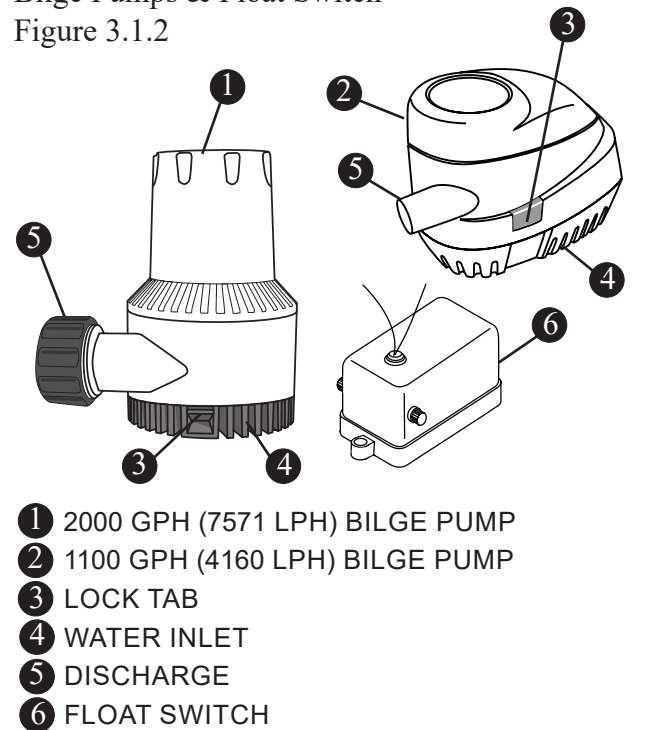
By depressing the switch at the helm labeled FWD BILGE, AFT BILGE or AUX bilge the operator can energize the pumps regardless of the position of the float switches.

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

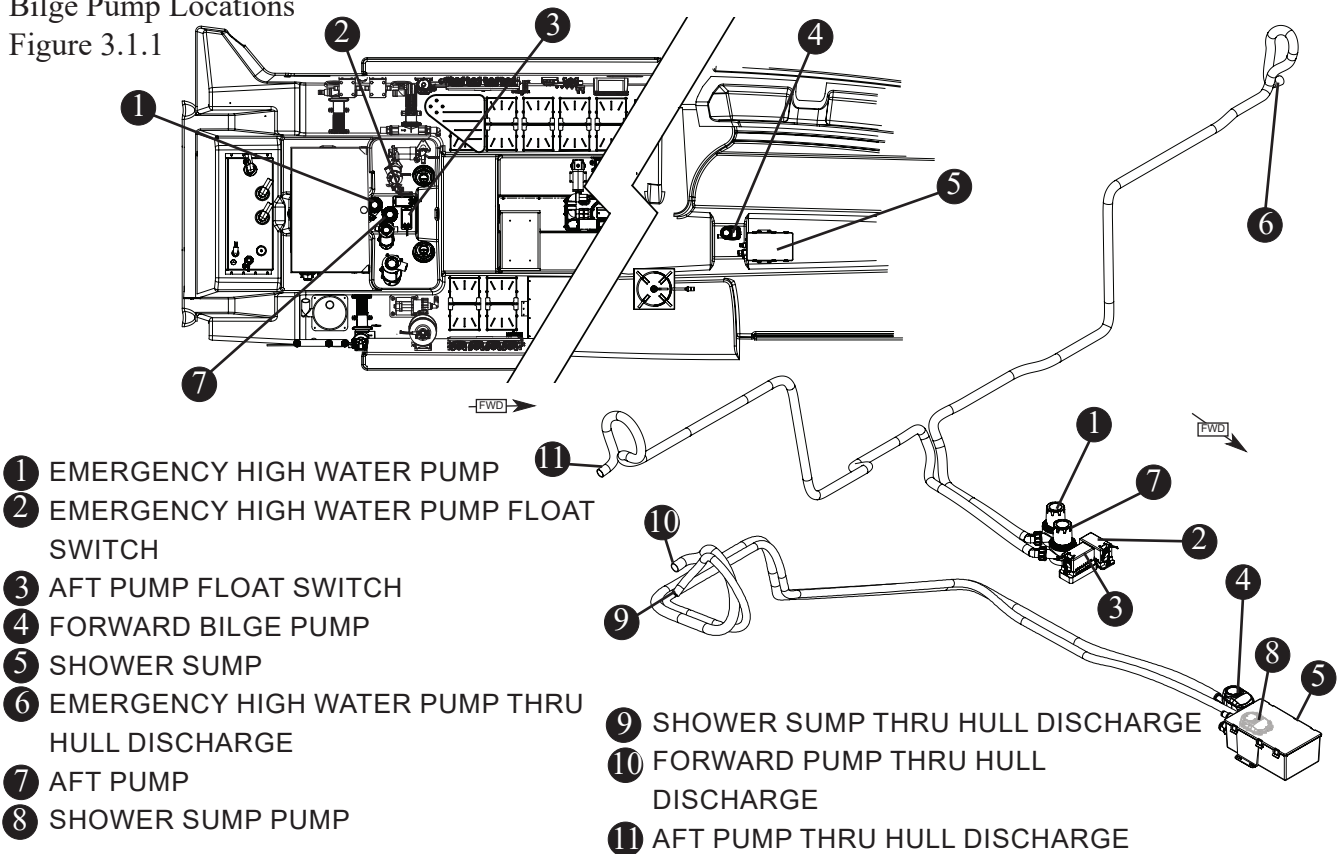
The high water pump discharges water overboard by way of a thru-hull fitting on the aft port hull.

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

Bilge Pumps & Float Switch  
Figure 3.1.2



Bilge Pump Locations  
Figure 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 helm switch panel will be ON.

#### Take immediate action:

- Switch all bilge pumps ON.
- Use your radio to broadcast a PAN-PAN distress call.

### Bilge Pump Maintenance

#### NOTICE

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

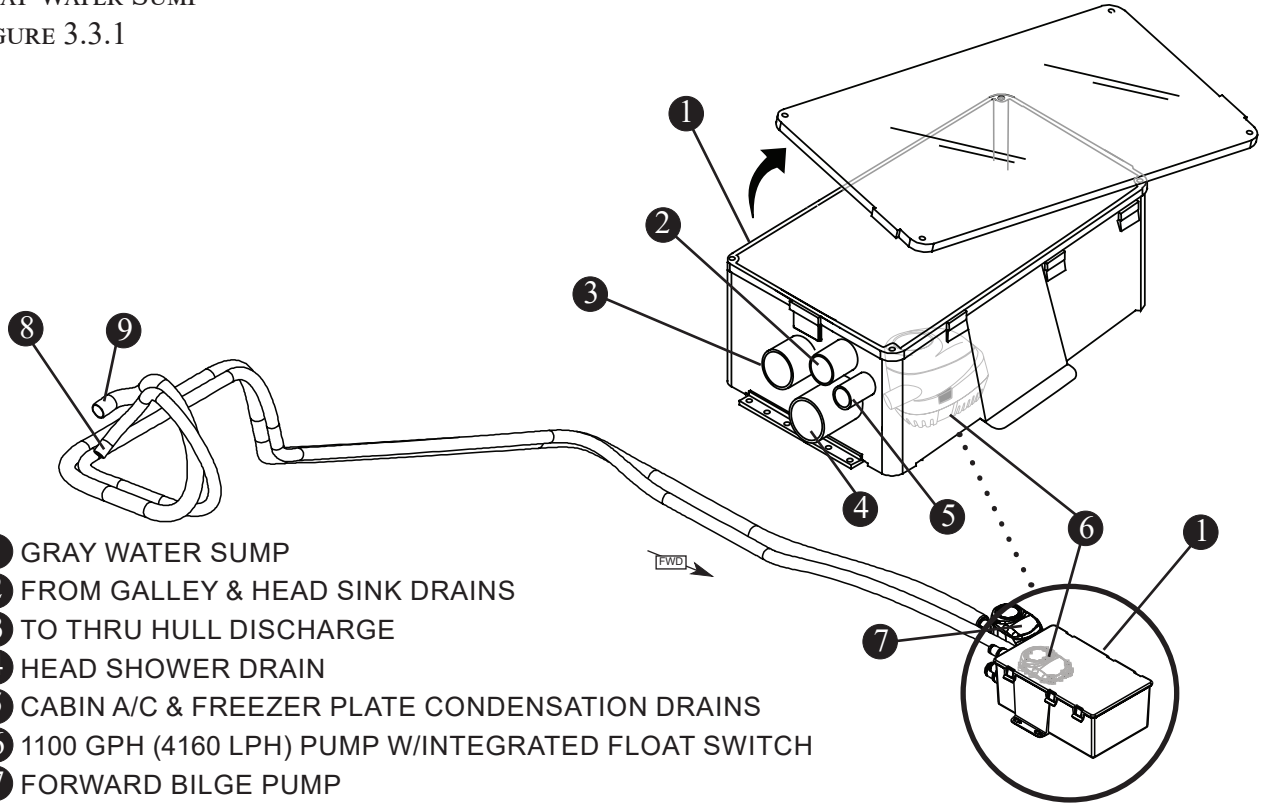
#### NOTICE

**After using shower run a gallon of clean water through shower drain to flush out 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  
FIGURE 3.3.1



- ① GRAY WATER SUMP
- ② FROM GALLEY & HEAD SINK DRAINS
- ③ TO THRU HULL DISCHARGE
- ④ HEAD SHOWER DRAIN
- ⑤ CABIN A/C & FREEZER PLATE CONDENSATION DRAINS
- ⑥ 1100 GPH (4160 LPH) PUMP W/INTEGRATED FLOAT SWITCH
- ⑦ FORWARD BILGE PUMP
- ⑧ SUMP THRU HULL DISCHARGE
- ⑨ FORWARD BILGE PUMP THRU HULL DISCHARGE

## 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.

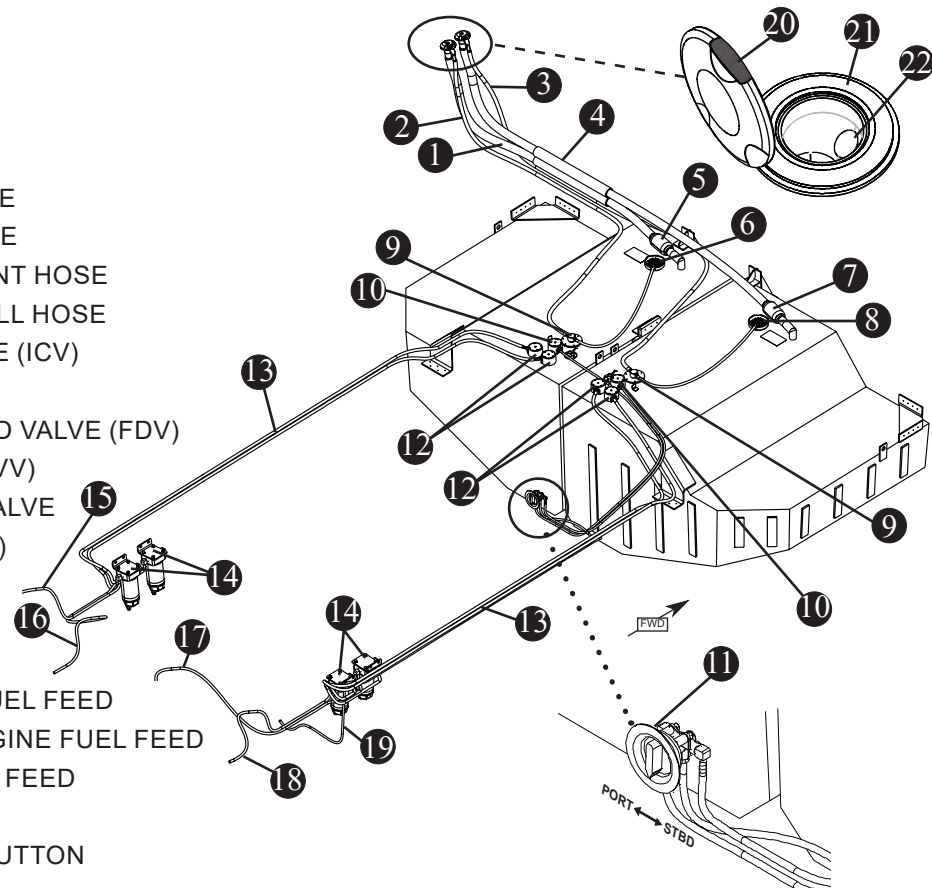
- Overfill protection is included with each system, reducing the possibility of accidental fuel spills.
- Reduce hydrocarbon emissions through the use of a specially designed fuel fill. This fuel fill has a permanent cap with a closure mechanism that has an audible click, to inform you when it is sealed.

### Fuel tank

Your boat is equipped with two (2) low permeation aluminum fuel tanks with a usable fuel capacity of 700 gallon (2650 L). The usable capacity of the fuel tank is different from the tank capacity marked on the tank from the manufacturer. The difference is the

Fuel Tank  
Figure 3.4.1

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

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 Figure 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

### WARNING

**The fuel system on this vessel complies with all applicable ABYC standards. Fueling station pump flow rates that exceed 18 gallons (68 liters) per minute may damage system components and cause fuel leakage into the vessel.**

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.

### 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.**



### Ethanol-Blended Fuel

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 percent ethanol) currently allowed by the U.S. EPA.

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.

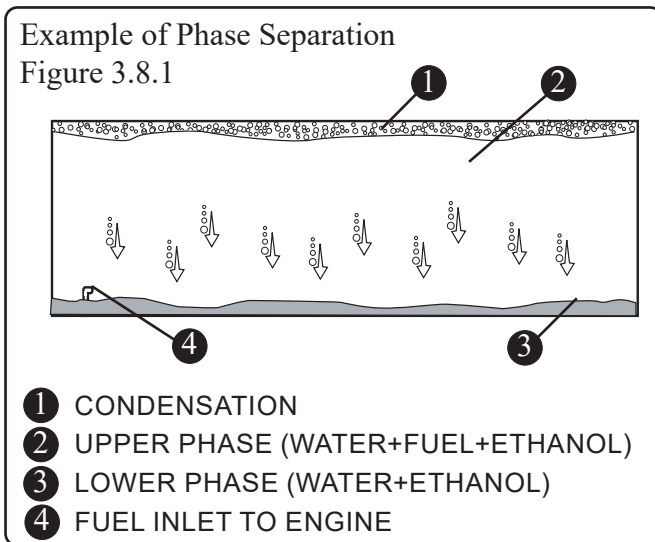
### Fuel Filters

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  
Figure 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.

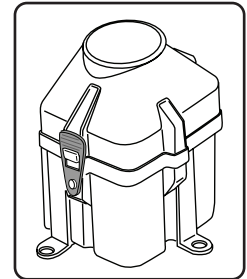
- Add fuel stabilizer/treatment at manufacturers recommended dosage.
- Run engine(s) for 10 minutes.
- Shut off fuel valve.
- Allow engine to run until it stops.
- Top off fuel tank, leaving space for expansion. Do not fill to point of overflow.
- Do not cap the tank vent.

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

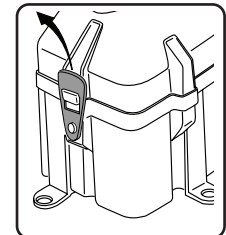
The Verado four-stroke engines use enclosed hydraulic pump units. The pumps are electrically operated to provide hydraulic pressure to the steering system. The pumps are located in the forward center of the bilge and can be accessed by lifting the equipment hatch in the aft cockpit deck.



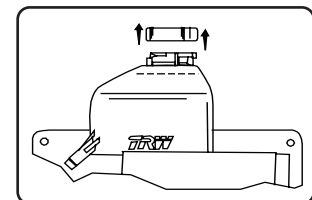
## Filling and Maintenance

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.

Proper maintenance of this system will ensure worry-free usage for the life of your boat. Steering system

## NOTICE

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

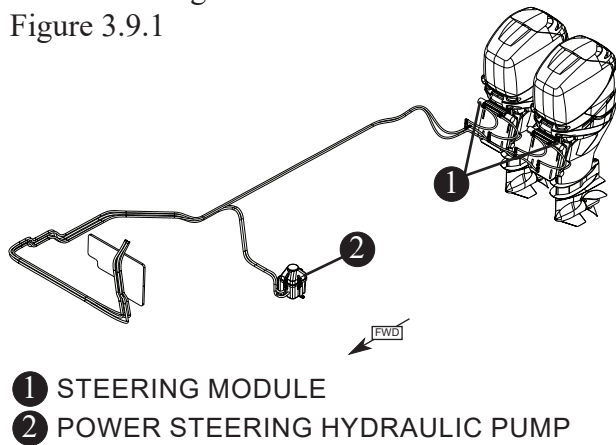
integrity is imperative when engaging in recreational water activities. Special care and attention must be taken to ensure proper performance of the steering system and should include the following:

- 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.

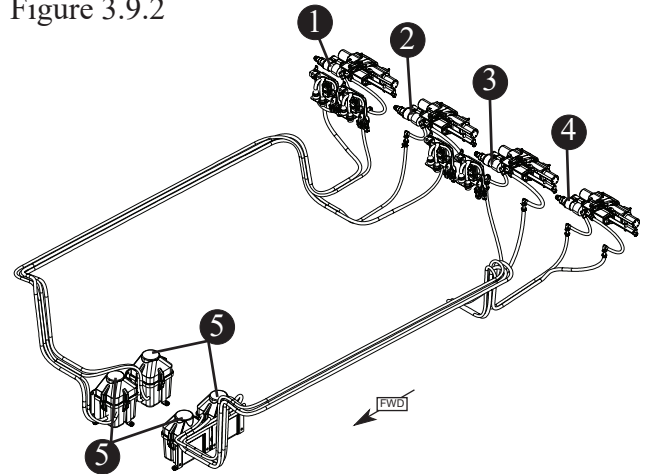
All steering systems whether mechanical or hydraulic require regular inspections, periodic adjustment and occasional replacement may be necessary.

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

Power Steering  
Figure 3.9.1



Power Steering w/ Joystick Piloting (option)  
Figure 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

*NOTE: When equipped with optional joystick piloting and/or V12 engines, power steering configuration varies*

## ATTENTION

**Optional Mercury V12 engines do not have external power steering pumps and instead use a built-in, electro-hydraulic steering motor. Steering commands between helm/joystick and engine are digital.**

### Theft Deterrent with 1st Mate and Remote Connectivity System (Whaler Watch) (Option)

Whaler Watch is a remote-monitoring system that provides a snapshot of the boat's key components, operating systems, as well as alarm notifications.

Subscribing to Whaler Watch\* allows use of the app and Web portal to monitor the following:

- 1st Mate safety and security system – Anti theft feature immobilizes engines.
- GPS tracking system with geofence notifications.
- Remote monitoring and notification of high-water bilge alarm, tank levels, batteries, shore power connections, and propulsion system information.
- Remote control of courtesy and underwater lights.

\*A limited subscription to Whaler Watch is included and thereafter the service is subscription based. To access the system remotely visit [whalerwatch.net](http://whalerwatch.net).

For more information, see the owner's packet or contact an authorized Boston Whaler dealer.

### Starting the Engines

#### CAUTION

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

#### 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.

### Pre-start Checklist

1. Ensure lower units of engines are in water and engine emergency stop switch is in run position.

2. If equipped with 1st Mate theft deterrent system, Press the power button on the captain's fob. A single beep indicates the captain's fob is connected and the boat is ready for operation.

### Start-up Procedure

1. On helm controls, ensure throttle and shift levers are in the neutral position. Check to ensure throttle and shift lever's neutral indicator light is illuminated

NOTE: For further information on throttle controls, see *Throttle and Shift Control* in chapter 2, *General Information*.

2. On the *BATTERY SWITCH CONTROL* panel press and release each of the *IGNITIONS* switches (see Figure 3.11.1).
3. Insert ignition keys into the *MASTER IGNITION* and rotate to the *ON* position (see Figure 3.11.1).
4. On shift and throttle control, press *START ALL ENGINES* button.

### NOTICE

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

### 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 to avoid possible ejection due to boat spinout. Do not attempt to turn boat when the engine is trimmed extremely down, under or in.

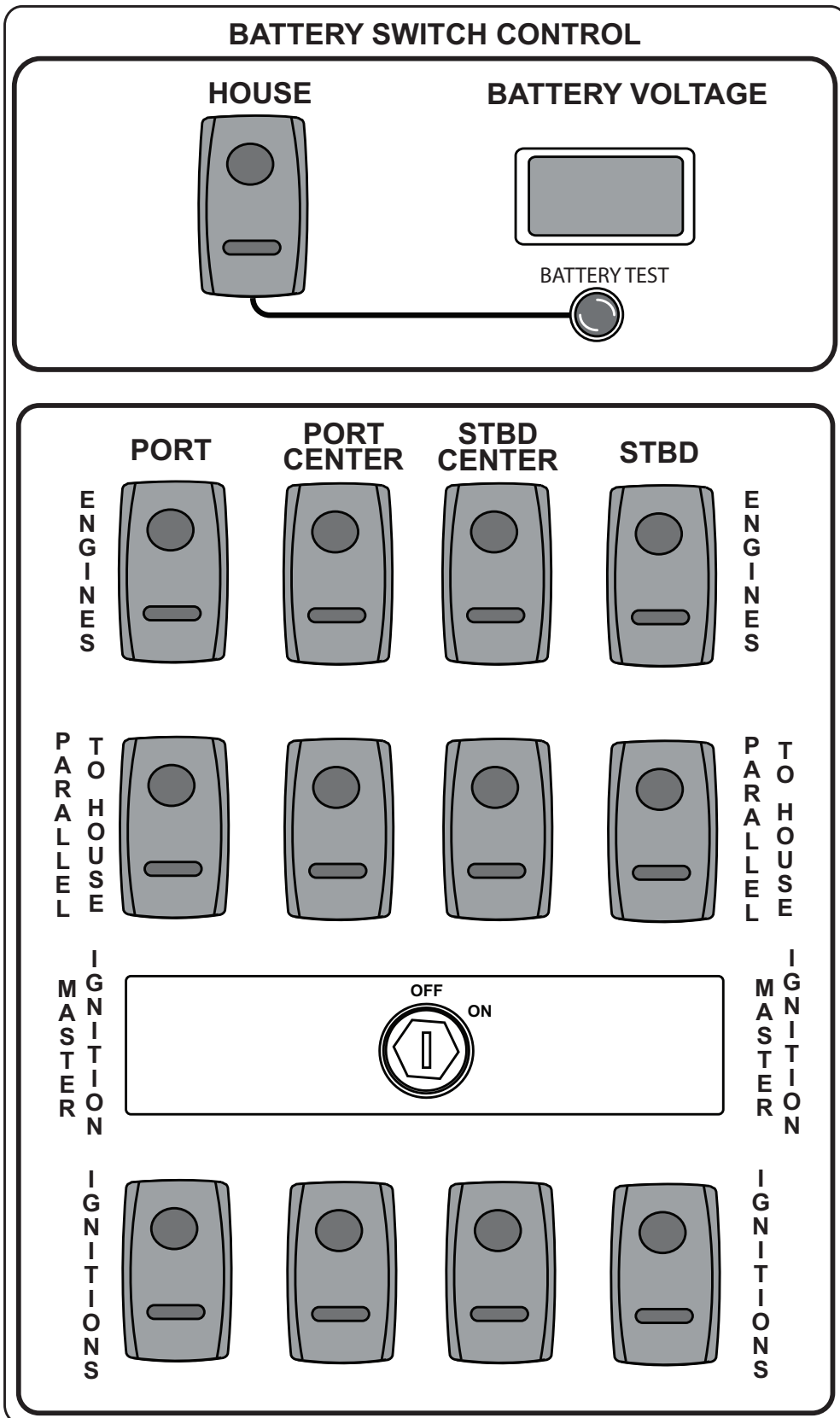
### Parallel Switching

In the event the battery for a particular engine is not sufficiently charged to start the engine, depress the *PARALLEL TO HOUSE* switch for the particular engine to connect to the house battery switch and initiate ignition (see Figure 3.11.1).

#### CAUTION

Start remaining engines before initiating parallel switching.

Battery Switch Control Panel  
Figure 3.11.1



NOTE: When equipped with optional V12 engine, panel configuration varies.



### Engine(s) Warm Up

The *THROTTLE ONLY* button on the throttle and shift control allows the operator to increase engine RPMs for warm-up without being in gear. To operate:

1. Ensure throttle and shift levers are in neutral.
2. Press and hold *THROTTLE ONLY* button while moving port throttle and shift lever forward.
3. Hold in *THROTTLE ONLY* button until an audible signal sounds twice and neutral lights start flashing. Flashing lights indicate *THROTTLE ONLY* program is engaged.
4. Advance port throttle and shift lever to increase engine RPMs; RPMs are limited to prevent engine damage.
5. To disengage *THROTTLE ONLY*, return port throttle and shift lever back to neutral position.

### Stopping the Engines

1. Ensure throttle and shift levers are in neutral.
2. Press *START ALL ENGINES STOP* button.
3. Turn the master ignition key switch off.
4. Turn off the engine batteries. On the *BATTERY SWITCH CONTROL* panel press and release each of the *IGNITIONS* switches (see Figure 3.11.1).

### Active Trim

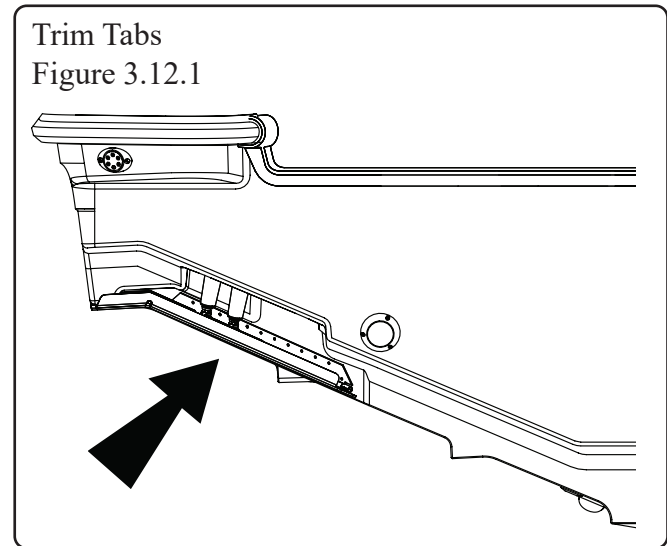
#### NOTICE

**Boats can be operated in a manner and speed resulting in trim angles that cause visibility to be obscured. Motor trim, hull trim plane and speed are factors that affect a boat's trim angle.**

Active Trim is a GPS, speed-based automatic engine trim system from Mercury Marine. This hands-free system continually adjusts engine trim based on changes in boat speed and maneuvers to improve performance, fuel economy, and ease of operation. On this vessel, Active Trim is managed via the helm display. 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 getting on plane. Active trim has

five selectable trim profiles that allow the operator to compensate for changes in boat load, operator preference and weather conditions, while maintaining full auto operation.

REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.



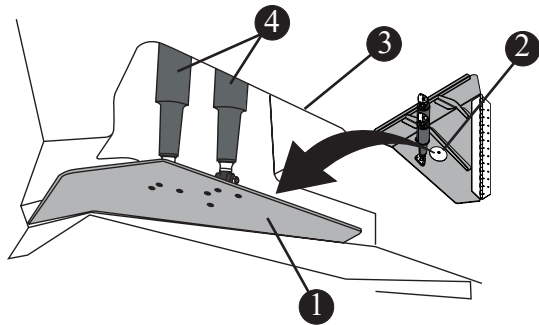
### Dynamic Running Surface™ (Trim Tabs)

#### ATTENTION

**Visibility from the helm station is limited, use of trim tabs is necessary to maintain adequate visibility in some running conditions. Avoid serious injury or death from collisions. Maintain a lookout as required by USCG navigation rules.**

The electric trim tabs on this vessel are of a unique design which further enhances the ride and handling of this vessel (see Figure 3.12.1 and Figure 3.14.1). Trim tabs are located on the port and starboard bottom of the hull at the transom and are used to assist in leveling the vessel caused by uneven weight distribution or strong cross winds.

Dynamic Running Surface  
Figure 3.13.1



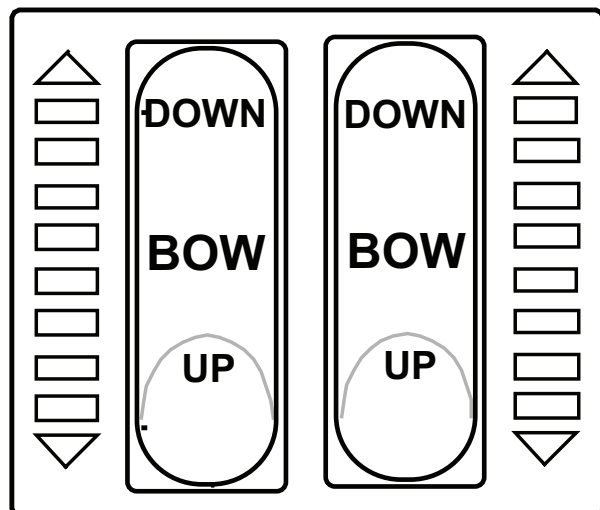
- 1 DYNAMIC RUNNING SURFACE
- 2 SACRIFICIAL ANODE
- 3 TRANSOM
- 4 ACTUATORS

## Operation

### 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 to avoid possible ejection due to boat spinout. Do not attempt to turn boat when the engine is trimmed extremely down, under or in.**

Trim Tab Switch Pad  
Figure 3.13.2



The trim tabs are controlled by rocker switches (see Figure 3.13.2) located at the helm. Short momentary bursts of the rockers will achieve proper attitude of the hull. The trim tab switch is marked bow up and bow down. Using the trim tabs can:

- Level the boat; fore and aft, port and starboard
- Reduce resistance in the steering system
- Increase speed
- Reduce strain on the engines
- Provide a smoother, more stable ride

## Maintenance

The trim tabs units are sealed, waterproof and maintenance free. General cleaning is recommended, and marine growth should be removed when the boat is out of the water. Also inspect the sacrificial anodes regularly and replace as necessary, refer to chapter 5, *Care & Maintenance* for additional information.

REFER TO THE OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

## Electrolytic Corrosion & Sacrificial 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).

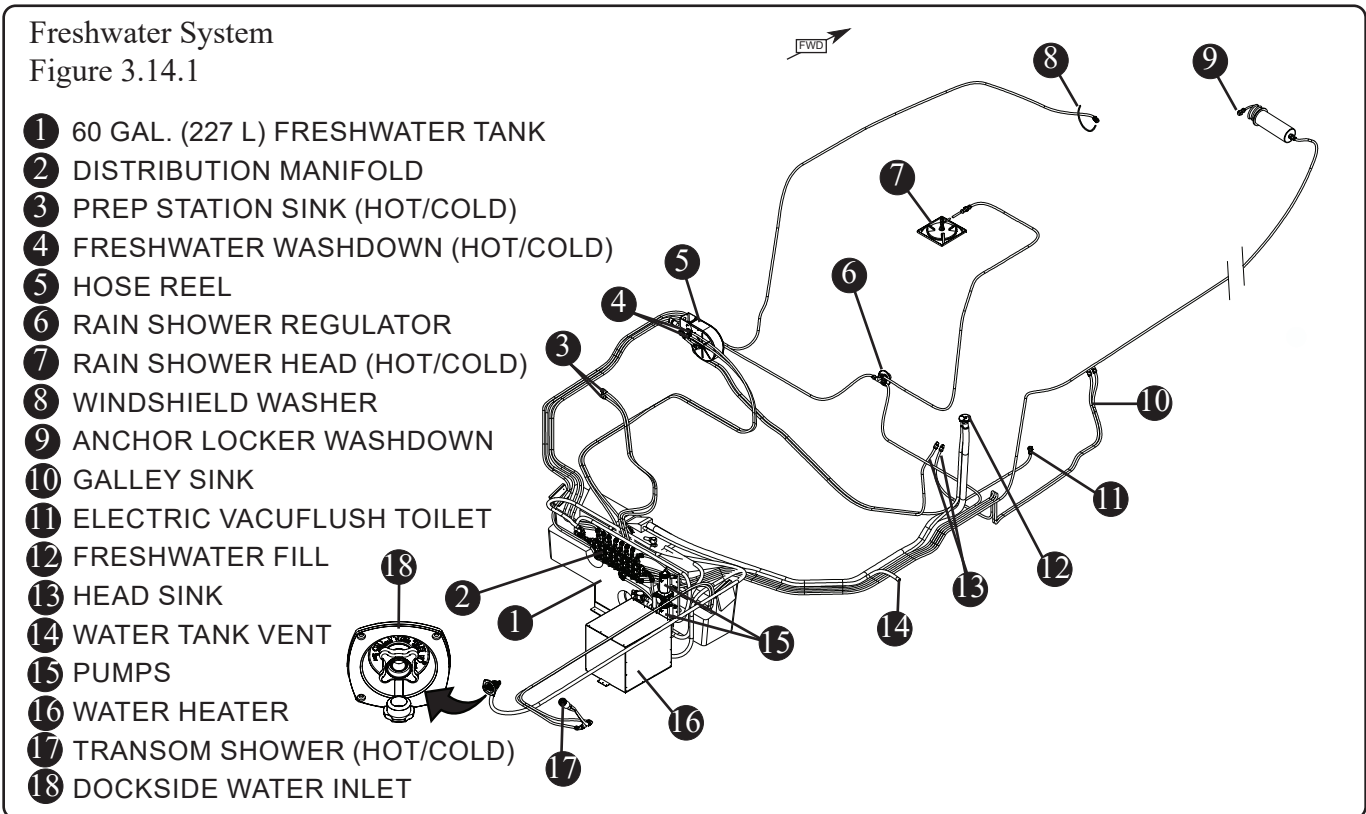
Zinc buttons (sacrificial anodes) are installed on the trim tabs to protect underwater hardware. Zinc, being less noble than copper based alloys and aluminum used in underwater fittings, will deteriorate first and protect the less noble metals.

The zinc anodes generally need replacement once a year in freshwater, every 6 months in a salt water environment.

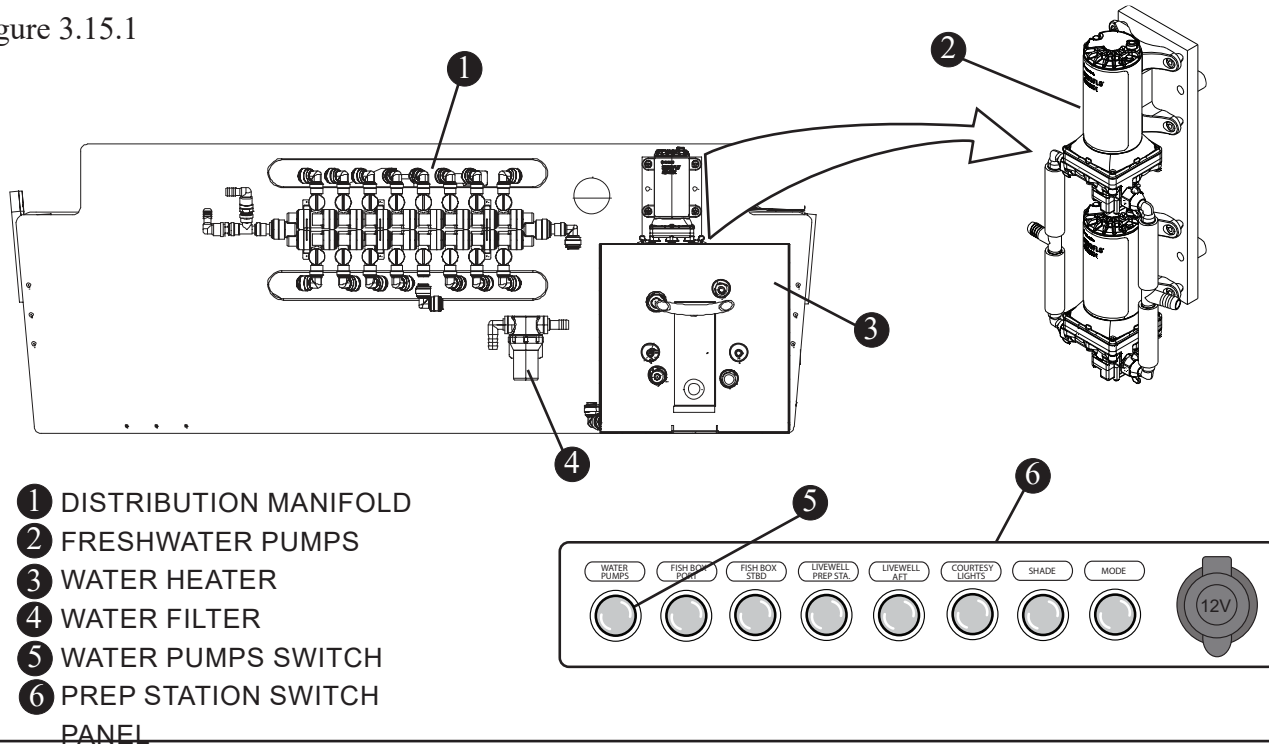
The need to replace anodes more frequently may indicate a stray current problem within your boat or at the slip or mooring. If your anodes do not need replacement after one year, loose anodes or low-grade zinc may be the problem.

## Freshwater System

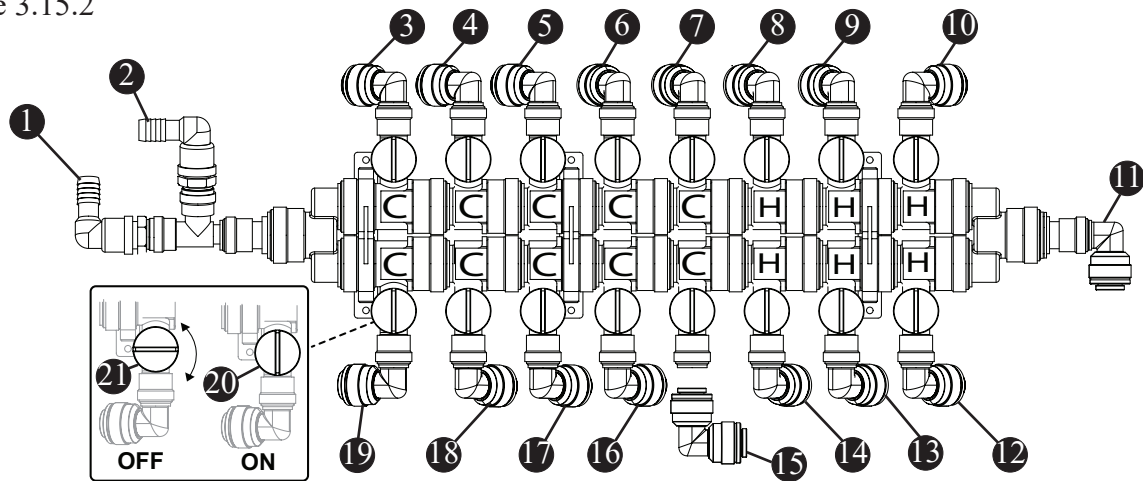
The freshwater system includes a freshwater tank, pump, and provides water to the sink/shower in the head, sinks, and showers. The tank is filled through the deck plate located midship on the starboard gunwale. Be sure to fill the tank from a source known to provide safe, pure drinking water. If you do not use the freshwater system for long periods of time or only use it seasonally, follow the disinfecting practice before using it. Consult your Boston Whaler dealer for the proper tank disinfection procedure.



Freshwater Bulkhead  
Figure 3.15.1



Freshwater Distribution Manifold  
Figure 3.15.2

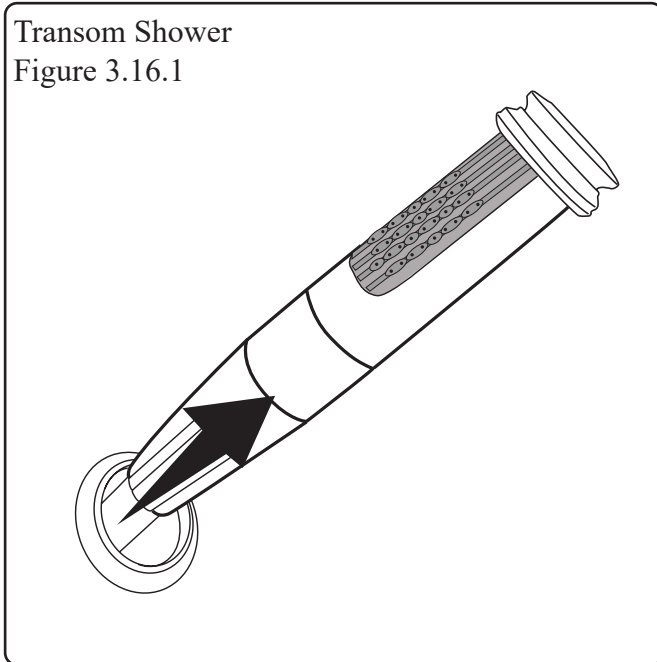


- 1 FROM FRESHWATER PUMP
- 2 DOCKSIDE WATER INPUT
- 3 HEAD SINK (COLD)
- 4 WINDSHIELD WASHER
- 5 HEAD SHOWER (COLD)
- 6 HOSE REEL (COLD)
- 7 PREP STATION SINK (COLD)
- 8 PREP STATION SINK (HOT)
- 9 HOSE REEL (HOT)
- 10 HEAD SHOWER (HOT)
- 11 TO WATER HEATER
- 12 TRANSOM SHOWER (HOT)
- 13 GALLEY SINK (HOT)
- 14 HEAD SINK (HOT)
- 15 FROM WATER HEATER
- 16 TRANSOM SHOWER (COLD)
- 17 ANCHOR LOCKER WASHDOWN
- 18 GALLEY SINK (COLD)
- 19 TOILET
- 20 VALVE "ON"
- 21 VALVE "OFF"

## Transom Shower

The transom shower (see Figure 3.14.1) is located on the starboard side, aft of the transom door. The shower is supplied by the freshwater 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 freshwater pumps and the spray head is activated by twisting the center of the unit.

Transom Shower  
Figure 3.16.1



## Anchor Locker Washdown

For your convenience, there is an expandable, freshwater 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.

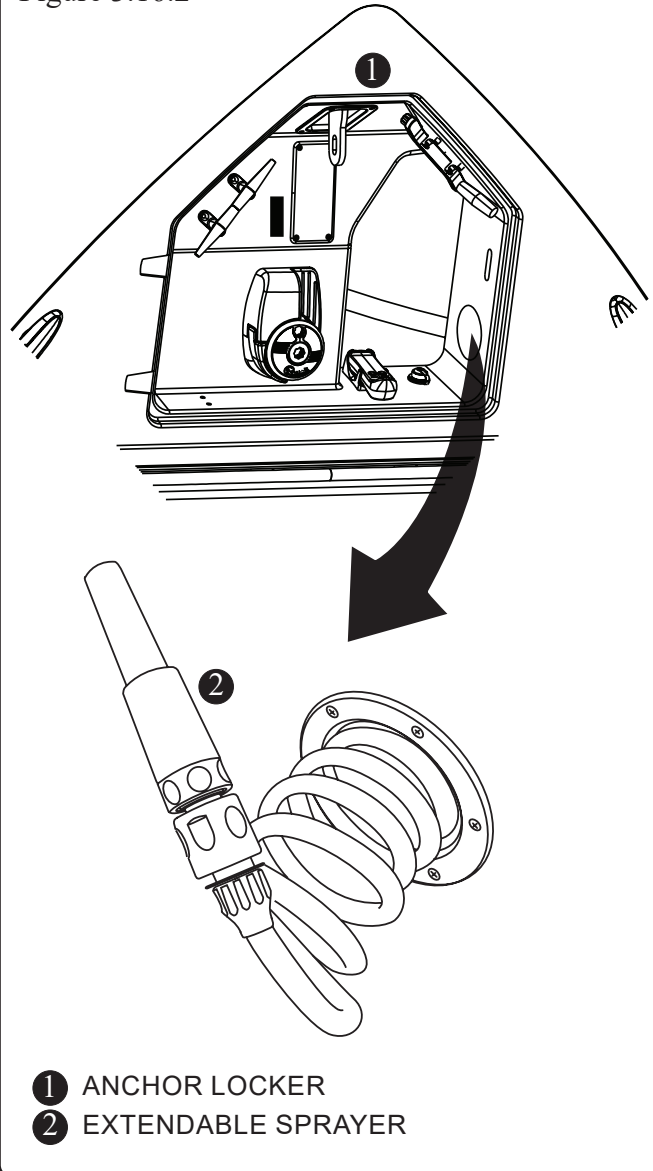
The “WATER PUMPS” switch on the bait prep station must be ON to operate the freshwater washdown. If desired, the switch can be left ON permanently without any damage to the system.

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

## NOTICE

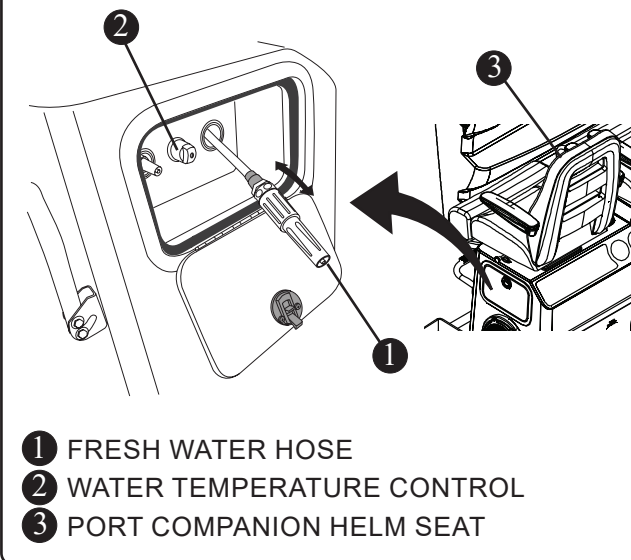
The “WATER PUMPS” switch activates both the freshwater and raw water pumps. If only one system is required the other pumps can be turned off via the helm display.

Anchor Locker Washdown  
Figure 3.16.2





Cockpit Fresh Water Washdown  
Figure 3.17.1



### 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 Figure 3.15.1)

The washdown unit is pressurized by the freshwater 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 must be ON to operate the freshwater washdown. If desired, the switch can be left ON permanently without any damage to the system.

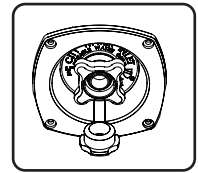
- The first press turns ON both pumps.
- The second press turns OFF both pumps.

### NOTICE

The “WATER PUMPS” switch activates both the freshwater and raw water pumps. If only one system is required the other pumps can be turned off via the helm display.

### 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 freshwater 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

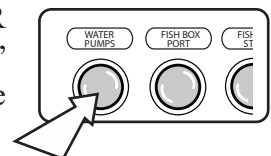
As a precaution against accidental flooding, remove the hose when leaving the boat for an extended period of time.

### Water Heater

### NOTICE

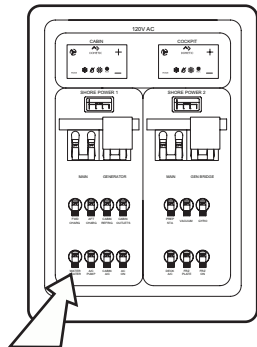
Make sure the freshwater tank is full before operating the water heater. Operating the water heater empty will cause damage to the system.

Make sure the “WATER PUMPS” switch is “ON” (SEE Figure 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.

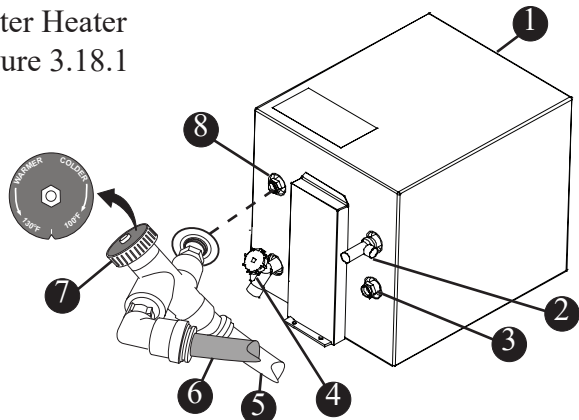
## NOTICE

**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 (Figure 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.

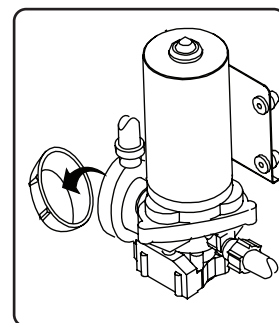
Water Heater  
Figure 3.18.1



- 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 freshwater 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.

## Engine Flush 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

1. Attach a water hose to the hose fitting (see Figure 3.17.1).
2. Activate the system by depressing the button on the *ENG FLUSH OPERATION* panel (see Figure 3.17.1).

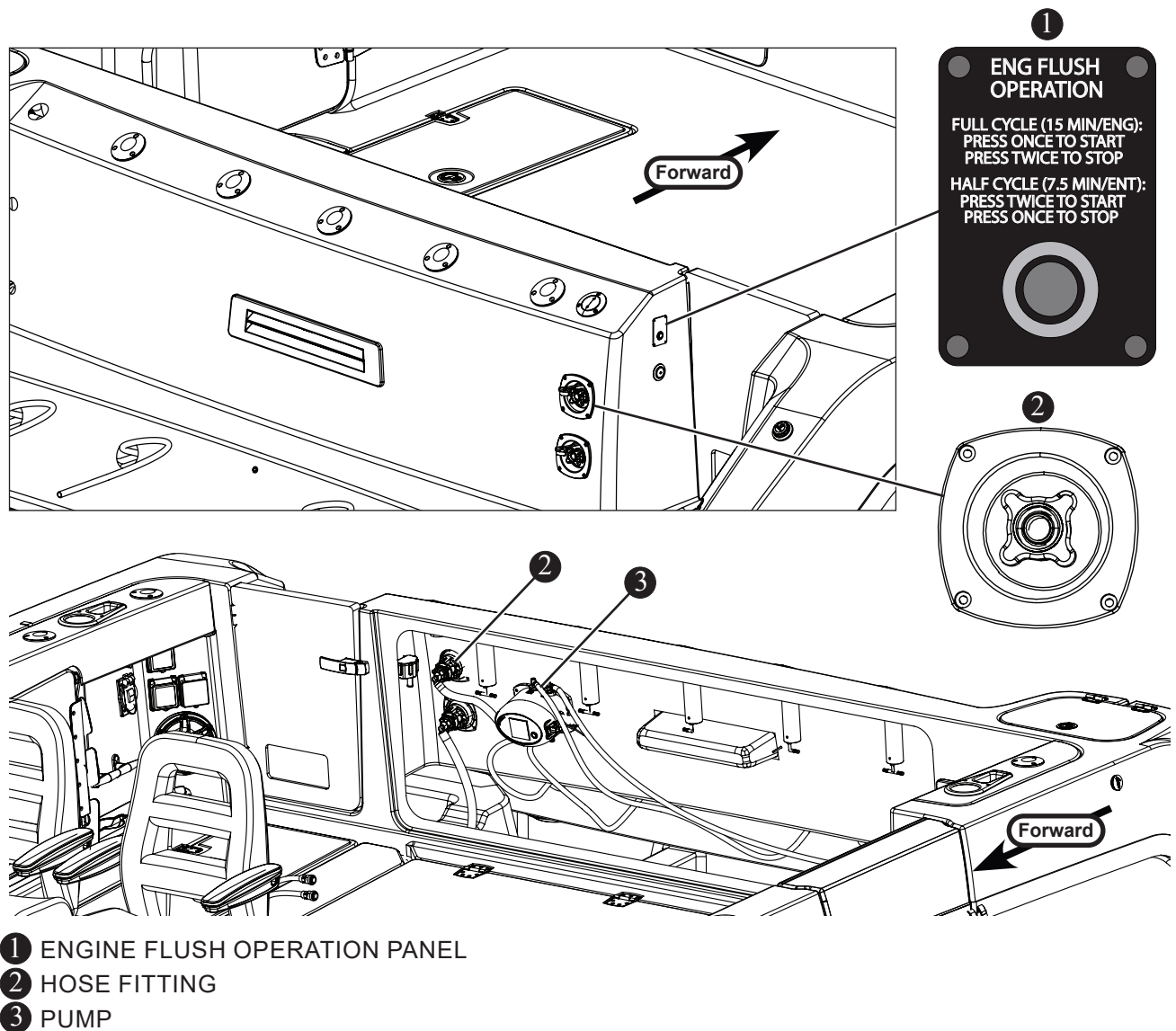
### Full Cycle (15 minutes)

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

### Half Cycle (7.5 minutes)

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

Engine Flush System  
Figure 3.19.1



## Raw Water System

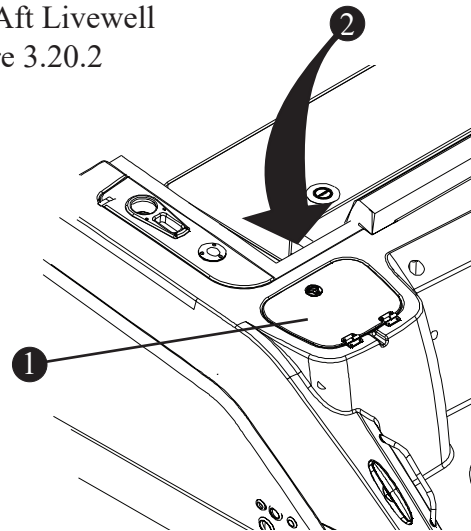
The raw water system includes a seacock with auxiliary pump and a livewell and raw water hose connection.

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.

## Livewells

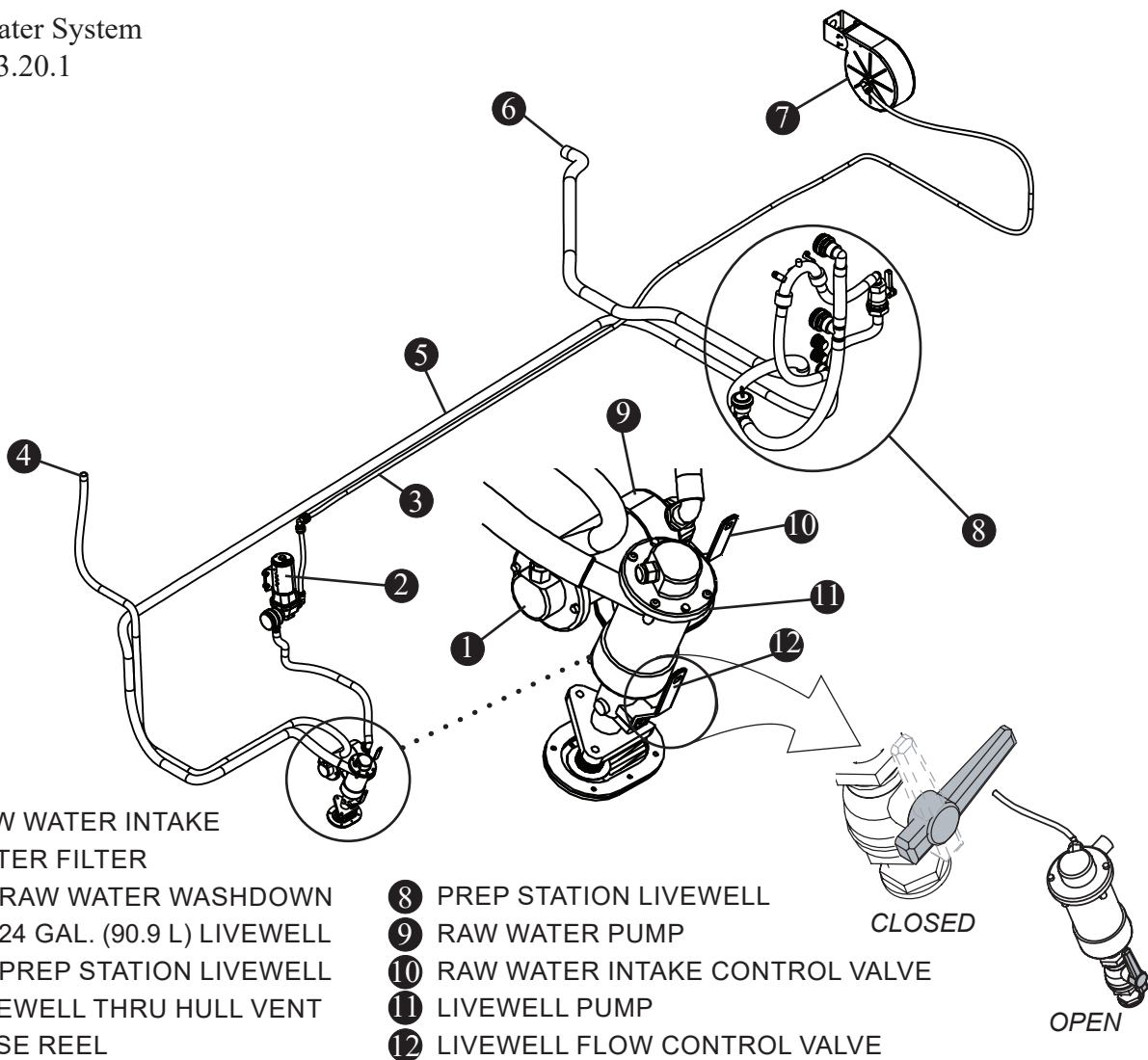
The livewells keep bait alive by circulating fresh seawater through the tank.

Port Aft Livewell  
Figure 3.20.2



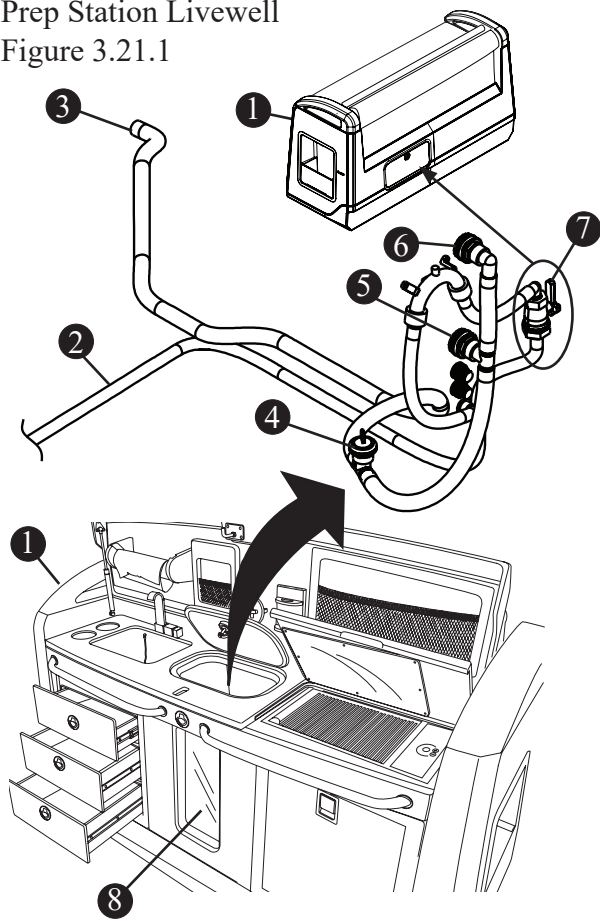
- 1 24 GAL. (90.9 L) LIVEWELL
- 2 LIVEWELL FLOW CONTROL ACCESS

Raw Water System  
Figure 3.20.1



- 1 RAW WATER INTAKE
- 2 WATER FILTER
- 3 TO RAW WATER WASHDOWN
- 4 TO 24 GAL. (90.9 L) LIVEWELL
- 5 TO PREP STATION LIVEWELL
- 6 LIVEWELL THRU HULL VENT
- 7 HOSE REEL
- 8 PREP STATION LIVEWELL
- 9 RAW WATER PUMP
- 10 RAW WATER INTAKE CONTROL VALVE
- 11 LIVEWELL PUMP
- 12 LIVEWELL FLOW CONTROL VALVE

Prep Station Livewell  
Figure 3.21.1



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

The livewells have three 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 Figure 3.21.1).
- 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.
  - The prep station livewell flow control valve is located behind the access door on the forward base of the prep station.
- Fill the livewell(s) by depressing either the “LIVEWELL AFT” or “LIVEWELL PREP STA.” switch on the bait prep station switch panel. The raw water pump will be activated and the system will become functional.

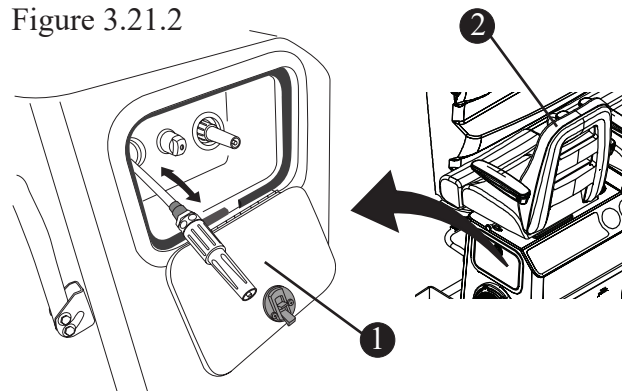
## ATTENTION

**The seacock MUST be in the OPEN position when livewell is in use. Running the pump dry may damage 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 pump which is activated by depressing the “WATER

Raw Water Washdown Hose  
Figure 3.21.2



- ① RAW WATER HOSE
- ② PORT COMPANION HELM SEAT



PUMPS” switch on the prep station switch panel. The spray head is activated by twisting the unit.

## NOTICE

**The “WATER PUMPS” switch activates both the freshwater and raw water pumps. If only one system is required the other pumps can be turned off via the helm display.**

## ATTENTION

**The seacock MUST be in the OPEN position when washdown is in use. Running the pump dry may damage the unit.**

### 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

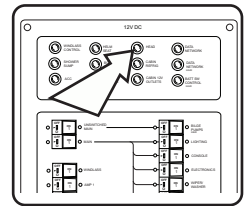
The Environmental Protection Agency (EPA) standards state that in freshwater lakes, reservoirs, impoundments whose inlets or outlets are such as to prevent the ingress or egress by vessel traffic subject to this regulation, or in rivers not capable of navigation by interstate traffic subject to this 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 VacuFlush 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.



The waste system includes an electric VacuFlush toilet, vacuum generator, a holding tank and thru-hull vent.

When depressed, the “FLUSH” button on the function panel 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 (Figure 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.**

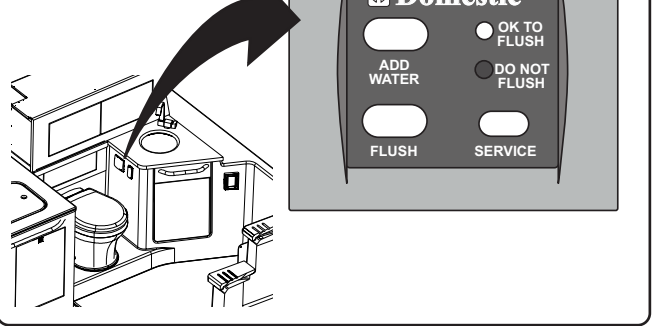
- To flush, depress the “FLUSH” button on the function panel (Figure 3.21.2) until bowl is clear.

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 (Figure 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

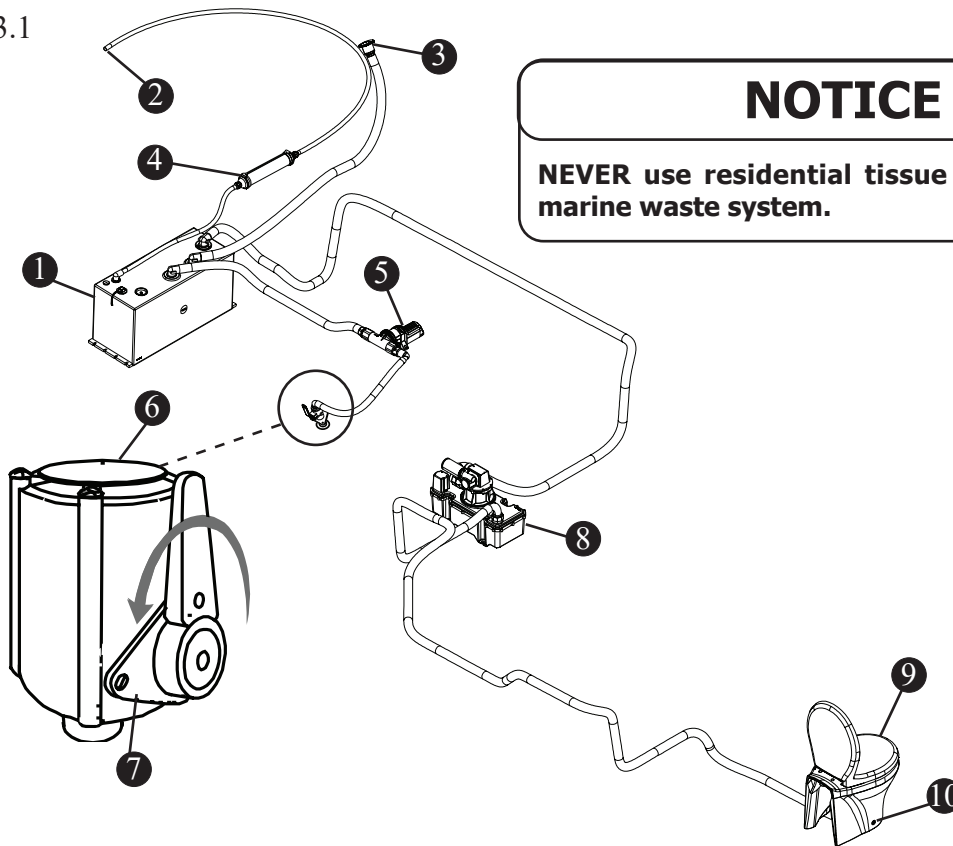
Head Panel  
Figure 3.23.2



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  
Figure 3.23.1



**NOTICE**

**NEVER use residential tissue paper in your marine waste system.**

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>① 20 GAL ( 75.7 L ) WASTE HOLDING TANK</li> <li>② THRU-HULL VENT</li> <li>③ DOCKSIDE PUMP OUT DECK PLATE</li> <li>④ IN-LINE FILTER</li> <li>⑤ OVERBOARD DISCHARGE PUMP</li> </ul> | <ul style="list-style-type: none"> <li>⑥ LOCKABLE DISCHARGE SEACOCK</li> <li>⑦ LOCKING PLATE</li> <li>⑧ VACUUM GENERATOR</li> <li>⑨ ELECTRIC VACUFLUSH TOILET</li> <li>⑩ FRESH WATER INLET</li> </ul> |
|--|---|

### Waste System Vent

#### NOTICE

**Replace filter 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 waste system vents odors associated with waste operations via a thru hull vent (see Figure 3.23.1).

### Vent Filter Replacement

The vent's in-line filter is located in the mechanical hatch on the aft bulkhead. To replace:

1. Unscrew vent hose fittings from old vent filter
2. Remove old filter from bracket, seal open ends with tape or wrap inside plastic bag, and discard
3. 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

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.

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..
- Make sure the discharge seacock is in the open position.
- Activate discharge by turning the key switch 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 OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### Windshield Vents

This vessel has two electrically-actuated upper windshield vents controlled by the *VENT* button located on the helm switch panel. Depress and hold the switch to open or close partly or completely.

### Air Conditioning (A/C)

This vessel is equipped with two reverse-cycle air conditioning systems (see Figure 3.27.1):

LOCATION	UNIT SIZE
CABIN A/C	12000 BTU
DECK A/C	18000 BTU

The air conditioning/heating system is controlled at the helm display or by separate display panels located in the cabin on the *AC Distribution Panel* (see Figure 3.26.1). The helm display allows the operator to preset the temperature. Once on and the temperature is set, the A/C units activate automatically when the temperature of the cabin/helm is not consistent with the preset temperature. When the A/C is turned on, raw water is pumped through a Raw Water Seacock/Strainer (see Figure 3.28.1), passes through the system and then flows overboard through a *THRU-HULL DRAIN* (see Figure 3.27.1).

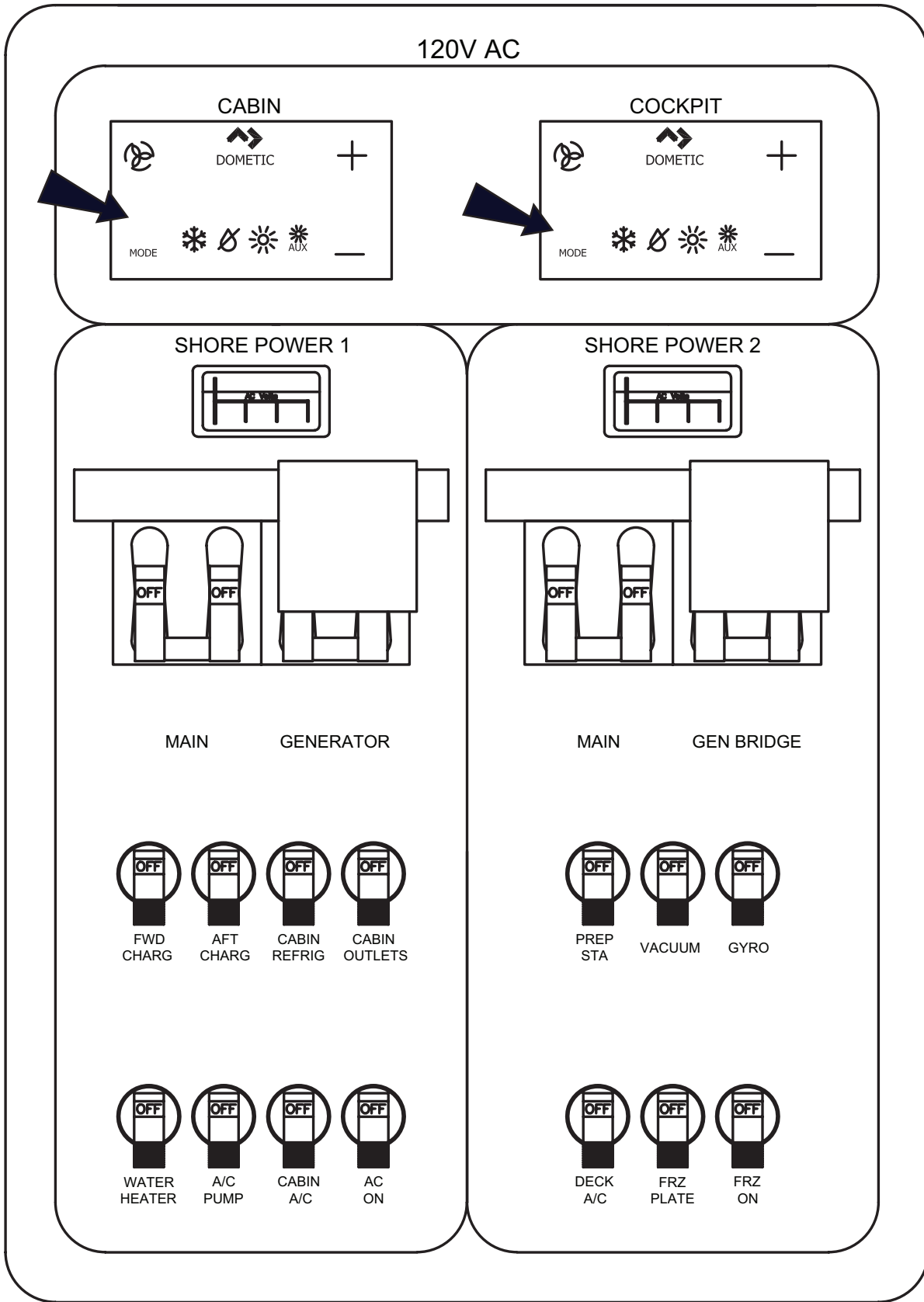
The *CABIN A/C* unit is located under the cabin entry steps and can be accessed through a panel on the port side of the head. The *DECK A/C* unit is located behind an access door below the helm seat. The *DECK A/C* efficiency is reduced as ambient temperature rises.

### Start the Air Conditioning (A/C)

1. Ensure shore power is plugged in or generator is on.
1. Ensure raw water intake seacock is open (see Figure 3.27.1 and Figure 3.28.1).
2. Turn on A/C PUMP breaker on the main AC distribution panel located in the cabin (see Figure 3.26.1).
3. Turn on all A/C breakers on the main AC distribution panel located in the cabin (see Figure 3.26.1).
4. Set the desired temperature at the helm display, or an A/C display in the cabin. For additional information refer to *Digital Switching* in chapter 4, *Electrical*.

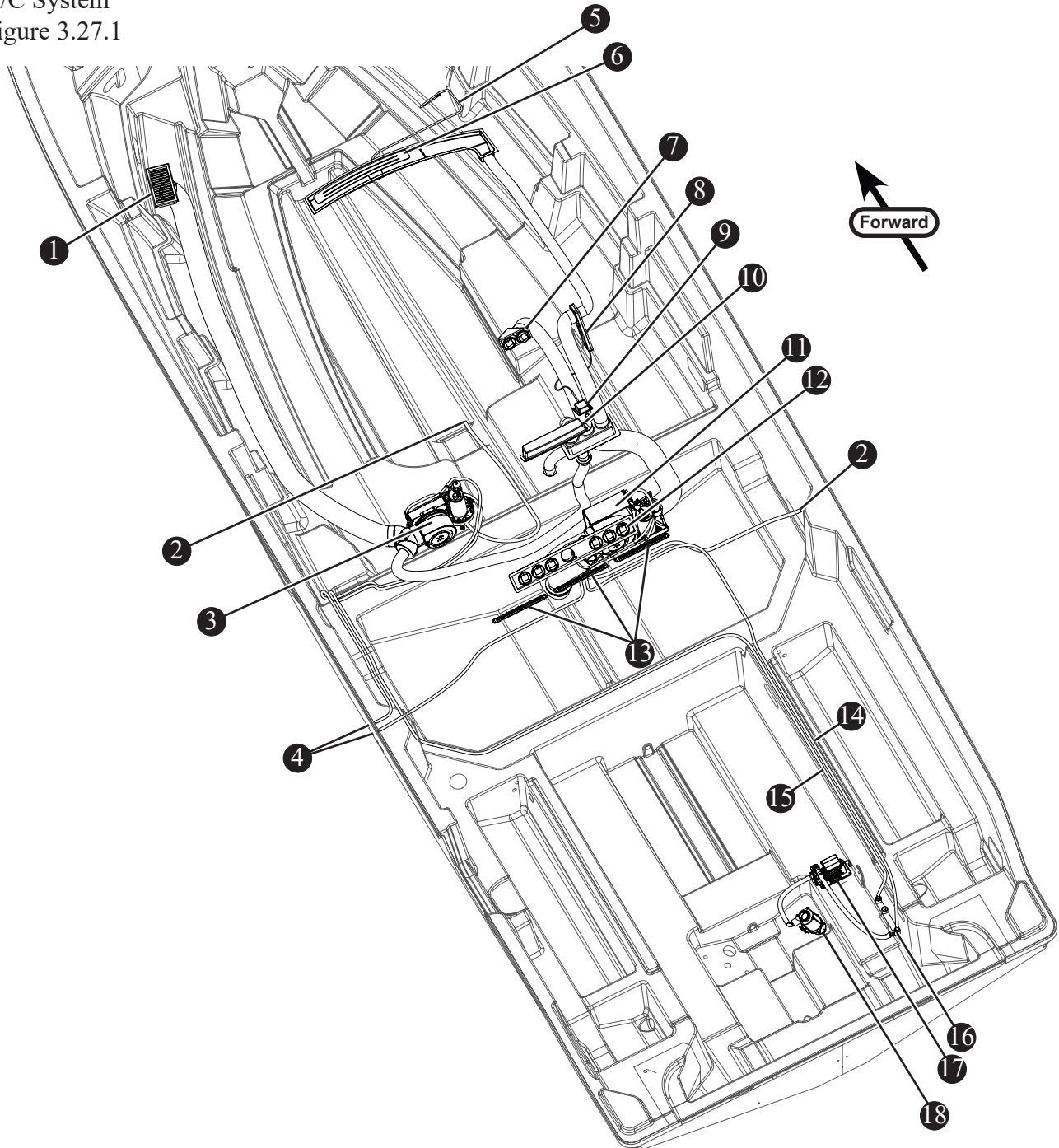
REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

Main A/C Distribution Panel  
Figure 3.26.1





A/C System  
Figure 3.27.1



- |                                 |                               |
|---------------------------------|-------------------------------|
| ① CABIN VENT                    | ⑩ LARGE HELM VENT             |
| ② CONDENSATE DRAIN (2)          | ⑪ DECK A/C                    |
| ③ CABIN A/C                     | ⑫ SMALL HELM SEAT VENT (6)    |
| ④ THRU-HULL DRAIN               | ⑬ HELM SEAT A/C INTAKE VENT   |
| ⑤ WINDSHIELD CONDENSATE DRAIN   | ⑭ DECK A/C WATER INTAKE HOSE  |
| ⑥ WINDSHIELD DEFOG VENT         | ⑮ CABIN A/C WATER INTAKE HOSE |
| ⑦ SMALL HELM VENT (2)           | ⑯ WATER DISTRIBUTION MANIFOLD |
| ⑧ WINDSHIELD DEFOG VENT VALVE   | ⑰ WATER PUMP                  |
| ⑨ WINDSHIELD DEFOG VENT CONTROL | ⑱ WATER SEACOCK/STRAINER      |

### Air Conditioning (A/C) Raw Water Strainer

The air conditioning system, has two raw water pumps to cool the A/C units located inside the mechanical access hatch, (see Figure 3.27.1). Each pump has a *Raw Water Seacock/Strainer*. Periodically check the strainers for debris and clean as necessary (see Figure 3.28.1). To inspect strainer:

1. Ensure A/C units are turned off.
2. Close intake seacocks (see Figures 3.27.1 and 3.28.1).
3. Using *TWO-PRONGED SPANNER TOOL*, located in the owner's packet (see Figure 3.28.1); unscrew strainer cover.
4. Remove internal *FILTER* and remove debris.
5. Replace the *FILTER* and secure cover.

NOTE: If A/C system does not functioning properly after cleaning seacock/strainer and water is not draining from the A/C thru-hull, flush the system as described in *Flushing Air Conditioning System*. If flushing doesn't resolve the issue, contact a Boston Whaler dealer for service.

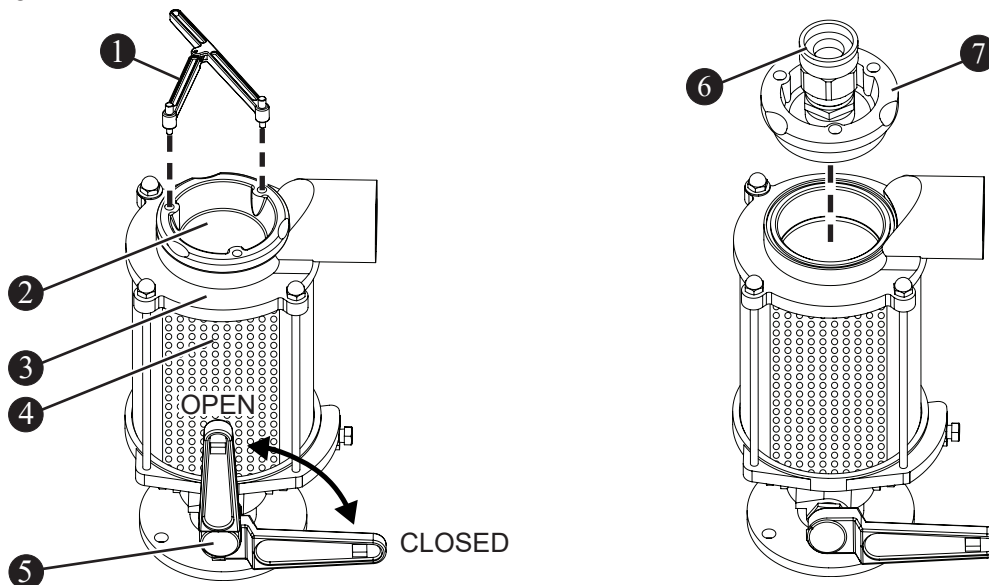
### Flushing Air Conditioning System

When the boat is not in use, debris can settle inside the A/C pumps. This can interfere with pump impeller operation causing the A/C unit to overheat and shutdown. Flush the system with freshwater upon returning to the dock or any time the boat is left in the water any length of time with the A/C seacocks open. To flush the system:

1. Ensure A/C units are turned off; close *RAW WATER SEACOCK /STRAINER* (see Figure 3.27.1 and Figure 3.28.1).
2. Using the *TWO-PRONGED SPANNER TOOL* (see Figure 3.28.1), turn strainer cap counter clockwise to loosen; remove and set aside.
3. Screw in *FLUSH CAP*, located in the owner's packet (see Figure 3.28.1). Tighten clockwise with spanner tool.
4. Attach a garden hose to *HOSE FITTING* on the flush cap. Turn on water and run for 10 minutes.
5. Turn off freshwater and replace strainer cap. Tighten with spanner tool and repeat process on second A/C strainer.

Raw Water Seacock/Strainer

Figure 3.28.1



- 1 TWO-PRONGED SPANNER TOOL
- 2 STRAINER CAP
- 3 STRAINER
- 4 FILTER

- 5 SEACOCK
- 6 HOSE FITTING
- 7 FLUSH CAP

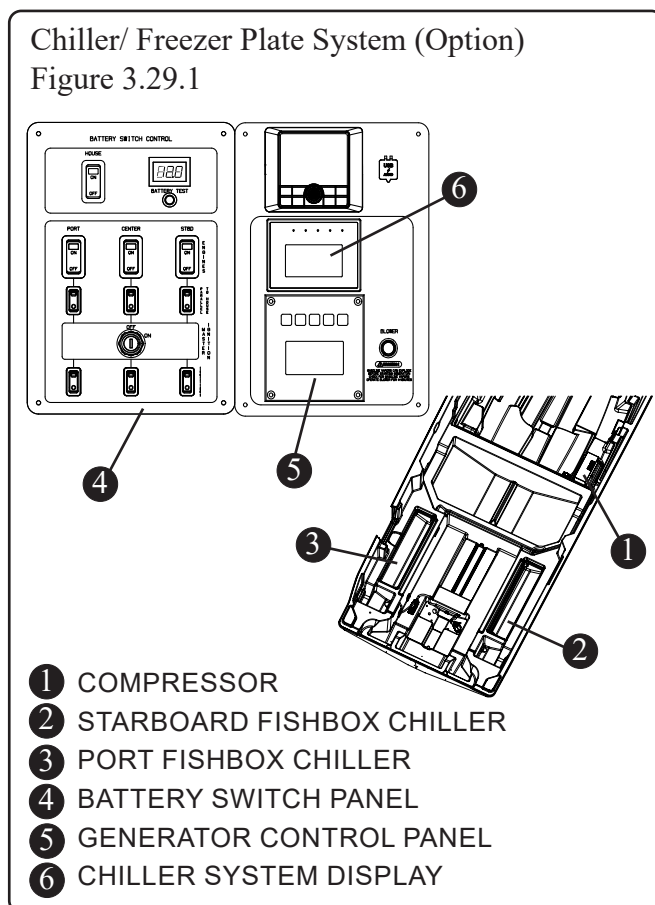
## Chiller/Freezer Plate System (Option)

If equipped, the refrigerated chiller/freezer plate system (see Figure 3.25.1) transforms the fishboxes and the rear-facing cockpit cooler into refrigerated units. The system utilizes the A/C intake seacock to provide the raw water necessary for the unit to function. Water is discharged via a thru hull fitting.

The compressor for the freezer plate(s) is located behind an access panel in the starboard side of the cabin behind the VacuFlush toilet. Limited access is possible through the door in the panel. For complete access to the compressor the panel must be removed.

NOTE: The A/C PUMP, and FRZ PLATE breakers on the AC Main Breaker Panel must be ON for the systems to function.

The freezer plates can be turned ON and OFF using the Theft Deterrent System w/remote connectivity (option).



## Generator

**It is recommended that you read and understand the information in the manufacturers owners manual before operating the generator.**

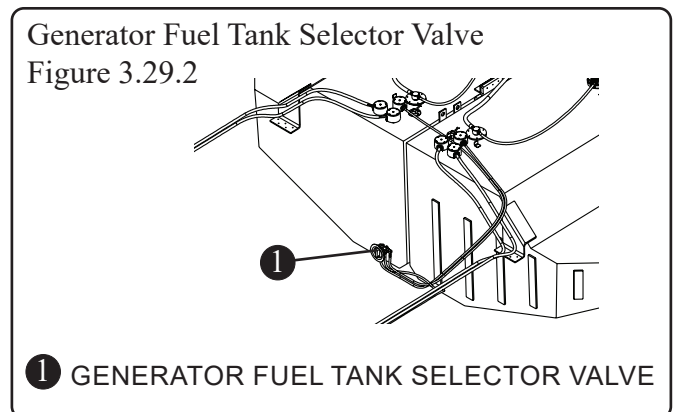
Your boat's AC electrical system operates on 120V/60Hz or 220V/50Hz from the generator and/or shore power.

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).

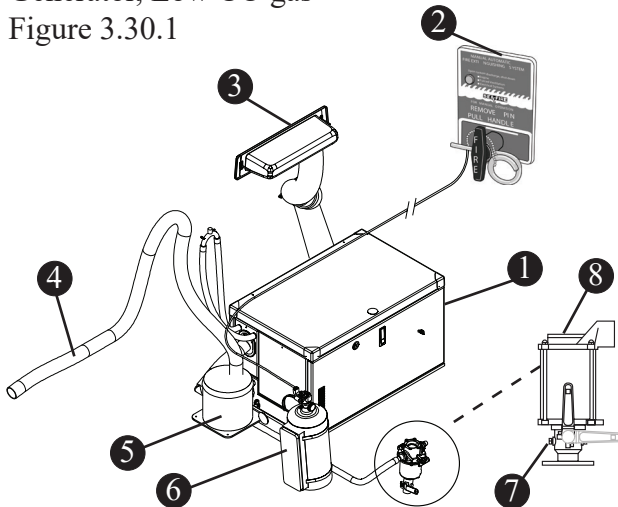
The generator has a built in cooling pump which draws cooling water through a seacock located in the aft machinery compartment. The raw water passes through a strainer before entering the engine cooling manifold. The seacock **MUST** be open in order for the generator to function.

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 3.25.2).

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.

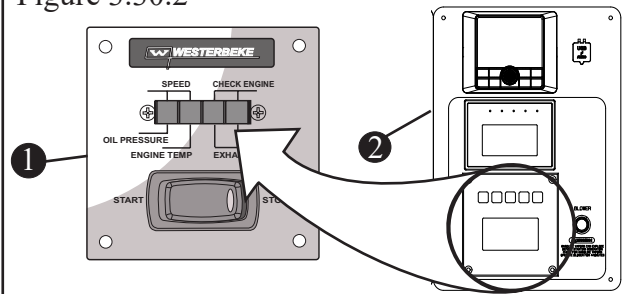


Generator, Low CO gas  
Figure 3.30.1



- 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

Generator Panel, Gas  
Figure 3.30.2

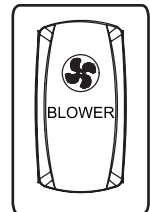


- 1 GENERATOR START/STOP PANEL
- 2 STEREO, FISHBOX FREEZER PLATE, BLOWER, GENERATOR PANEL

There is a remote operation panel also located on the stereo, fishbox freezer plate, blower, generator panel (Figure 3.26.2).

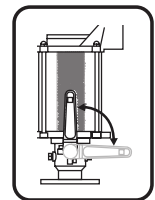
Your owner's packet will have the complete operations manual for your generator. Be sure to read the manual before operating the generator. Several key points are indicated below:

- Locate the blower switch on the DC Breaker Panel and operate the blower for 4 minutes. Manually check the bilge for fuel or fuel vapor.

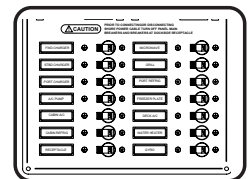


NOTE: Refer to the manufacturer's Operations Manual for a Pre-Start Checklist.

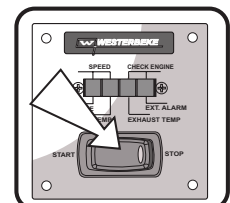
- OPEN the generator seacock.



- Make sure that ALL breakers on the AC Panel are switched OFF.



- Press the START/STOP button until the generator starts (the green light will illuminate).



## Starting the Generator

### ATTENTION

Ensure seacock is open before starting. Close seacock when generator is not in use to prevent generator damage while underway.

### 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.

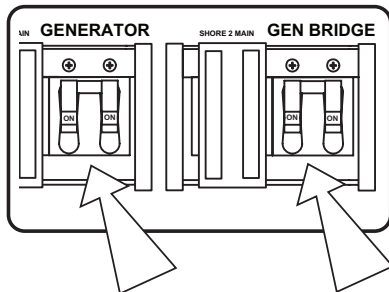


## ! WARNING

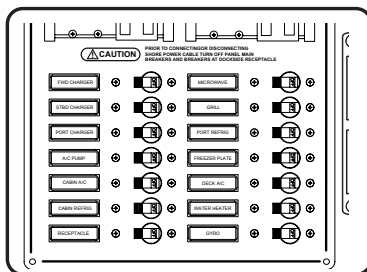
**Under no circumstances override the source select system.**

**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.

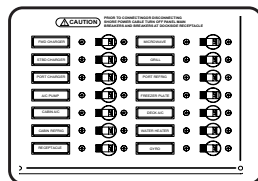


- After a successful start, breakers can be switched ON.

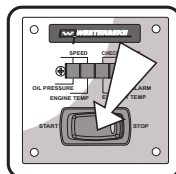


## Stopping Generator

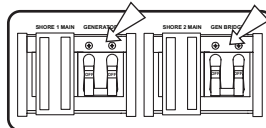
- Make sure that ALL breakers on the AC panel are switched OFF.



- 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 OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.



### Diesel Generator (Option)

It is recommended that you read and understand the information in the manufacturer's owner's 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 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

#### NOTICE

##### Fuel Recommendation #2 Diesel

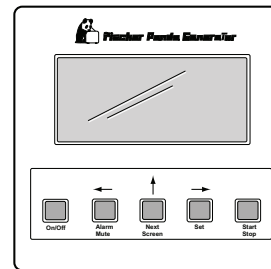
Use a clean, good quality diesel fuel with a cetane number of 45 or greater. Clean fuel prevents the fuel injectors and pumps from clogging. Avoid storing the fuel for more than a month. Take care to keep all dirt, water and other contaminants out of the fuel to prevent the growth of microbes. Microbes 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. The generator cover acts as protection and a sound shield. It can be removed by pulling latches located on the bottom of the housing.

Generator Control Panel

Figure 3.32.1



### 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.

### ! 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.

### Starting the Generator

### ! CAUTION

**Do not start the generator if water has accumulated beneath the generator.**

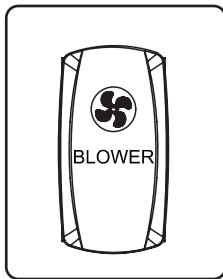
### ATTENTION

**Ensure seacock is open before starting. Close seacock when generator is not in use to prevent generator damage while underway.**

## Chapter 3 • Systems Overview & Operation

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:

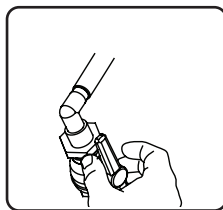
- Locate the blower switch on the AC Breaker Panel and operate the blower for four (4) minutes. Manually check the bilge for fuel or fuel vapor.



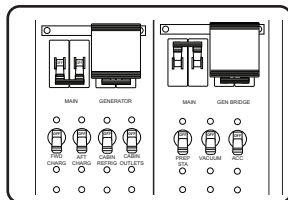
NOTE: ALWAYS run the blower when operating below cruising speed.

- Refer to the Manufacturers Operations Manual for a Pre-Start Checklist.

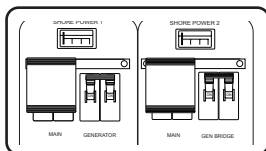
- OPEN the generator seacock.



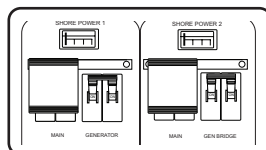
- Make sure that ALL breakers on the AC Panel are switched OFF.



- Slide the selector on the AC Panel to expose the GENERATOR & BRIDGE switches.



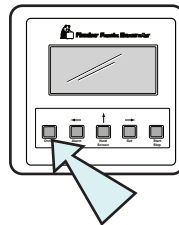
- Switch the line breakers ON.



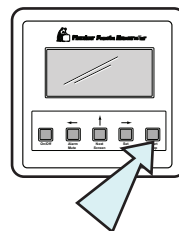
### WARNING

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. The light will begin blinking and the generator will start.

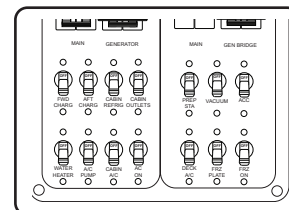


**DO NOT press the button more than once.** Allow for a 60 second cool down period between cranking attempts.

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

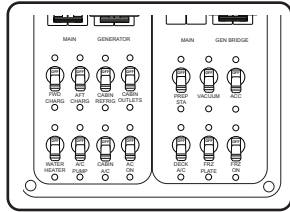
**DO NOT run the generator set out of fuel because the fuel lines will draw in air and necessitate bleeding the system before restarting the unit. The operations manual included in the owners packet will have complete instructions on bleeding the fuel system should it be needed.**

### Stopping The Generator

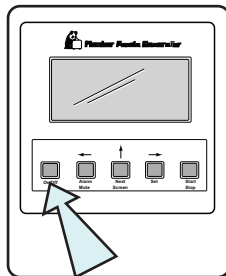
### NOTICE

**If the electrical load has been operating at more than 70% or if the ambient temperature is higher than 77F, generator temperatures should be stabilized by turning off breakers at the AC panel and letting generator run for a minimum of 5 minutes before shutting down.**

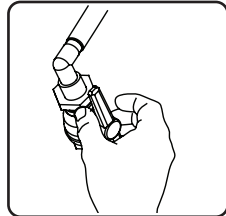
- Make sure that ALL breakers on the AC Panel are switched OFF.



- Press the On/Off button to de-activate the panel.



- Close the seacock.



## Maintenance

### 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.**

### ! WARNING

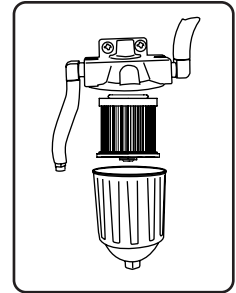
**ACCIDENTAL STARTING** can cause severe injury or death. Disconnect the battery cables before working on the generator set. Disconnect the negative, (-) cable first when removing and reconnect it last when replacing.

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.

### 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

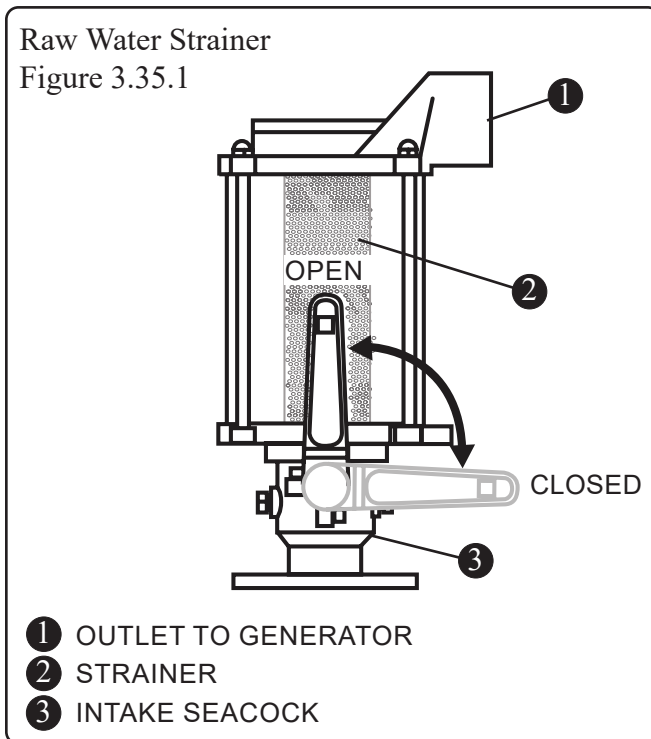
Periodically check the raw water strainer for debris and clean as necessary (see Figure 3.35.1).

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.

### 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 OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.



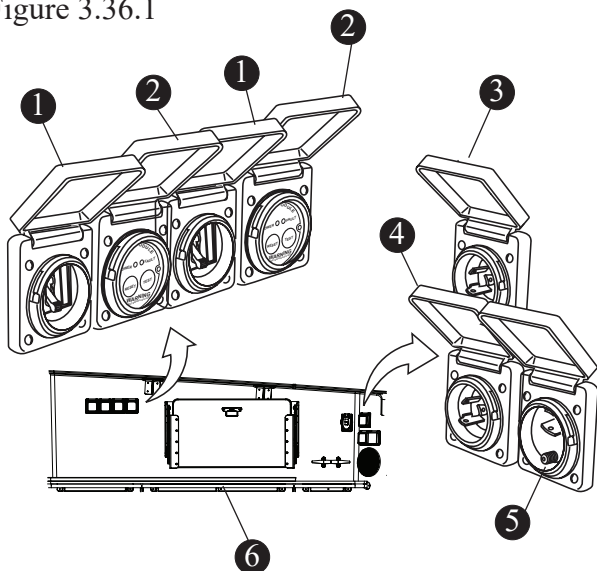
REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

## 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  
Figure 3.36.1



- 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.

## Equipment Leakage Circuit Interrupter (ELCI)

The shore power system on your boat includes an ELCI located on the aft starboard freeboard.

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.



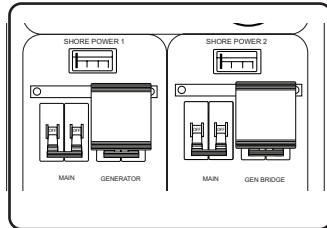
## ⚠ CAUTION

- 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

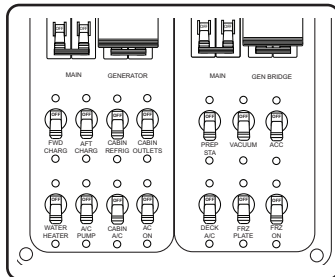
Before making shore power connections make sure your boat is properly moored.

- Slide the covers on the panel to expose SHORE POWER # 1 & SHORE POWER #2 breakers.

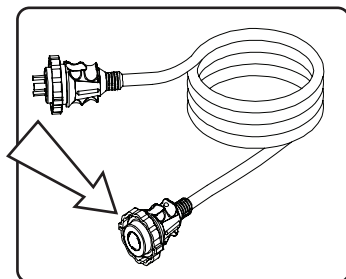


- Make sure the breakers are OFF.

- Assure that ALL component breakers are OFF.



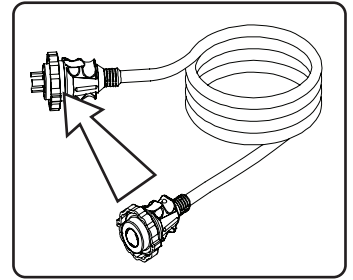
- Using the shore cords, (supplied) connect the female plug to the boat receptacle first.



## ⚠ CAUTION

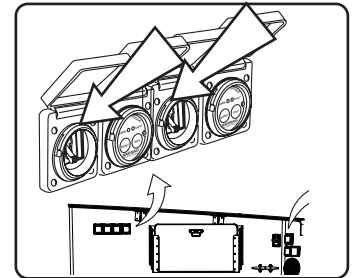
Shore power cords should be secured or routed to avoid laying or falling into water and to avoid stress on shore power plug and inlet.

- Next connect the male plug to the dockside panel.

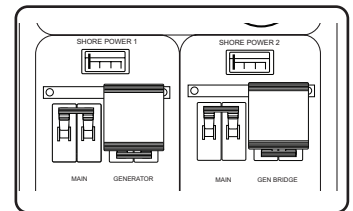


- Turn dockside panel breakers ON.

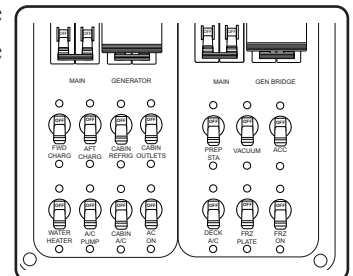
- Switch the boat side shore power breaker(s) ON.



- 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

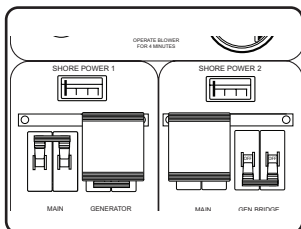
It is imperative that the shore power outlet is dry before plugging into the dock power outlet.

## Single Cord Shore Power

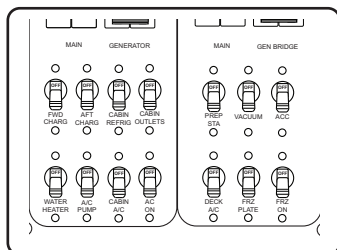
In some cases you may be limited to operating your boat's equipment utilizing only a single shore power cord. The following procedure will provide the most efficient power to the boat.

- Make sure ALL breakers are OFF.

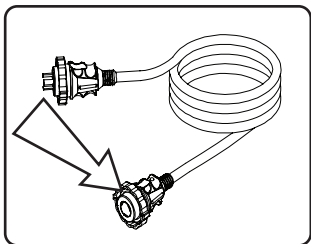
- Slide the covers on the panel to expose the SHORE POWER #1 & GEN BRIDGE breakers.



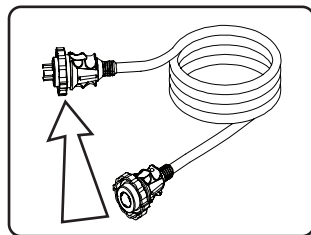
- Ensure that ALL component breakers are OFF.



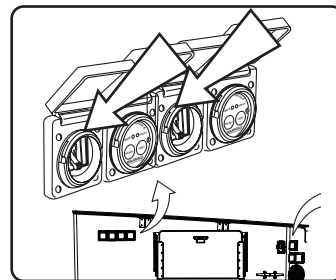
- Using the shore cords, connect the female plug to the boat receptacle first.



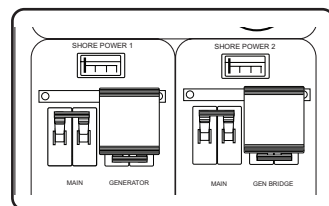
- Next connect the male plug to the dockside panel.



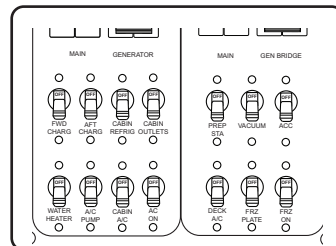
- Turn dockside panel breaker ON.
- Switch the boat side shore power breaker ON.



- 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.

### 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 OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### Fire Suppression System

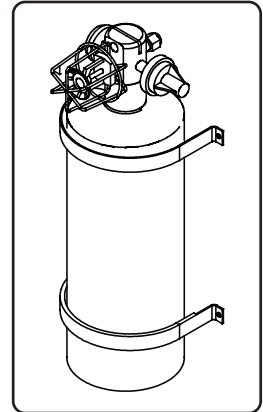
#### **⚠ DANGER**

**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.**

It is recommended that the fire suppression tank be weighed on an accurate scale every six months. There is a chart in the manufacturer's 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.

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.

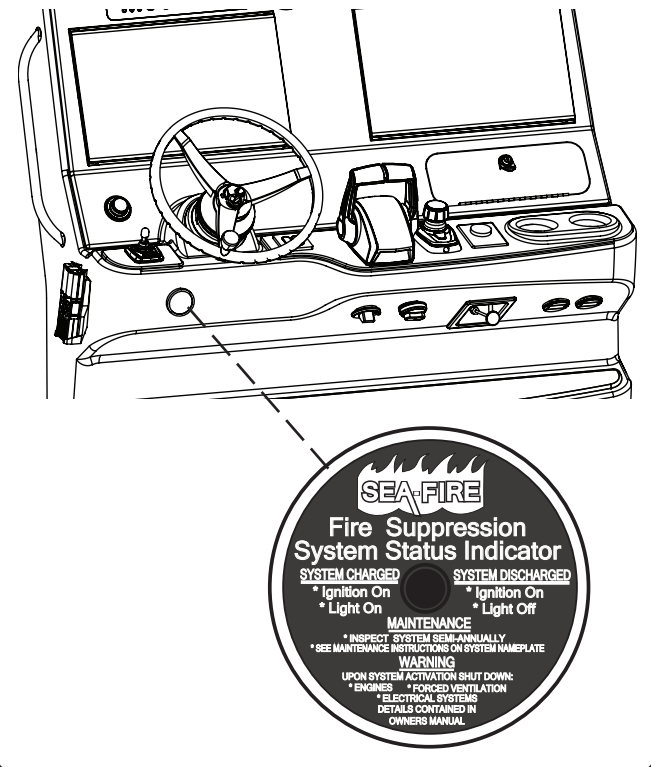
### To Operate

1. Pull pin securing the handle.
2. Pull red FIRE handle quickly and briskly.

REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

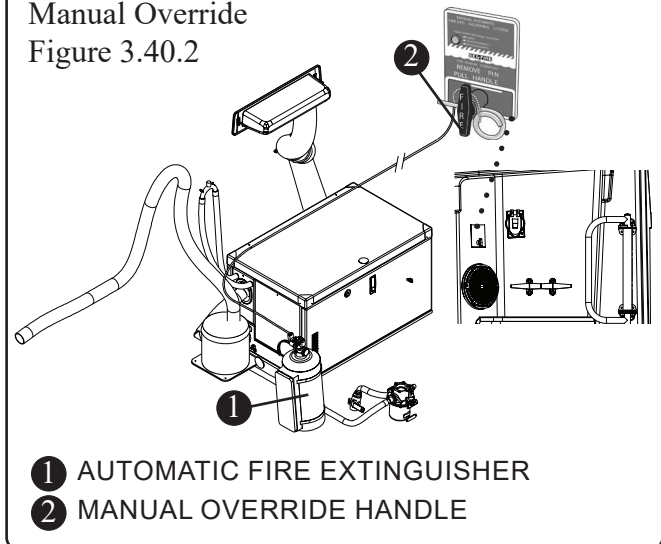
Fire Suppression System Panel

Figure 3.40.1



Manual Override

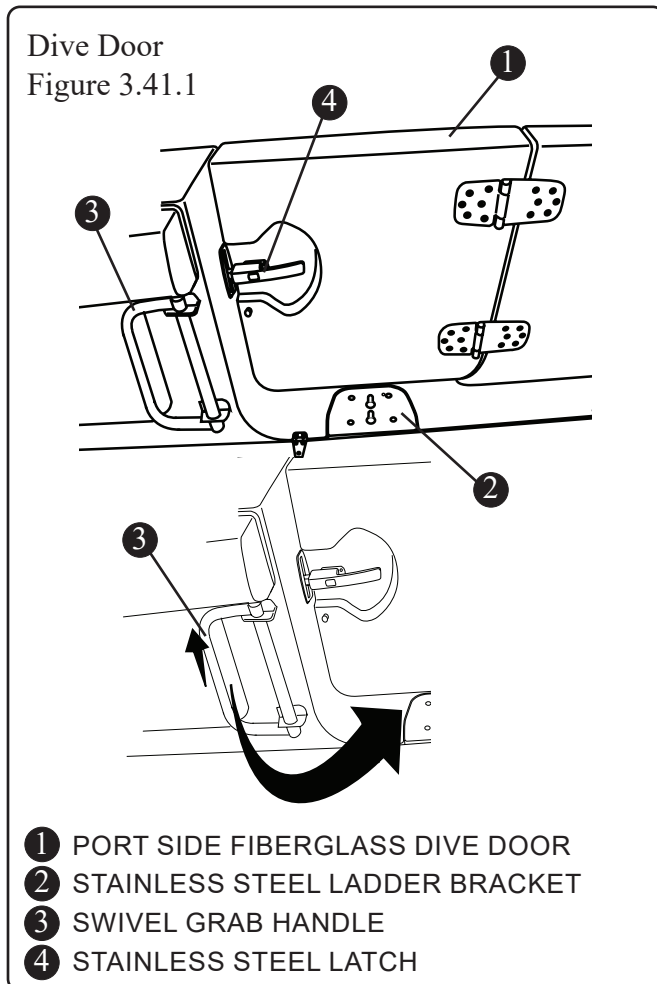
Figure 3.40.2



## Dive Door

The innovative design of your boat includes a port side 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 accommodates a removable ladder which is stowed in base of the aft bench seat when not in use.



## ⚠ DANGER

Ensure that door is closed and securely latched when boat is underway.

## Dive Ladder

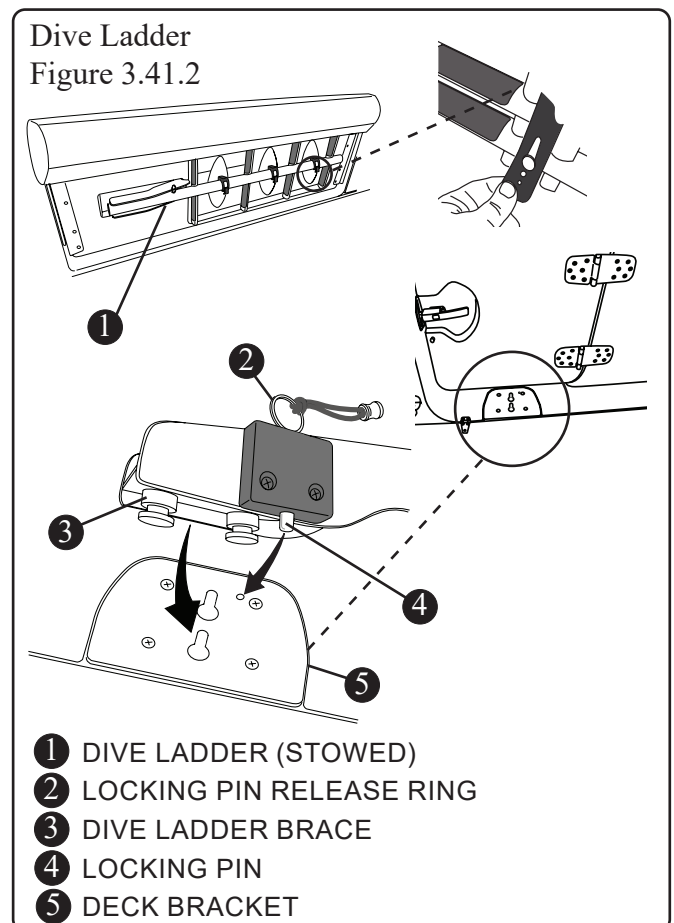
### ⚠ DANGER

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:

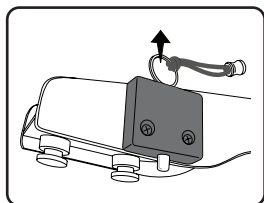
- Remove the ladder from its stowed position on the base of the aft bench seat.
- Rotate the brace at the top of the ladder so that it is perpendicular to the shaft.
- Insert the two pegs on the brace into the deck bracket.
- Secure the ladder into place by pushing the brace outboard until it seats firmly into the bracket and the locking pin has snapped into place.





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.

## NOTICE

**ALWAYS use bungee straps to secure the dive ladder in the aft bench seat brackets.**

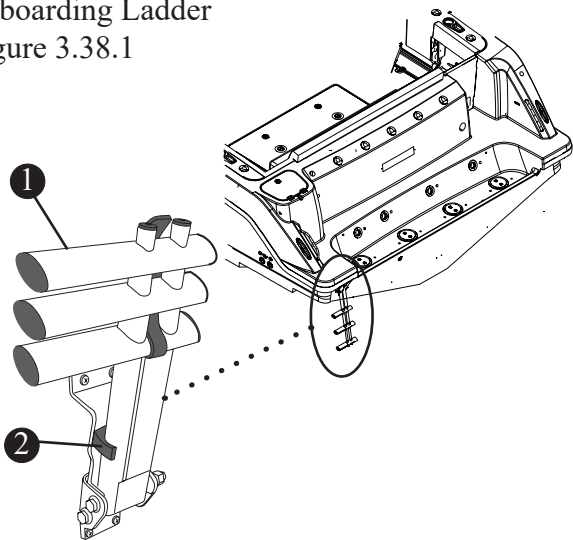
## Reboarding Ladder

### **⚠ 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.

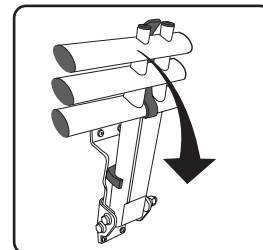
Reboarding Ladder  
Figure 3.38.1



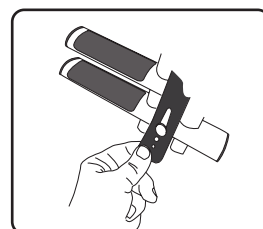
- ① REBOARDING LADDER (STOWED)
- ② HOLDING BRACKET

To deploy the reboarding ladder:

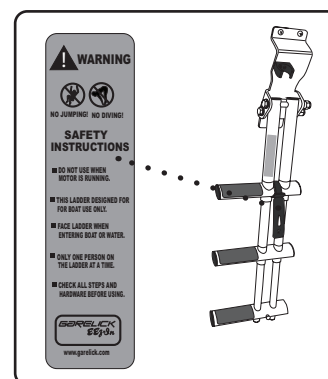
- Pull the ladder from the holding bracket and rotate downward.



- Release the steps by pulling down on the strap holding the steps.



- Extend the ladder to its full length.



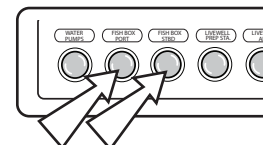
## Fish Boxes

Your boat has two deep well, insulated fish boxes. One located in the starboard cockpit deck and one in the port cockpit deck.

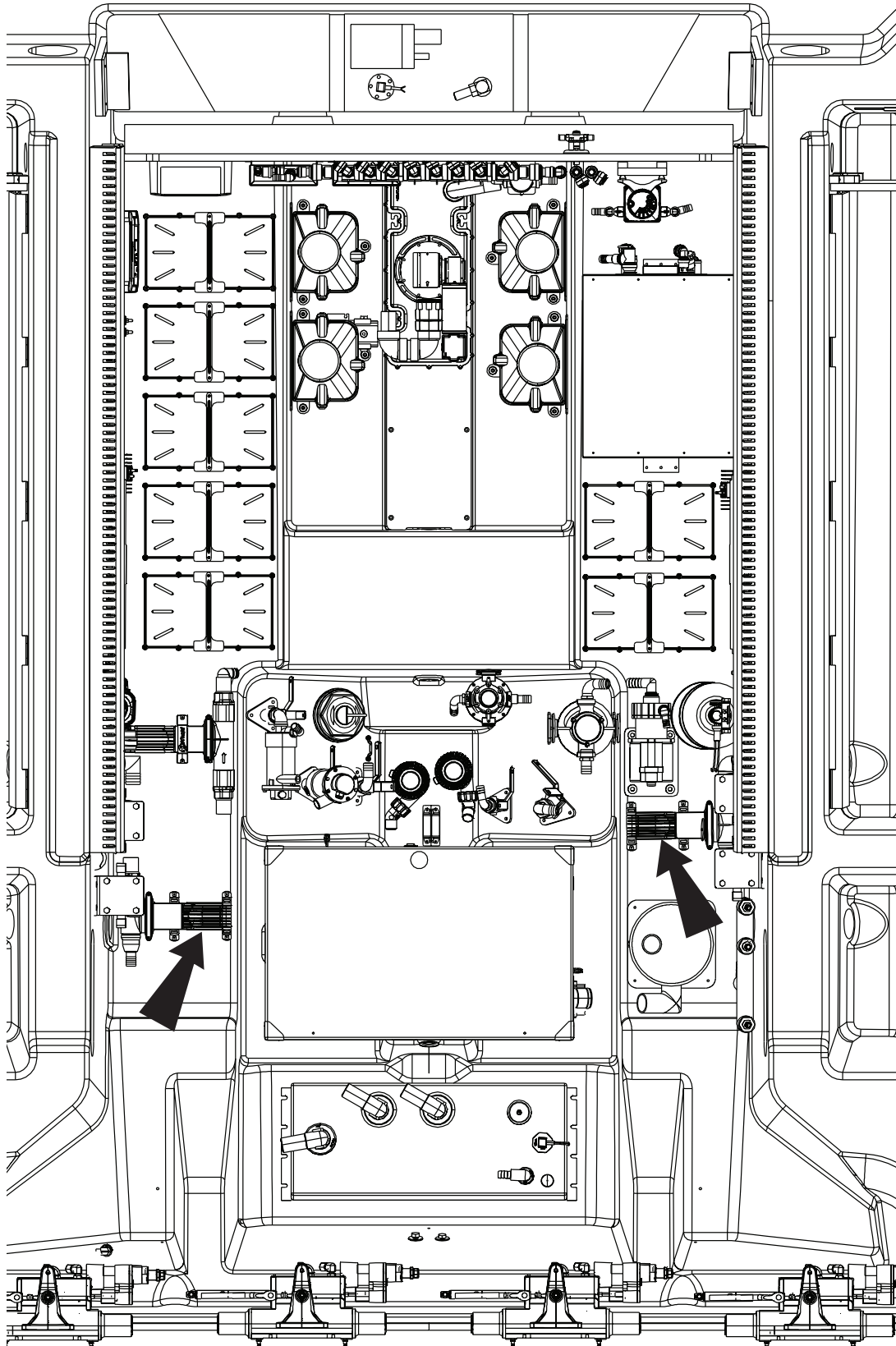
The boxes have gaskets in the lids and draw latches for a secure seal. The fish boxes utilize an electrical pump system to discharge water overboard by way of thru-hull fittings port and starboard.

The discharge pumps are located in the bilge and can be accessed through the hatch in the aft cockpit deck (see Figure 3.41.1).

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.



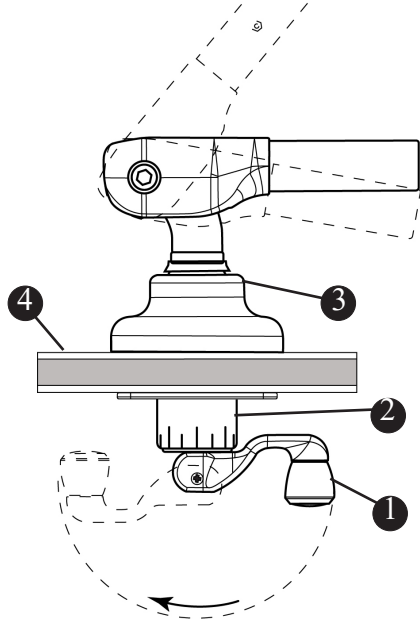
Fish Box Discharge Pumps  
Figure 3.43.1



## Radial Outriggers (Option)

Radial Outriggers (Option)

Figure 3.44.1

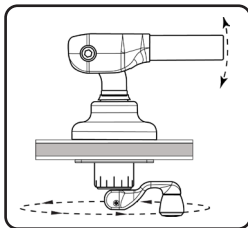


- 1 ROTATION ADJUSTMENT HANDLE
- 2 LOWER UNIT
- 3 UPPER UNIT
- 4 HARDTOP

If equipped, there are two 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. The outriggers use the same handle for raising, lowering, and swinging the outriggers.

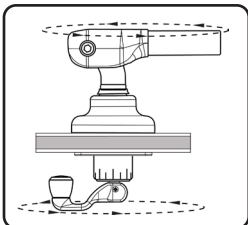
### To Raise and/or Lower the Outriggers:

With the handle in the “down” position use the knob for grip and rotate the handle clockwise to raise or lower the outtrigger in the desired position.



### To Swing the Outriggers in and/or out:

Once the desired height is reached, flip the handle to the “up” position. Grab firmly on the handle, and rotate the handle to position the outtrigger to the desired fishing position.

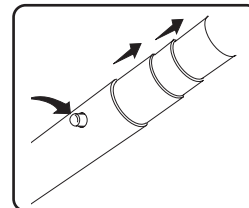


Leaving the base in the down position will keep the base from rotating while fishing and running.

### Operation

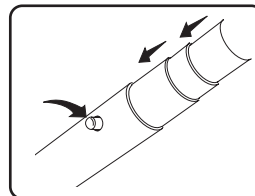
#### To extend the outriggers:

Starting with the outboard section, extend each section out until the locking button snaps into place.



#### To retrieve the outriggers:

Starting with the inboard most section, push in the locking button on each 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.

## ! CAUTION

**Always ensure clearance of bridges, lights, power lines, etc. while operating your vessel.**

## ATTENTION

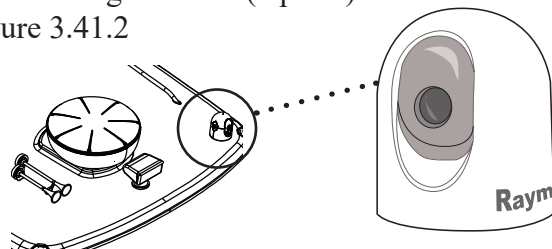
**The outriggers have an operable angle (up and down) of 65 degrees to 10 degrees. Please keep this in mind when making adjustments to your outriggers.**

REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

## Thermal Night Vision (Option)

Thermal Night Vision (Option)

Figure 3.41.2



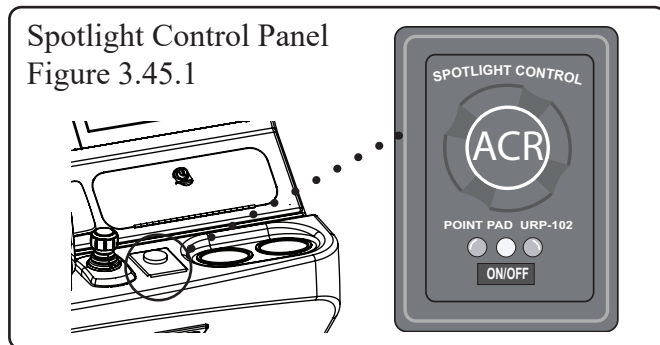
If equipped, the fixed mount thermal night vision camera (Figure 3.41.2) gives the operator the ability to detect floating objects, navigation aids, other vessels and even people in the water at night using thermal imaging technology.

The camera is controlled remotely from the infrared camera application on the helm display.

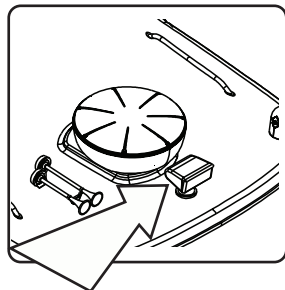
REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

## Spotlight

Spotlight Control Panel  
Figure 3.45.1



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)

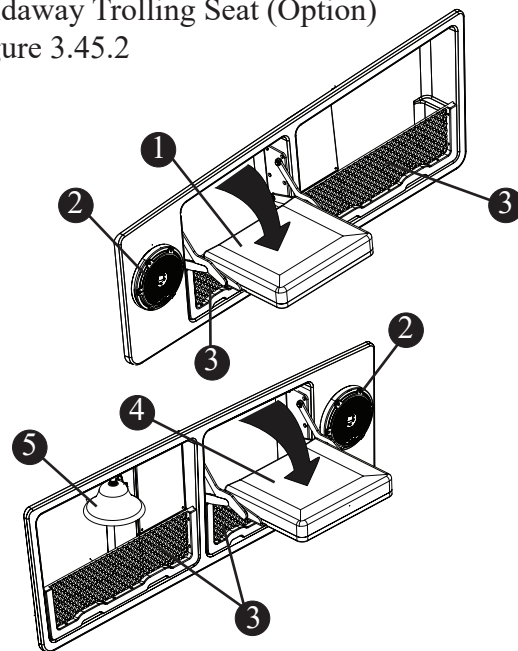
### CAUTION

**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 helm. The seat is folded away into the freeboard when not in use but can be dropped down to provide stable additional seating when necessary.

## Foldaway Trolling Seat (Option)

Figure 3.45.2



- 1 PORT FOLDAWAY TROLLING SEAT
- 2 STEREO SPEAKER
- 3 NETTED STORAGE
- 4 STARBOARD FOLDAWAY TROLLING SEAT
- 5 SHIP'S BELL

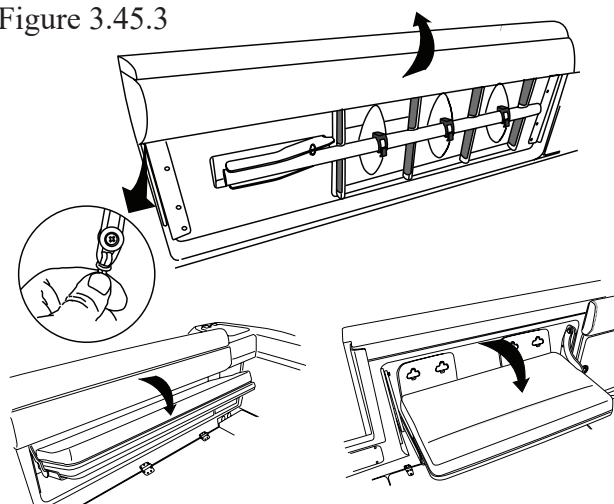
Simply lift up on the seat using the molded hand hold and pull away from the freeboard to drop down in a seated position.

## Foldaway Aft Bench Seat

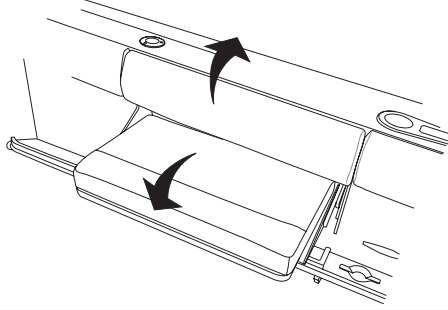
When the aft bench (Figure 3.42.3) is not in use it can be folded flush into the transom. To use the seat; raise the bolster, then, using the handle lift the seat up and out toward you and push down.

## Aft Bench Seat

Figure 3.45.3



Starboard Cockpit Bench Seat  
Figure 3.46.1



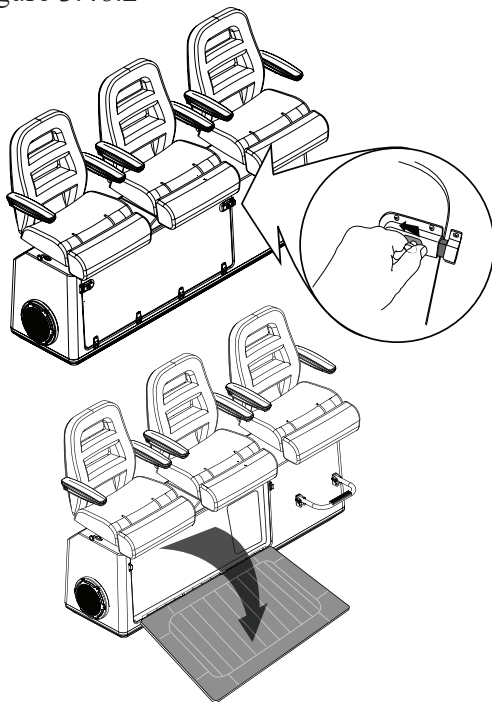
## Foldaway Starboard Bench Seat (option)

If equipped, the starboard bench (Figure 3.43.1) can be folded flush into the gunwale 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  
Figure 3.46.2



## Bow Table (Option)

### ATTENTION

Cover tables with the included cover when not in use. Refer to teak care instructions in chapter 5.

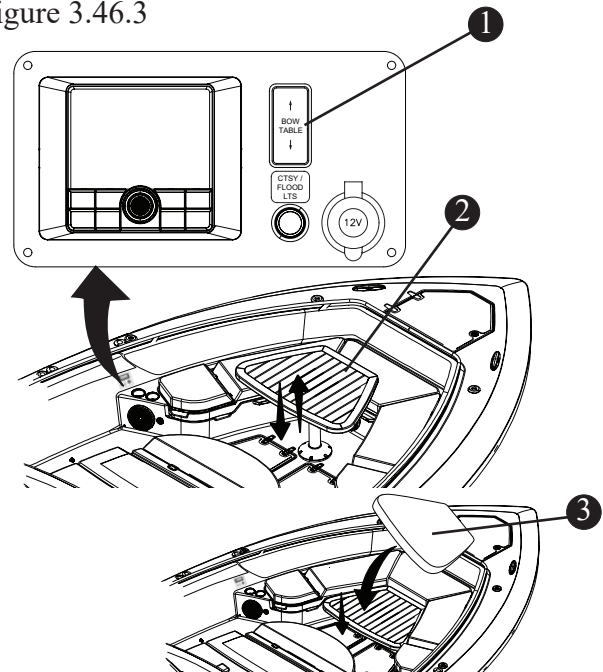
The optional bow table is electrically actuated, powered by the house batteries. The switch to raise and lower the table is located on the port side wall of the bow.

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)  
Figure 3.46.3



- 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 turned 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 Lounge

The forward lounge provides comfortable seating with fold-down armrests, four 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

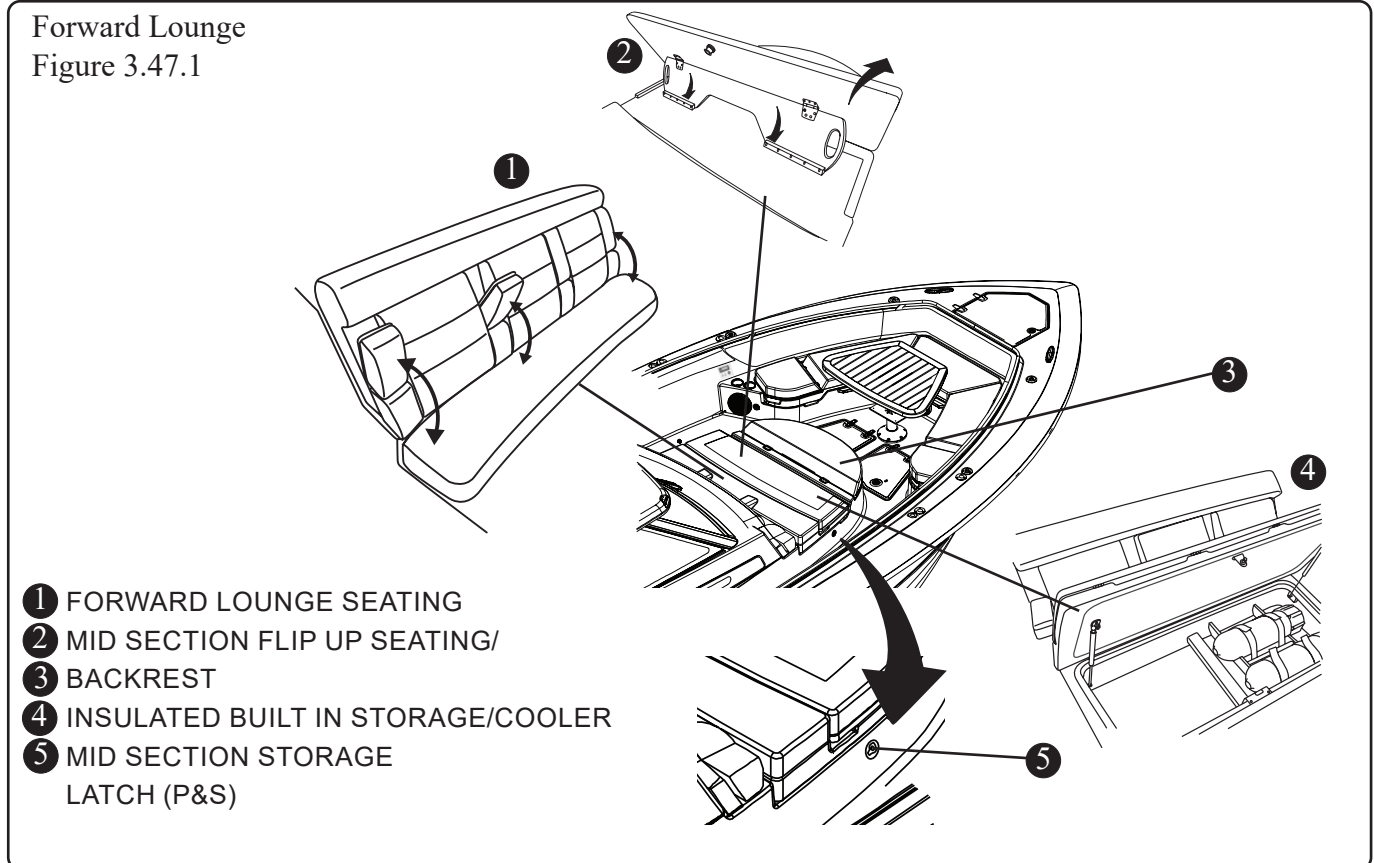
- Wash with soap and water.
- Lubricate with standard marine lubrication.

### Gyroscopic Stabilizer (Option)

If equipped, the innovative gyro stabilizer (see Figure 3.455.1) 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 helm (see Figure 3.45.2).



## 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

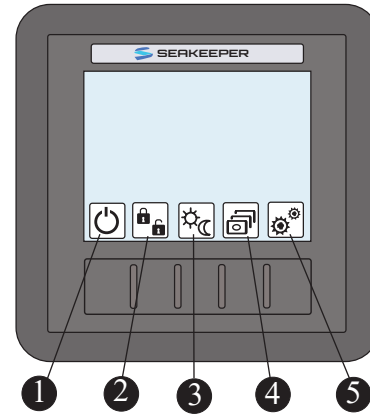
Full speed to zero RPM - approx 2 hours

## ! 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)

Figure 3.48.2

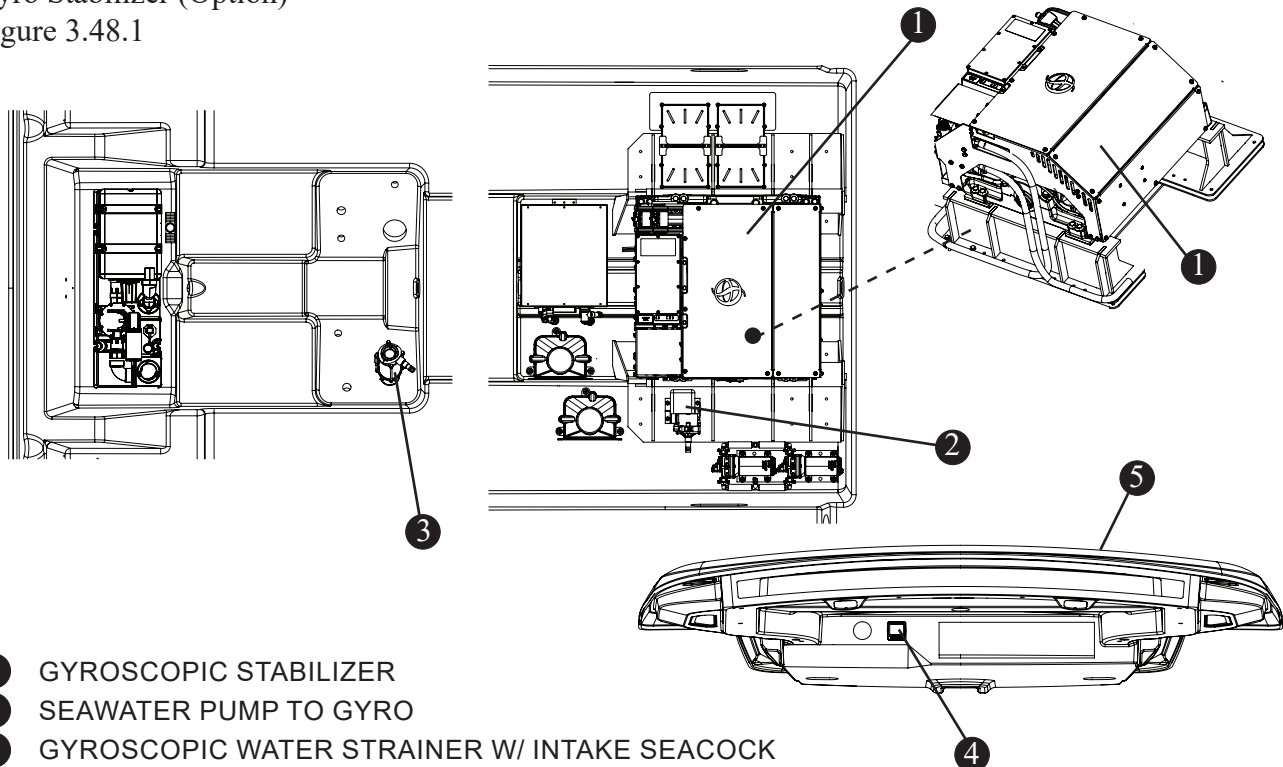


- ① ON/OFF AND FAULT RESET
- ② GYROSCOPIC LOCK/UNLOCK
- ③ DISPLAY BRIGHTNESS (DAY/NIGHT)
- ④ SCREEN VIEWS (TOGGLE)
- ⑤ SETTINGS

REFER TO OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

Gyro Stabilizer (Option)

Figure 3.48.1



- ① GYROSCOPIC STABILIZER
- ② SEAWATER PUMP TO GYRO
- ③ GYROSCOPIC WATER STRAINER W/ INTAKE SEACOCK
- ④ GYROSCOPIC 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.

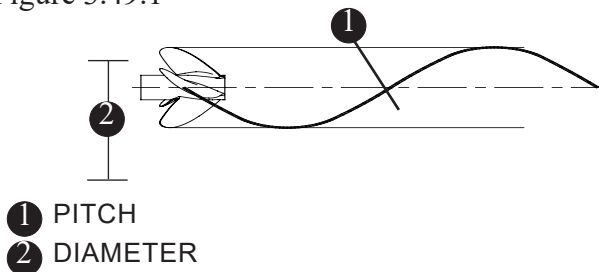
Trimming the engines OUT will push the stern down and raise the bow. If OUT too far the maximum engine RPMs cannot be achieved.

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.

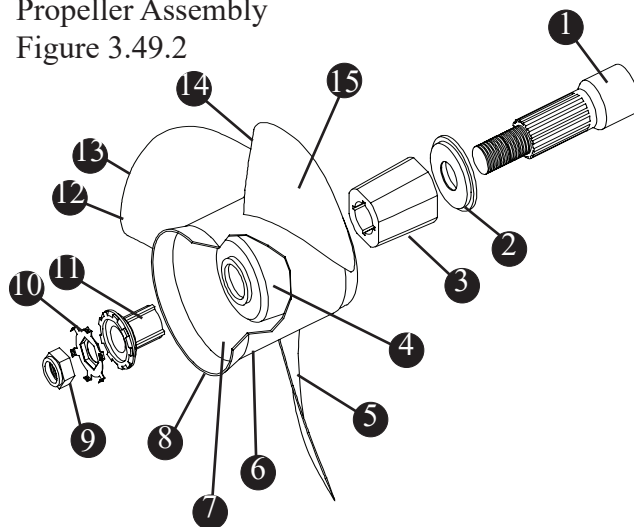
### Propeller Pitch & Diameter

Figure 3.49.1



### Propeller Assembly

Figure 3.49.2



- 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 helm starboard switch panel or by a hand held remote located in the bow locker.

The “WINDLASS” switch on the helm 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.

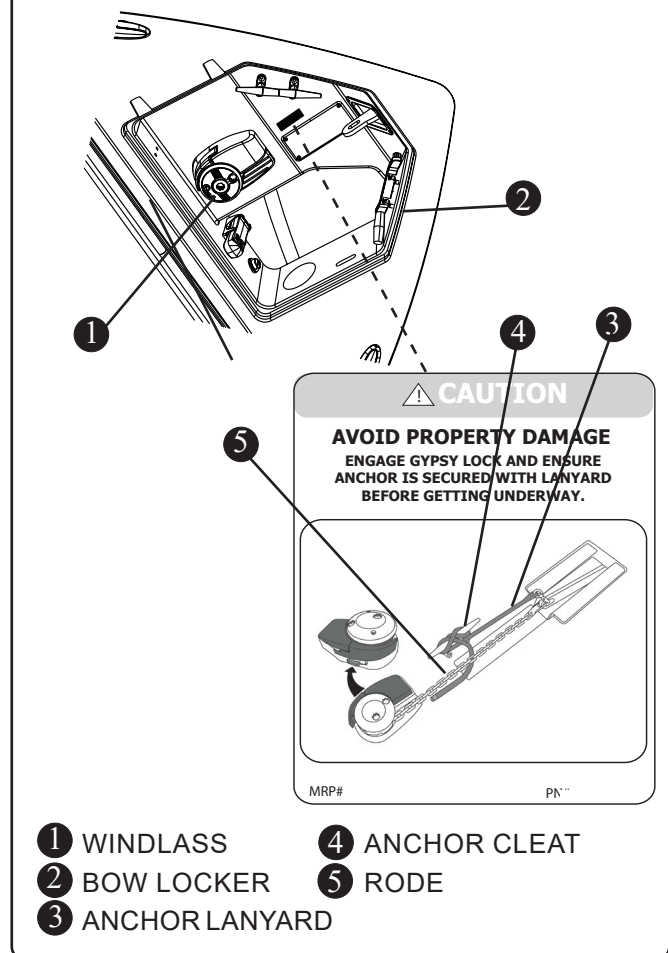
When not in use, the remote can be stored in a receptacle located on the bulkhead of the bow locker.

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.

The windlass is protected by an 100 amp circuit

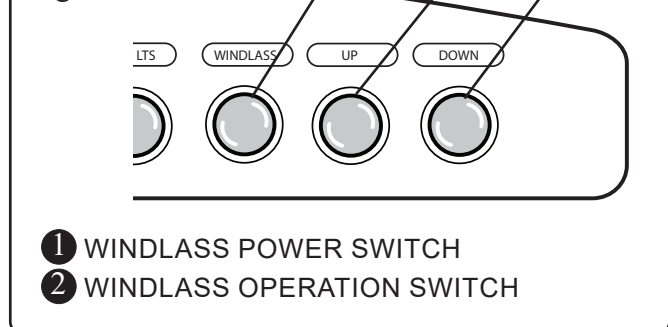
Windlass  
Figure 3.50.1



breaker located on the battery switch panel. 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  
Figure 3.50.2



## 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.

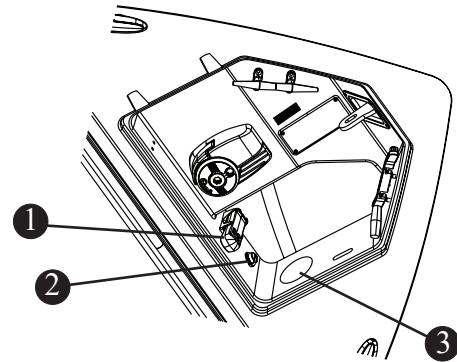
### Operating From the Bow

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. 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

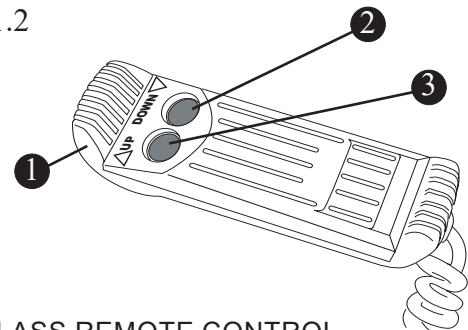
Figure 3.51.1



- ① HAND HELD REMOTE
- ② POWER SOURCE
- ③ EXPANDABLE WASHDOWN HOSE

### Anchor Windlass Remote

Figure 3.51.2



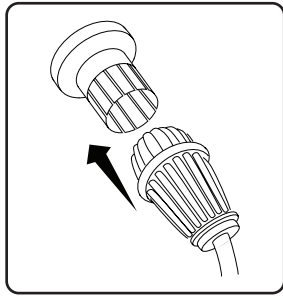
- ① WINDLASS REMOTE CONTROL
- ② “DOWN” BUTTON
- ③ “UP” BUTTON

## ⚠ WARNING

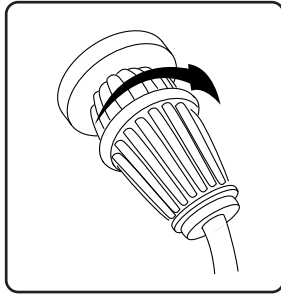
Keep hands, feet, hair and loose clothing clear of moving parts. Entanglement may cause severe bodily injury (i.e. lose of fingers or toes).



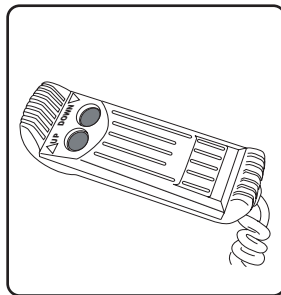
- Plug the power cable into the power receptacle on the aft of the bow locker (Figure 3.44.1)



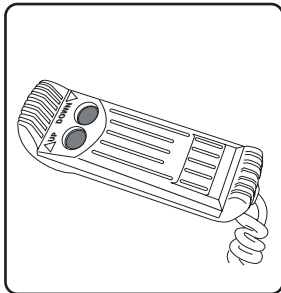
- Turn the forward portion of the plug clockwise to lock.



- **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.



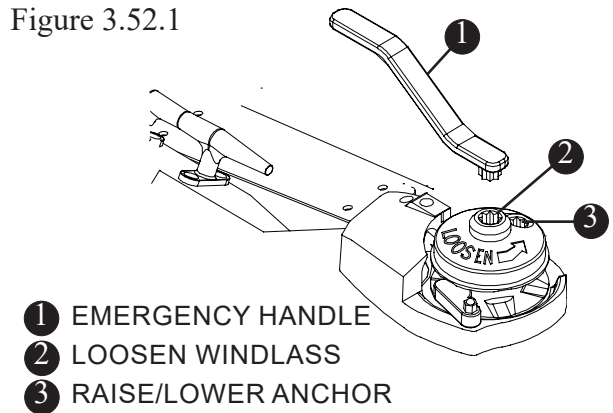
## Operating The Windlass Manually

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  
Figure 3.52.1



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.

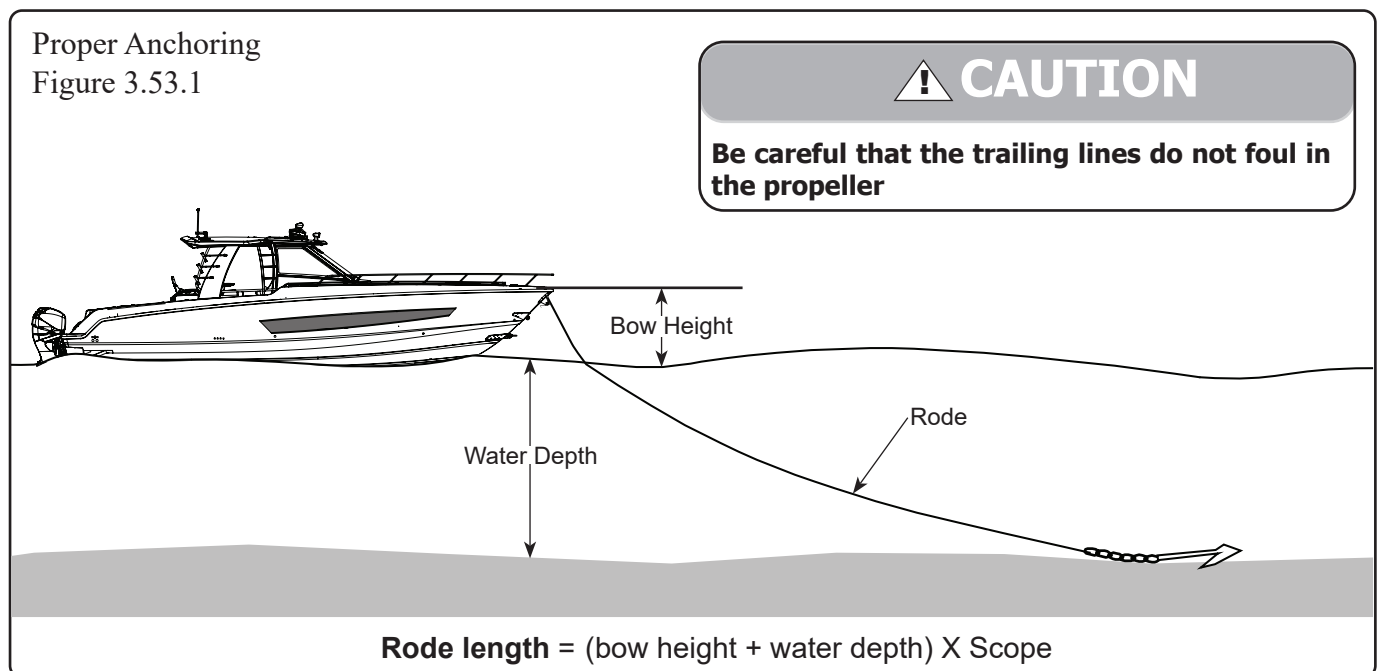
#### Example:

$$\text{Rode length} = (3 \text{ feet} + 10 \text{ feet}) \times 7^*$$

$$\text{Rode length} = 13 \text{ feet} \times 7^*$$

$$\text{Rode length} = 91 \text{ feet}$$

\* Scope may range from 5 to 10 or more. However, less than 5, the anchor will break out too easily.



### 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 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 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.**

## DC Electrical System

Your boat is equipped with an electrical system powered by a series of 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 facilitates the charging of the batteries when using shore power. The electrical system utilizes selector switches to control the delivery of power to engine ignition, engine trim system, helm instrumentation, lighting/navigation, livewell system, and add-on accessories and electronics.

## Batteries

### ⚠ DANGER

**Batteries contain sulfuric acid which can cause serious injury. Avoid contact with skin, eyes and clothing. If contact occurs, flush affected area with water and seek medical attention.**

### NOTICE

**Ensure batteries meet Mercury's AGM/CCA requirements.**  
**Store batteries in battery trays. Use retaining lid and nylon lock nuts to keep batteries secure.**

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

Use only AGM batteries with Mercury Verado engines. Table below is for reference purposes only.

Application	Group	Volts	MCA*	RC 25	Qty.
USA (SAE)	31	12	800	135 min	7

\* Marine Cranking Amps

\*\* Additional battery needed with triple engines.

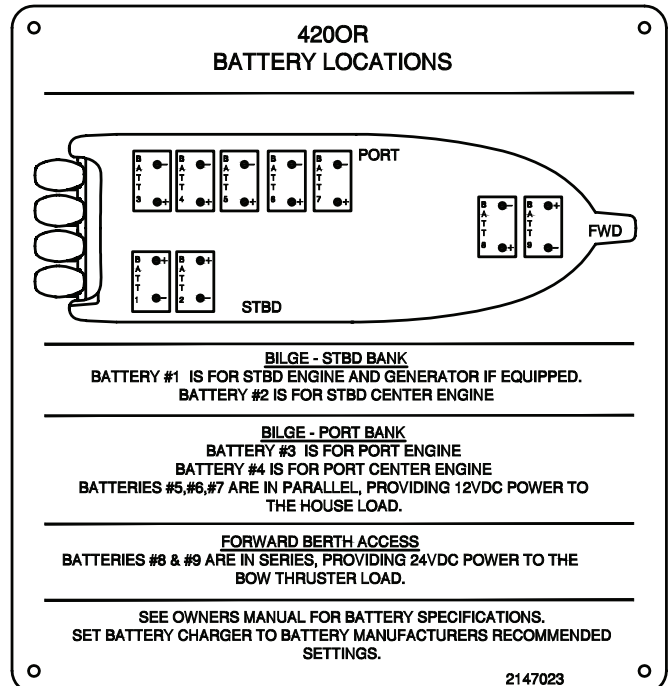
Application	Group	Volts	CCA*	Reserve	Qty.
Int'l (EN)	31	12	975	65Ah	7

\* Cold Cranking Amps

## Battery Trays

Batteries are secured in battery trays and held in place by retaining brackets (Figure 4.2.1). The trays ensure that while underway the batteries do not move around, thus causing damage to components fitted in the same area. To remove battery(s), disconnect negative wires followed by positive wires, and then remove retaining lid and hold down on battery tray.

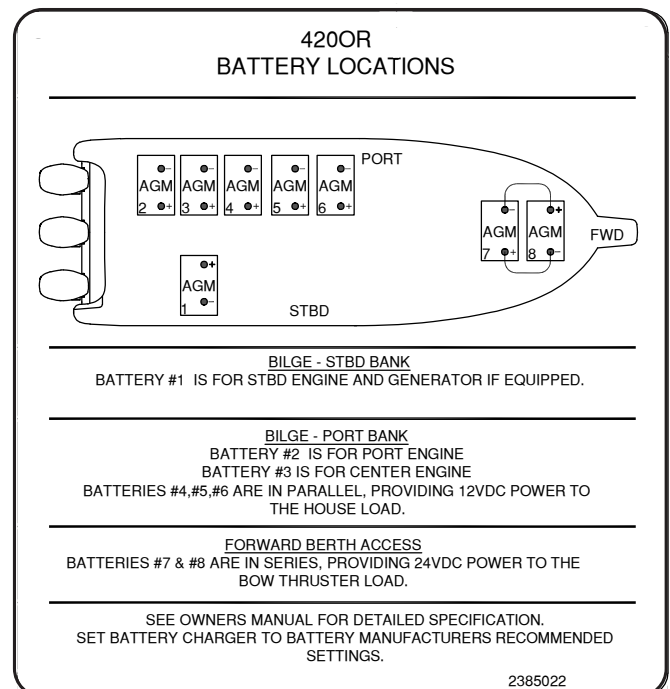
## Standard Battery Plate



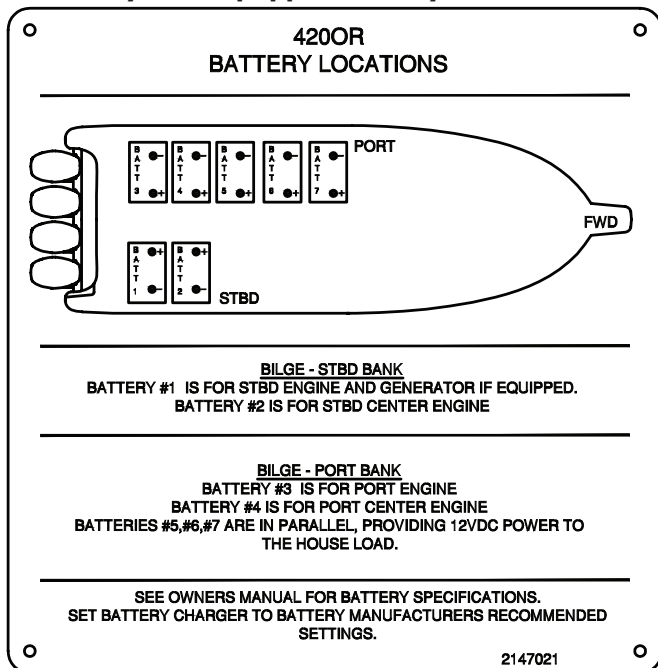
### ⚠ WARNING

**Use only deep-cycle, sealed design batteries for bow thruster. Failure to do so will result in an increased and dangerous presence of battery discharge gases accumulating in forward cabin.**

## V12 Engine Equipped Battery Plate



## Joystick Equipped Battery Plate



## NOTICE

**The bow thruster, battery charger, and battery trays are deleted w/ joystick option.**

## 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.

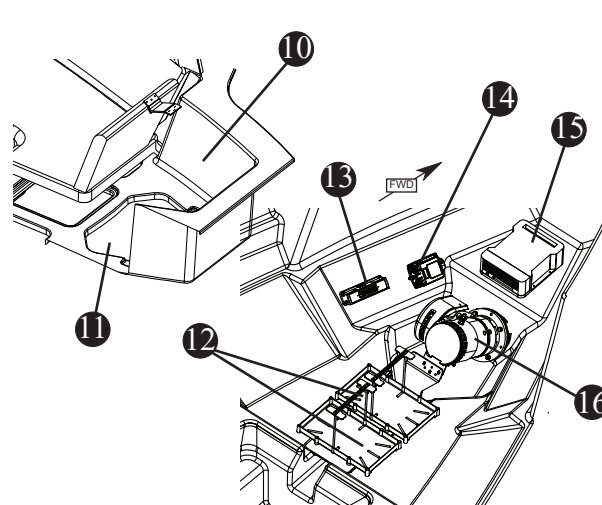
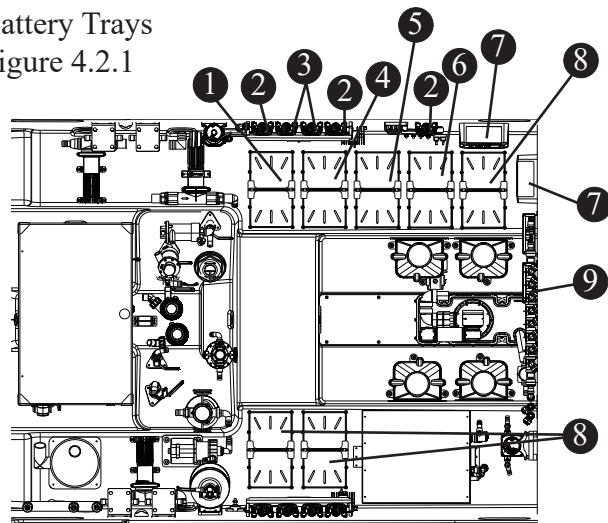
## Battery charger

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.

## Overload Protection

If an electrical short or overload occurs in the electrical system the charger will reduce its output

Battery Trays  
Figure 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 FRESHWATER 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 option

NOTE: When equipped with optional V12 engines, battery configuration varies.



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.

## Charge Rate

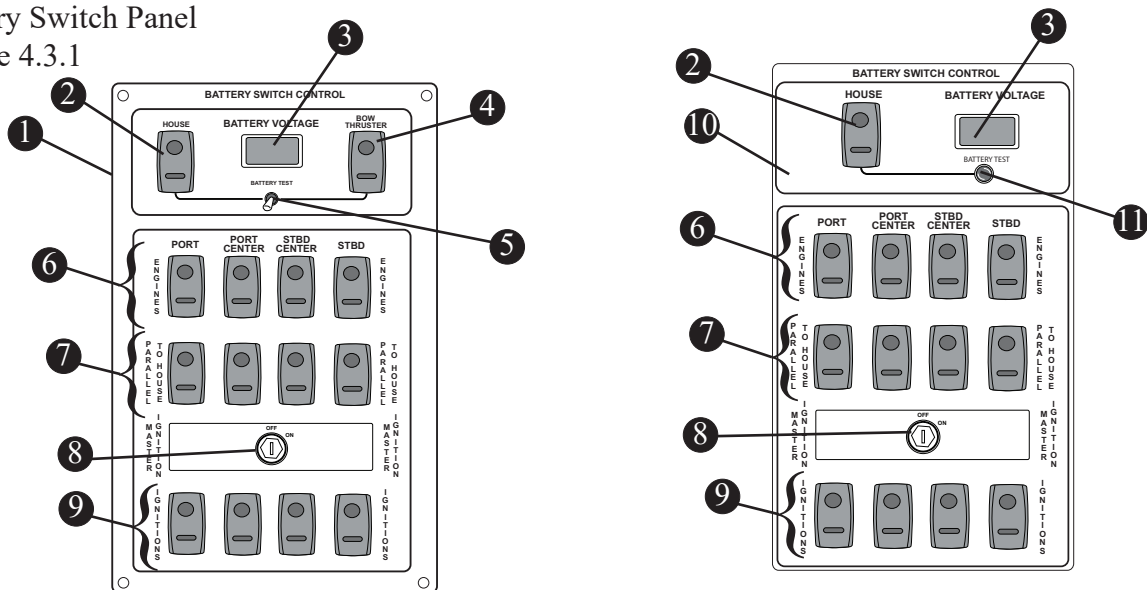
The battery charger has selectable profiles that affect the charge rate. The charge rate profile is pre-set at the factory to AGM to match the battery type installed in your vessel. Matching the charge rate to the battery type extends battery life and maximizes battery performance.

## NOTICE

The bilge pumps, theft deterrent system (if equipped), and battery switch control draw power from the batteries, even if the switches are set to off.

Battery Switch Panel

Figure 4.3.1



- ① BATTERY SWITCH PANEL
- ② HOUSE BATTERY SWITCH
- ③ BATTERY VOLTAGE METER (HOUSE (12V), BOW THRUSTER (24V))
- ④ BOW THRUSTER BATTERY SWITCH
- ⑤ BATTERY VOLTAGE SELECTOR SWITCH (HOLD TO TEST)
- ⑥ ENGINE BATTERY SWITCHES
- ⑦ PARALLEL TO HOUSE BATTERY SWITCHES
- ⑧ ENGINE KEY SWITCH
- ⑨ IGNITIONS SWITCHES
- ⑩ BATTERY SWITCH PANEL W/JOYSTICK (OPTION)
- ⑪ VOLTAGE TEST SWITCH (PUSH/HOLD TO TEST)

NOTE: When equipped with optional V12 engine, panel configuration varies.

### 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 Switches

Battery switches control delivery of DC power from the batteries. The battery switch panel, (see Figure 4.3.1) is located behind an access door on the port wall of the cabin. Pressing a battery switch provides DC power by activating a remote battery switch (RBS) located inside the mechanical access hatch (see Figure 4.5.1). 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.

### Battery Parallel Switches

Battery parallel switches are used when an engine battery does not have enough charge to start the engine. Battery parallel switches, located on the battery switch panel (see Figure 4.3.1), give the operator the ability to combine DC power from other charged batteries.

### Automatic Charging Relays (ACR)

Battery banks are automatically connected in parallel through the use of an Automatic Charging Relay

when a sufficient charging source is present (see Figure 4.5.1). 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 OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### Component Breakers

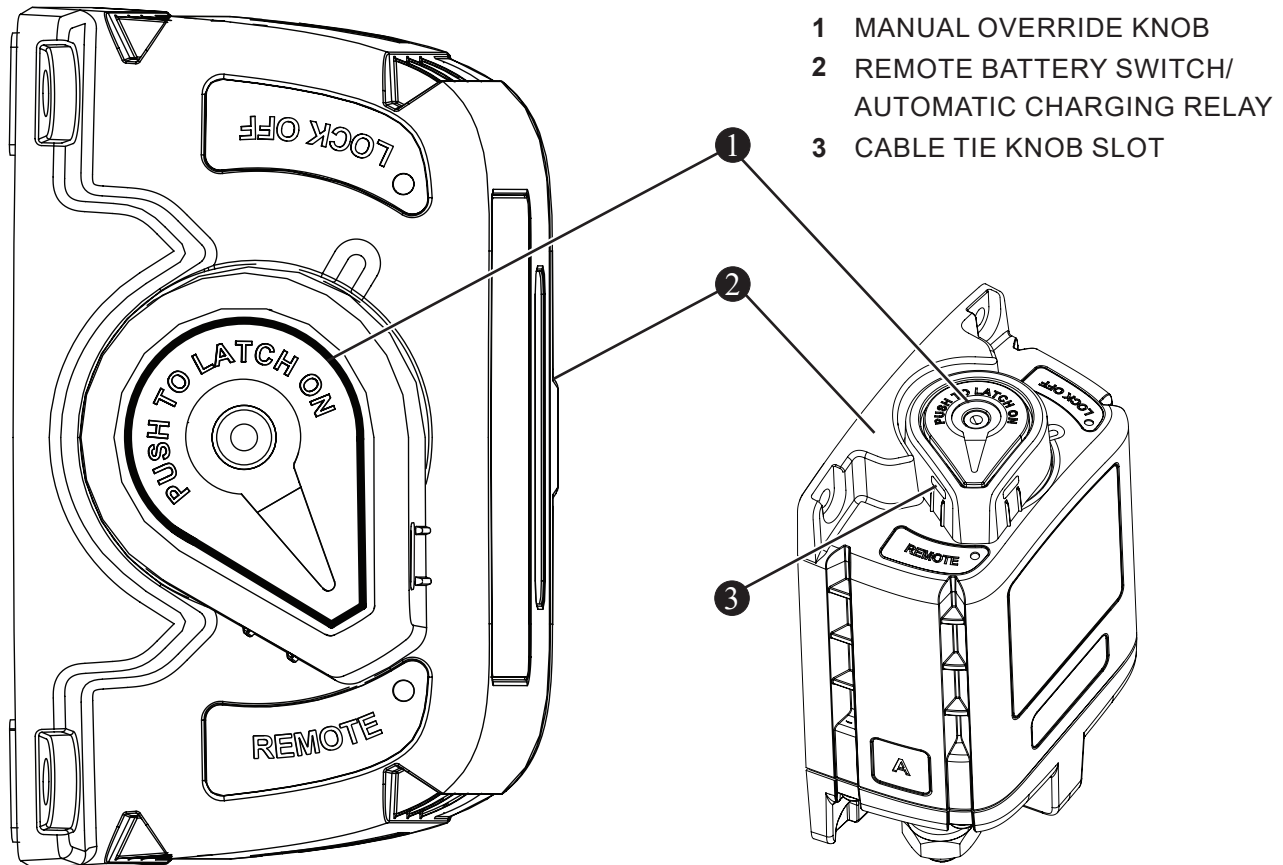
Your boat utilizes reset breakers for the various components throughout the boat. The breakers can be found on the AC and DC breaker panels (see Figure 4.7.1 and 4.8.1), the prep station breaker panel, and in the electronics box above the helm (see Figure 4.11.1). If a component breaker trips, determine 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.**

## Remote Battery Switch (RBS)/Automatic Charging Relay (ACR)

Figure 4.5.1



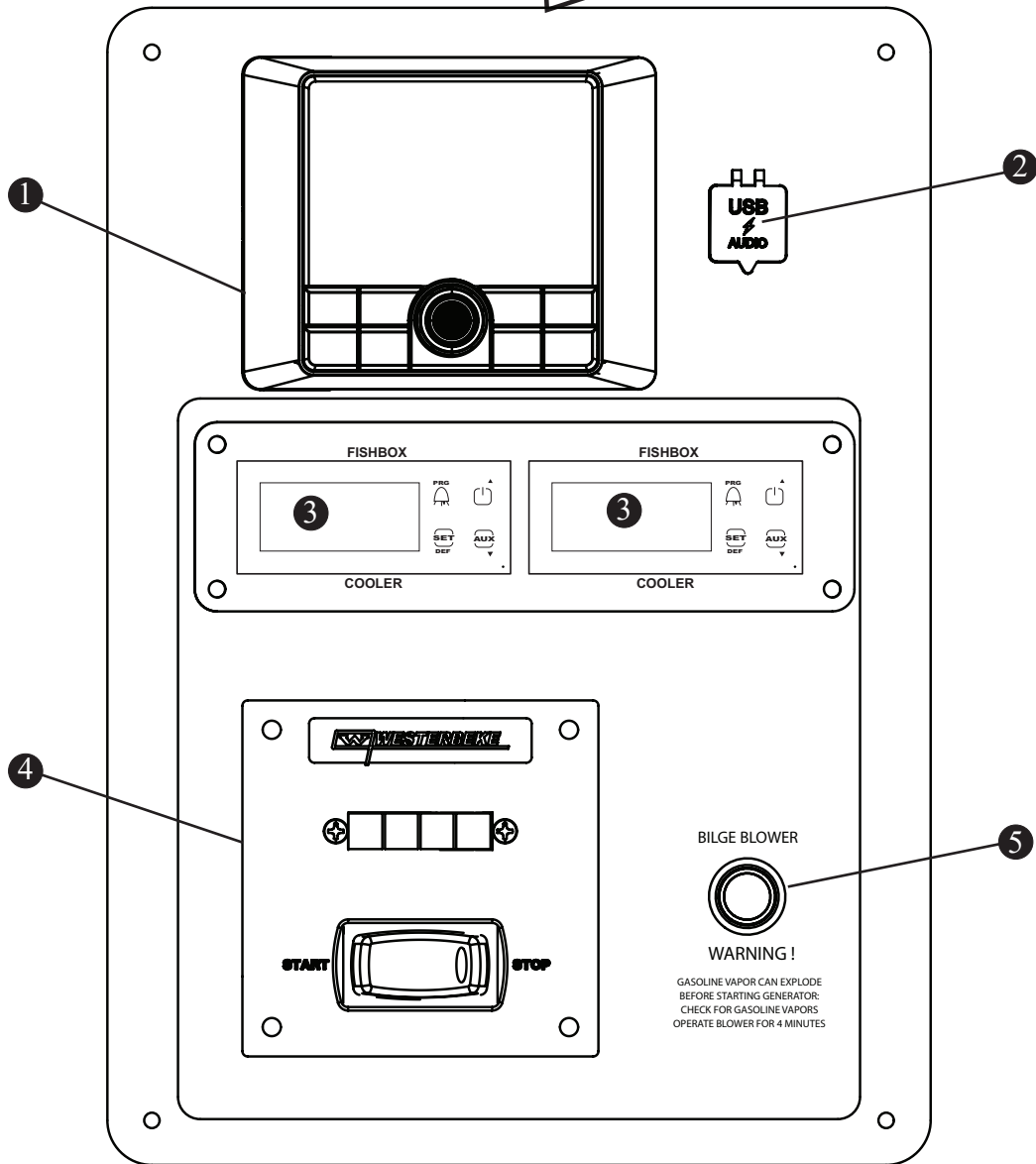
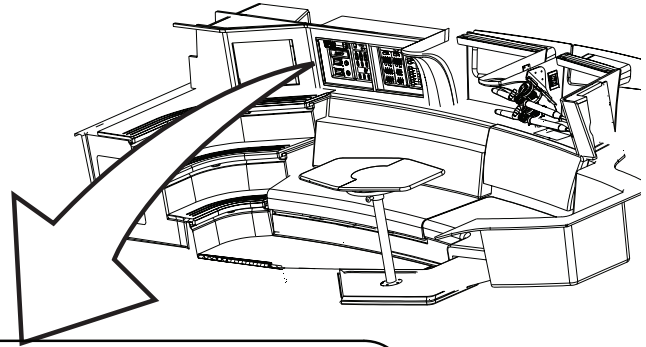
- 1 MANUAL OVERRIDE KNOB
- 2 REMOTE BATTERY SWITCH/  
AUTOMATIC CHARGING RELAY
- 3 CABLE TIE KNOB SLOT

<b>To combine battery banks</b>	With override knob in <i>REMOTE</i> position, push knob down until latched.
<b>To isolate battery banks that are connected</b>	To unlatch, rotate override knob to right (knob pops up); rotate knob back to <i>REMOTE</i> position.
<b>To prevent remote operation</b>	Rotate knob to <i>LOCK OFF</i> position.
<b>To secure for servicing</b>	With knob in <i>LOCK OFF</i> position, pass cable tie through knob slot.

## Main Distribution Panel

The following pages detail the four panels that make up the main distribution panel, located in the port cabin.

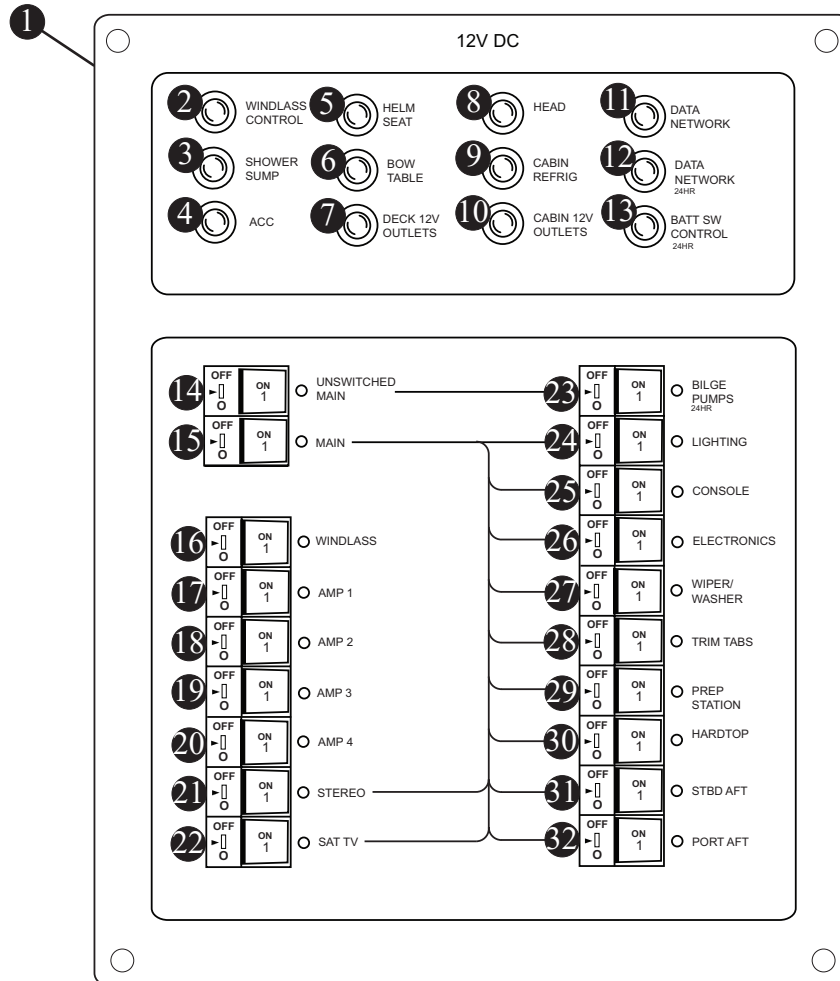
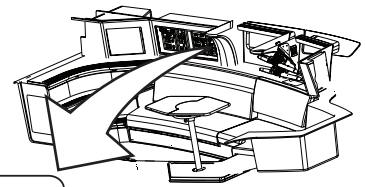
Stereo, Generator, Blower, 12V Receptacle  
Figure 4.6.1



- ① STEREO
- ② AUDIO USB
- ③ FISH BOX FREEZER CONTROLS (OPTION)
- ④ GENERATOR CONTROL PANEL
- ⑤ BLOWER SWITCH

*NOTE: Panel layout may vary depending on accessory options.*

DC Distribution Panel  
Figure 4.7.1

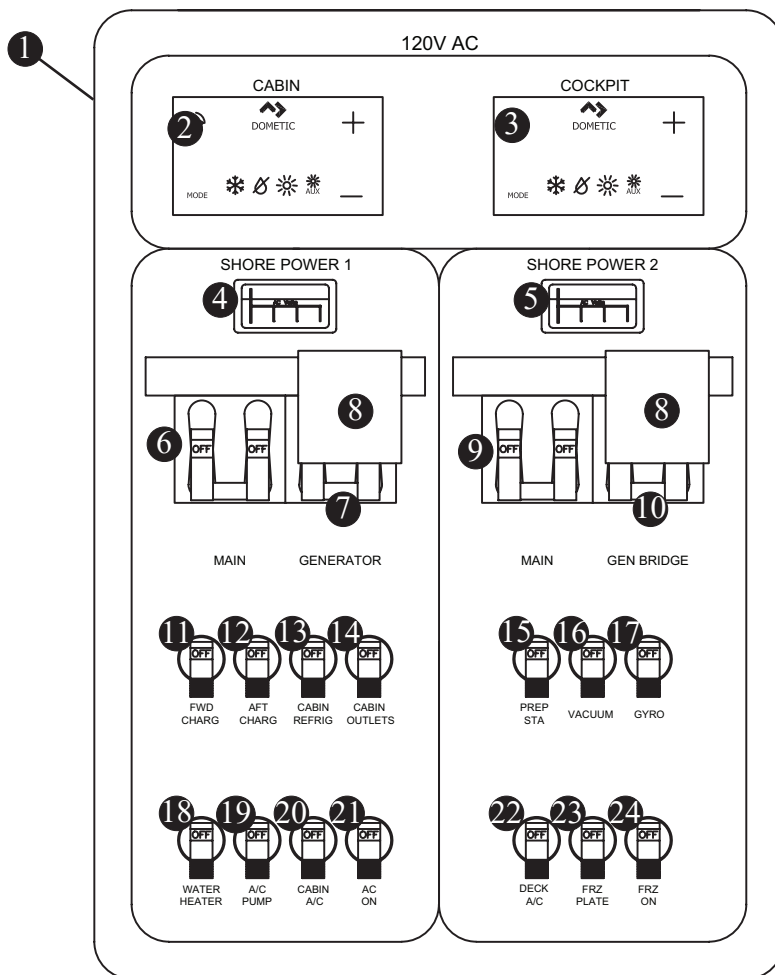
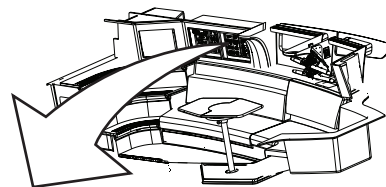


- |   |   |
|---|---|
| <b>1</b> 12V DC BREAKER PANEL                     | <b>17</b> AMP 1 . . . . . 50 AMPS               |
| <b>2</b> WINDLASS CONTROL . . . . . 10 AMPS       | <b>18</b> AMP 2 . . . . . 50 AMPS               |
| <b>3</b> SHOWER SUMP . . . . . 5 AMPS             | <b>19</b> AMP 3 . . . . . 50 AMPS               |
| <b>4</b> ACCESSORY . . . . . 10 AMPS              | <b>20</b> AMP 4 . . . . . 50 AMPS               |
| <b>5</b> HELM SEAT . . . . . 15 AMPS              | <b>21</b> STEREO . . . . . 20 AMPS              |
| <b>6</b> BOW TABLE . . . . . 20 AMPS              | <b>22</b> SATELLITE TV . . . . . 20 AMPS        |
| <b>7</b> DECK 12V OUTLETS . . . . . 15 AMPS       | <b>23</b> BILGE PUMPS (24 HR) . . . . . 30 AMPS |
| <b>8</b> HEAD . . . . . 3 AMPS                    | <b>24</b> LIGHTING . . . . . 20 AMPS            |
| <b>9</b> CABIN REFRIGERATOR . . . . . 20 AMPS     | <b>25</b> CONSOLE . . . . . 30 AMPS             |
| <b>10</b> CABIN 12V OUTLETS . . . . . 15 AMPS     | <b>26</b> ELECTRONICS . . . . . 50 AMPS         |
| <b>11</b> DATA NETWORK . . . . . 10 AMPS          | <b>27</b> WIPER/WASHER . . . . . 20 AMPS        |
| <b>12</b> DATA NETWORK (24 HR) . . . . . 10 AMPS  | <b>28</b> TRIM TABS . . . . . 30 AMPS           |
| <b>13</b> BATT SWITCH CONTROL (24 HR) . . 15 AMPS | <b>29</b> PREP STATION . . . . . 30 AMPS        |
| <b>14</b> UNSWITCHED MAIN . . . . . 50 AMPS       | <b>30</b> HARDTOP . . . . . 30 AMPS             |
| <b>15</b> MAIN . . . . . 125 AMPS                 | <b>31</b> STBD AFT . . . . . 40 AMPS            |
| <b>16</b> WINDLASS . . . . . 100 AMPS             | <b>32</b> PORT AFT . . . . . 40 AMPS            |



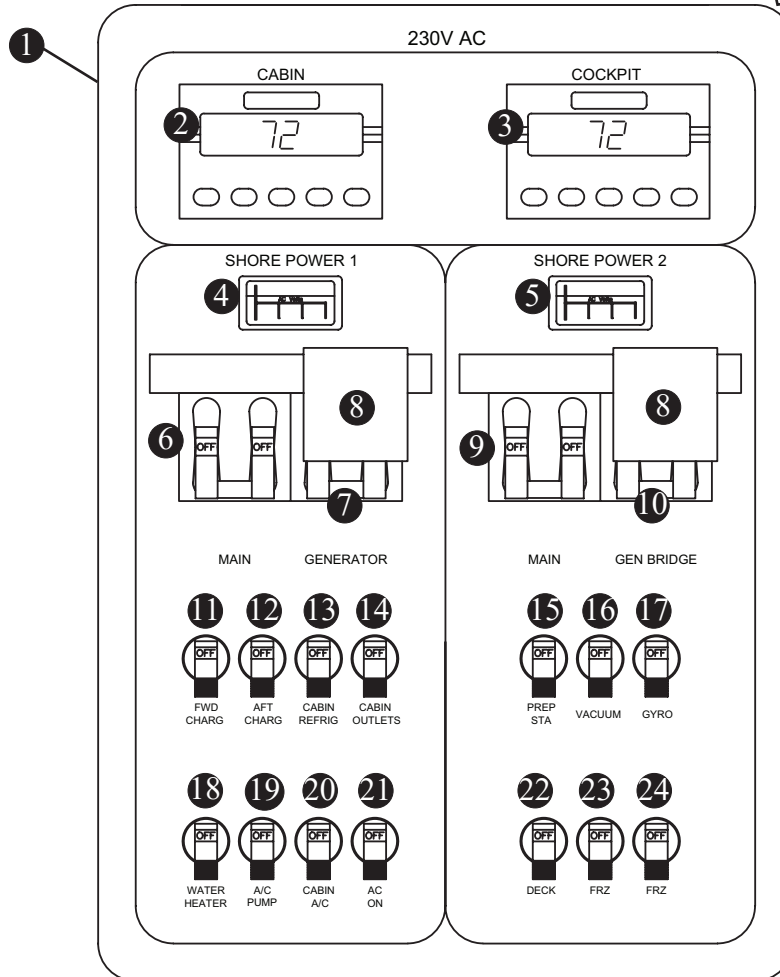
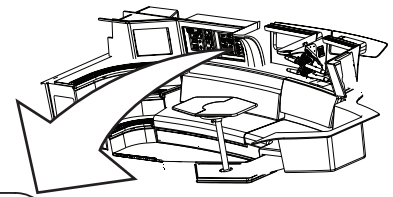
## AC Distribution Panel (120V)

Figure 4.8.1



- |   |   |
|---|---|
| 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 GYROSCOPIC STABILIZER . . . . . 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      |

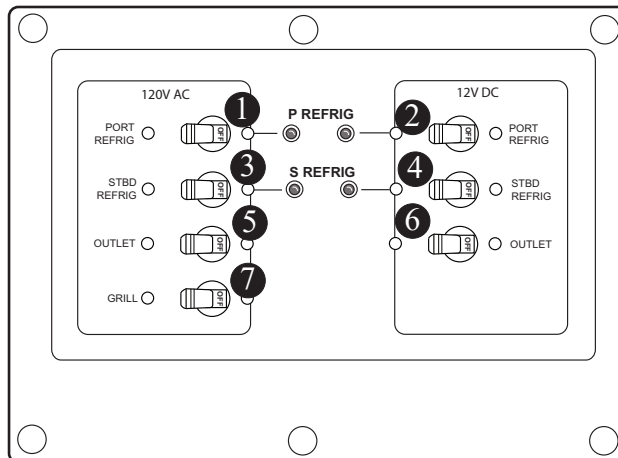
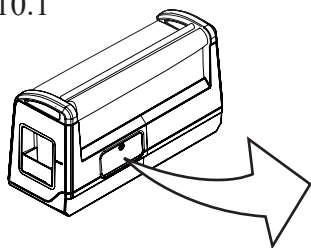
AC Distribution Panel (220V)  
Figure 4.9.1



- |   |   |
|---|---|
| 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 GYROSCOPIC STABILIZER . . . . . 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)

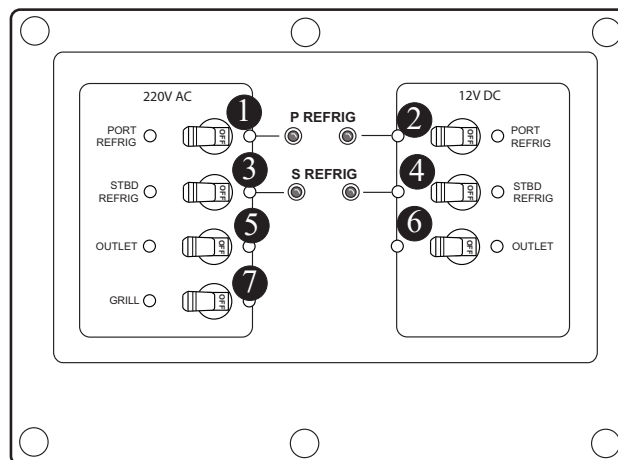
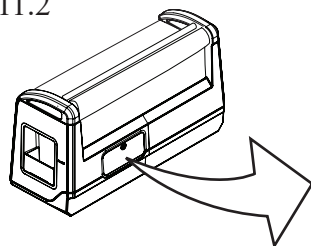
Figure 4.10.1



- 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

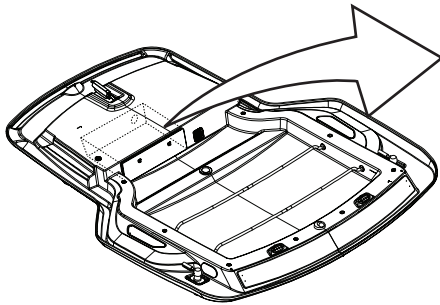
## Prep Station Breaker Panel (220V)

Figure 4.11.2

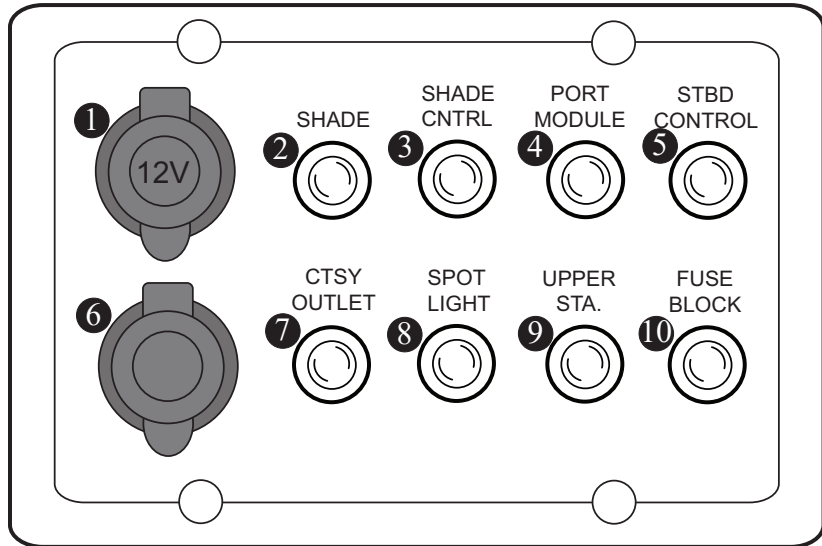


- ① PORT REFRIGERATOR 220V AC ..... 7.5 AMPS
- ② PORT REFRIGERATOR 12V DC ..... 20 AMPS
- ③ STARBOARD REFRIGERATOR 220V AC.... 7.5 AMPS
- ④ STARBOARD REFRIGERATOR 12V DC.... 20 AMPS
- ⑤ 220V AC OUTLET ..... 10 AMPS
- ⑥ 12V DC OUTLET ..... 15 AMPS
- ⑦ GRILL ..... 10 AMPS

Electronics Box Breaker Panel  
Figure 4.11.1



HARDTOP FLIPPED FOR CLARITY

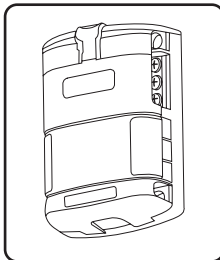


- |                                       |                                     |
|---------------------------------------|-------------------------------------|
| 1 12V ACCESSORY . . . . . 10 AMPS     | 6 USB CHARGER                       |
| 2 SHADE . . . . . 15 AMPS             | 7 COURTESY OUTLET . . . . . 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     |

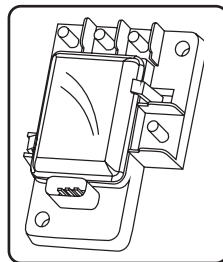
## Fuse Blocks

Your boat is equipped with four fuse blocks.

1. Located behind the helm. 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 helm.



4. A heavy duty fuse box is located in bilge and can be accessed by raising 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).**

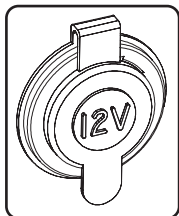


**CAUTION**

**DO NOT insert a cigarette lighter into the 12V receptacles. Damage to the unit and system may occur.**

Your boat is equipped with six 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 helm



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.

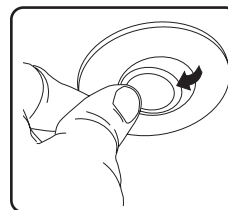
## Cabin Lighting

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.

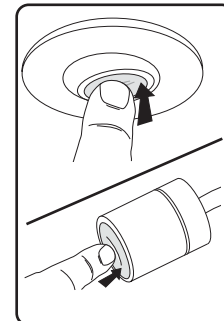
The cabin lighting is protected by a breaker on the DC breaker panel located on the port side of the cabin. The “LIGHTING” breaker must be ON for the lighting to function.

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.



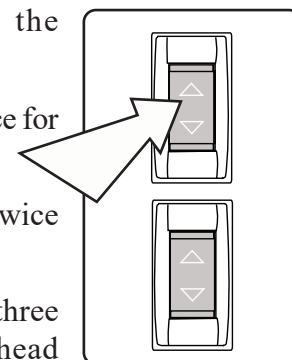
In addition to the wall switch, individual lights can be turned OFF and ON by pushing on the lens.



## Cabin Light Switches

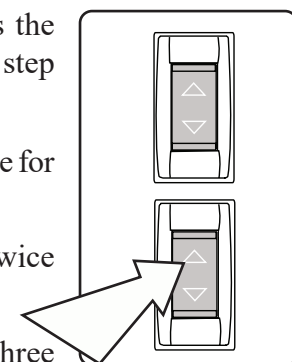
The top switch controls the overhead and Sky light.

- 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 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.

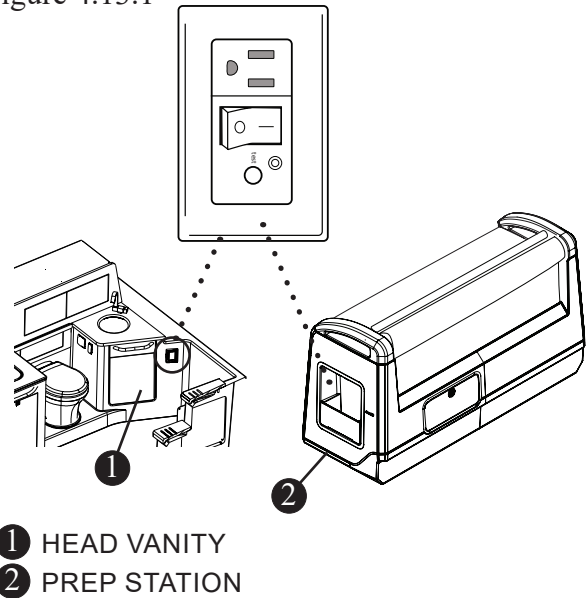
#### WARNING

**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  
Figure 4.13.1



### Digital Switching

#### CAUTION

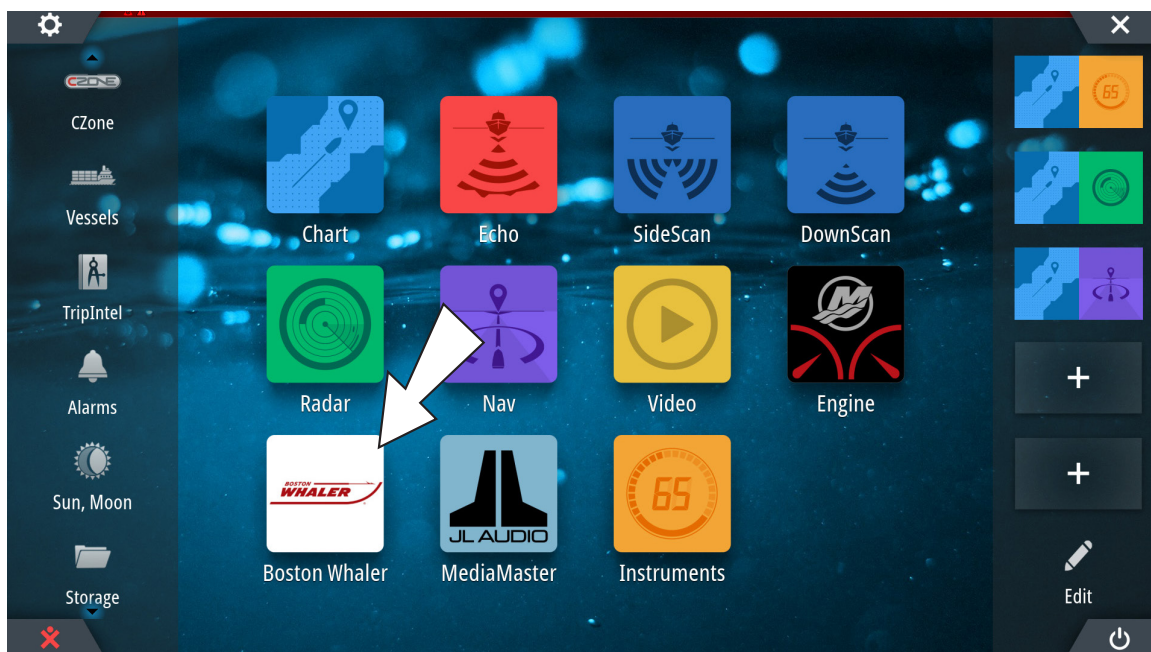
**To maintain digital switching access, do not update software on navigation system or VesselView without first contacting a Boston Whaler dealer.**

This vessel's digital switching system replaces traditional mechanical switches and circuit breakers with digital power distribution modules to provide monitoring and control of the electrical system. These modules are controlled from the helm displays, wireless remote, or switch panels, and are located throughout the boat. For the convenience of the operator, some switch functions duplicate those of mechanical switches.

#### Digital Switching Helm Display

Tap on the *Boston Whaler* app on the helm display to access digital switching screens (see Figure 4.14.1).

Boston Whaler App  
Figure 4.14.1

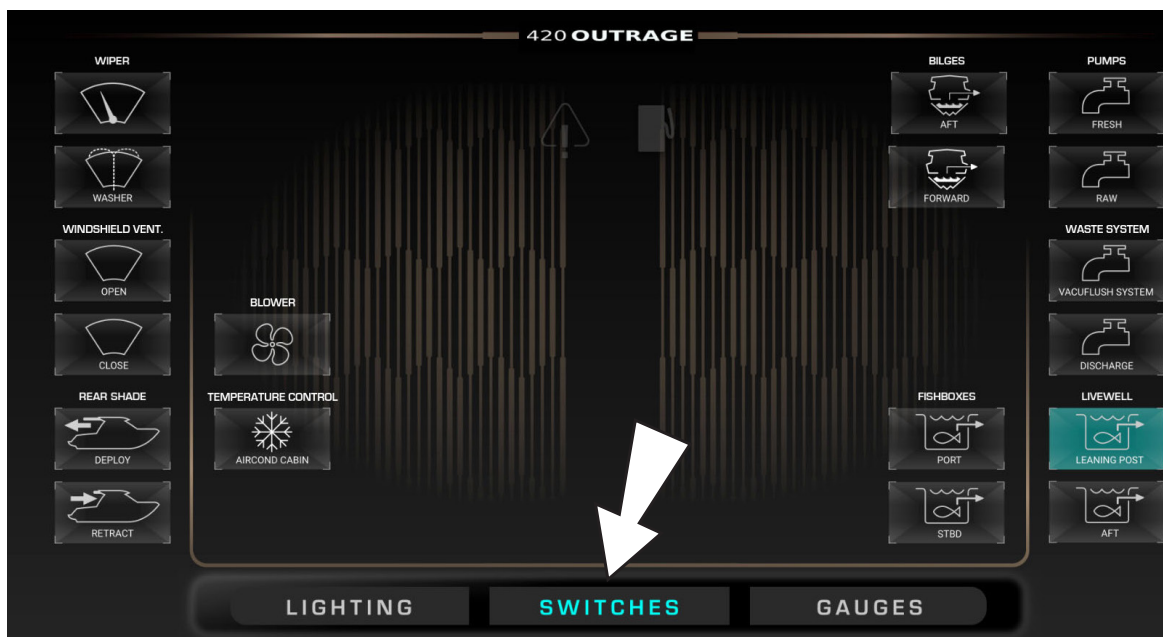


## Digital Switching Tabs

Shown on the following pages are the four digital switching system tabs lighting, switches, A/C, and gauges. Switches are illuminated a specific color when selected. Green indicates *ON*, orange indicates *AUTO ON*.

### Switches Tab

Tap *SWITCHES* to control windshield wiper, washer, and defogger. The rear sun shade can be deployed or retracted and bilge pumps can be turned on, off, or set to automatic discharge. Raw and freshwater pumps can be turned on and off. All switches are illuminated green when turned on. Bilge pump switches illuminate orange when set to automatic.



## Lighting Tab

Tap *LIGHTING* to monitor and control all exterior and interior lights and lighting modes. Switches will illuminate when on.

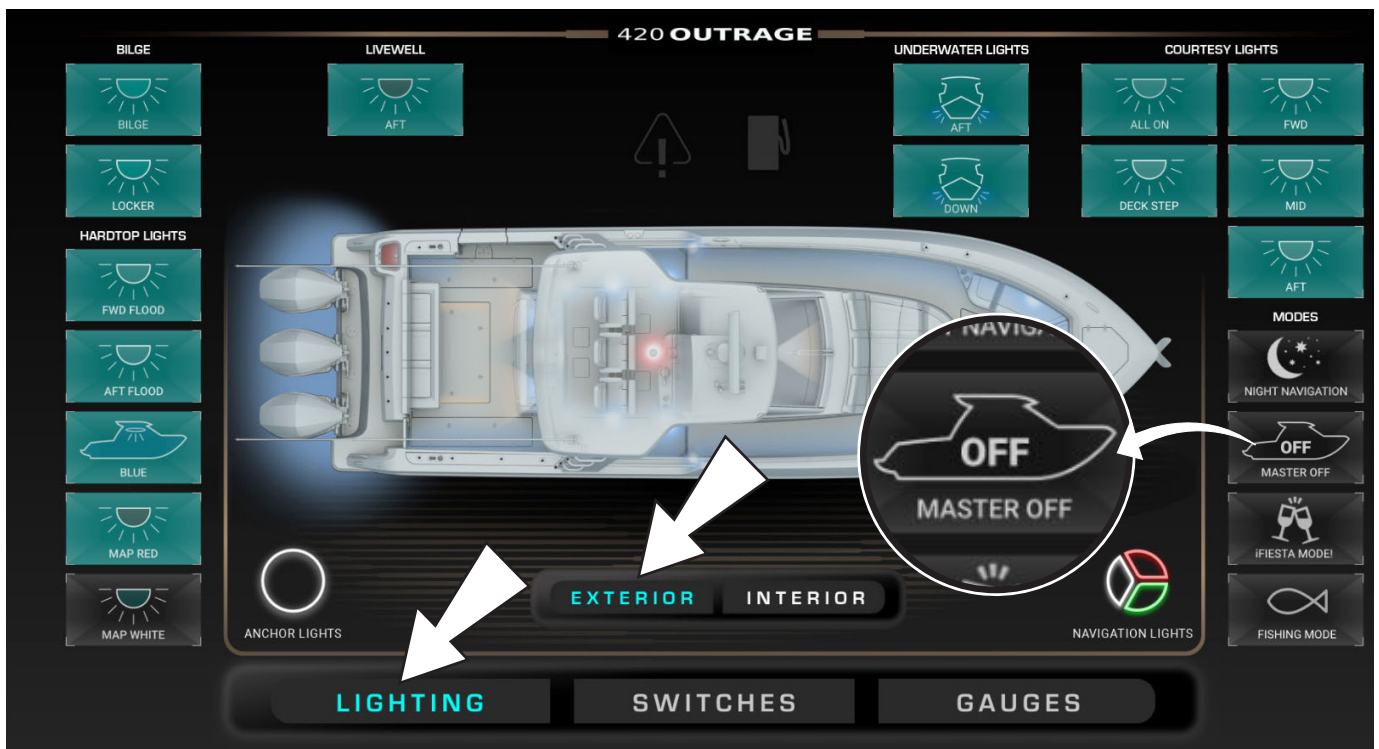
## Leaving the Boat

When preparing to leave the boat:

1. Turn off all engine battery switches on the *DC Distribution Panel* located in the cabin.
2. Tap the *MASTER OFF* switch on the *EXTERIOR LIGHTING* screen.

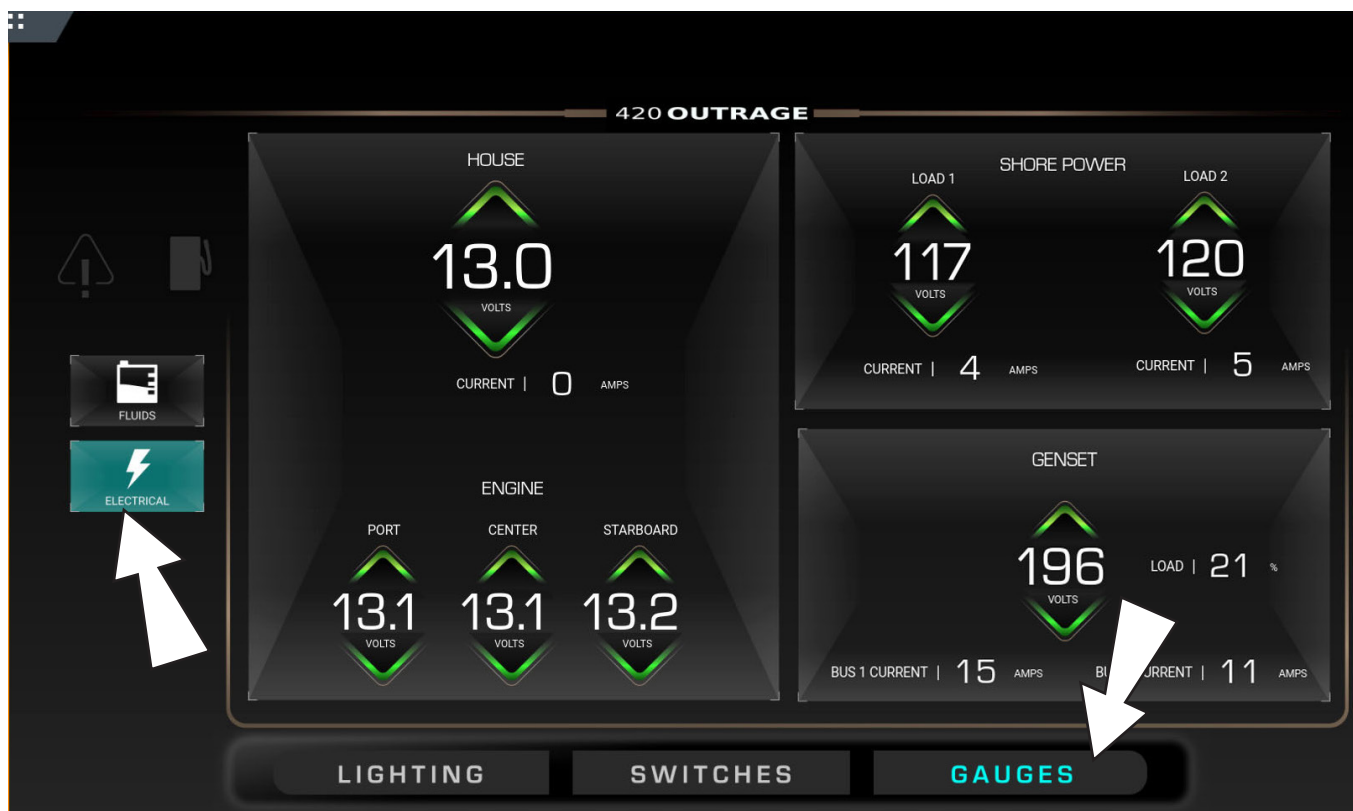
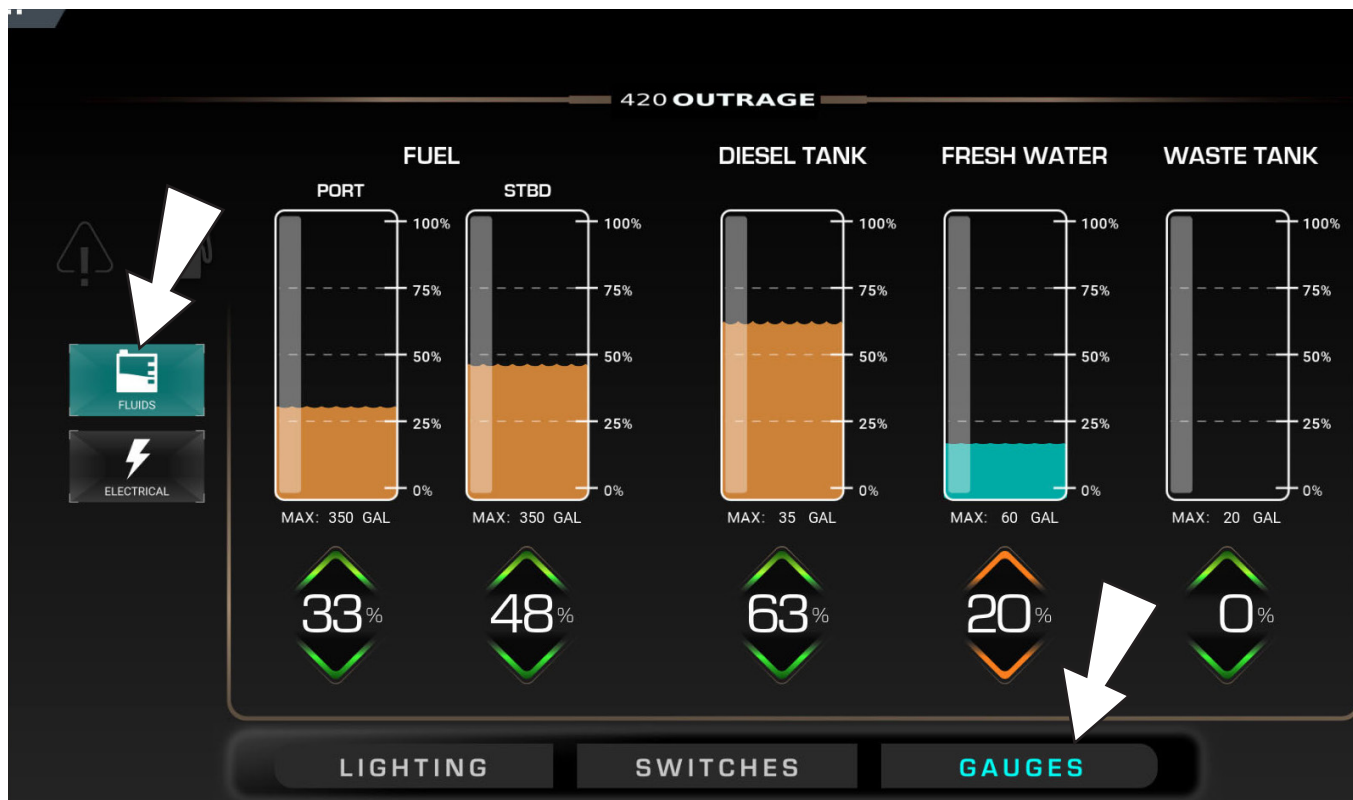
The *MASTER OFF* switch allows the user to shut down most of the lights and other components. Some lights and components if not already on, will turn on and remain on for two minutes allowing occupants to safely exit the boat. See the following list of effected lights and components.

Master Off Switch					
Function	Status		Function	Status	
Navigation lights	Off		Map lights (white)	On	Timer
Anchor light	Off		Midberth overhead lights	Off	
Mechanical access hatch lights	Off		Raw water pump	Off	
Deck courtesy lights	Off		Salon courtesy lights	Off	
Forward flood lights	Off		Salon overhead lights	On	Timer
Aft flood lights	On	Timer	Shade retract	On	Timer
Fresh water pump	Off		Underwater lights	Off	
Head courtesy & overhead lights	Off		Stateroom courtesy lights	Off	
House battery switch	On	Timer	Stateroom overhead lights	Off	
Hardtop overhead lights	Off		Stateroom reading lights	Off	
Map lights (red)	Off				



## Gauges Tab

Tap *GAUGES* to monitor fluid and power levels. Tap *FLUIDS* to monitor freshwater, waste, and fuel. Tap *ELECTRICAL* to monitor voltage on the generator, shore power, and batteries\*.



\*NOTE: Electrical tab content may vary depending on options.

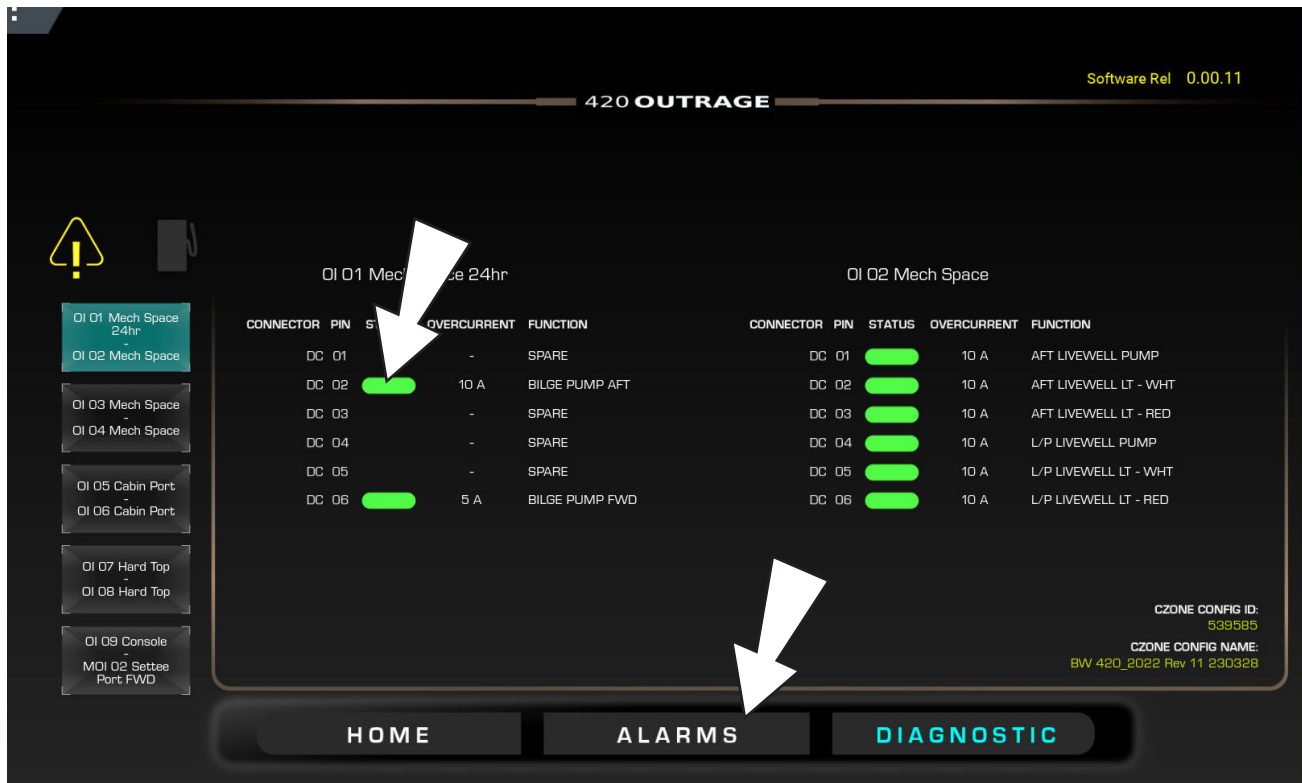
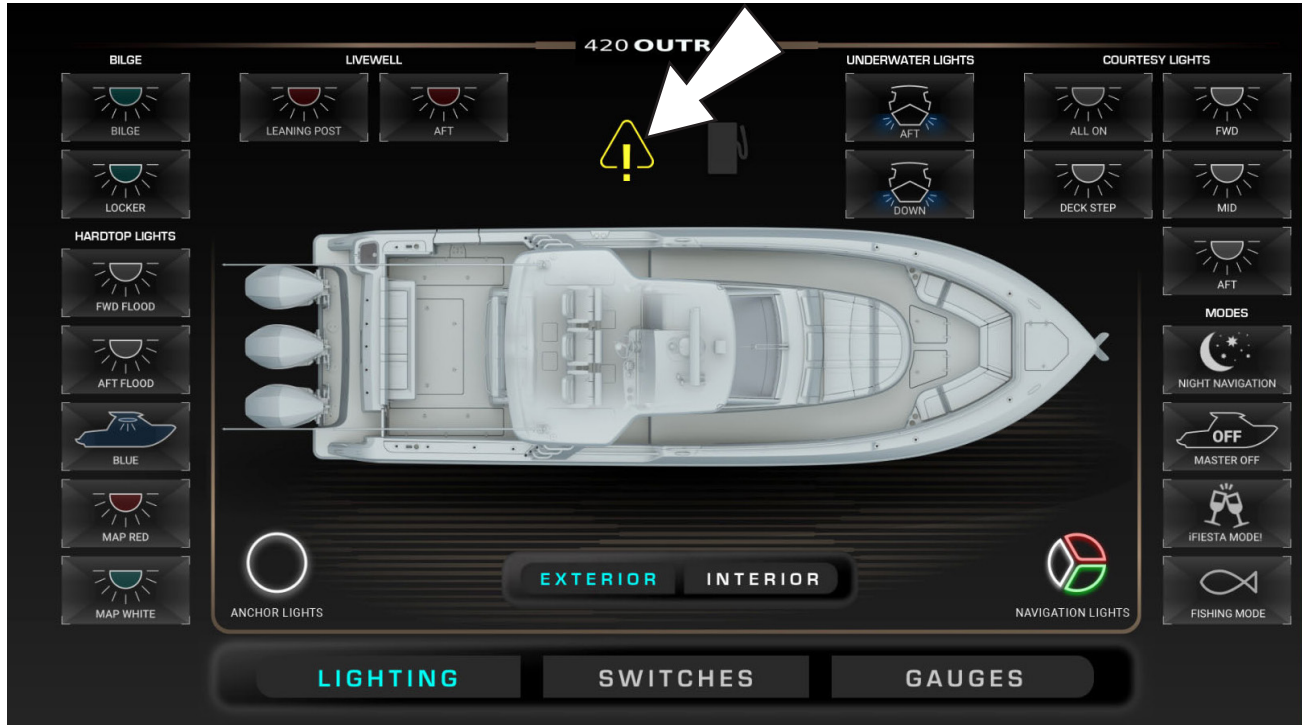


## Alarms

If any of the electrical systems fails a warning symbol appears near the center of the *LIGHTING*, *SWITCHES* screen. Tap on the warning symbol to access the *ALARM PAGE*. A green *STATUS* light indicates *FUNCTIONS* operating properly. A red *STATUS* light indicates *FUNCTIONS* requiring attention.

# ⚠ DANGER

Never ignore an alarm.

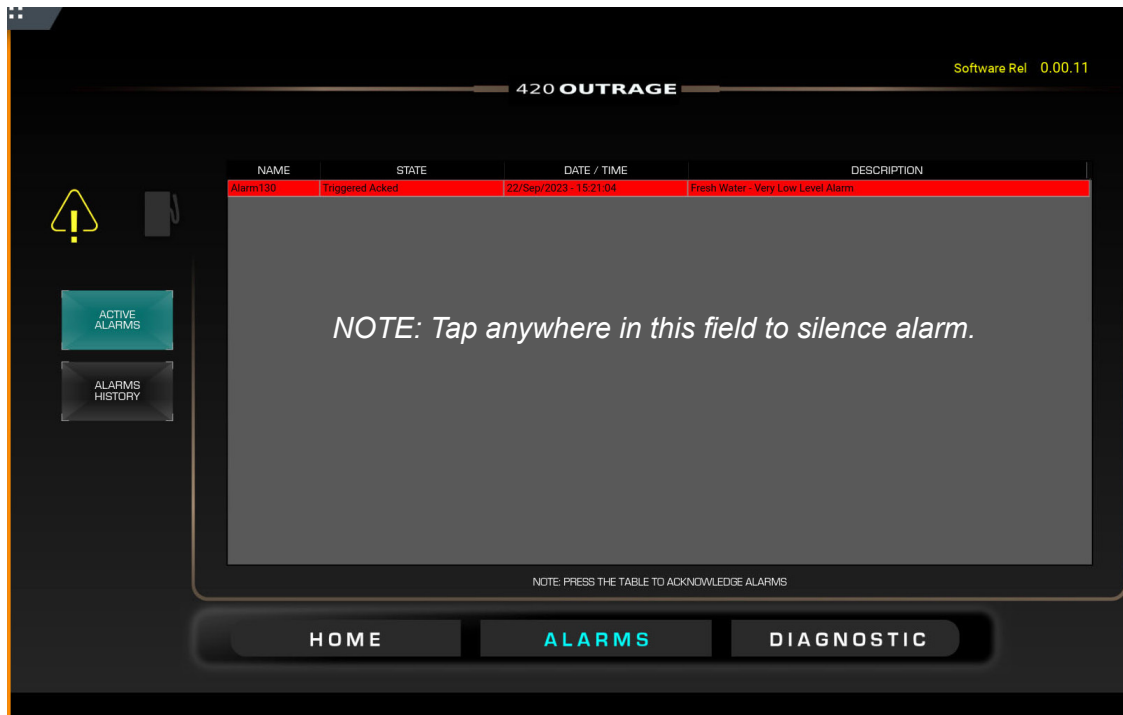




## Silence Alarm

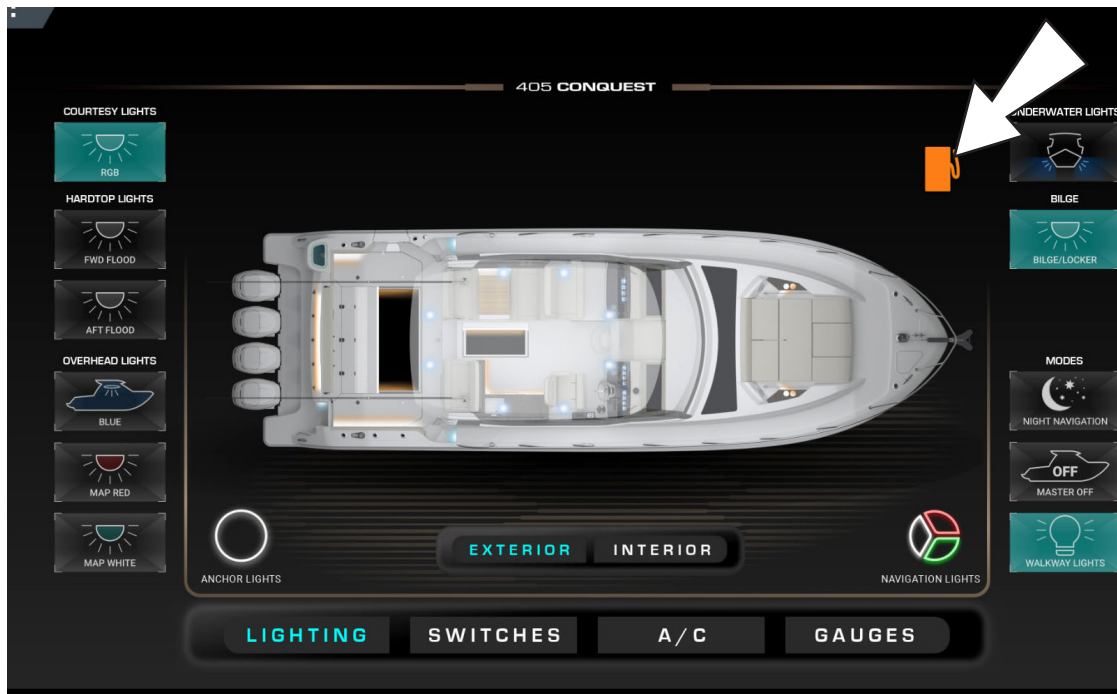
If an alarm sounds, silence it by tapping anywhere in the center field on the *ALARMS* tab screen. The specific issue that triggered the alarm will be listed in the center field. Click on the *DIAGNOSTIC* tab for additional status information.

For further information, contact a Boston Whaler dealer or Boston Whaler customer service.



## Low Fuel

When the fuel level runs low, a fuel pump symbol appears in the upper right corner of the *LIGHTING*, *SWITCHES* screen indicating low fuel. Tap on the symbol to be transferred to the *FLUIDS* display to view the fuel tank level.



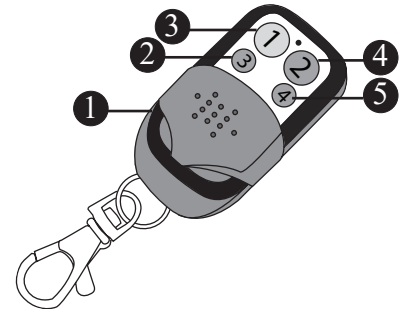
## CZone Wireless Remote

The wireless remote control key fob (see Figure 4.19.1) allows operation of four different functions from a distance of up to 250 feet (80 meters).

### Wireless Remote Key Fob

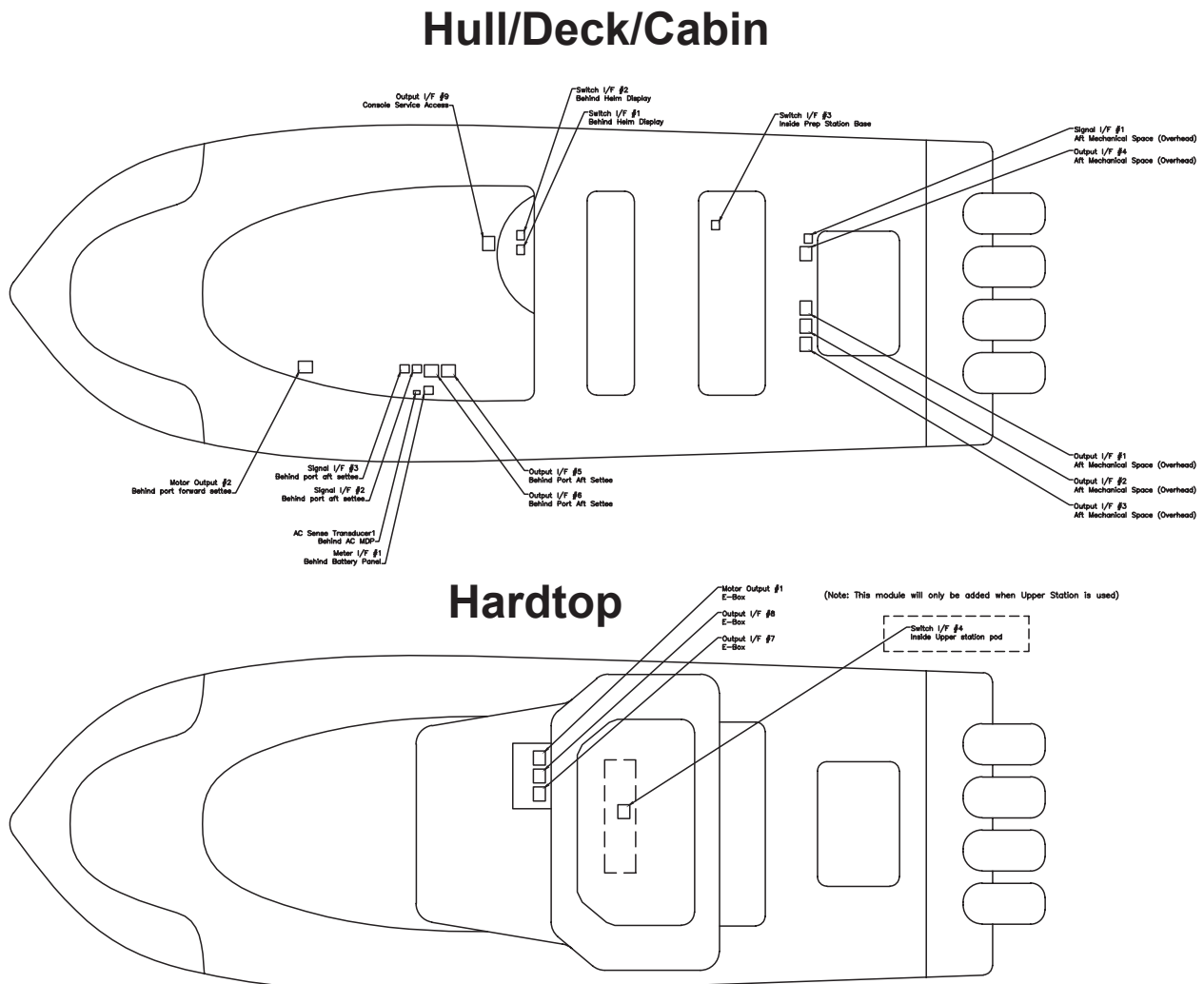
Figure 4.19.2

- 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

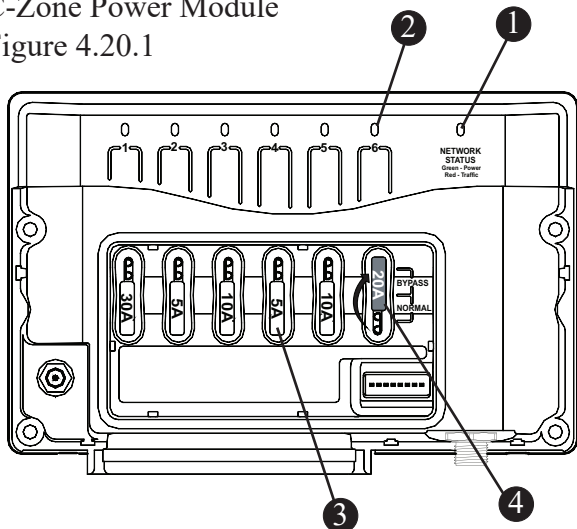


### C-Zone Power Module Locations

Figure 4.19.1



C-Zone Power Module  
Figure 4.20.1



- 1 POWER/CURRENT INDICATOR (LED)
- 2 CHANNEL CURRENT INDICATOR (LED)
- 3 FUSE (NORMAL POSITION)
- 4 FUSE (BYPASS POSITION)

### C-Zone Modules

Power modules/Output Interface (OI) provides the power supply, control and fusing for a circuit throughout the boat (see Figure 4.20.1).

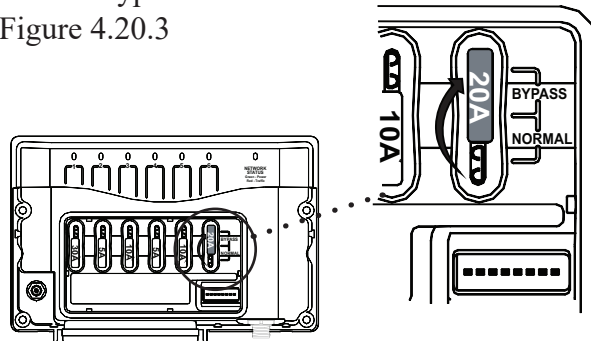
In the event of a system failure or you wish to test the output channels manually, the channels can be easily placed into manual override position.

There is a label on the inside of the OI cover which shows the LED codes and manual bypass instructions (see Figure 4.20.2 and Figure 4.20.3).

LED Flash Code Label  
Figure 4.20.2

LED Flash Codes: Fault Description		manual Bypass:
Gn solid on	Channel on	Remove fuse from "normal" (lower) position and place into "bypass" (upper) position.
Gn slow flash	Channel in timer mode	
1x RED	Channel not configured	<b>Ignition Danger!</b> Ensure area is free of explosive gases before removing or replacing fuse!
2x RED	Configuration conflict	
3x RED	Dip switch conflict	<p>Fuse in bypass position</p>
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	

Circuit Bypass  
Figure 4.20.3



### 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 its "NORMAL" position.
- Place the fuse in the "BYPASS" position (see Figure 4.16.3).

All internal electronics and software control has now been bypassed providing complete mechanical bypass.

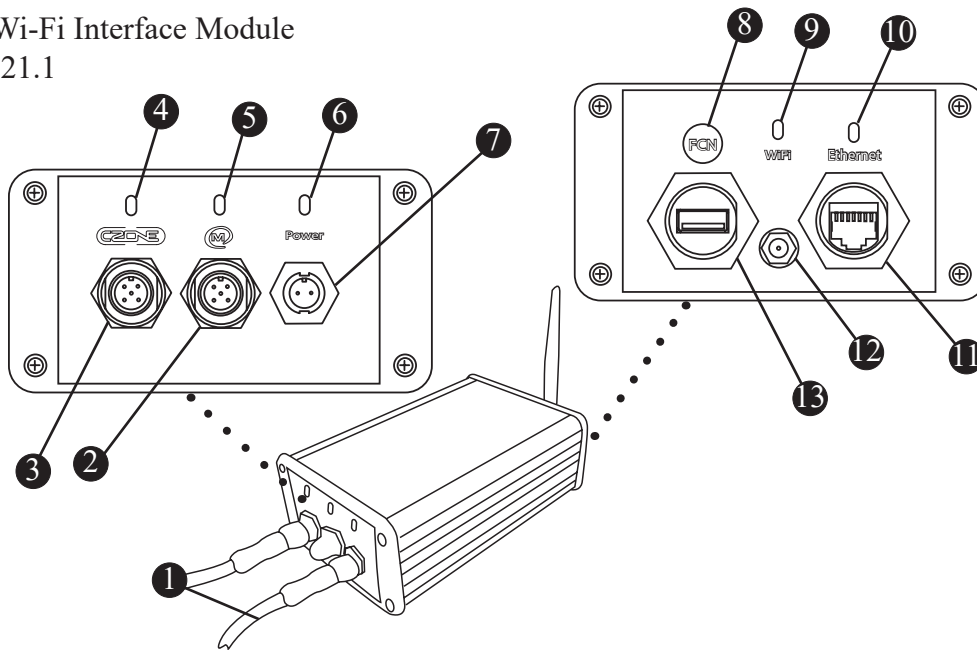
## NOTICE

**Contact your dealer if it becomes necessary to use the "BYPASS" position for continuous operation of a circuit**

### Wi-Fi Interface

The C-Zone Wi-Fi Interface Module (see Figure 4.24.1) is located behind the hardtop electronics box.

C-Zone Wi-Fi Interface Module  
Figure 4.21.1



- |                                 |                   |
|---------------------------------|-------------------|
| ① C-ZONE Wi-Fi INTERFACE MODULE | ⑧ FUNCTION BUTTON |
| ② NMEA2K - MASTERBUS            | ⑨ LED Wi-Fi       |
| ③ NMEA2K - CZONE                | ⑩ LED ETHERNET    |
| ④ CZONE DATA/POWER LED          | ⑪ ETHERNET SOCKET |
| ⑤ MASTERBUS DATA/POWER LED      | ⑫ WI-FI AERIAL    |
| ⑥ POWER LED                     | ⑬ USB SOCKET      |
| ⑦ DC INPUT                      |                   |

### LED FUNCTION

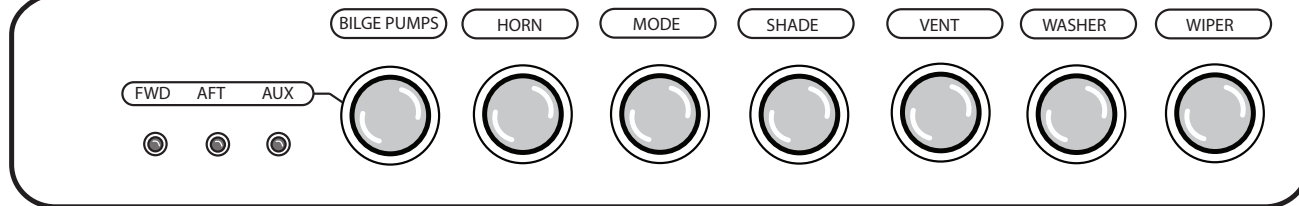
LED	LED State	LED Meaning
Power LED	Green	Power ON
CZone and MasterBus Data/Power LED	Green	Connected
CZone and MasterBus Data/Power LED	Red Flash	Traffic

LED Mode	Wi-Fi LED State	Ethernet LED State	Meaning
OFF	—	—	Not active or connected
ON continuously	Enabled	Connected	Normal use

## Helm Switch Panels

Helm Switch Panel - Port

Figure 4.22.1



NOTE: Switches glow blue when selected.

### 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.

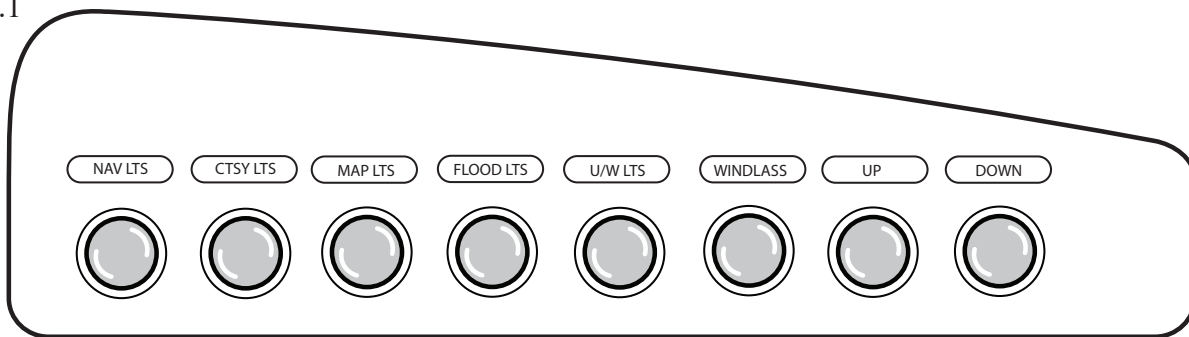
### WIPER

- Operates the windshield wiper. Toggles ON and OFF.



## Helm Switch Panel - Starboard

Figure 4.23.1



NOTE: Switches glow blue when selected.

### NAVIGATION LIGHTS

- 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 Navigation 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

Do not use underwater lights when navigational lights are in use as this may interfere with 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

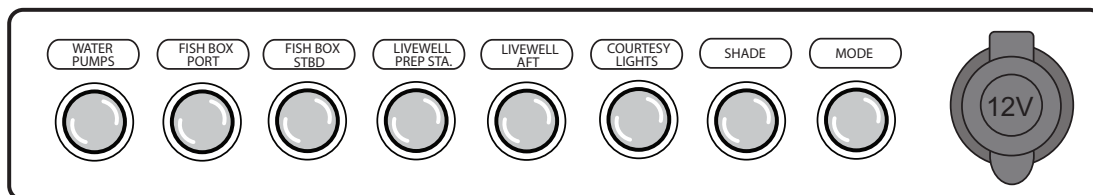
- Operates the windlass. The windlass will retrieve the anchor after being deployed. The windlass operates only while the switch is pressed.

### WINDLASS DOWN

- Operates the windlass. The windlass will deploy the anchor. The windlass operates only while the switch is pressed.

## Prep Station Switch Panel

Figure 4.24.1



NOTE: Switches illuminate when selected.

### WATER PUMPS

- Operates the FRESHWATER 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 helm display.

### 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

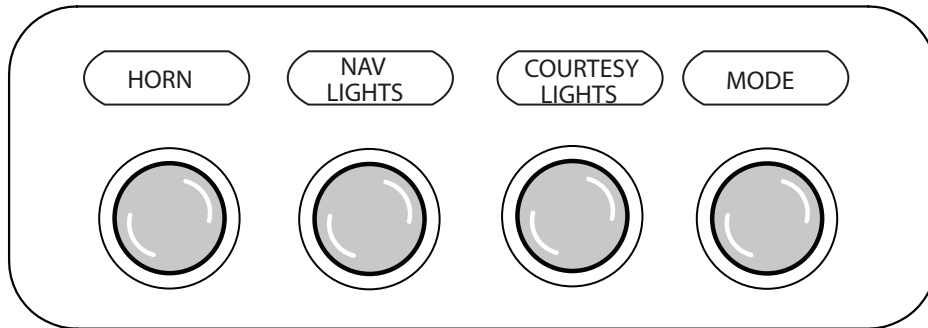
- Extends and retracts cockpit shade. “Garage Door Logic”. First press results in OUT. Second press stops it if full extension is not desired. Otherwise it will stop at full extension. The LED on switch will remain illuminated for a little while after full extension. Press again and the shade will retract 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.

### Upper Station Helm Switch Panel (Option)

Figure 4.25.1



NOTE: Switches illuminate when selected.

#### **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.

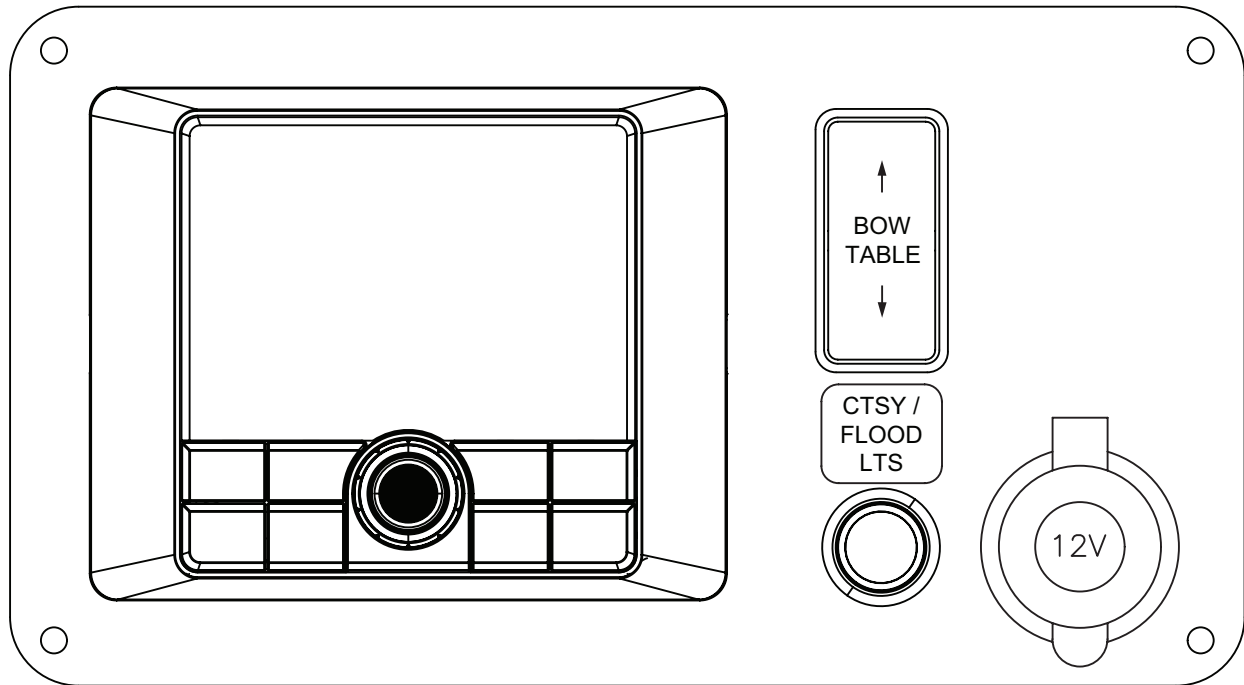
#### **COURTESY LIGHTS**

- 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.

Port Bow Switch Panel  
Figure 4.26.1



NOTE: Switches illuminate when selected.

### **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

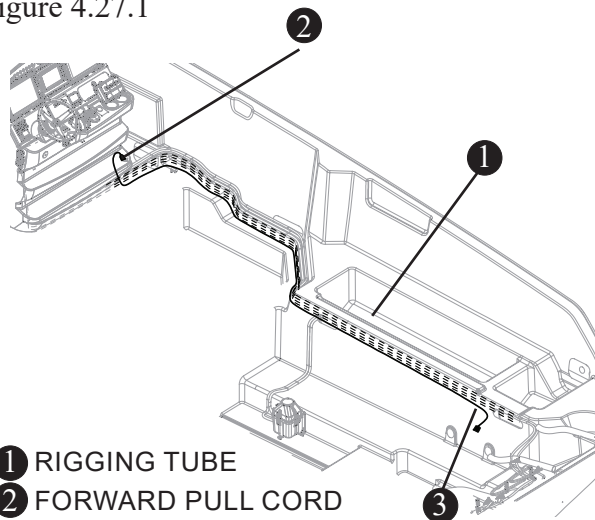
Your boat has a flexible conduit rigging tube, above the fuel tank and below the floor to allow the owner to run new wiring for electronics (Figure 4.27.1). There is a pull cord installed through the tube with the ends bundled and tied at either end of the tube. The ends are located in the aft bilge and inside the helm where it exits the rigging boot.

There is also a cord located in the starboard frame of the hardtop which terminates in the helm at one end and the electronics box at the other (Figure 4.27.2).

The optional upper station electrical wiring and hoses are routed through the port frame (Figure 4.27.3).

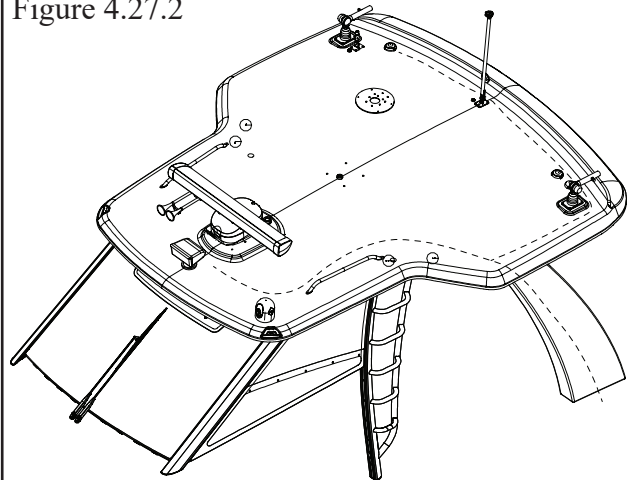
Tie another piece of nylon cord to the current accessory wiring being run and use that for later runs.

Rigging Tube/Pull  
Figure 4.27.1

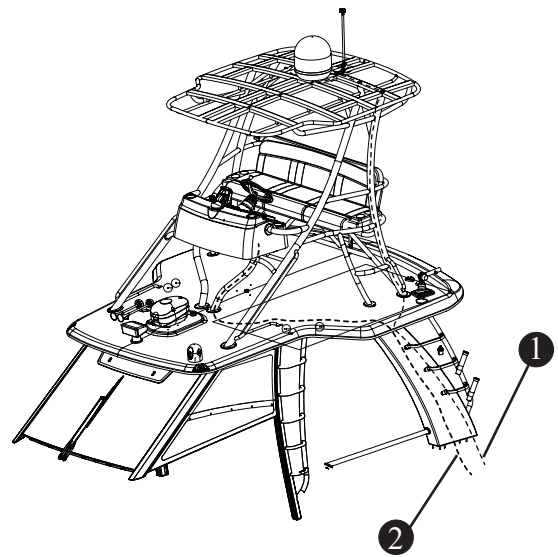


- ① RIGGING TUBE
- ② FORWARD PULL CORD
- ③ AFT PULL CORD

Hardtop Rigging  
Figure 4.27.2



Upper Station Rigging  
Figure 4.27.3

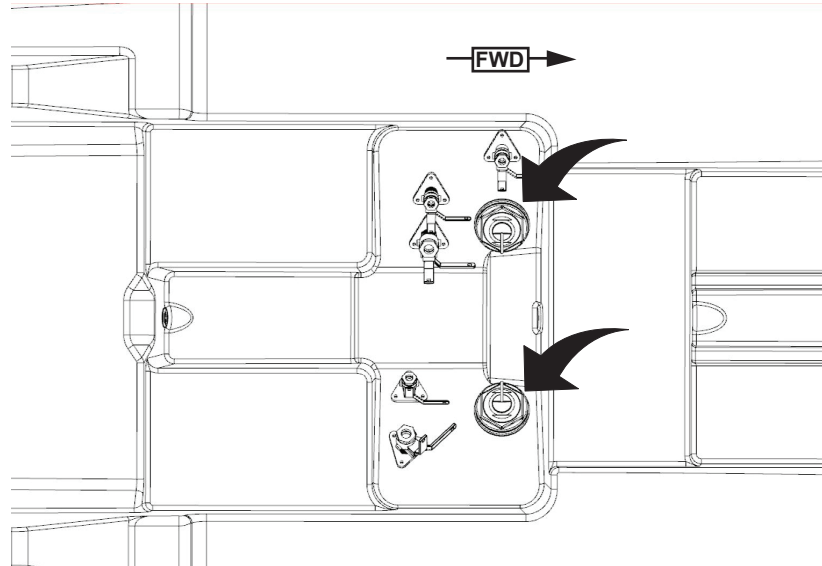


- ① ROUTING FOR ELECTRICAL WIRING
- ② ROUTING FOR STEERING HOSES AND ELECTRICAL WIRING (P&S)

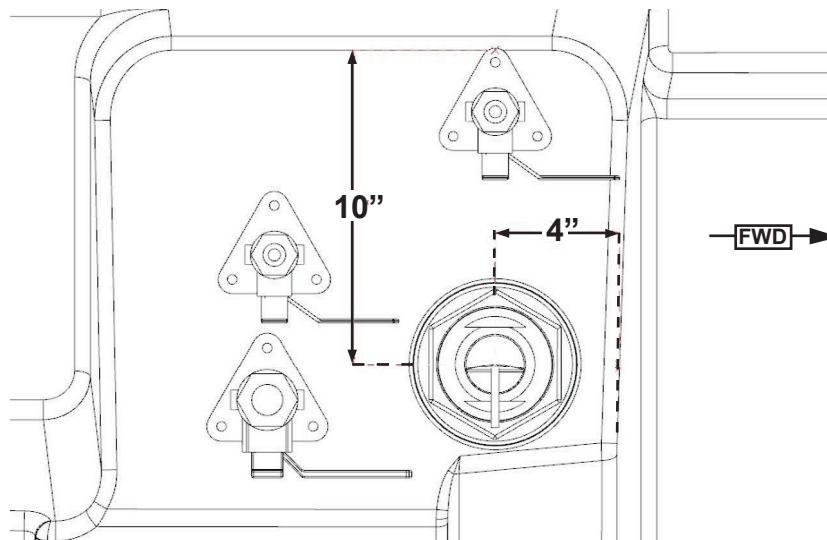


## Transducer

Transducer Locations  
Figure 4.28.1



Transducer Location  
Figure 4.28.2



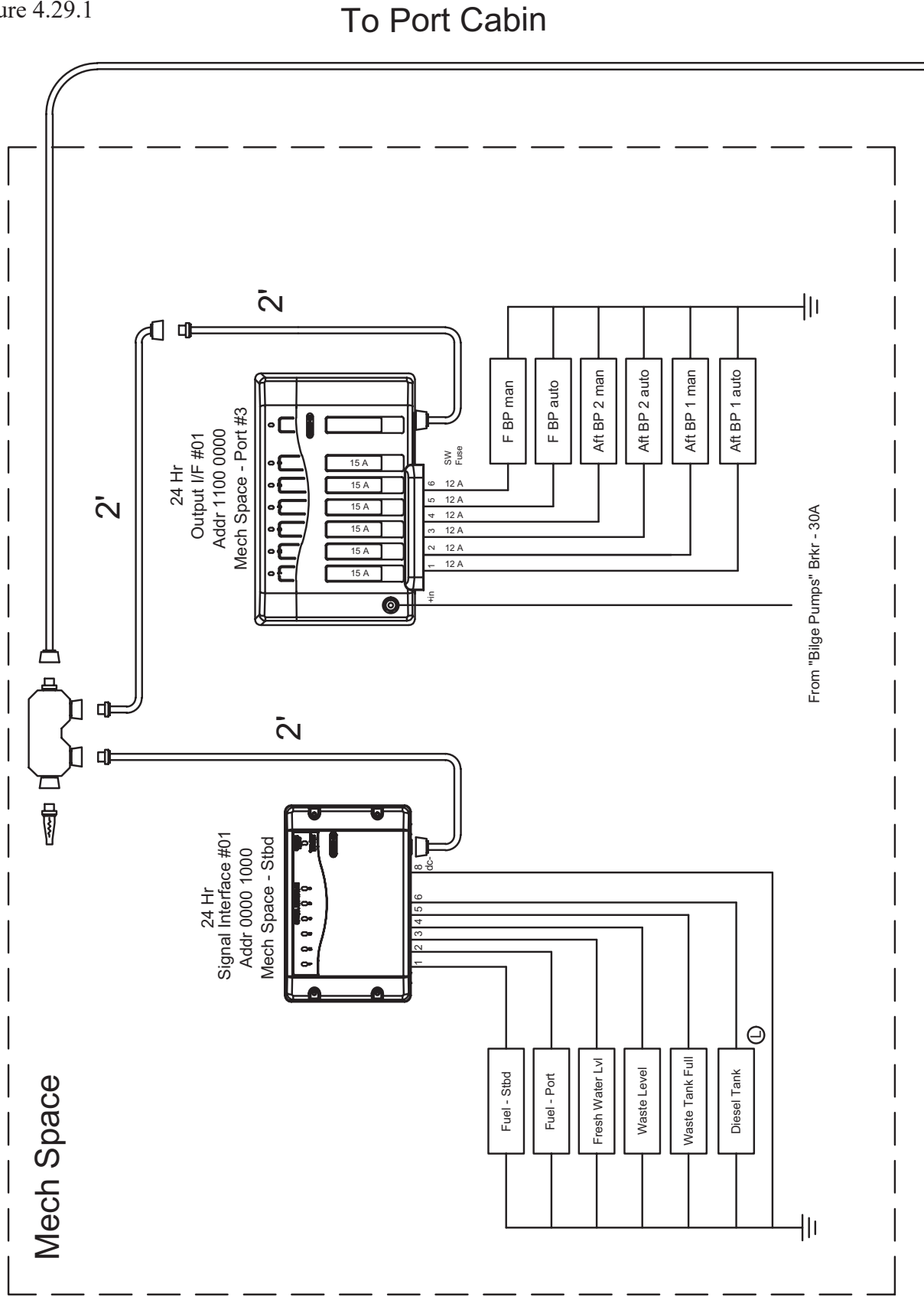
## Electrical Schematics

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.

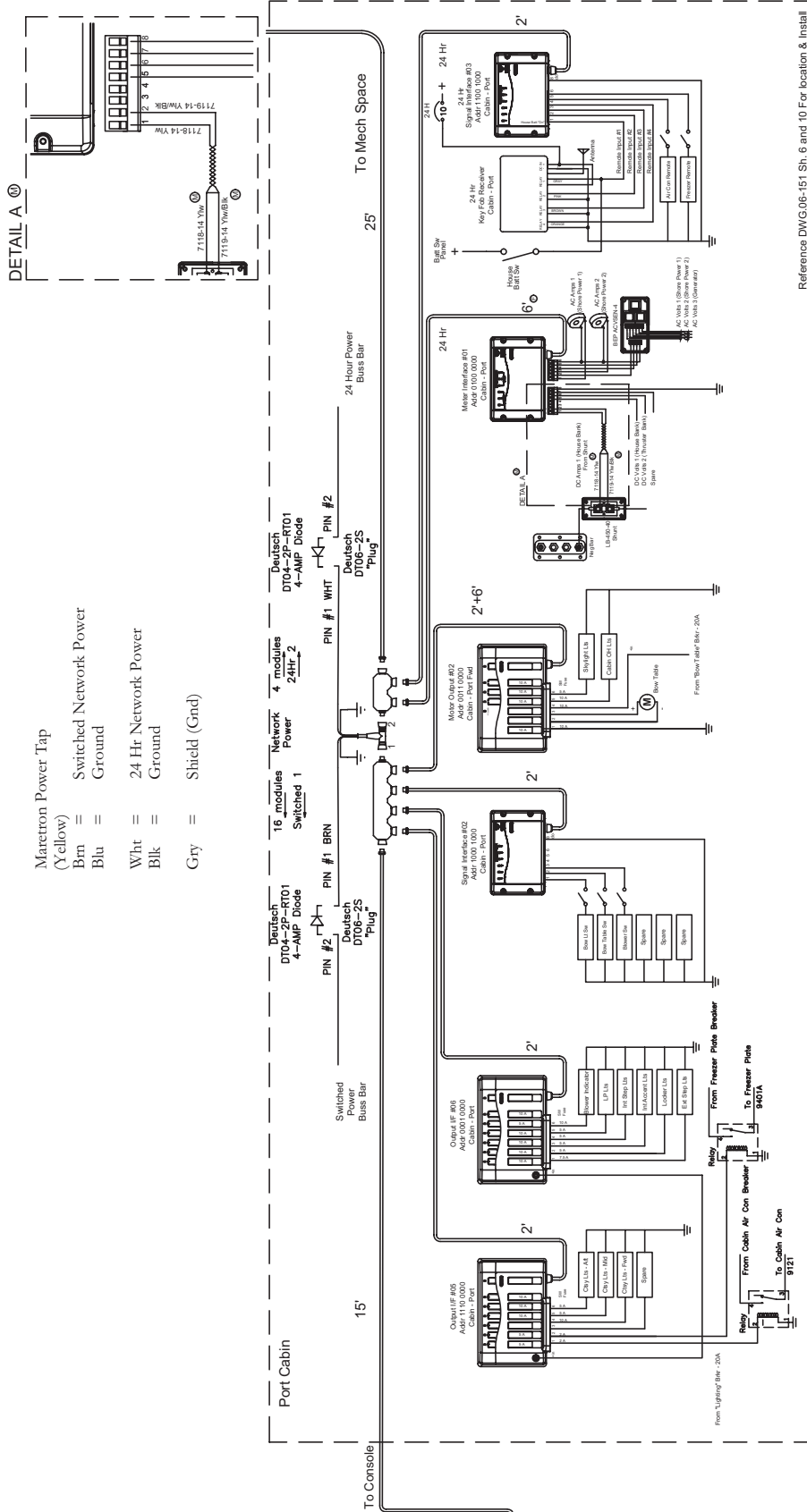
Boston Whaler reserves the right to change or update the electrical system on any model at any time without notice to the customer and is not obligated to make any updates to units built prior to the change. Contact customer service for current electrical schematics.

C-Zone Network  
Figure 4.29.1



6015-07-224\_1\_N

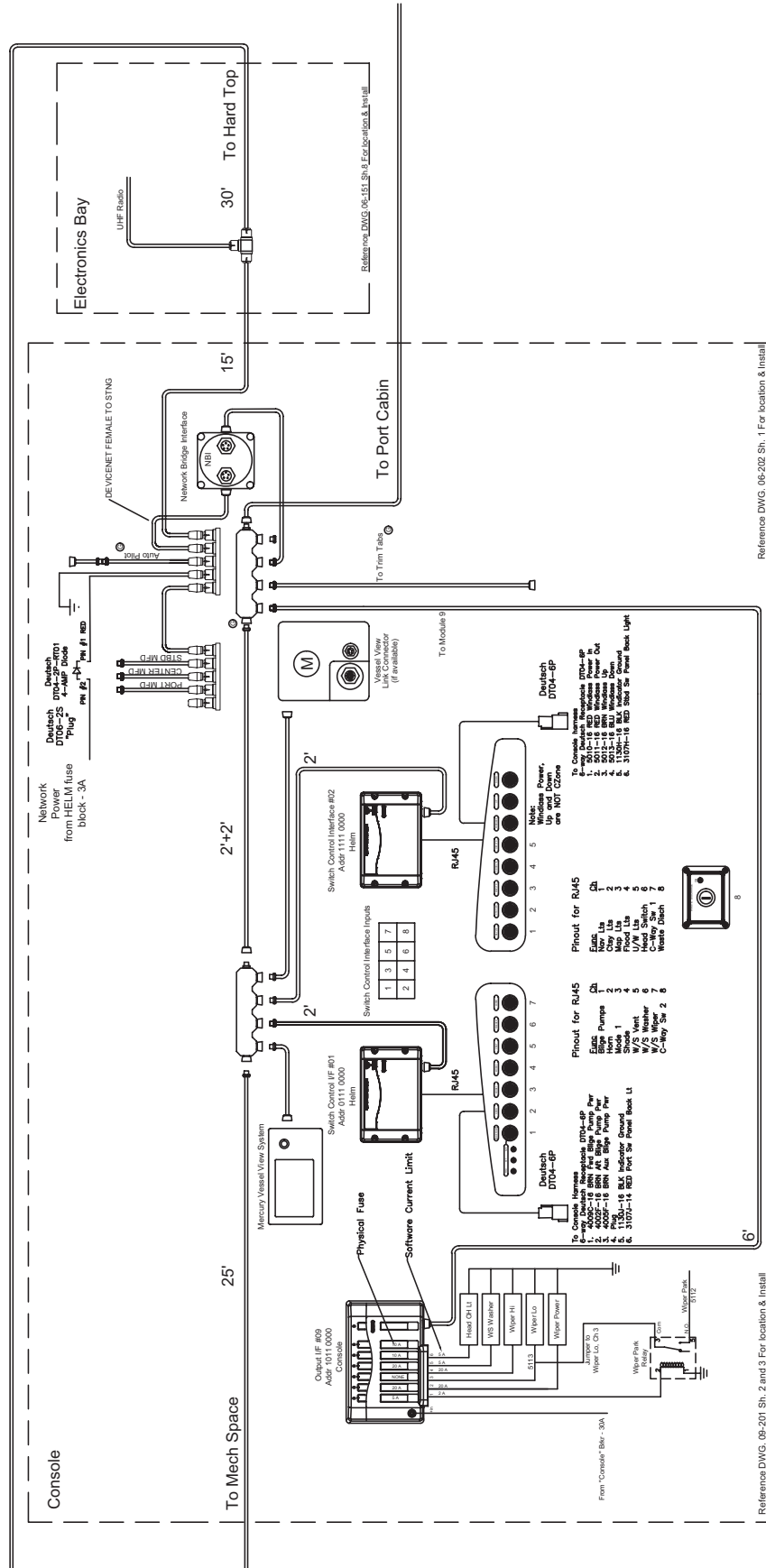
C-Zone Network  
Figure 4.30.1



Reference DWG 06-151 Sh. 6 and 10 For location & install

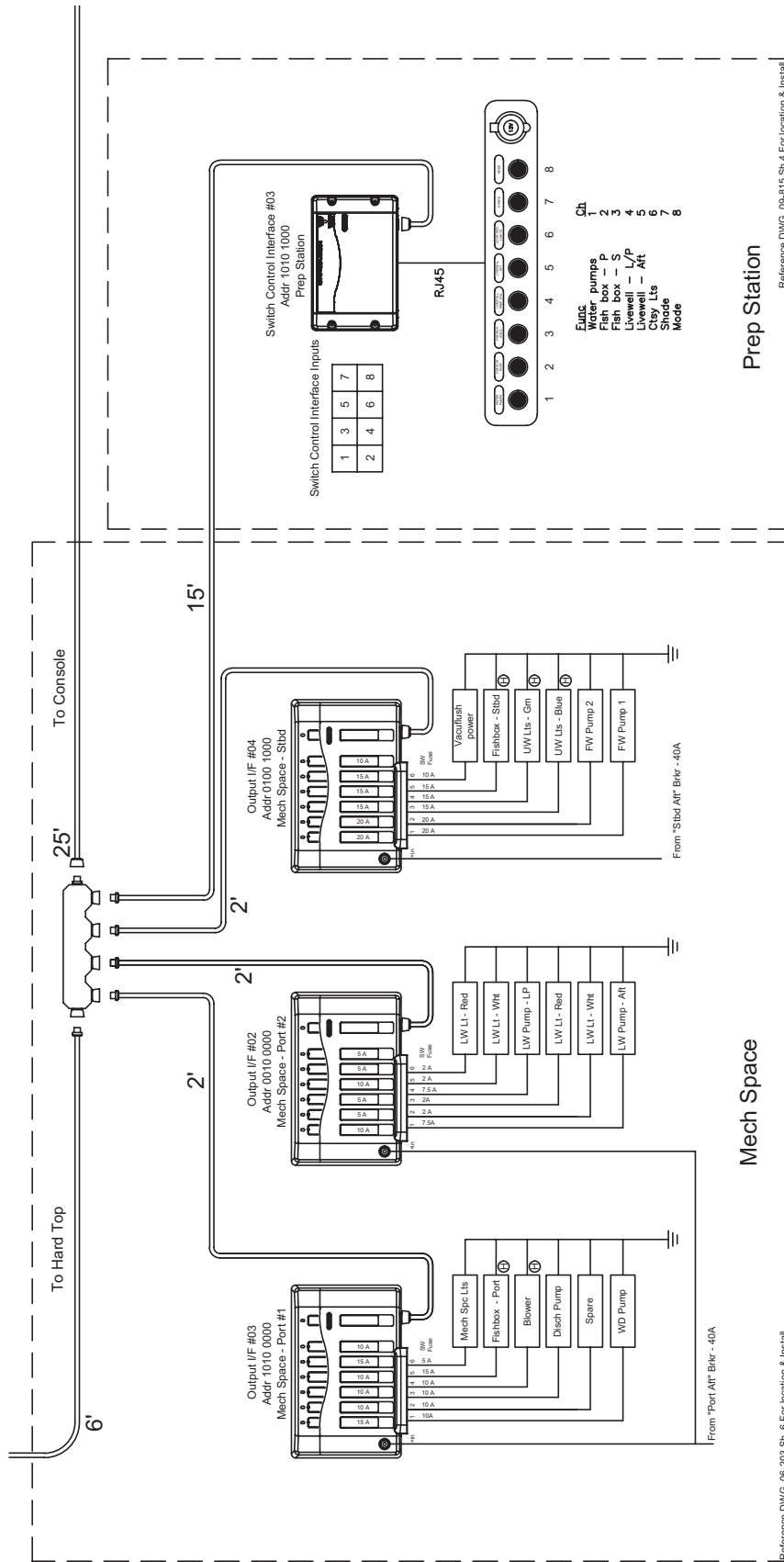
6015-07-224\_2\_N

C-Zone Network  
Figure 4.31.1



6015-07-224\_3\_N

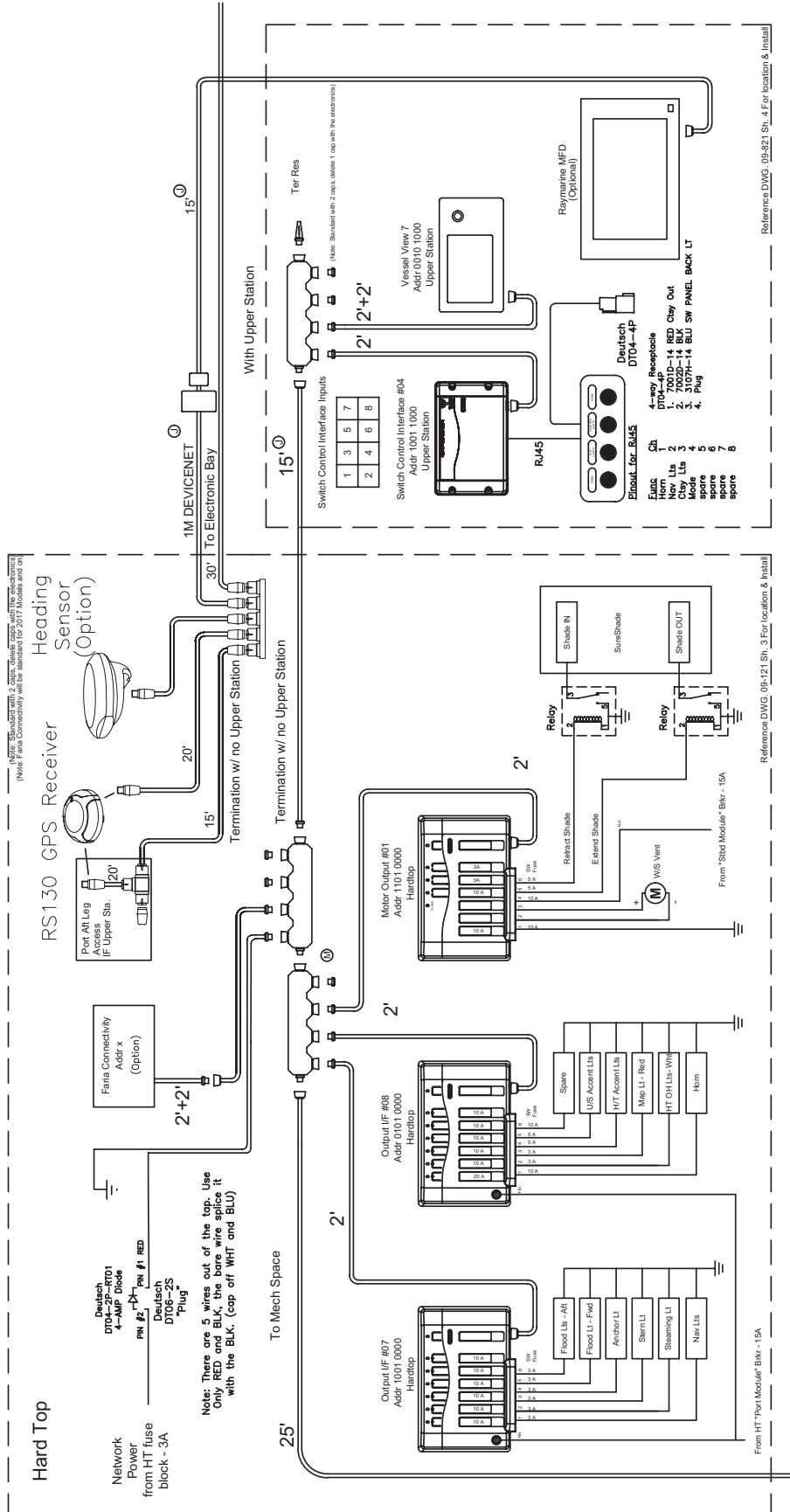
C-Zone Network  
Figure 4.32.1



6015-07-224\_4\_N

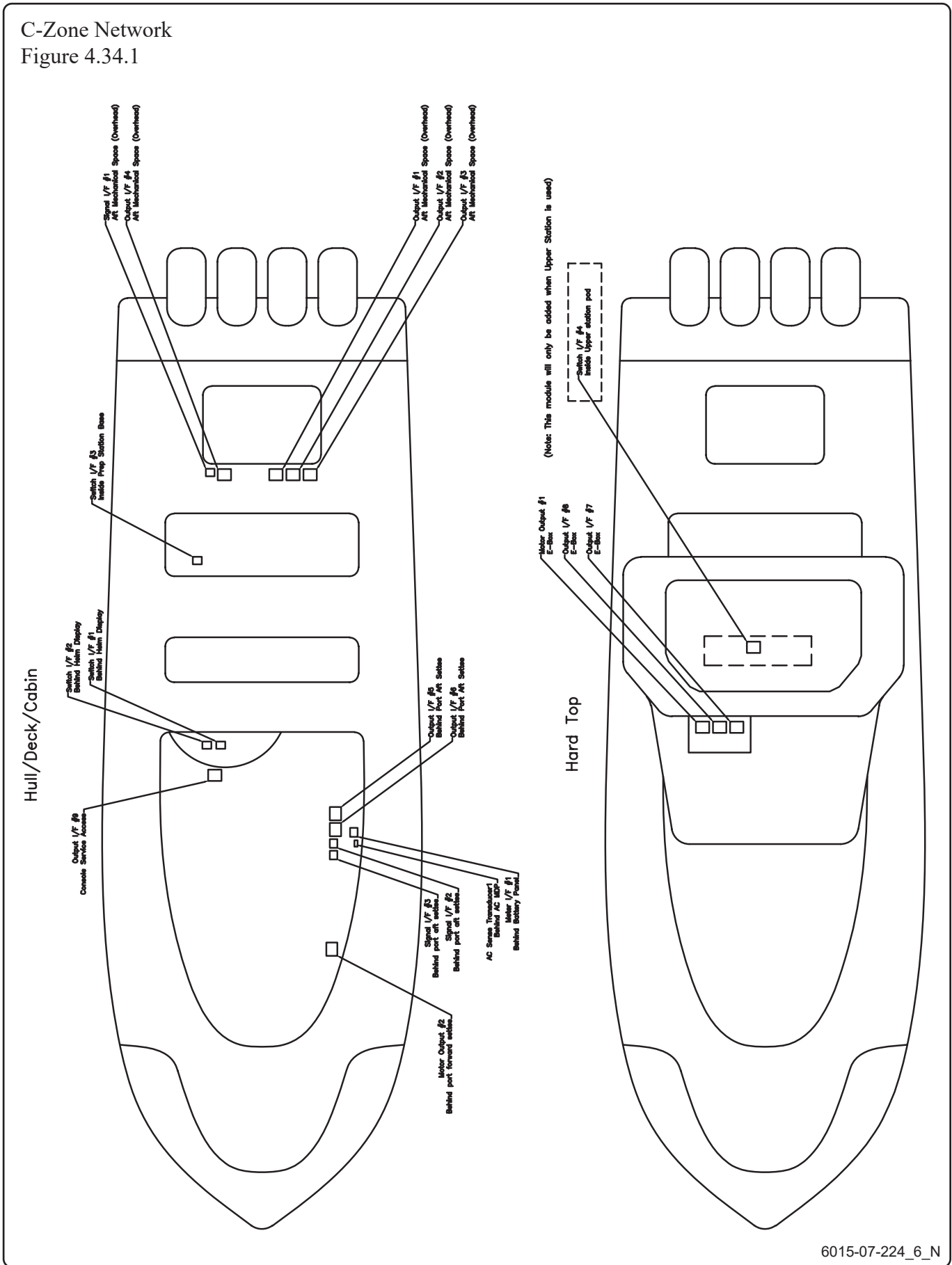


C-Zone Network  
Figure 4.33.1



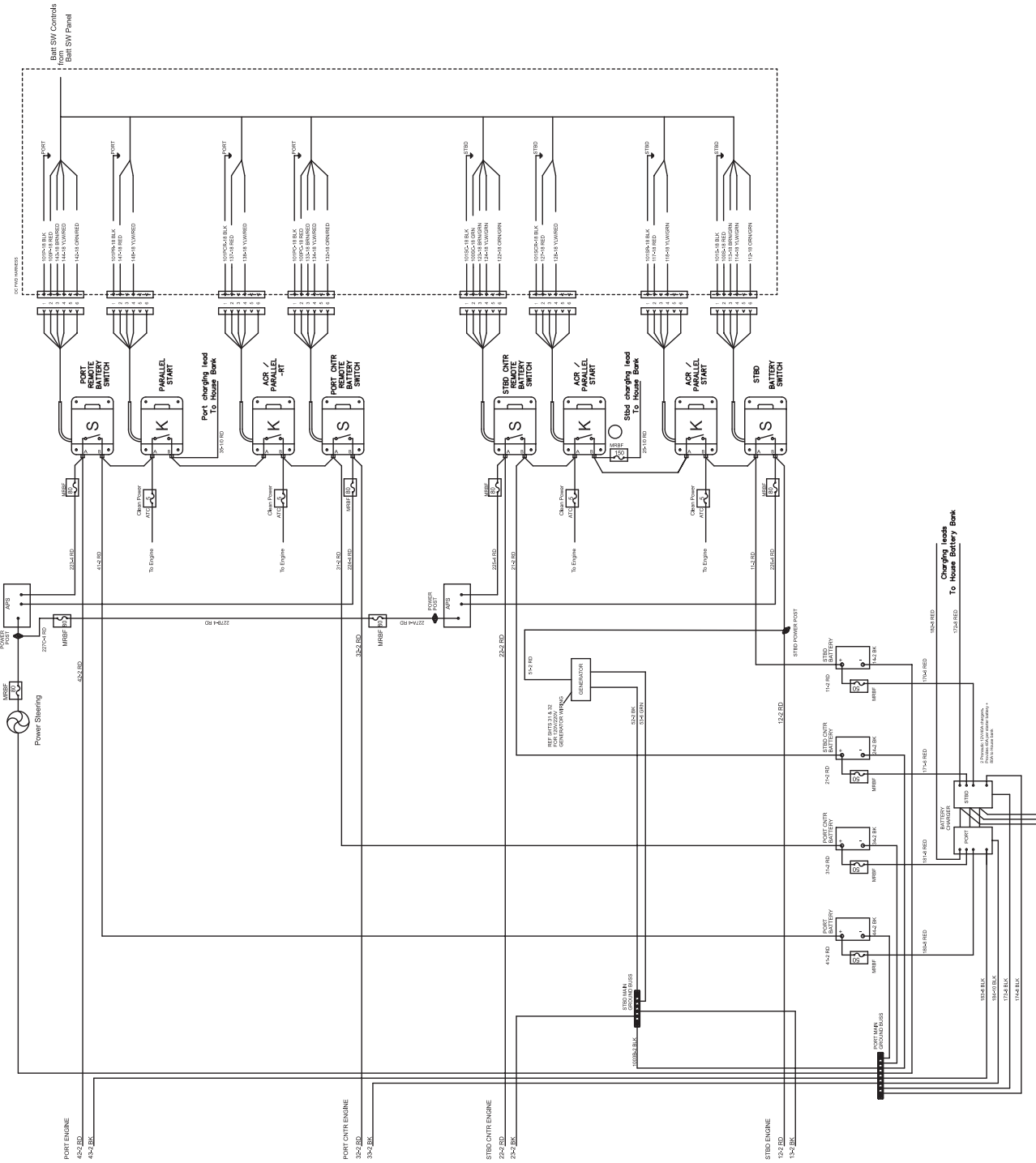
6015-07-224 5 N

C-Zone Network  
Figure 4.34.1



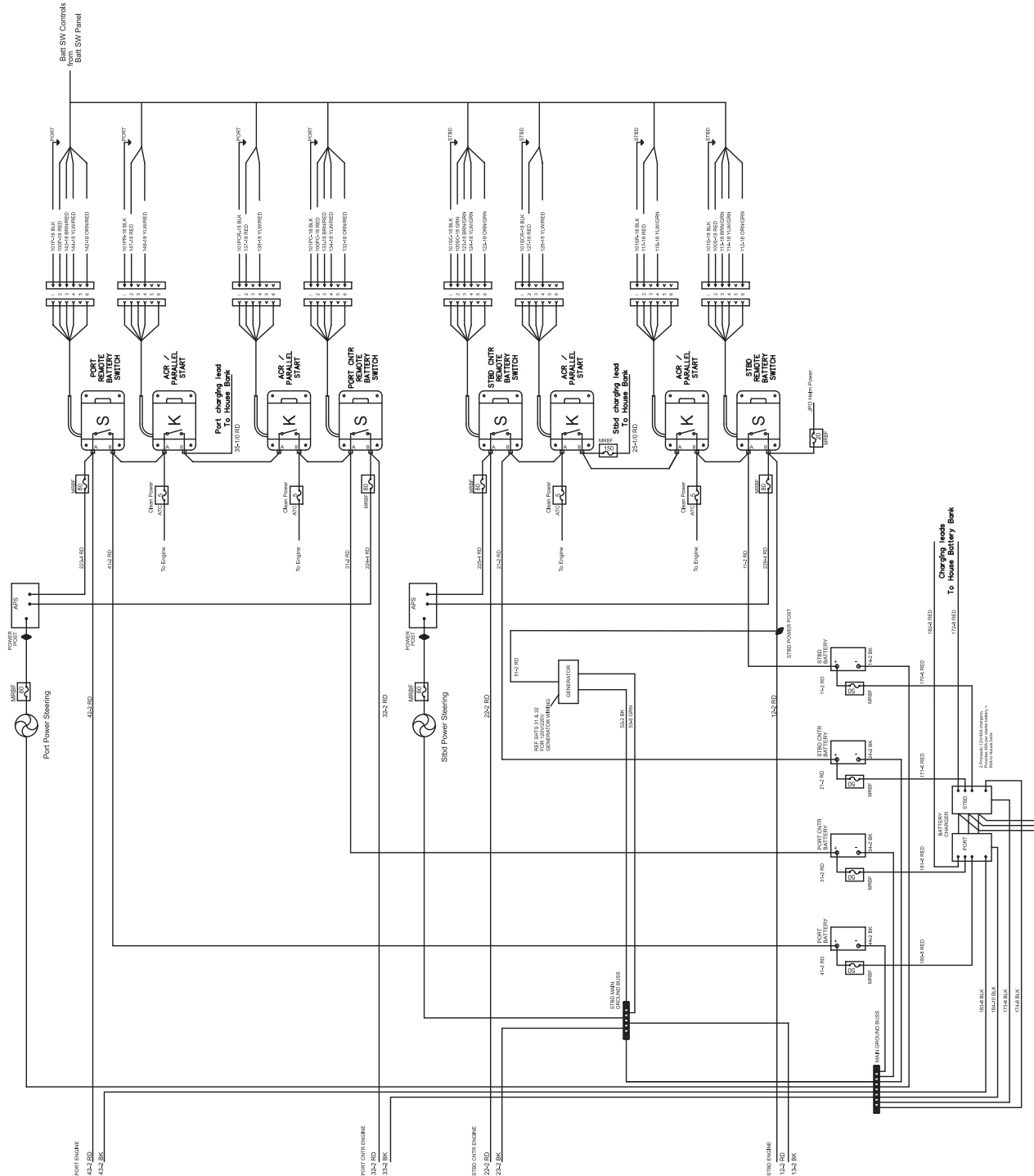
6015-07-224\_6\_N

Starter Battery Arrangement - Std Steering  
Figure 4.35.1

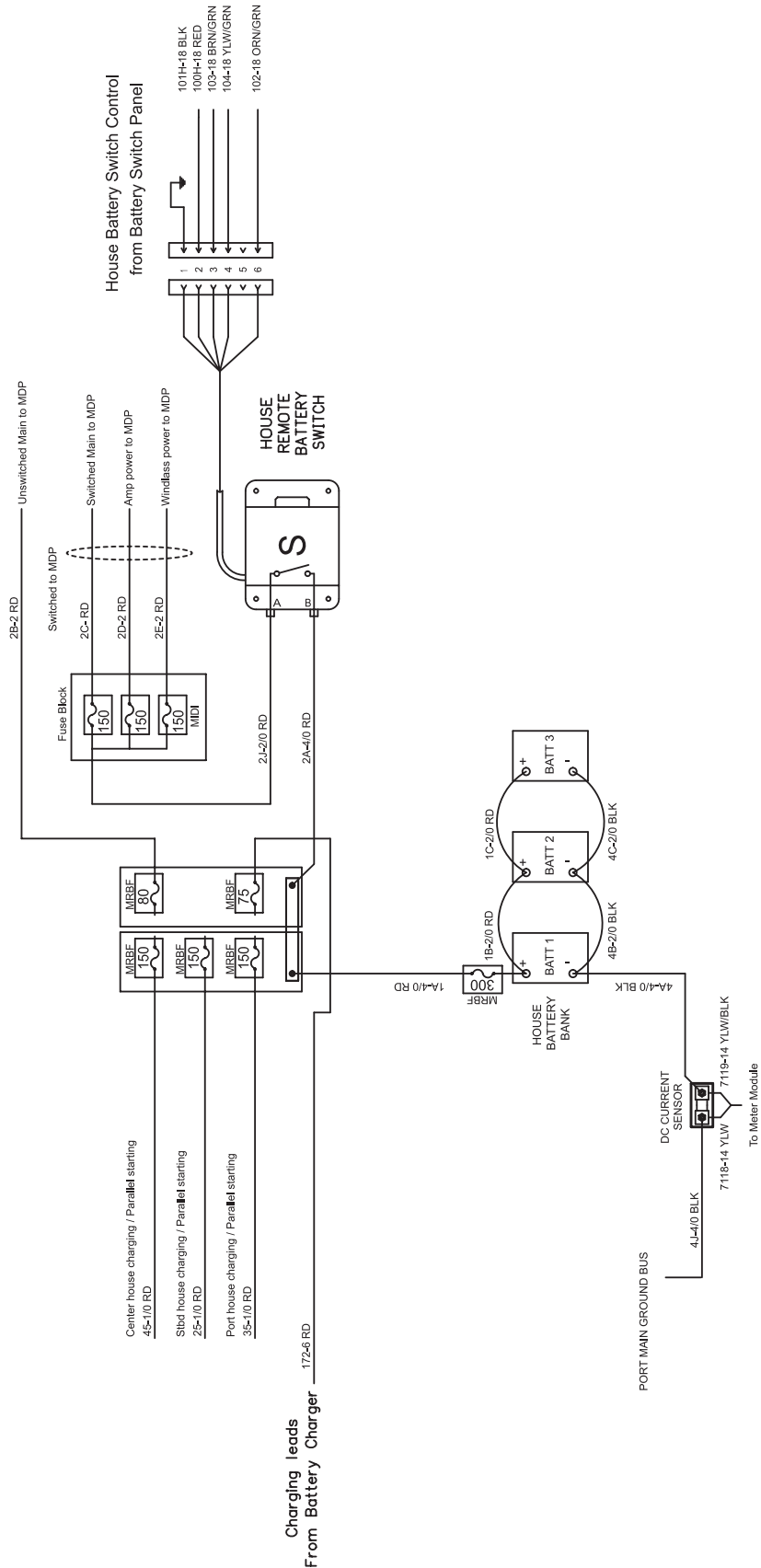


6015-07-401\_1\_AO

## Starter Battery Arrangement Joystick Steering Two Power Steering Pumps Figure 4.36.1



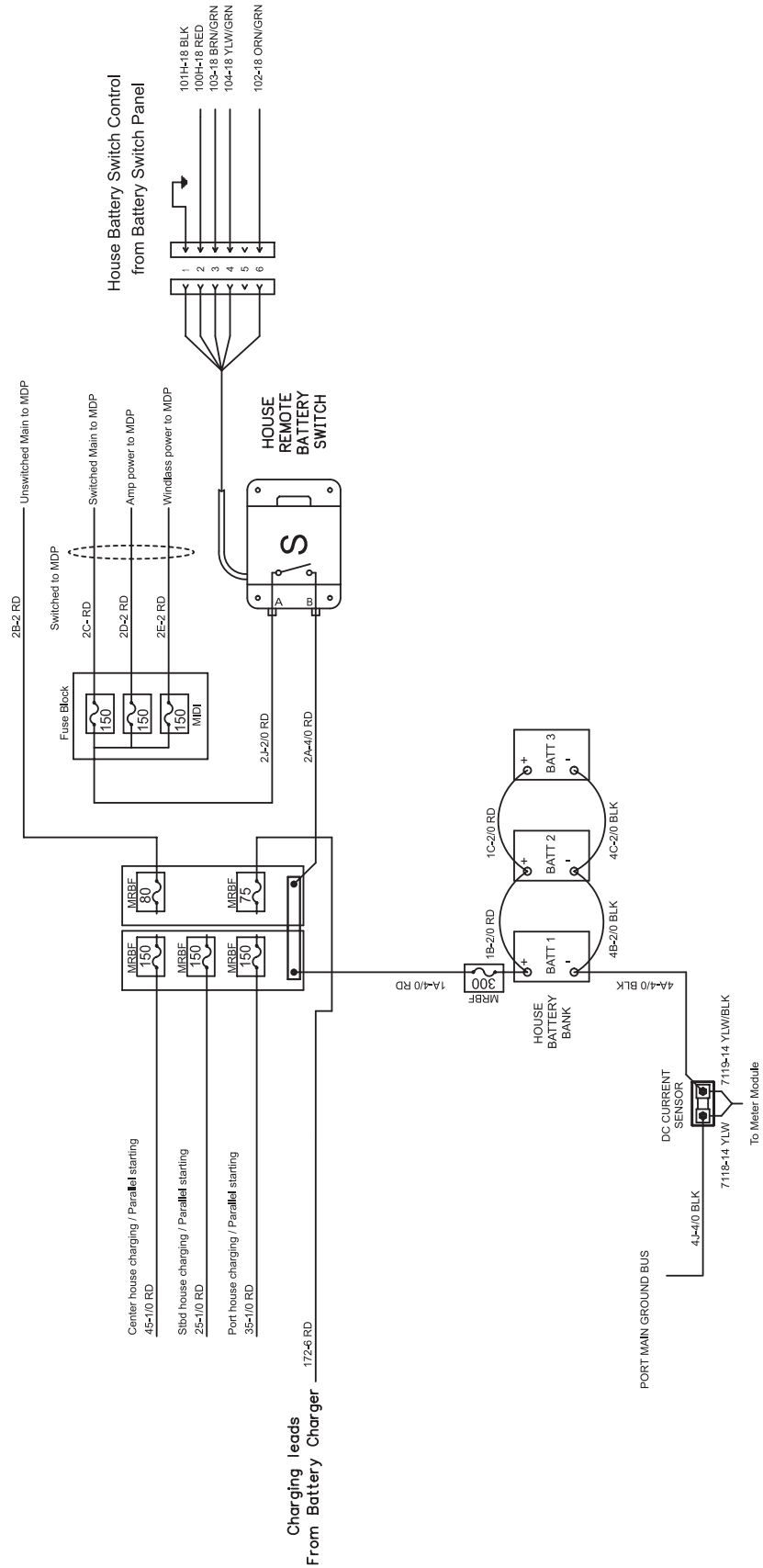
House Battery Arrangement, Triple Engine  
Figure 4.37.1



6015-07-401\_3\_AO

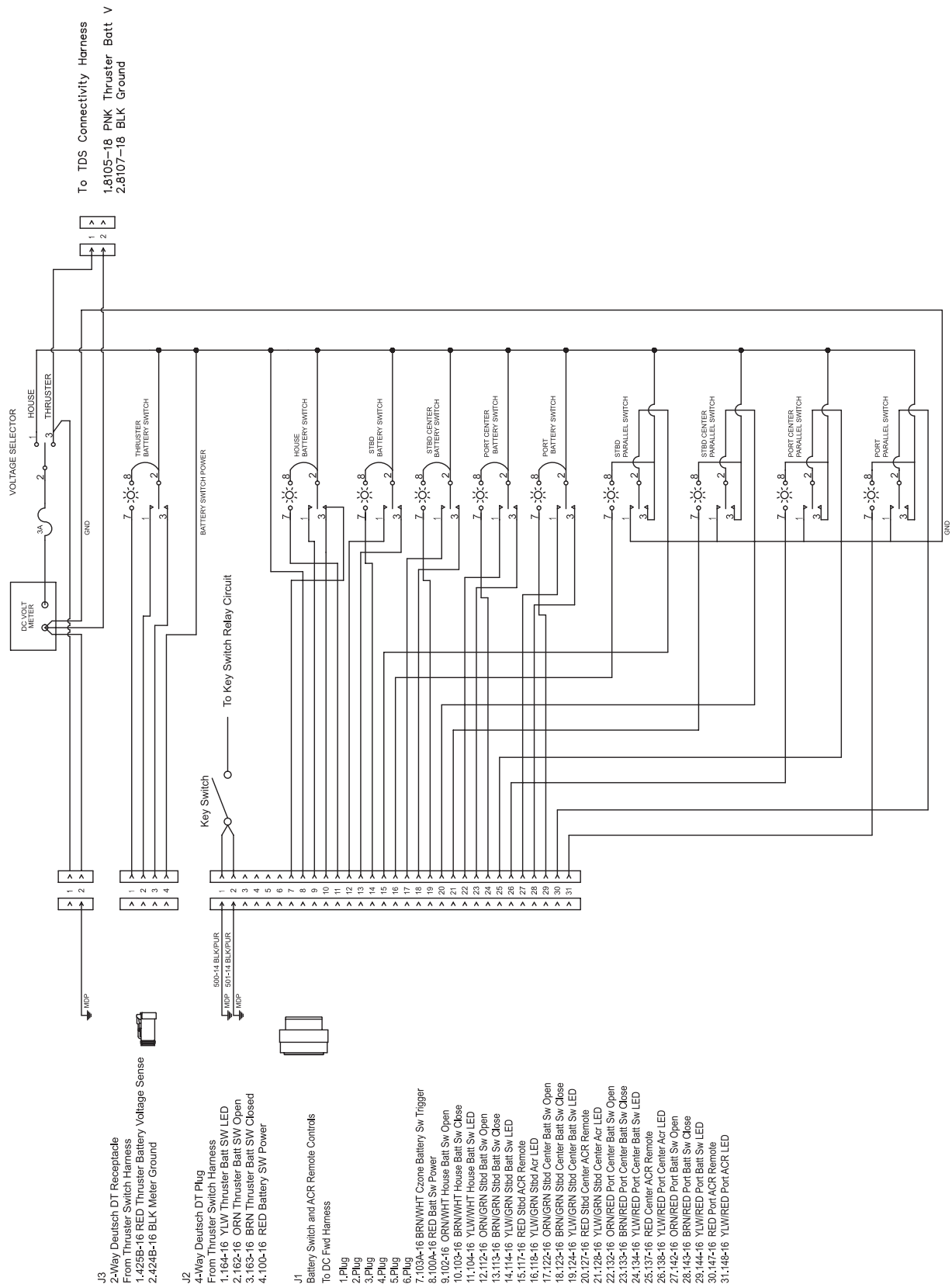


House Battery Arrangement, Quad Engine  
Figure 4.38.1



6015-07-401\_3\_AO

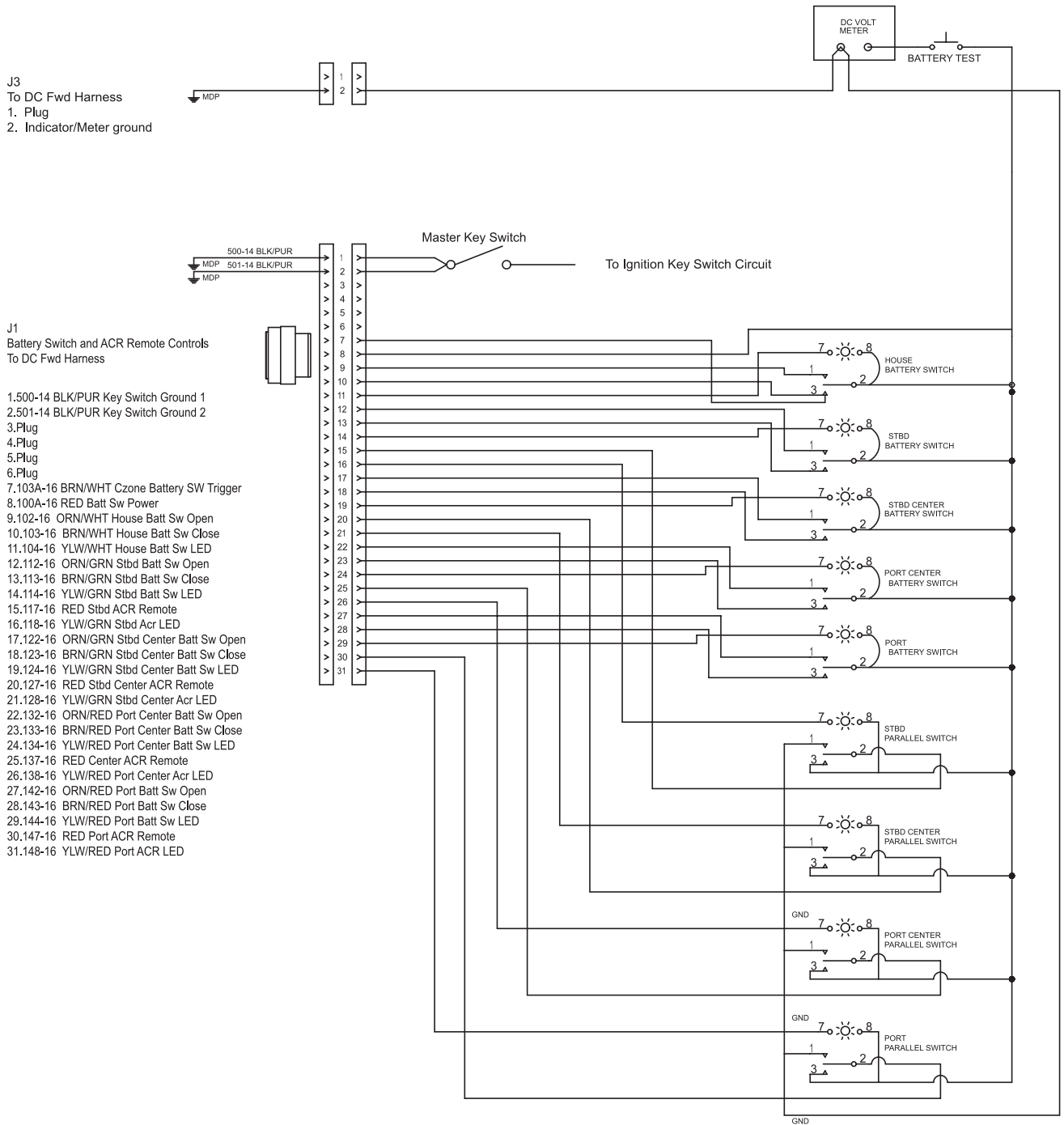
Battery Switch Control - Standard Steering  
Figure 4.39.1



6015-07-401\_4\_AO

## Battery Switch Control - Joystick Steering

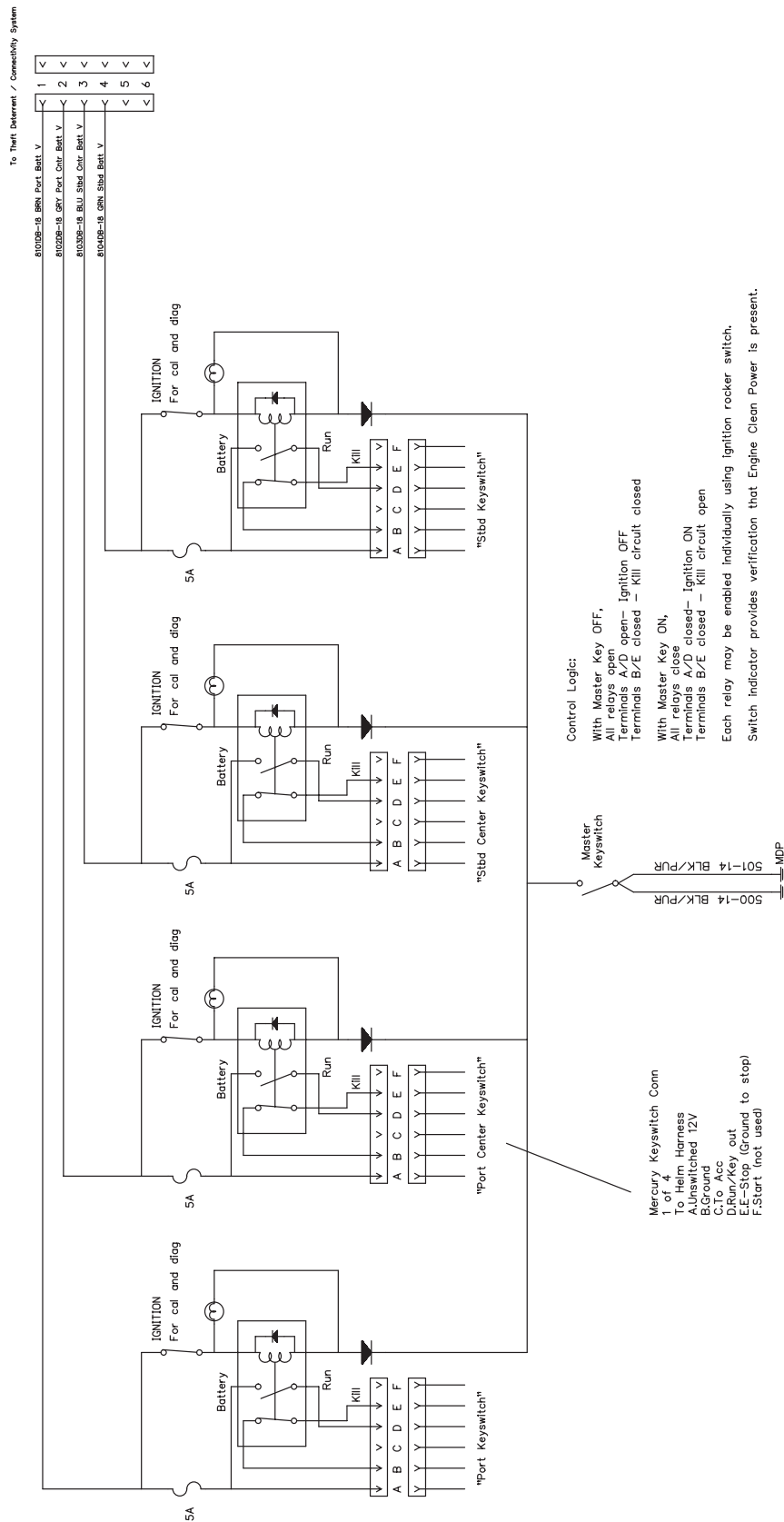
Figure 4.40.1



6015-07-401\_5\_AO

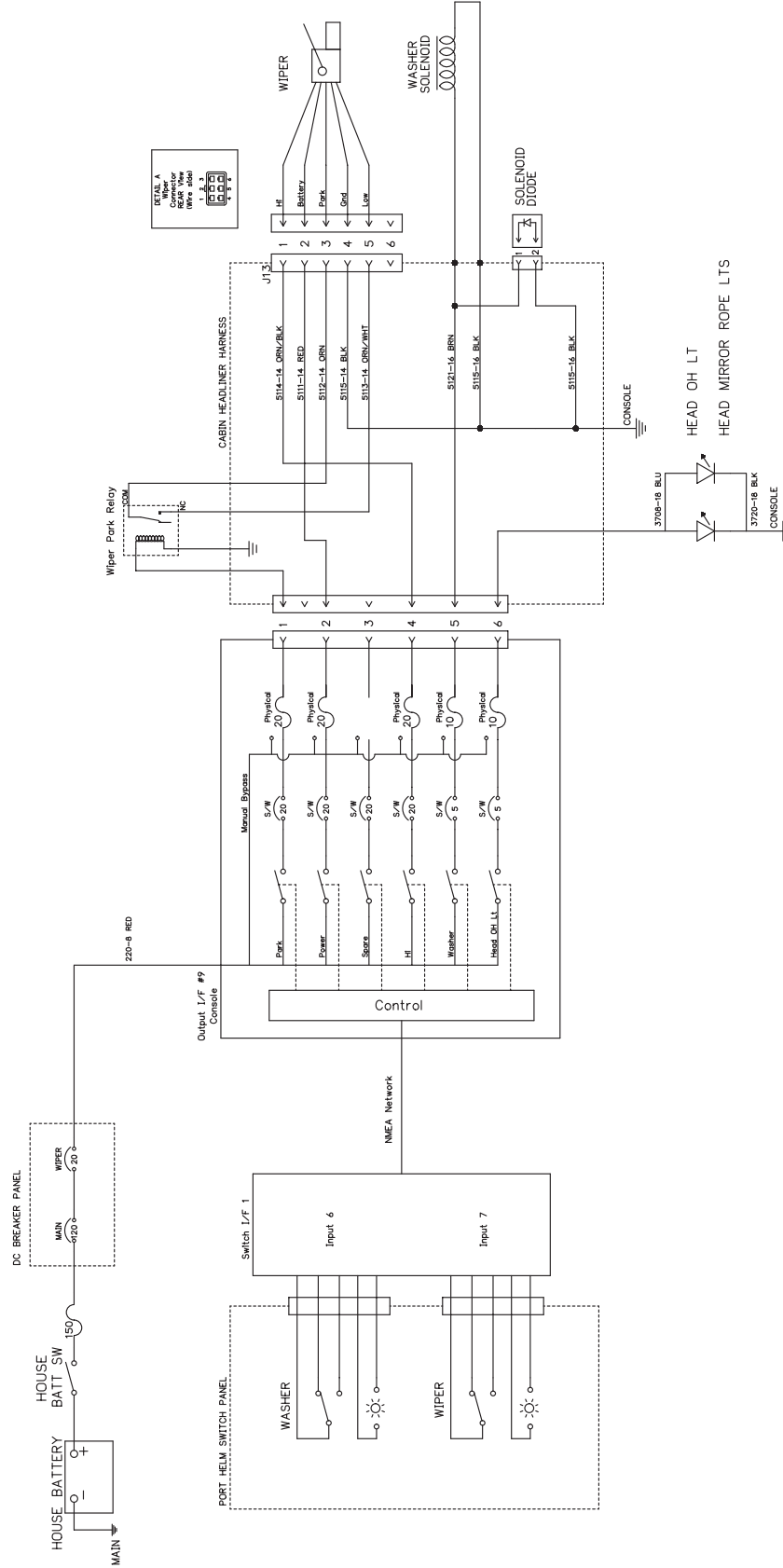
## Master Ignition Key Switch, Quad Engines

Figure 4.41.1



6015-07-401\_6\_AO

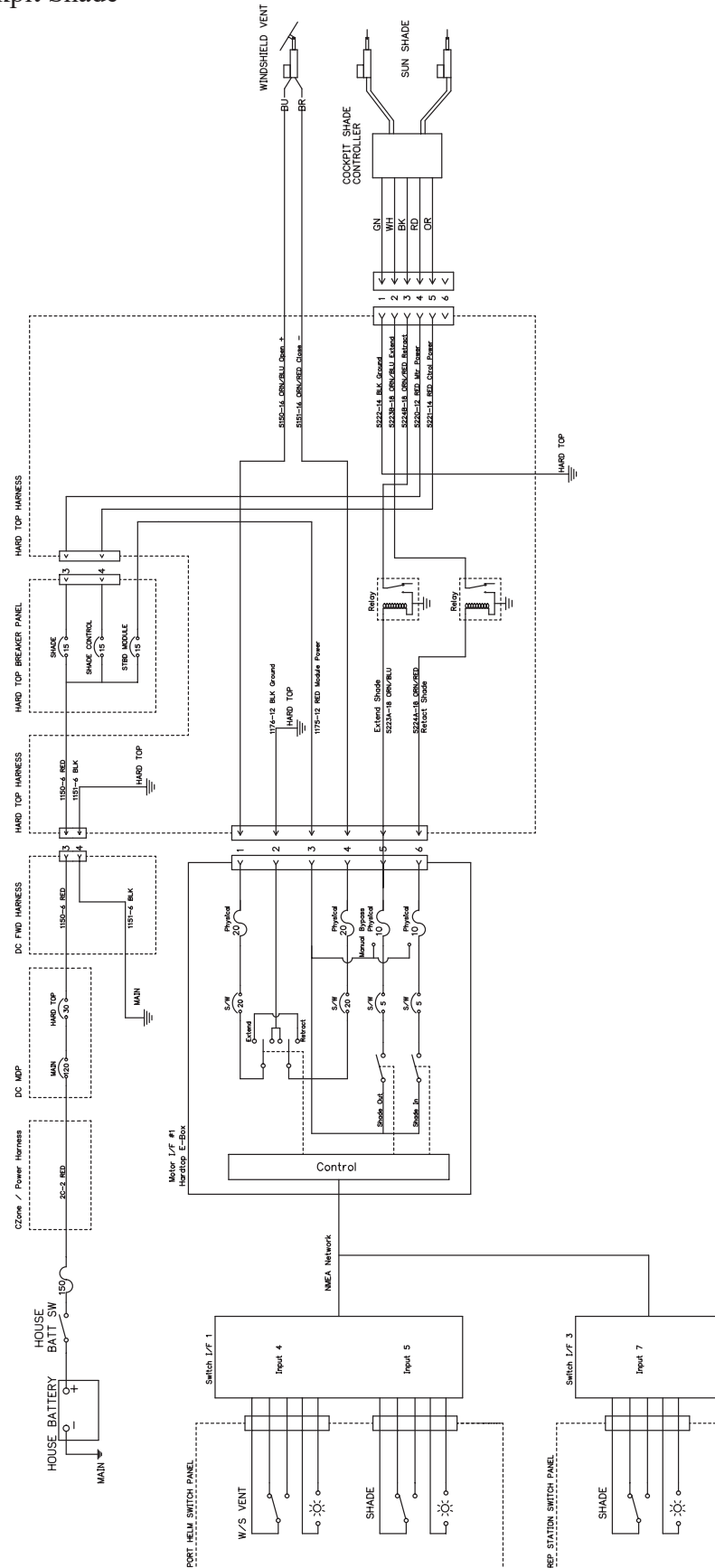
Wiper and Washer  
Figure 4.42.1



6015-07-401\_7\_AO

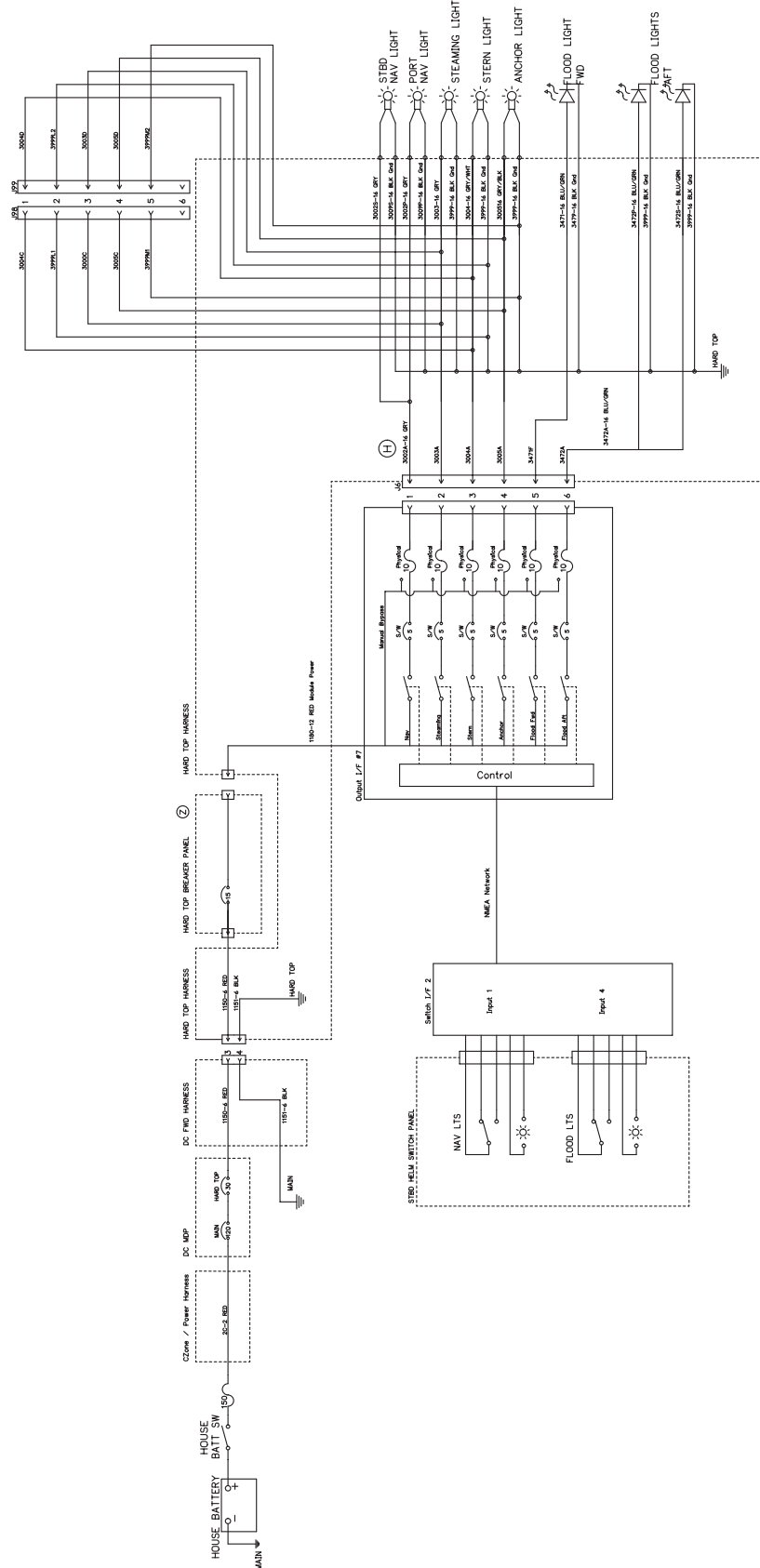


Windshield Vent and Cockpit Shade  
Figure 4.43.1



6015-07-401\_8\_AO

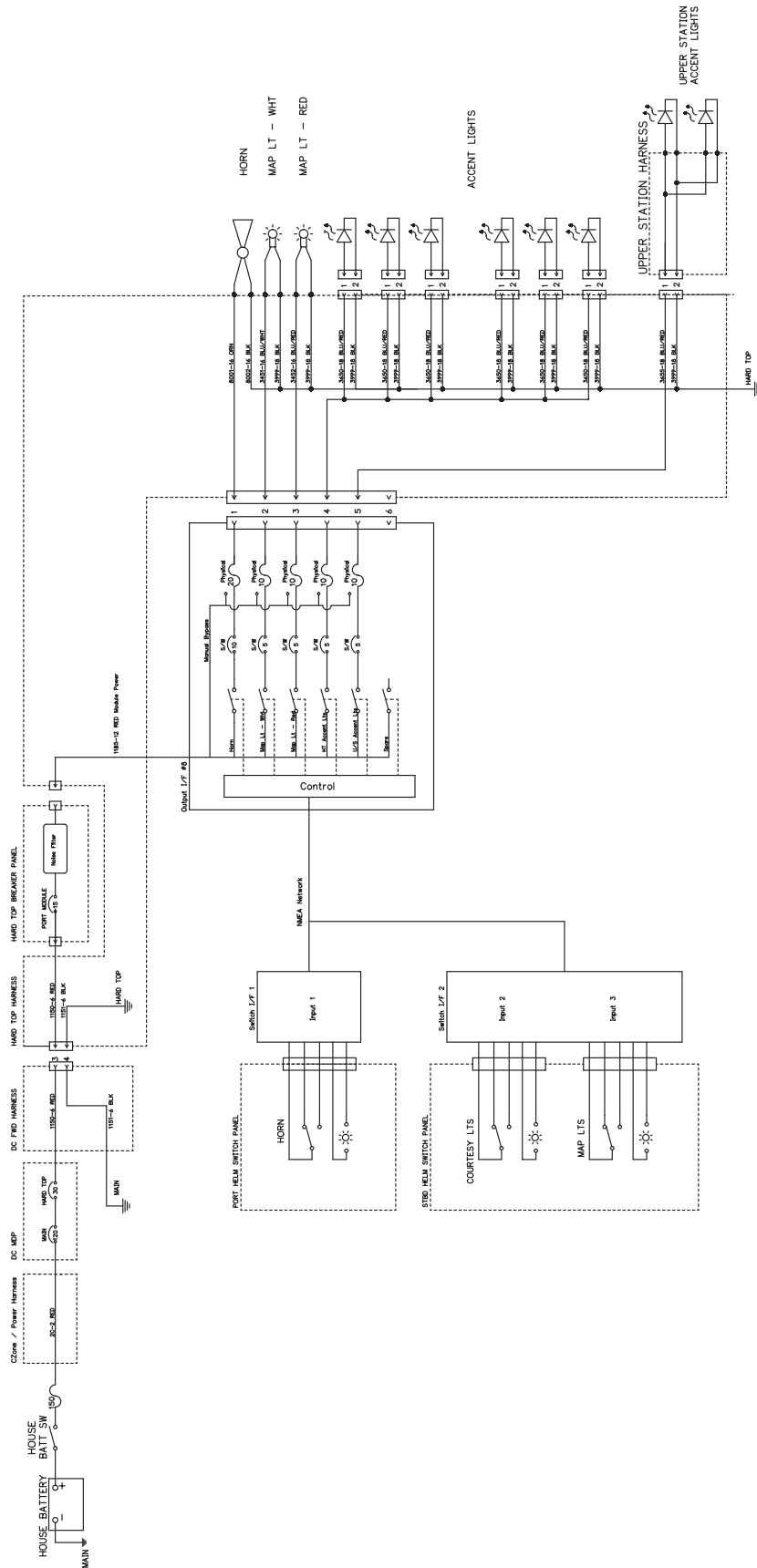
Navigation and Flood Lights  
Figure 4.44.1



6015-07-401\_9\_AO

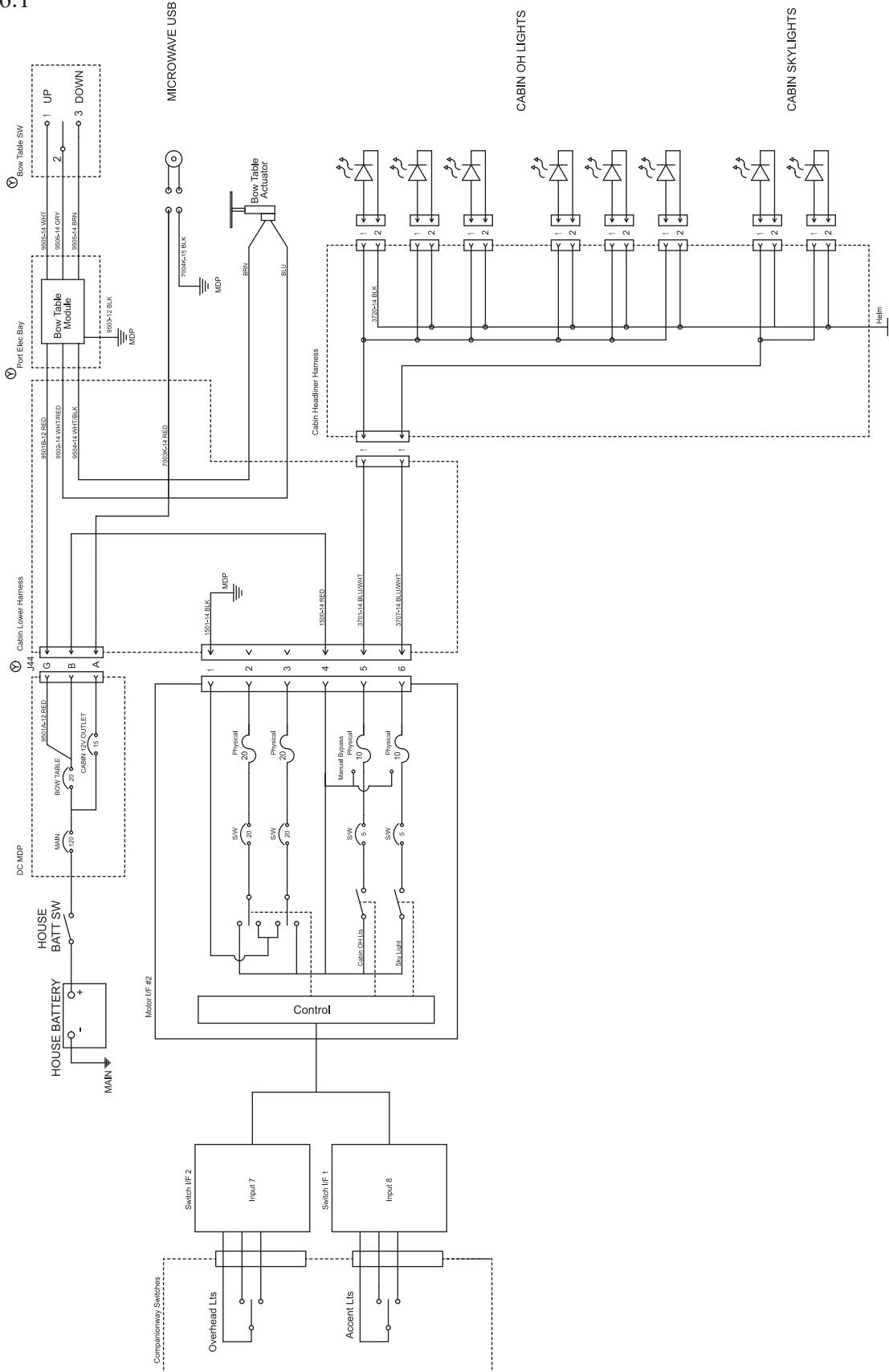
# Chapter 4 • Electrical

Horn, Map, HT Accent Lighting  
Figure 4.45.1



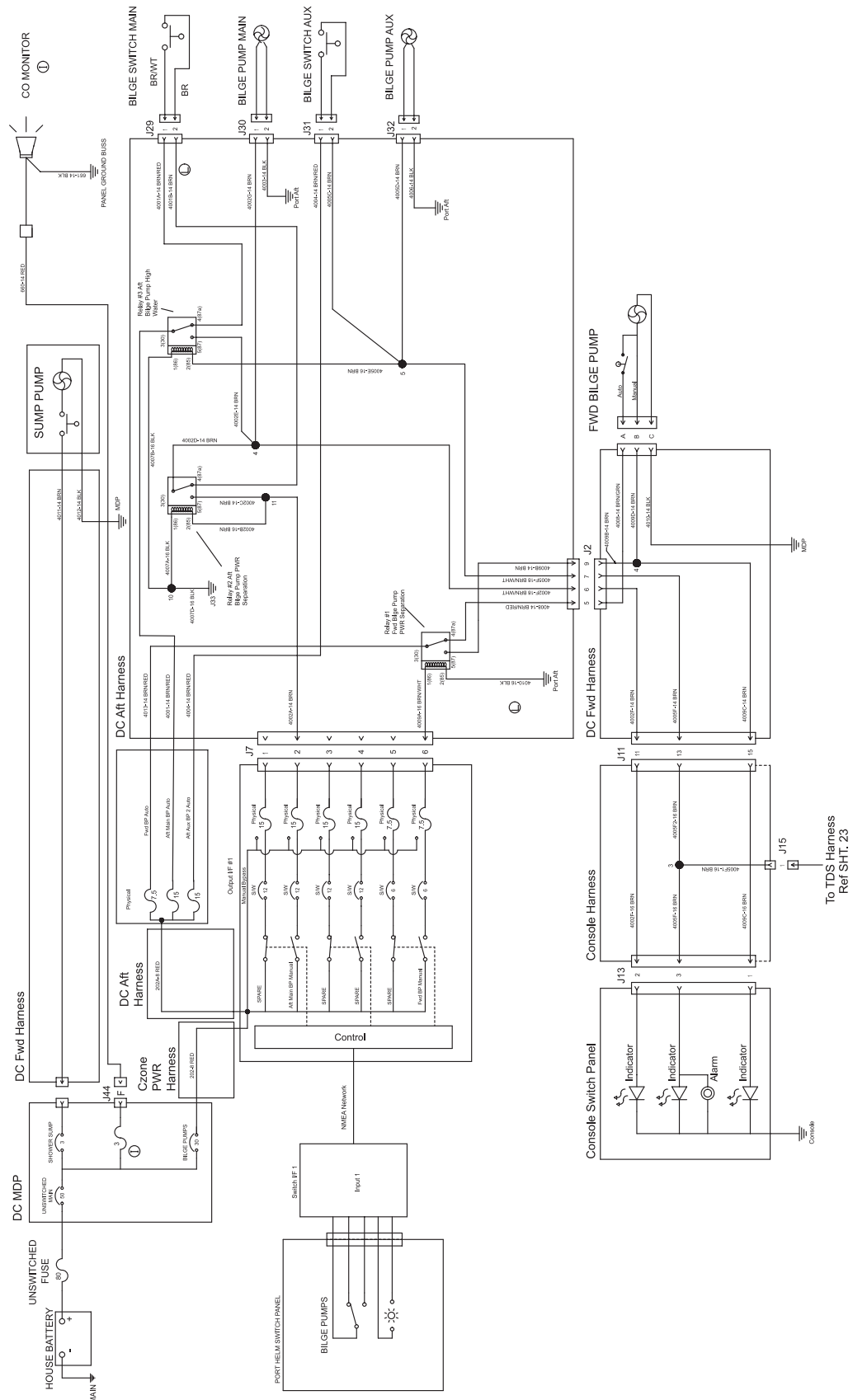
6015-07-401\_10\_AO

Cabin Overhead and Skylights, Bow Table  
Figure 4.46.1



6015-07-401\_11\_AO

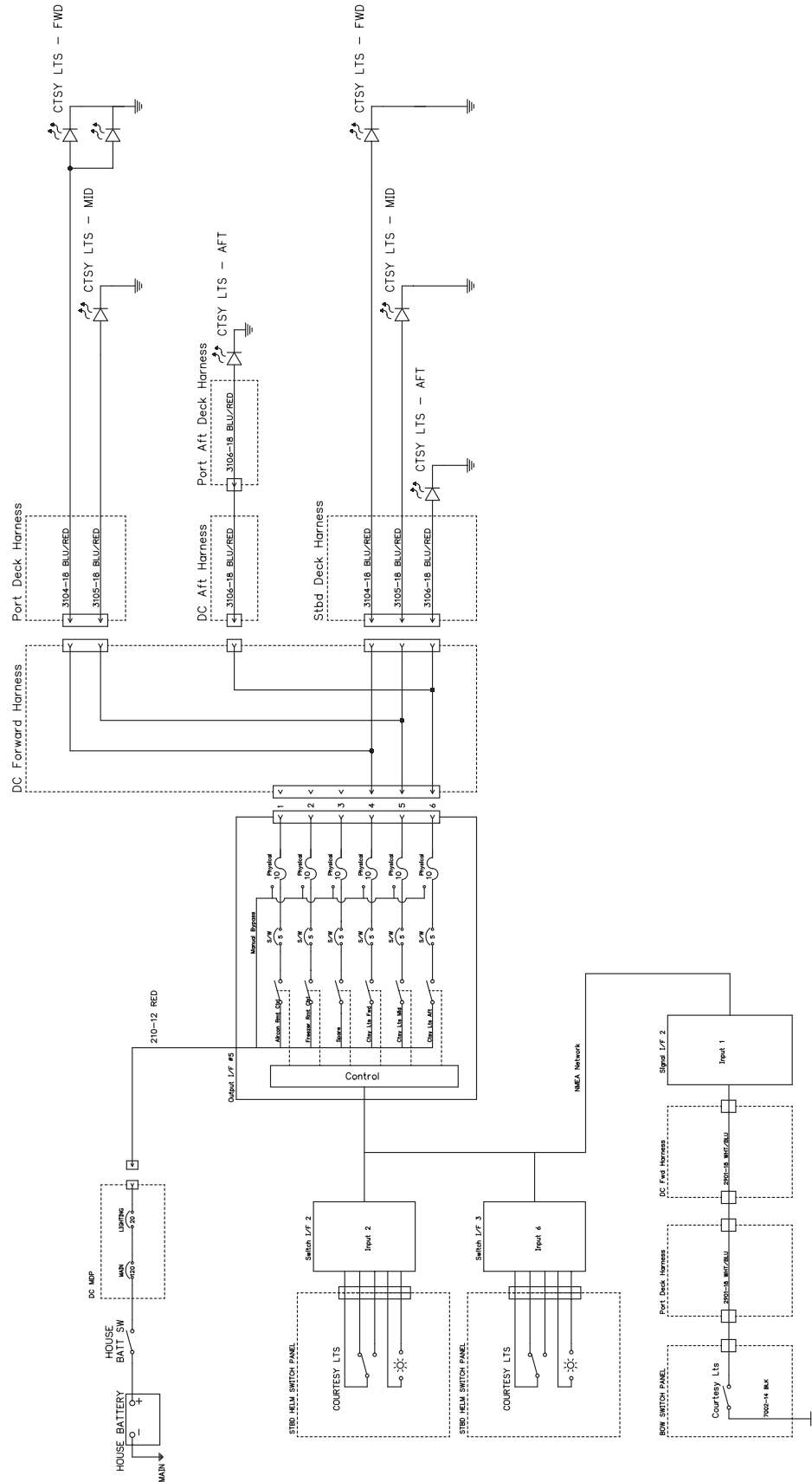
Bilge Pumps / Sump Pump  
Figure 4.47.1



To DSD Harness  
Ref SHT. 23

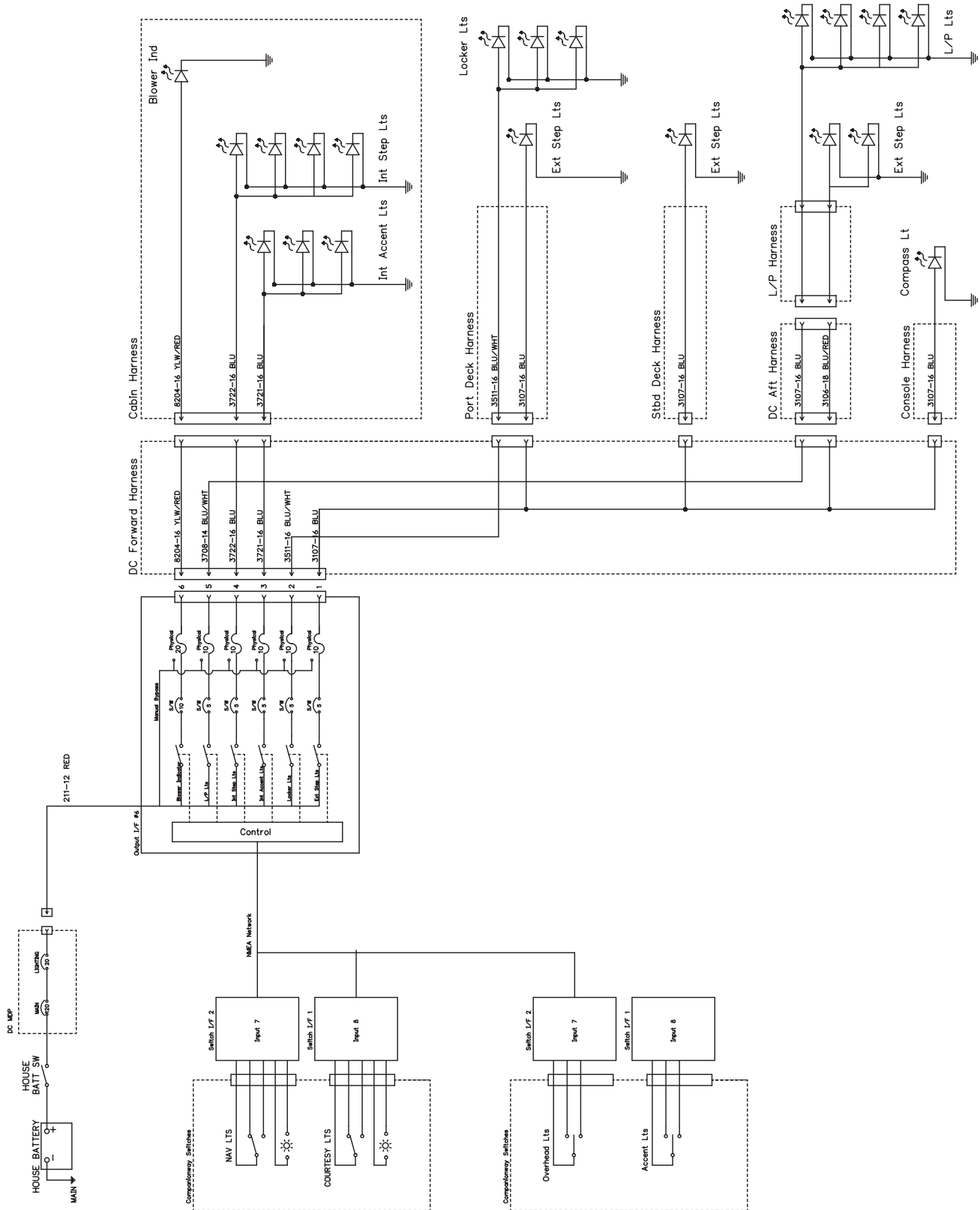


Deck Courtesy Lights  
Figure 4.48.1



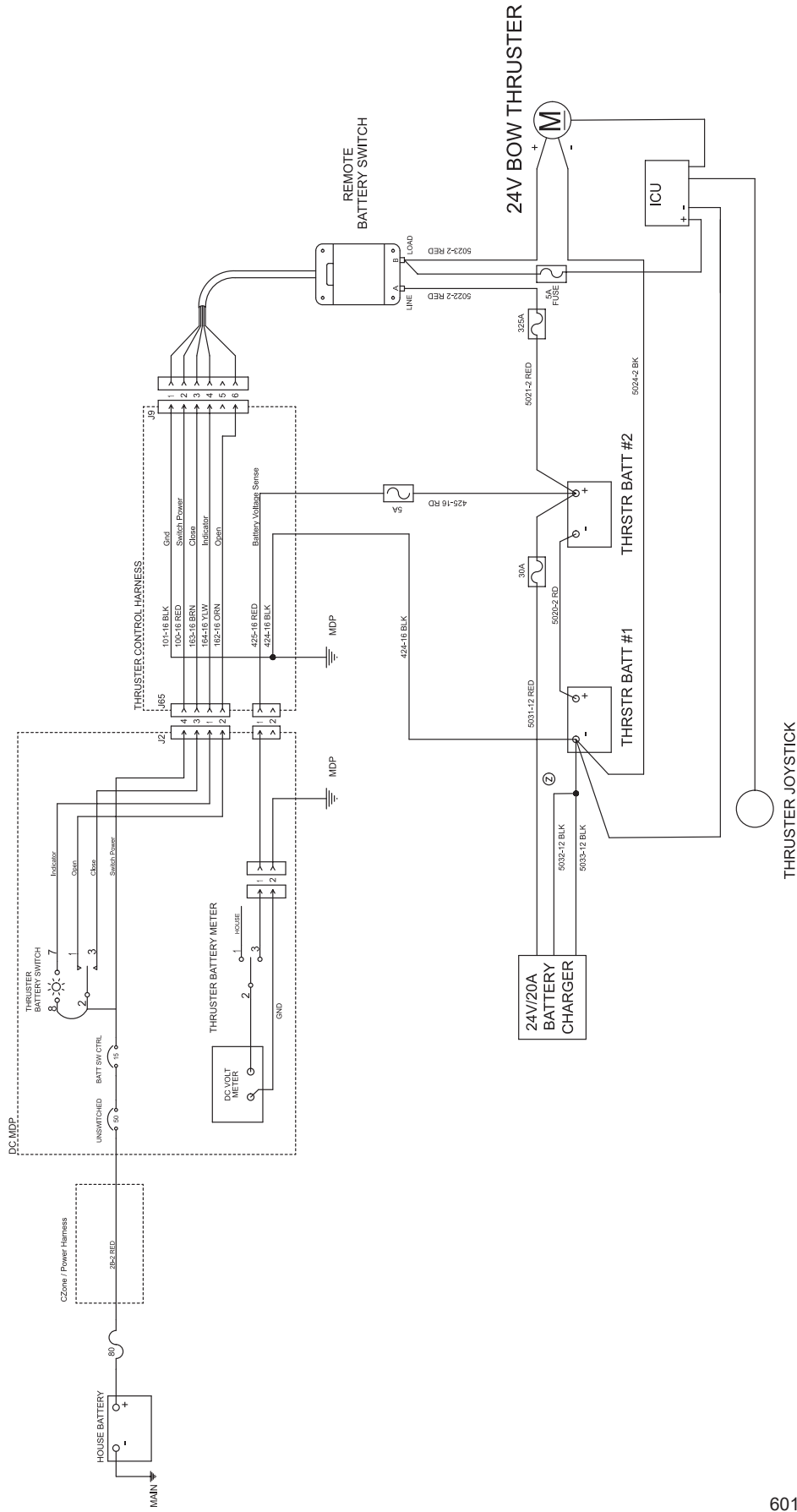
6015-07-401\_13\_AO

Lighting  
Figure 4.49.1



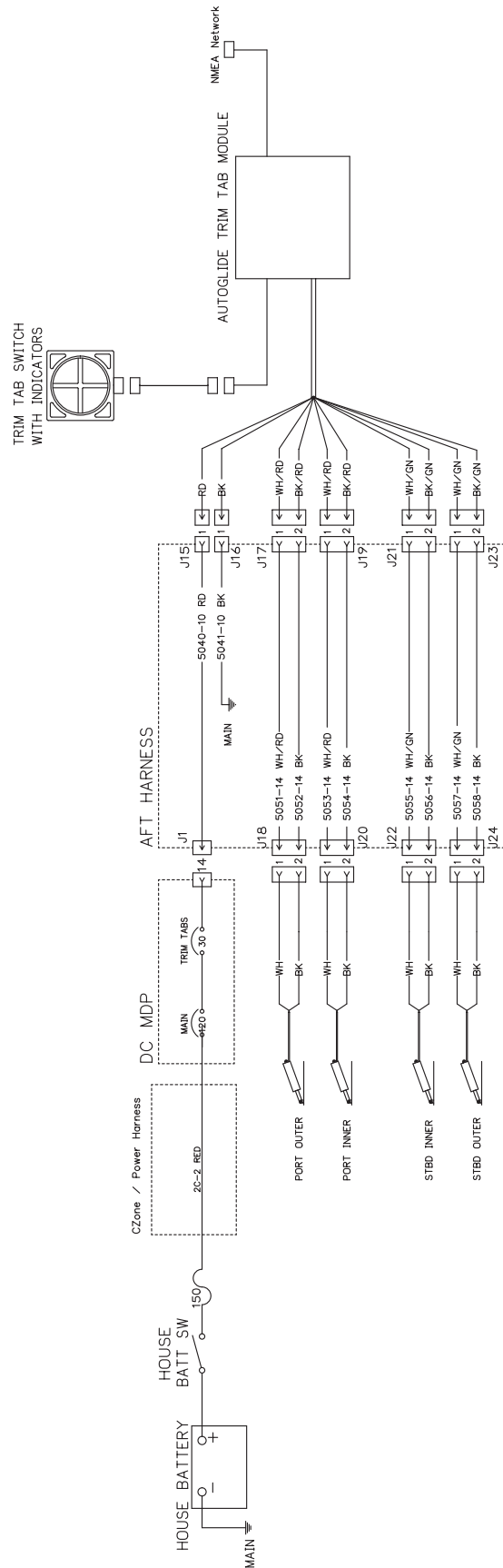
6015-07-401\_14\_AO

Bow Thruster  
Figure 4.50.1



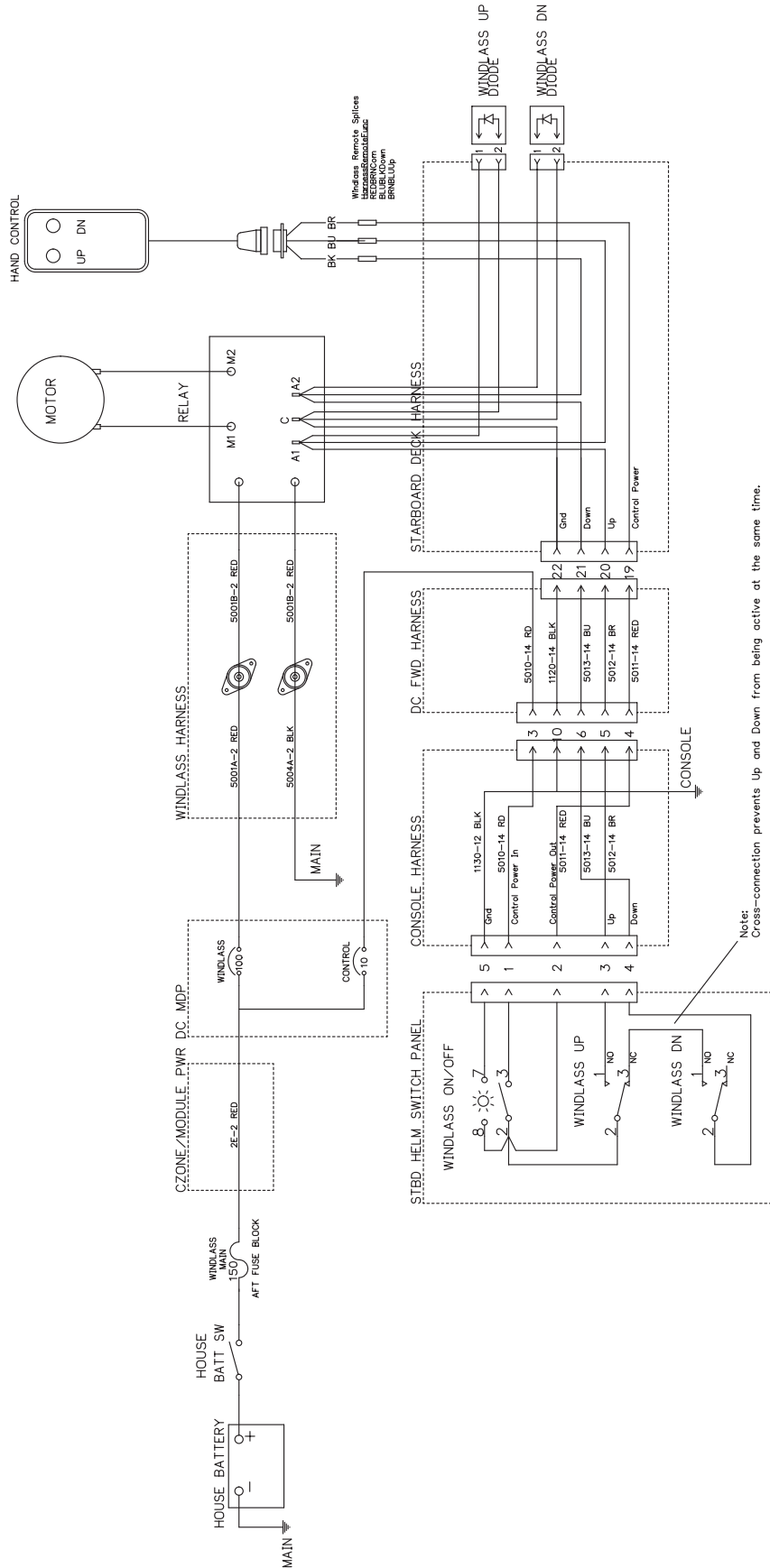
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Trim Tabs  
Figure 4.51.1



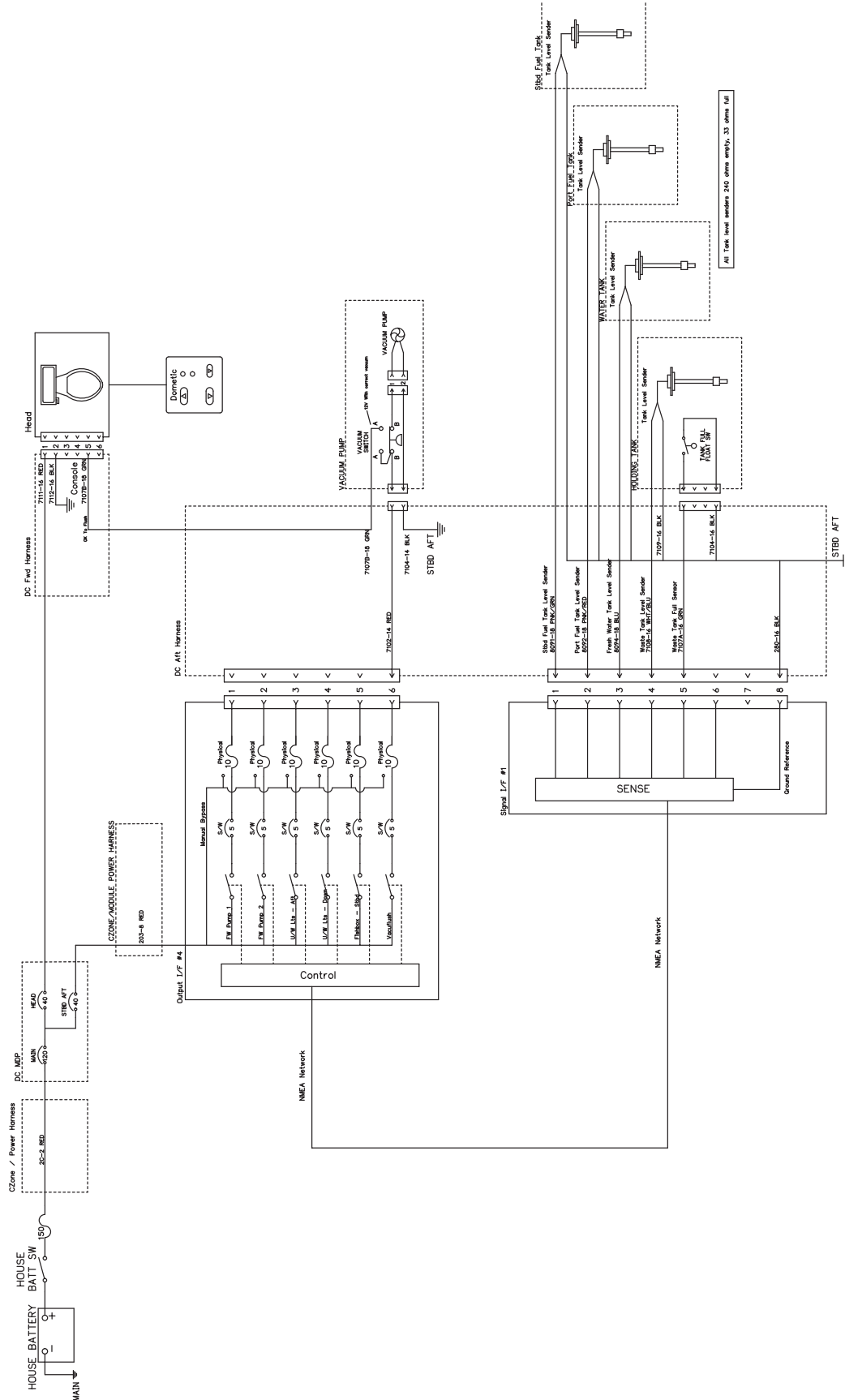
6015-07-401\_16\_AO

Windlass  
Figure 4.52.1



6015-07-401\_17\_AO

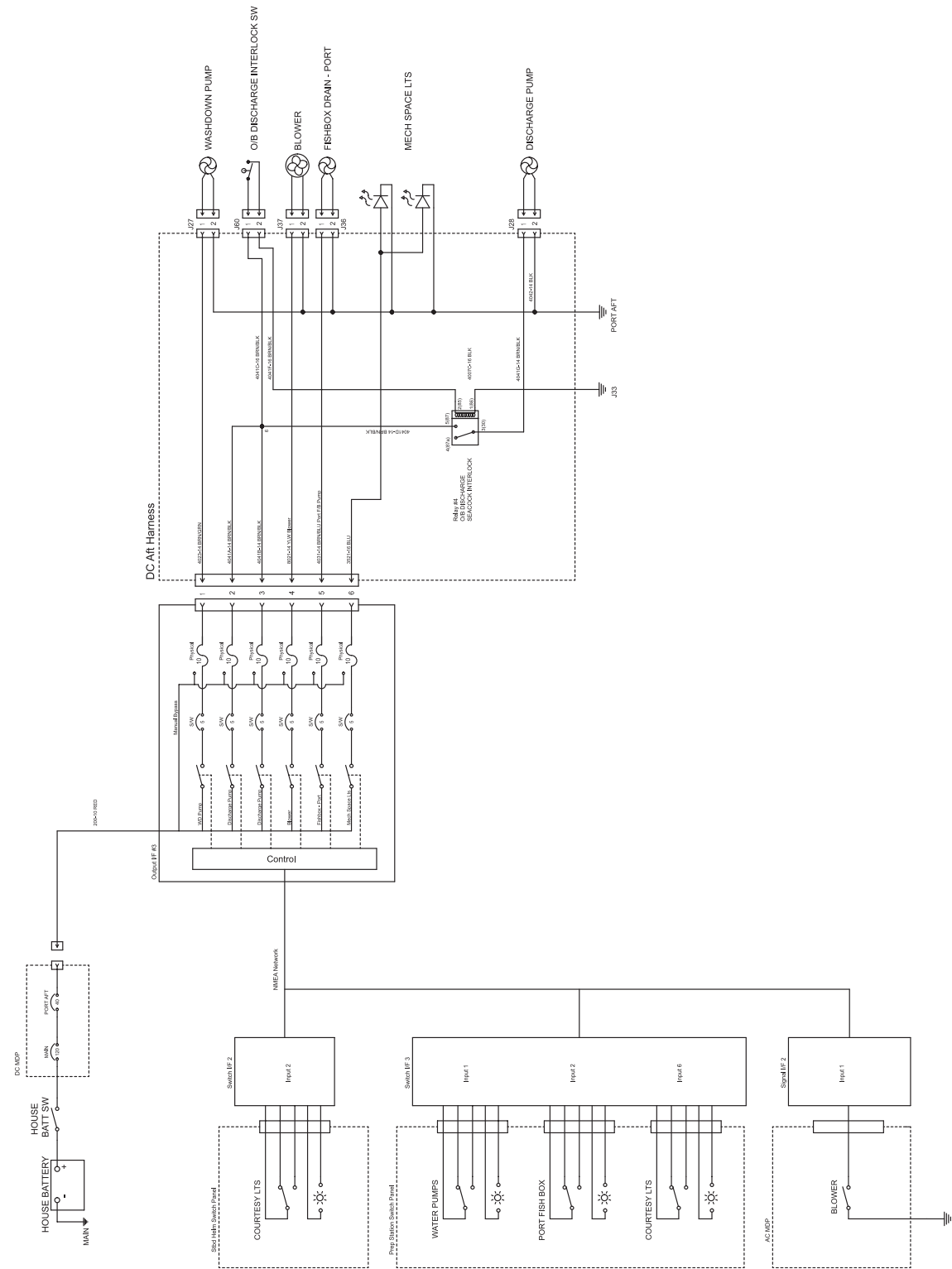
Waste System  
Figure 4.53.1



6015-07-401\_18\_AO

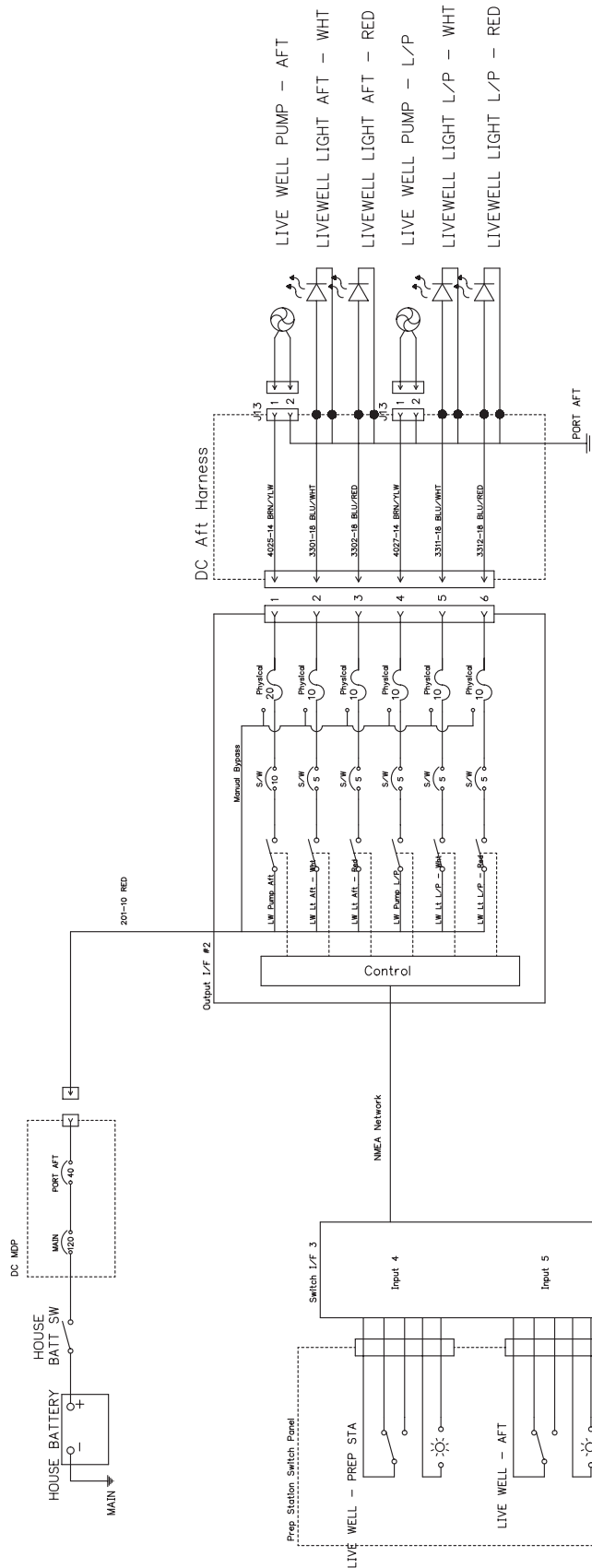


Pumps 1, Mech Space Lights  
Figure 4.54.1



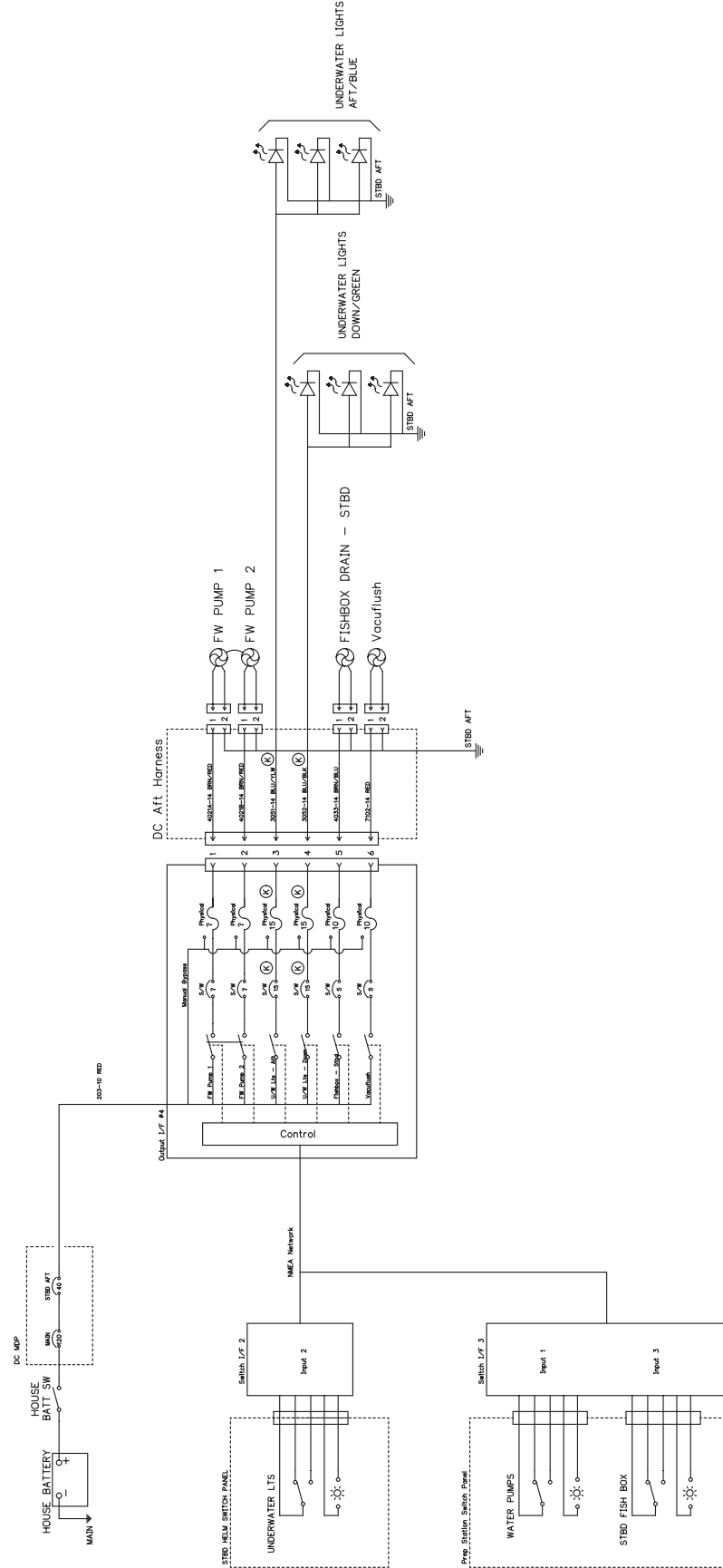
6015-07-401\_19\_AO

Livewell Pumps and Lights  
Figure 4.55.1



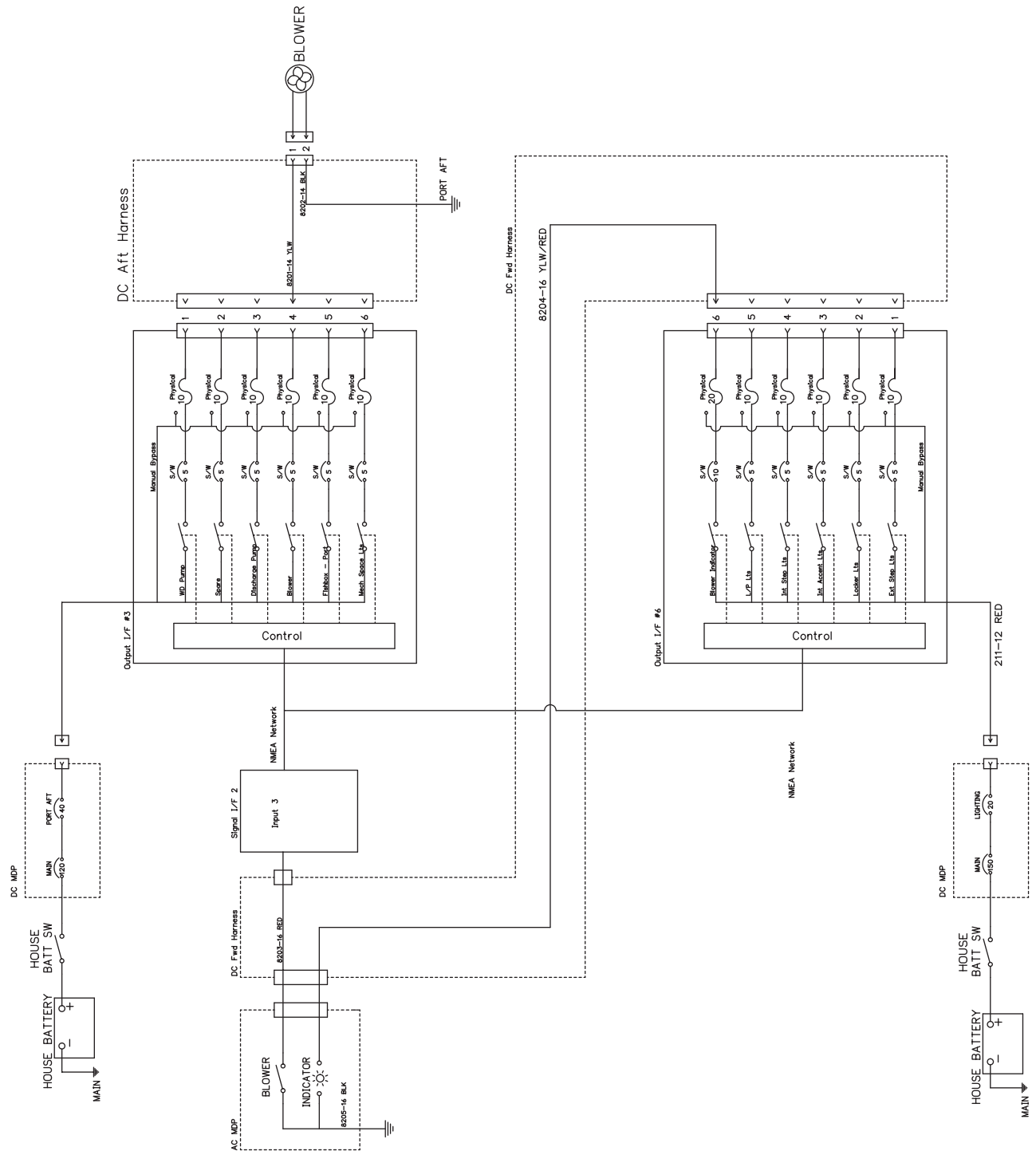
6015-07-401\_20\_AO

Starboard Pumps, Underwater Lights  
Figure 4.56.1



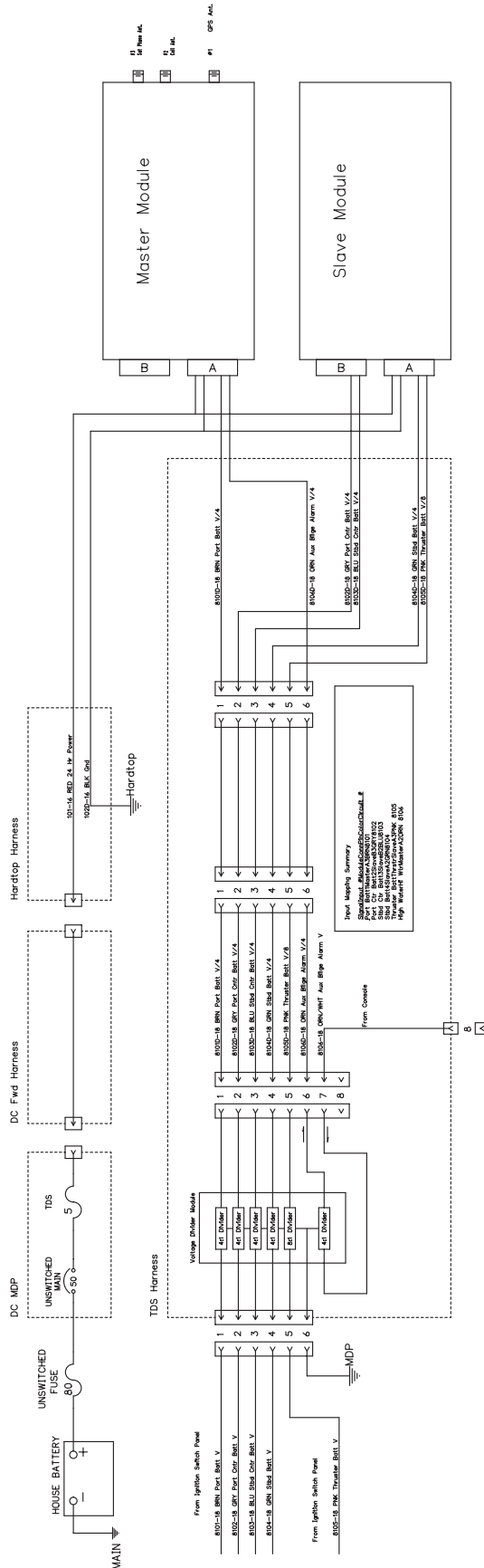
6015-07-401\_21\_AO

Blower  
Figure 4.57.1



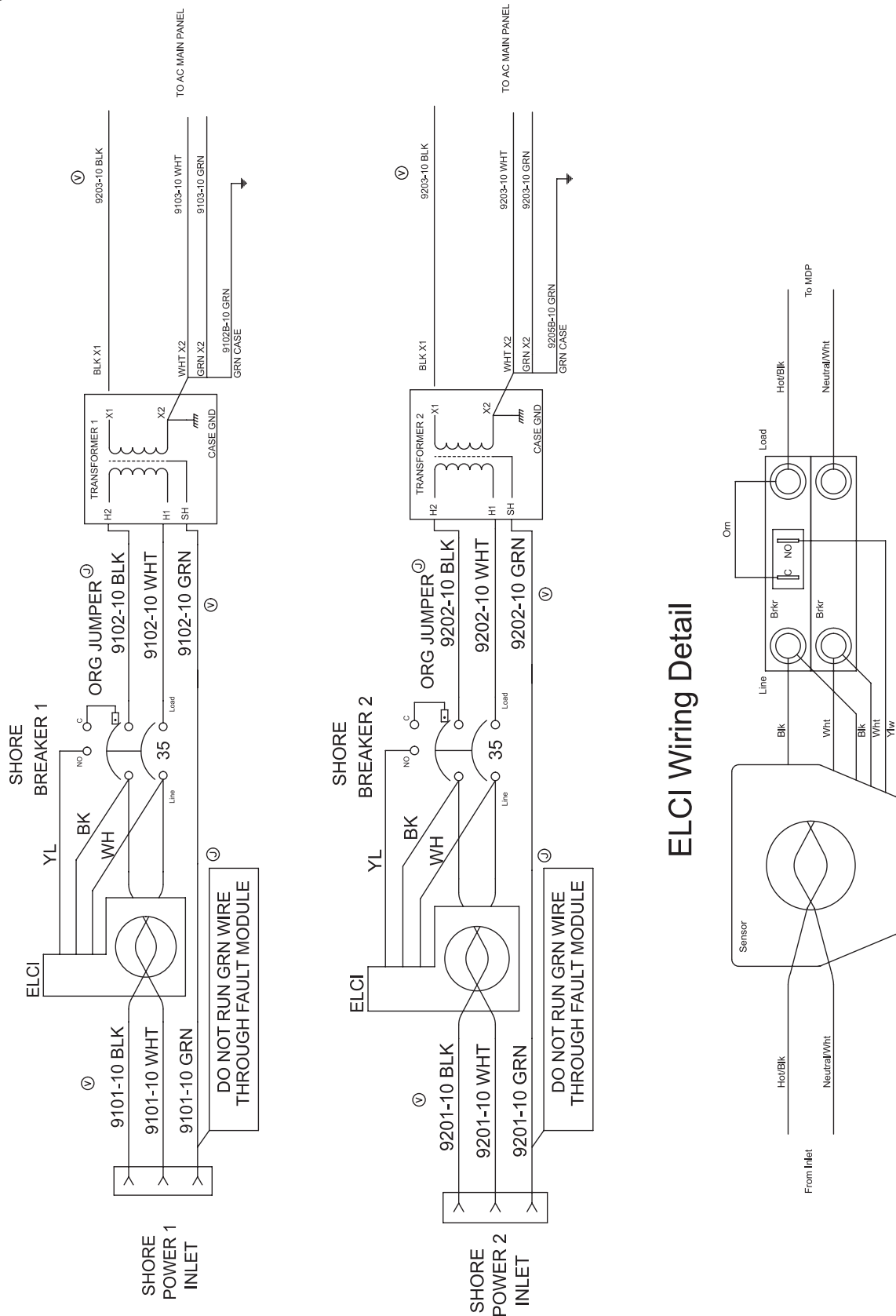
6015-07-401\_22\_AO

TDS Stage 3 with Remote Monitoring  
Figure 4.58.1



6015-07-401\_23\_AO

Shore Power Inlets (120V/60hz) / ELCI Wiring Detail (Domestic)  
 Figure 4.59.1

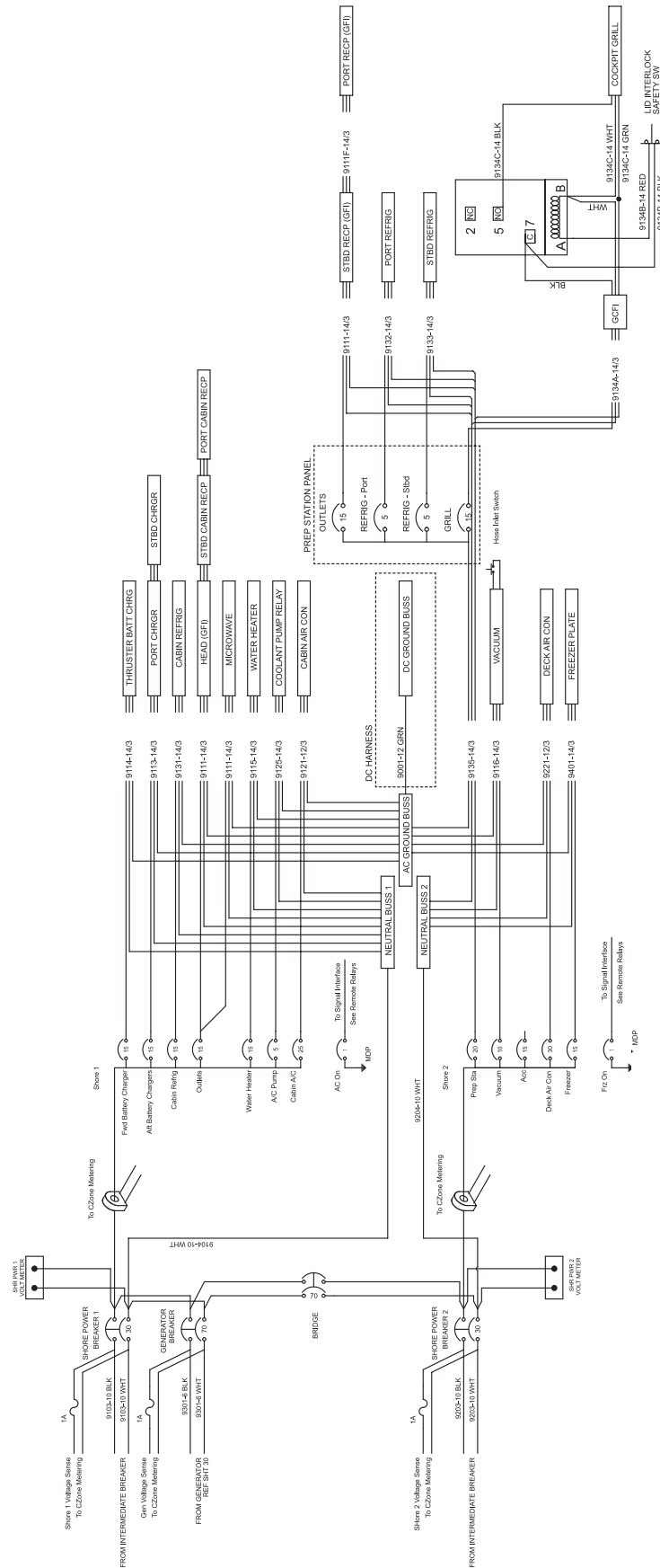


6015-07-401\_24\_AO



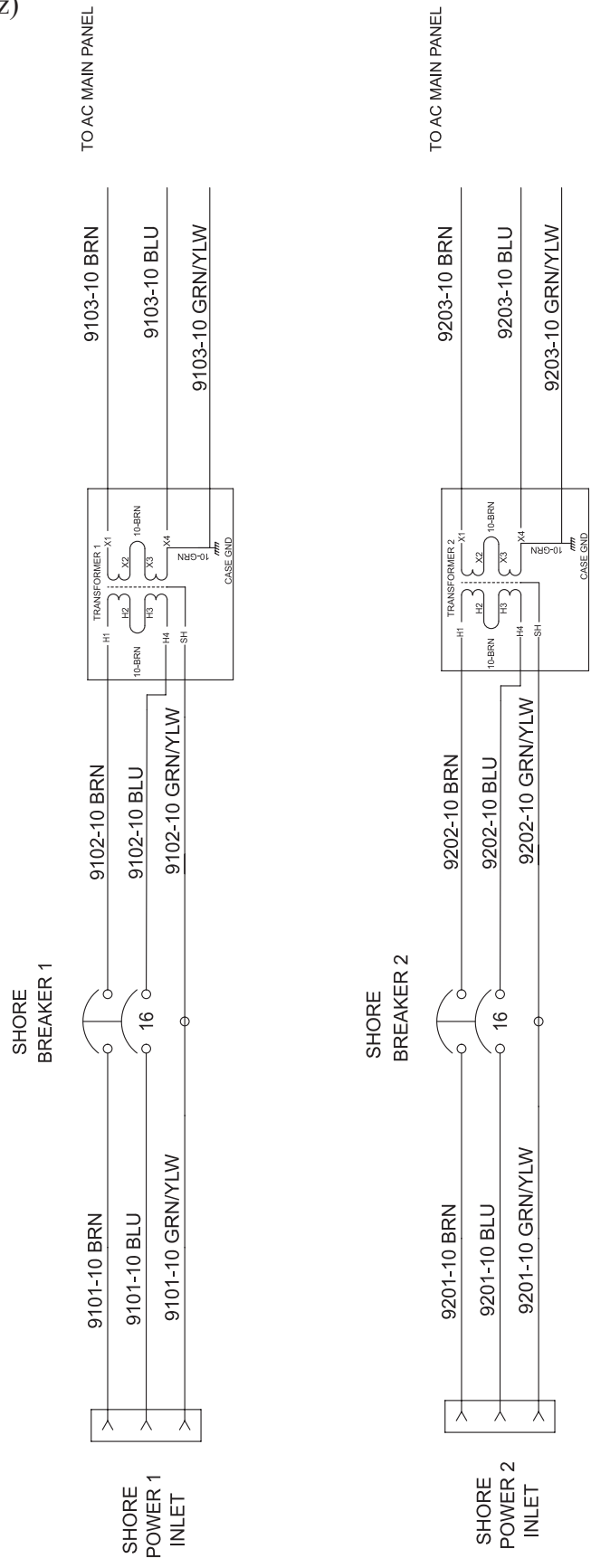
# Chapter 4 • Electrical

AC Power (120V/60hz)  
Figure 4.60.1



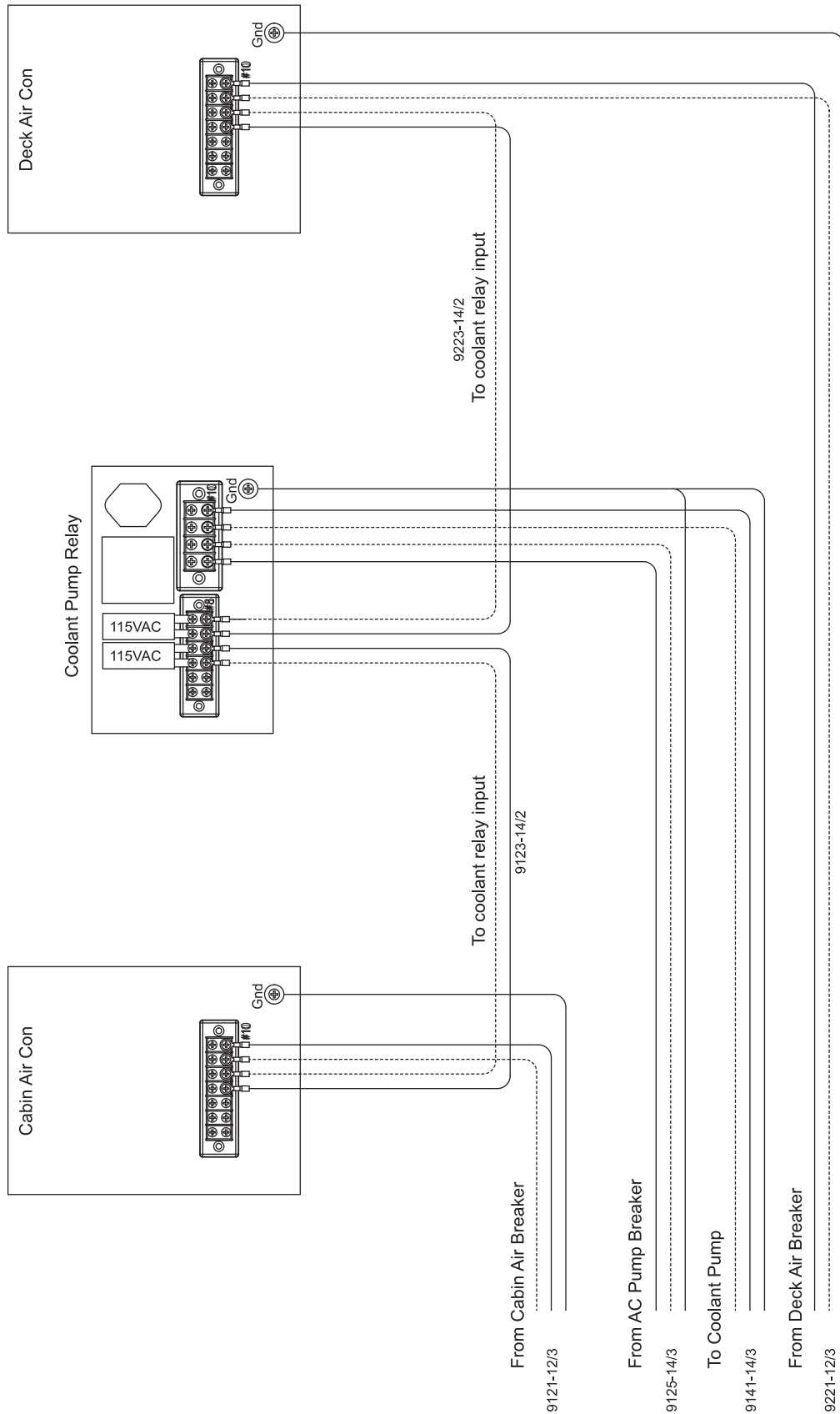
6015-07-401\_25\_AO

Shore Power Inlets (230V/50hz)  
Figure 4.61.1



6015-07-401\_26\_AO

Cabin and Deck Air Conditioning  
Figure 4.62.1

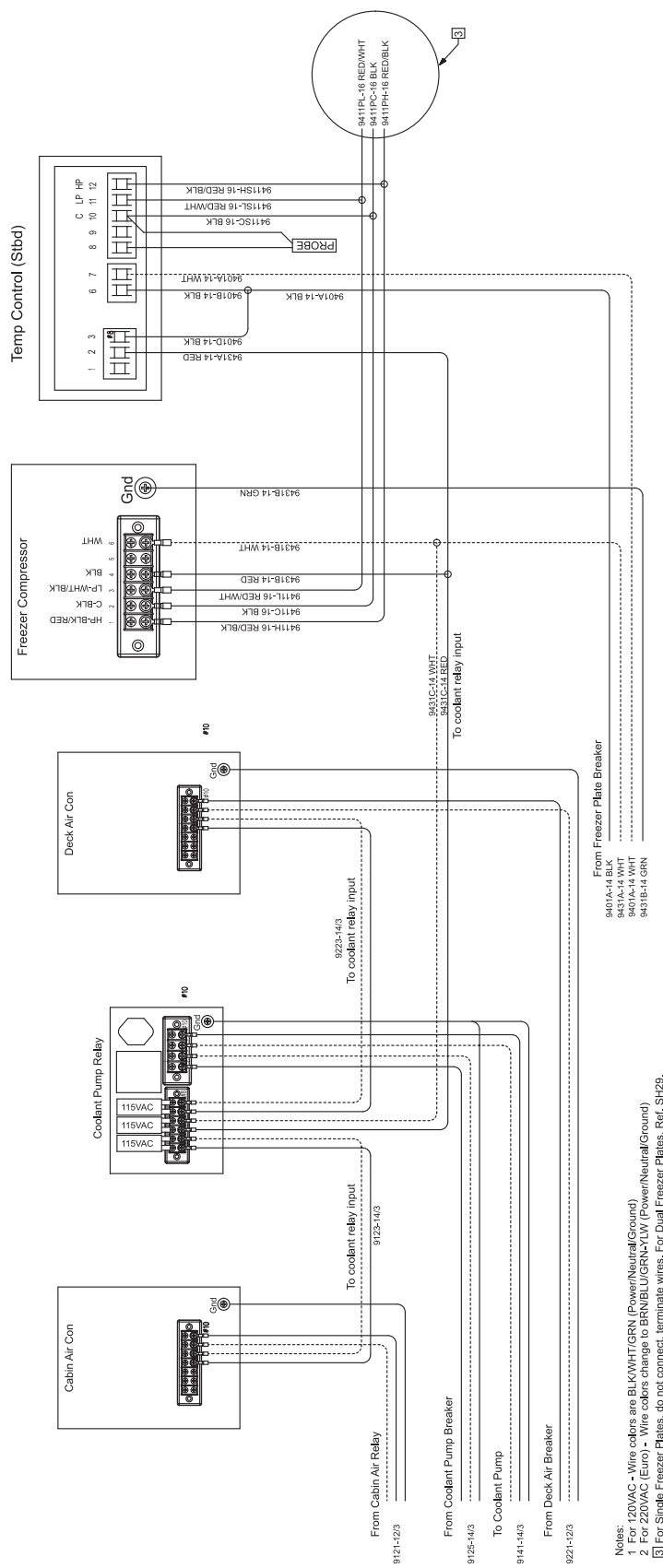


Notes:

6015-07-401\_27\_AO

# Chapter 4 • Electrical

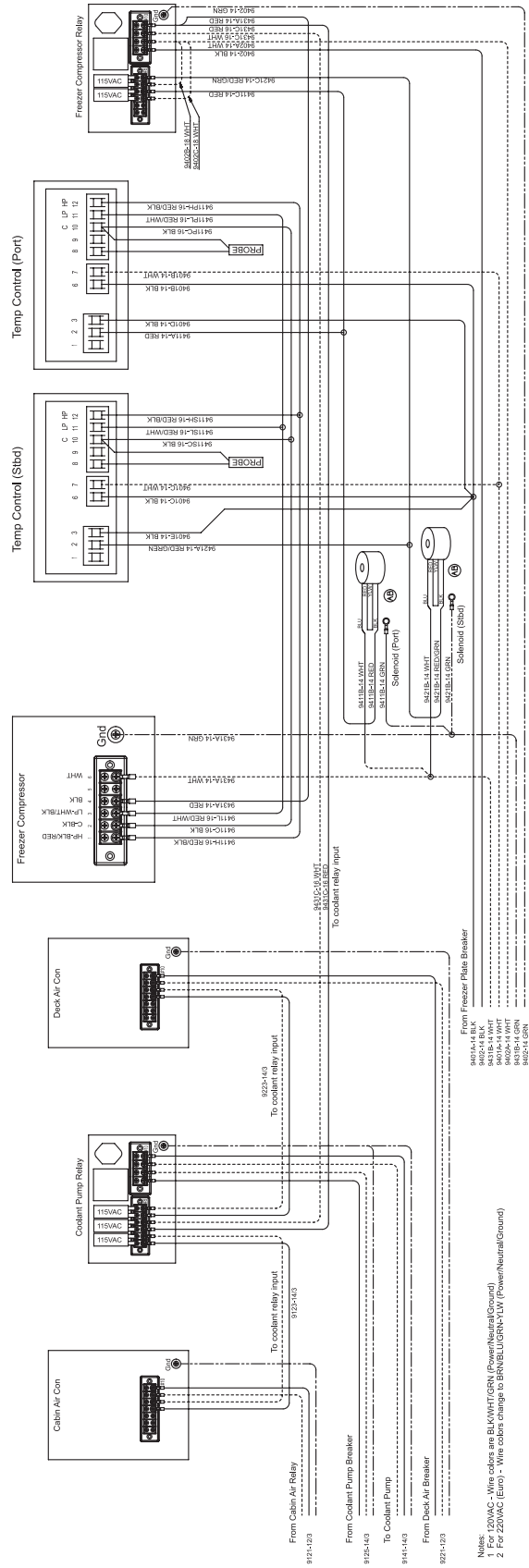
Cabin and Deck Air Conditioning with Single Freezer Plate  
Figure 4.63.1



6015-07-401\_28\_AO

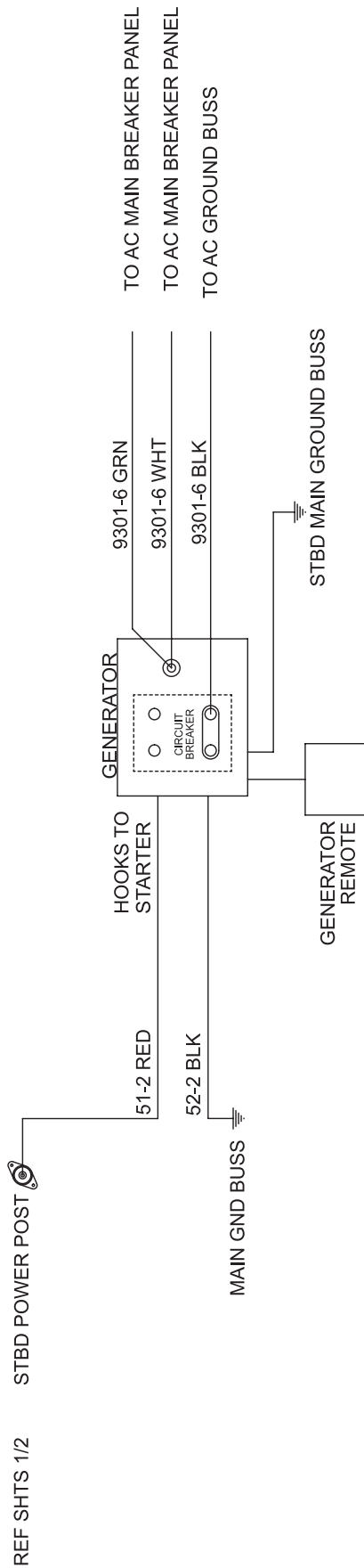
# Chapter 4 • Electrical

Cabin and Deck Air Conditioning with Dual Freezer Plate  
Figure 4.64.1



6015-07-401\_29\_AO

Generator - 120V/60hz  
Figure 4.65.1

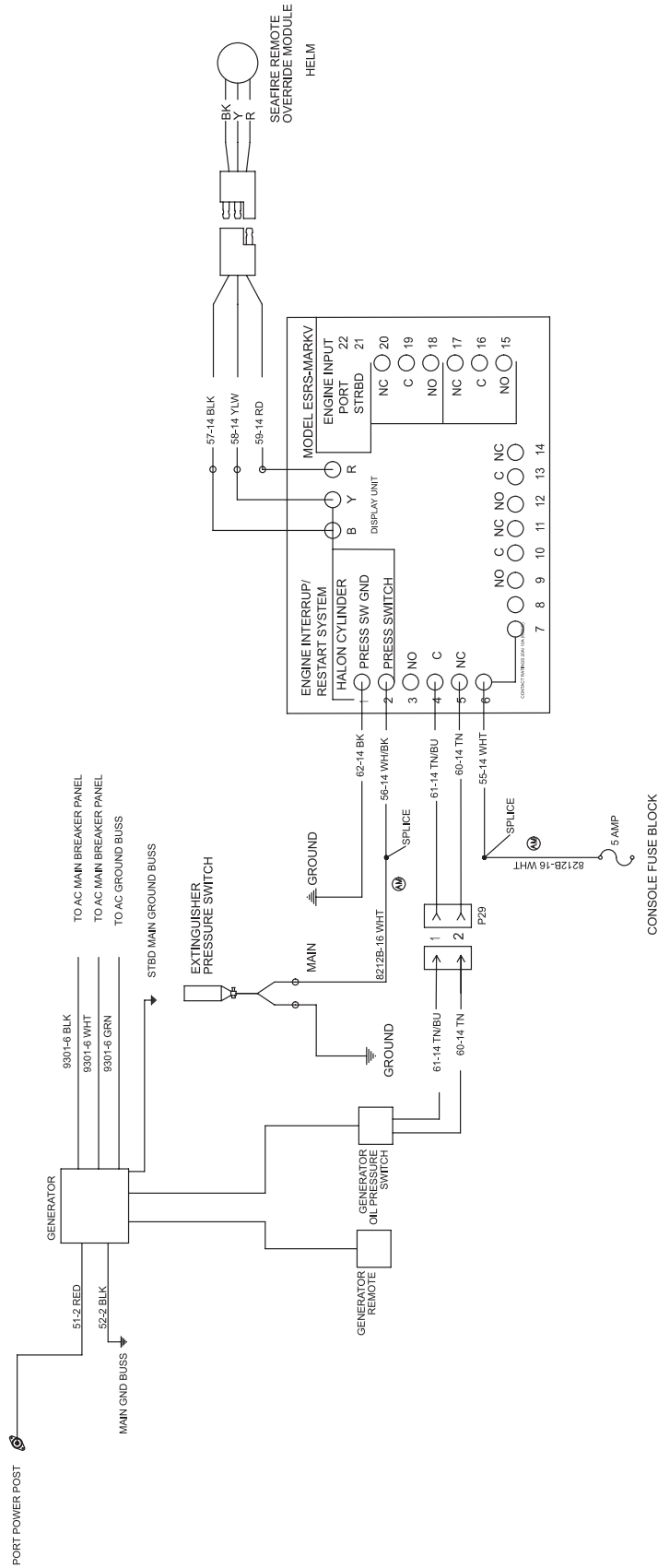


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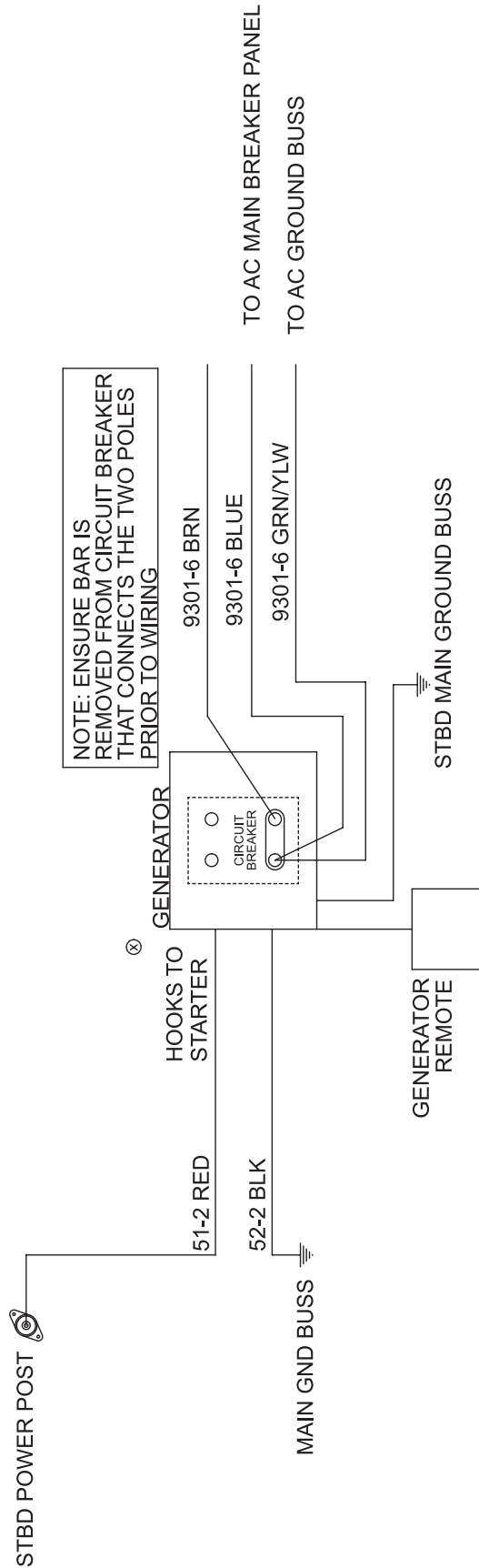
# Chapter 4 • Electrical

Diesel Generator - 120V/60hz  
Figure 4.66.1



6015-07-401\_31\_AO

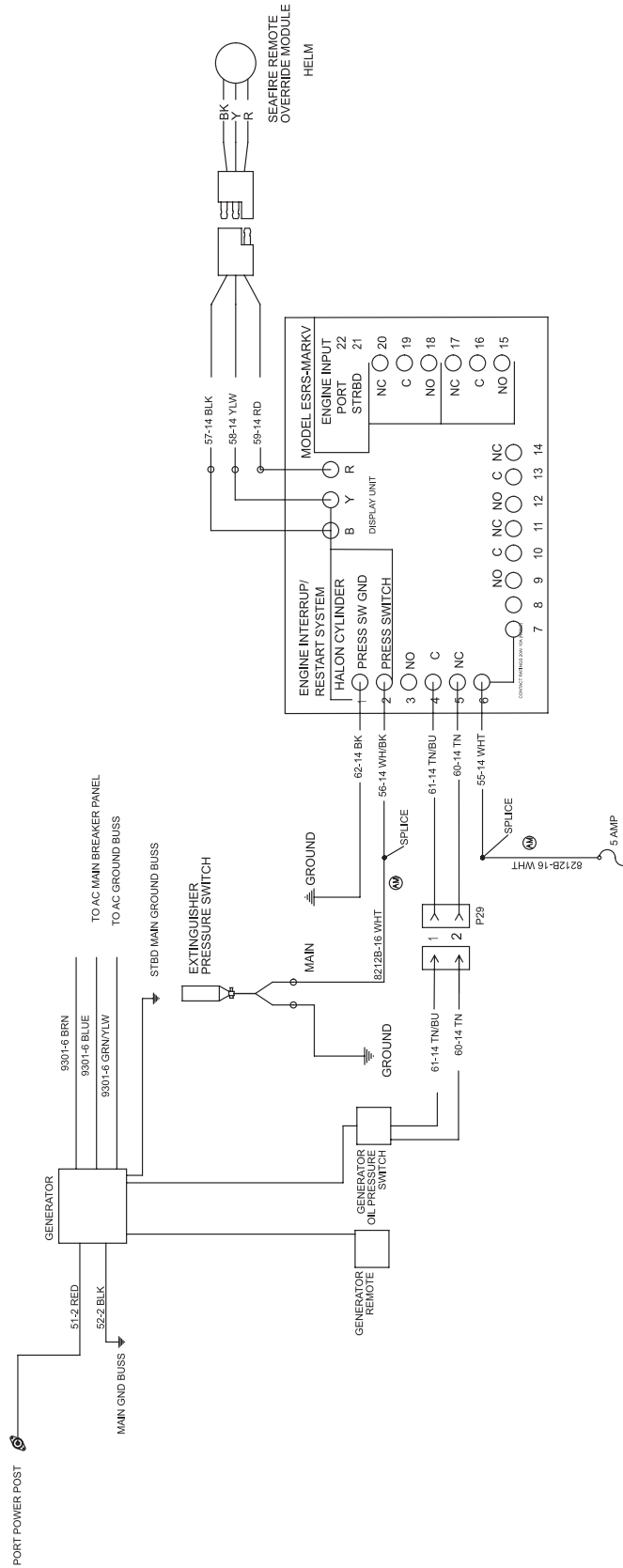
Generator - 230V/50hz  
Figure 4.67.1



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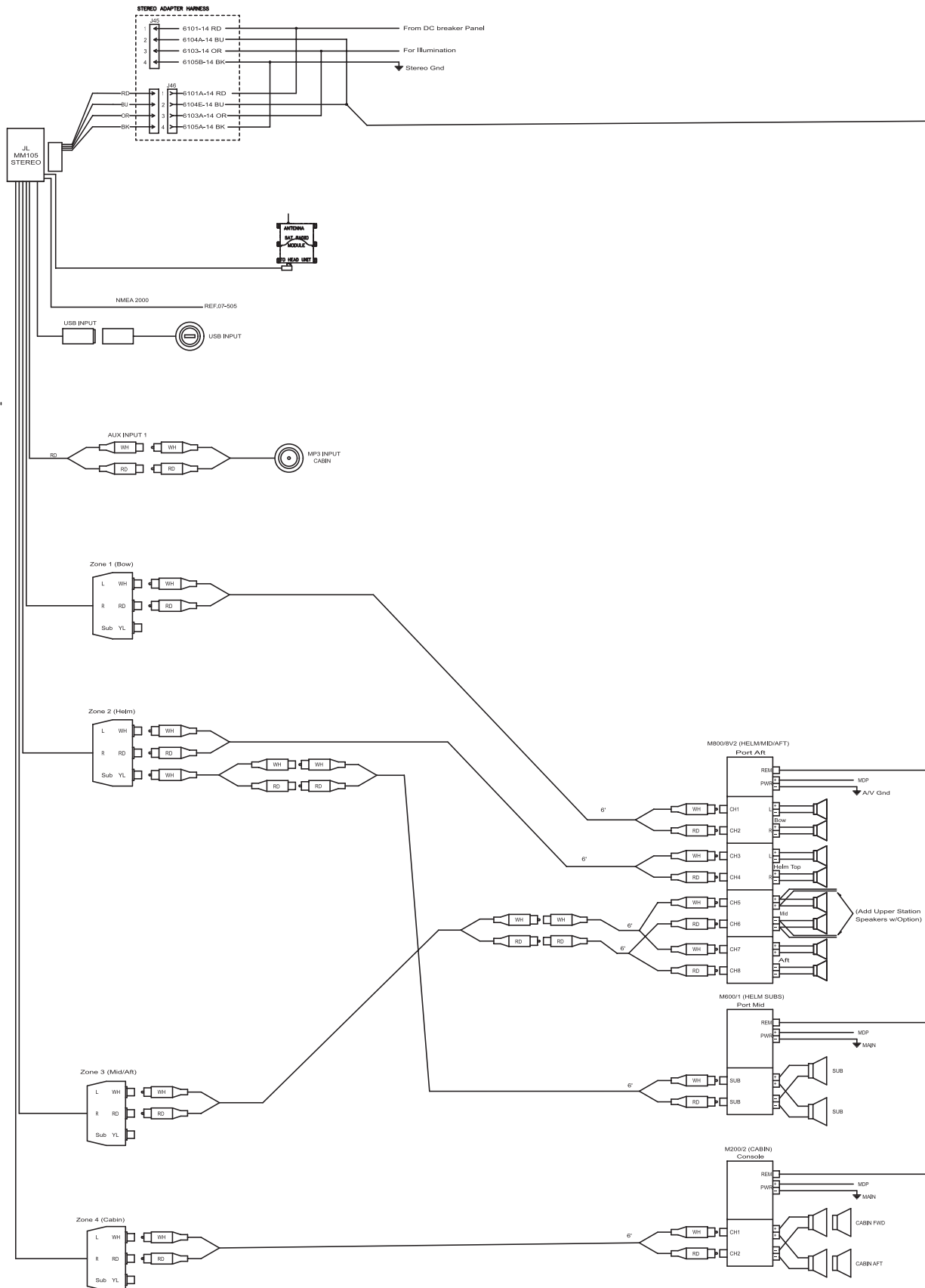
# Chapter 4 • Electrical

Diesel Generator - 230V/50hz  
Figure 4.68.1



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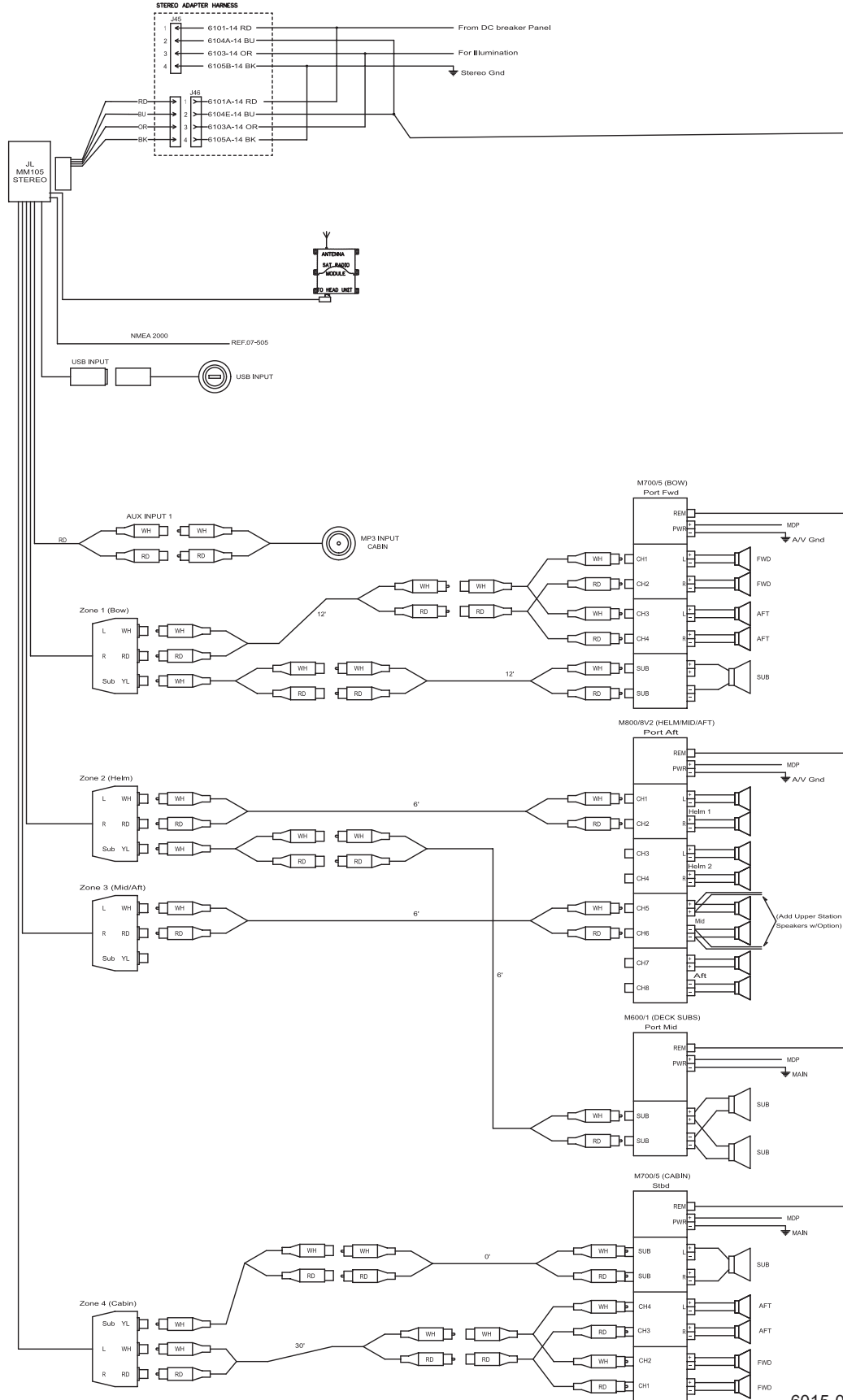
Standard Audio with JL Audio  
Figure 4.69.1



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# Chapter 4 • Electrical

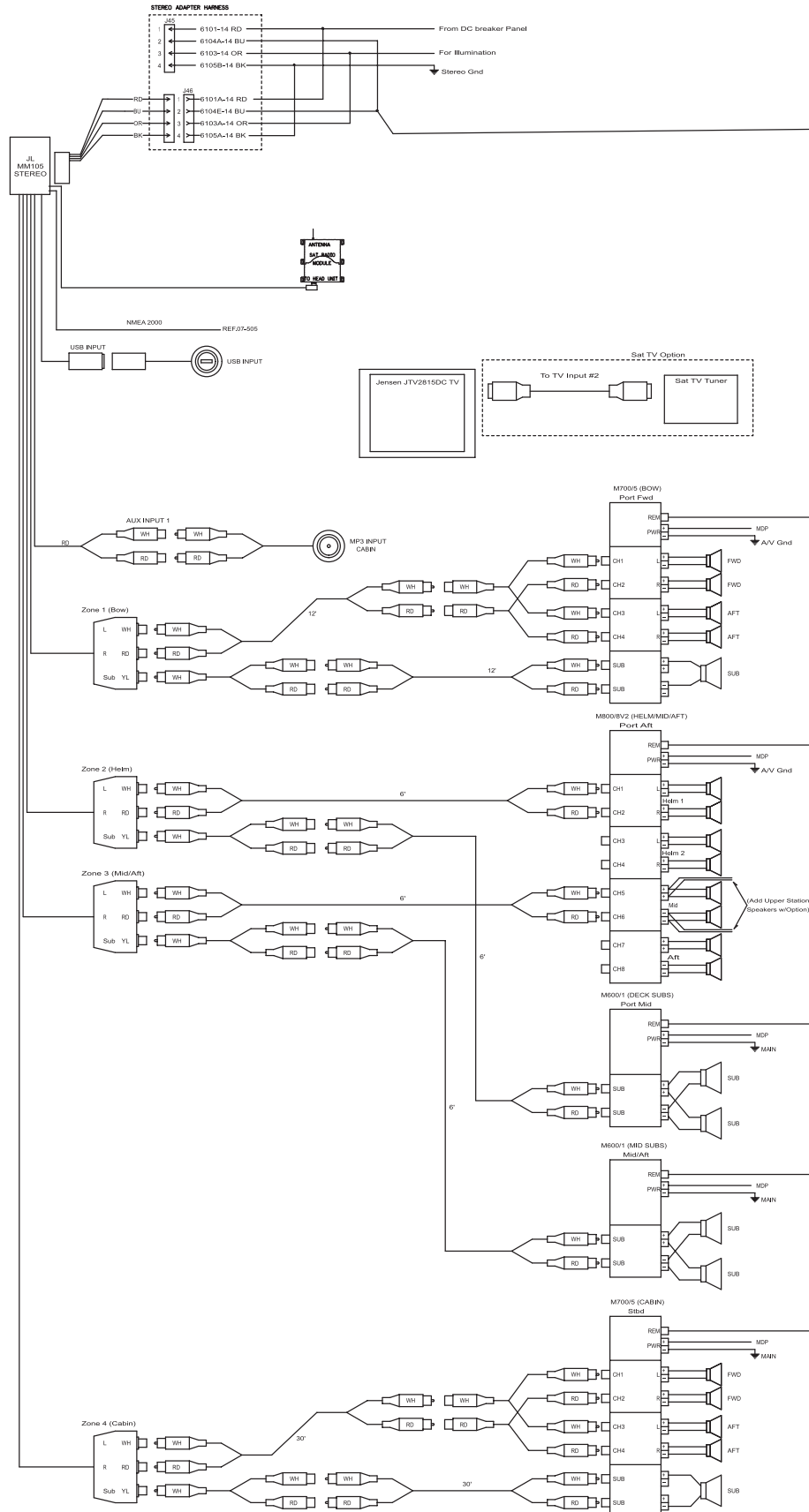
Premium Audio JL Audio  
Figure 4.70.1



6015-07-401\_35\_AO

# Chapter 4 • Electrical

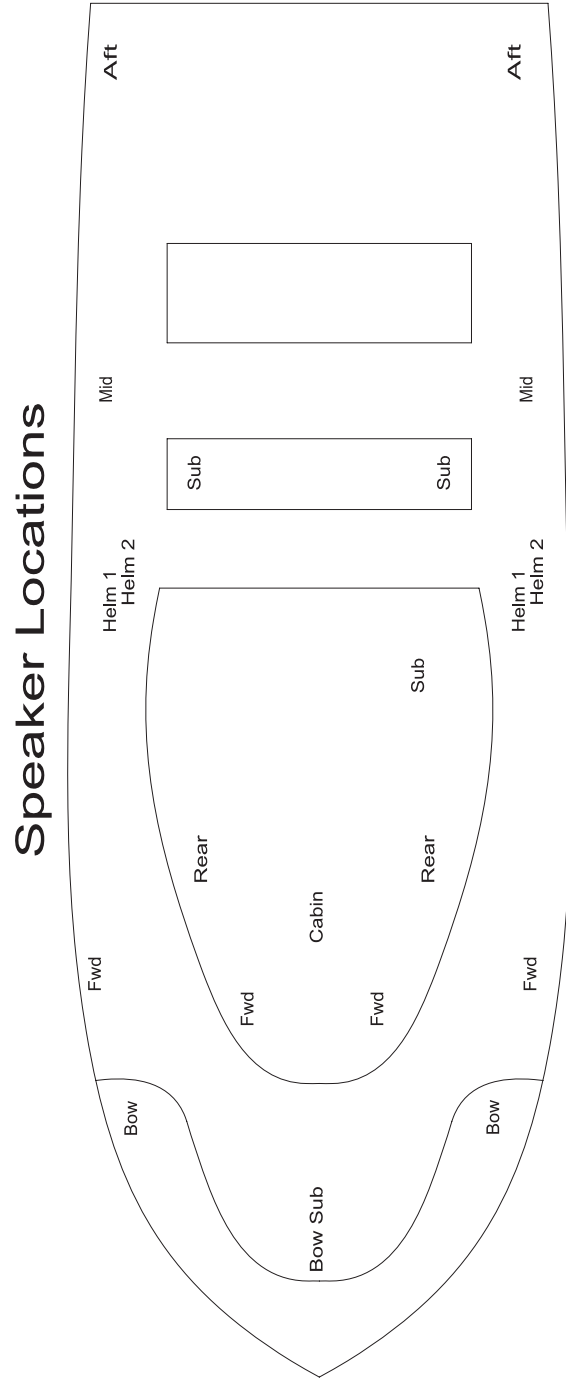
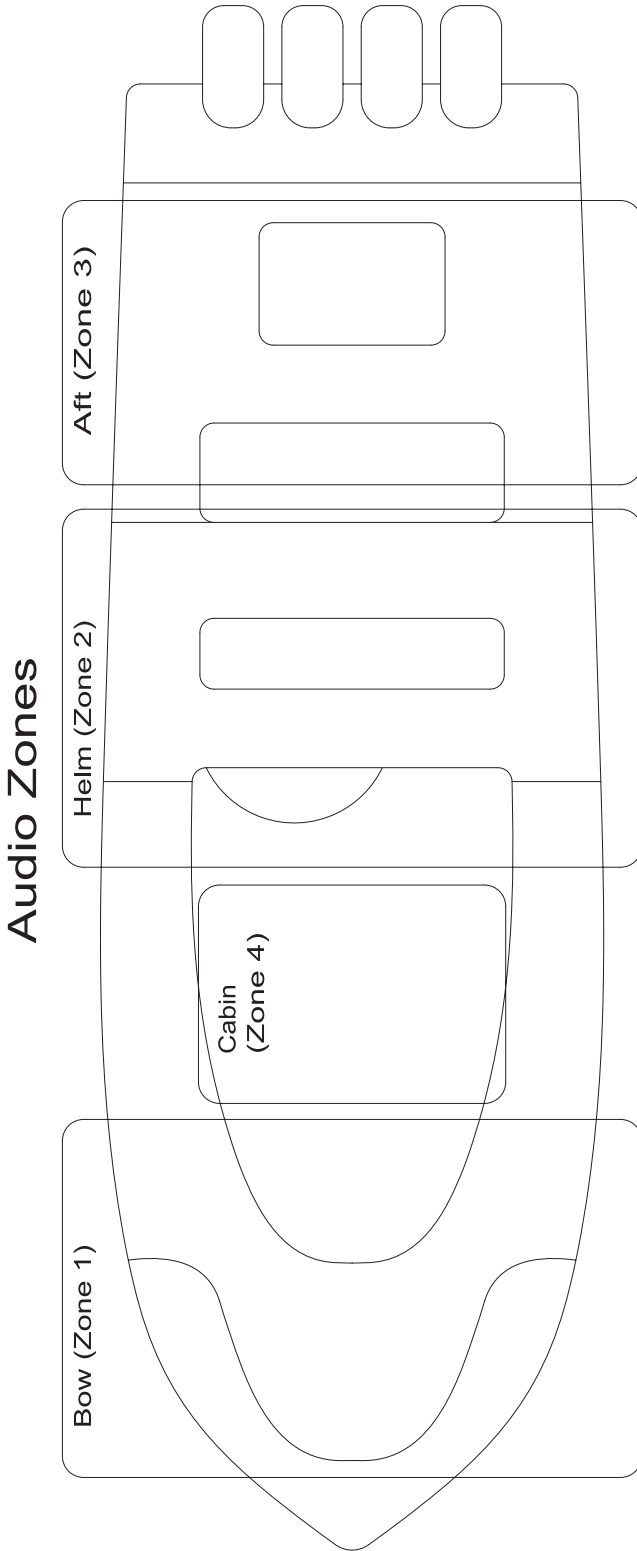
Premium Audio with JL Audio w/ Satellite  
Figure 4.71.1



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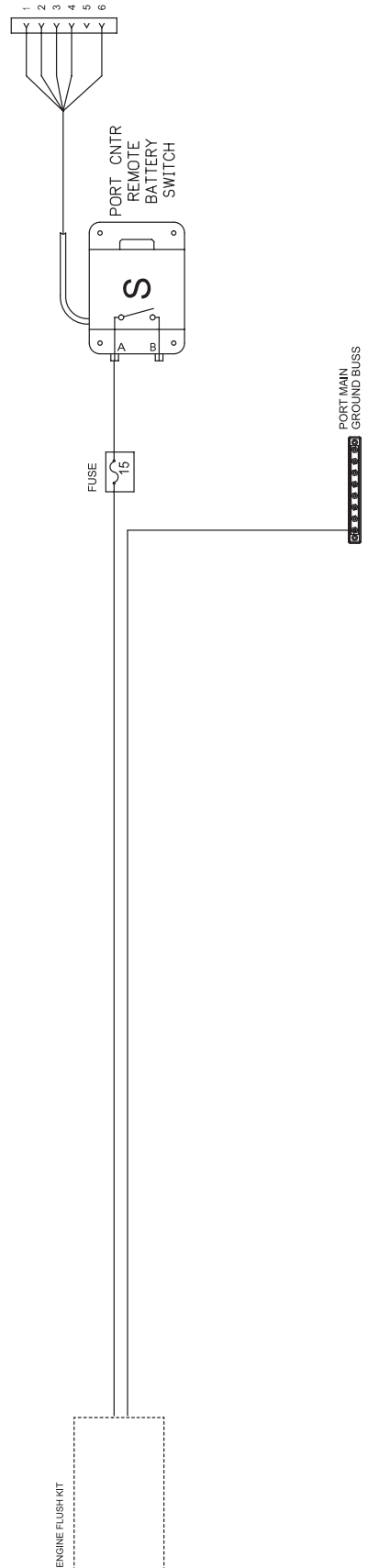


Audio Zones, Speaker Locations  
Figure 4.72.1



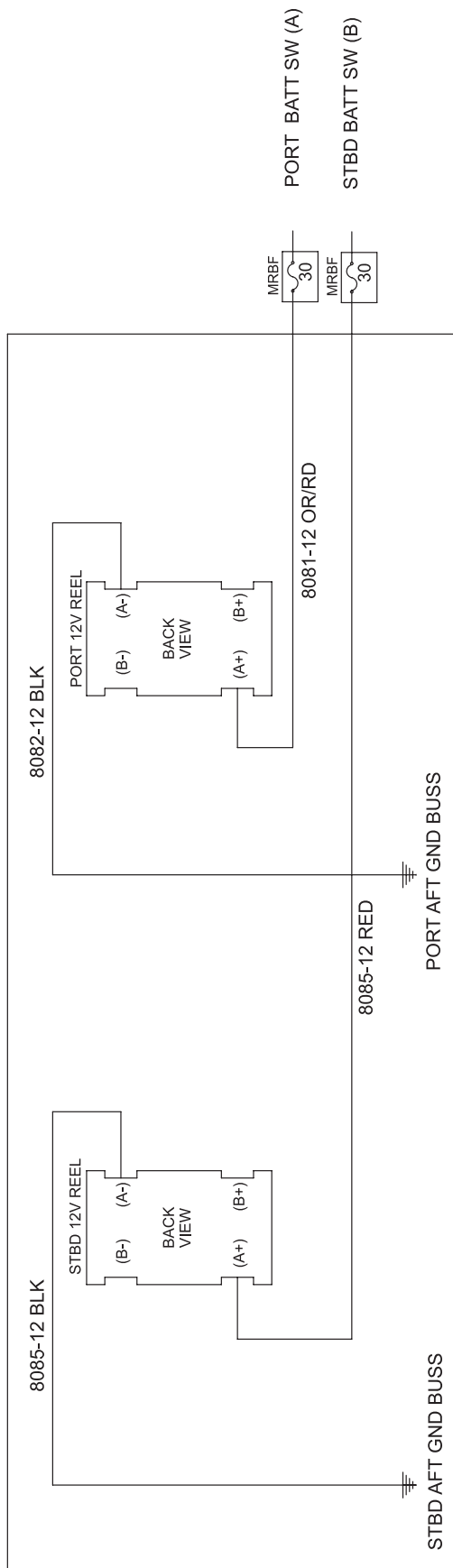
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Engine Flush System  
Figure 4.73.1



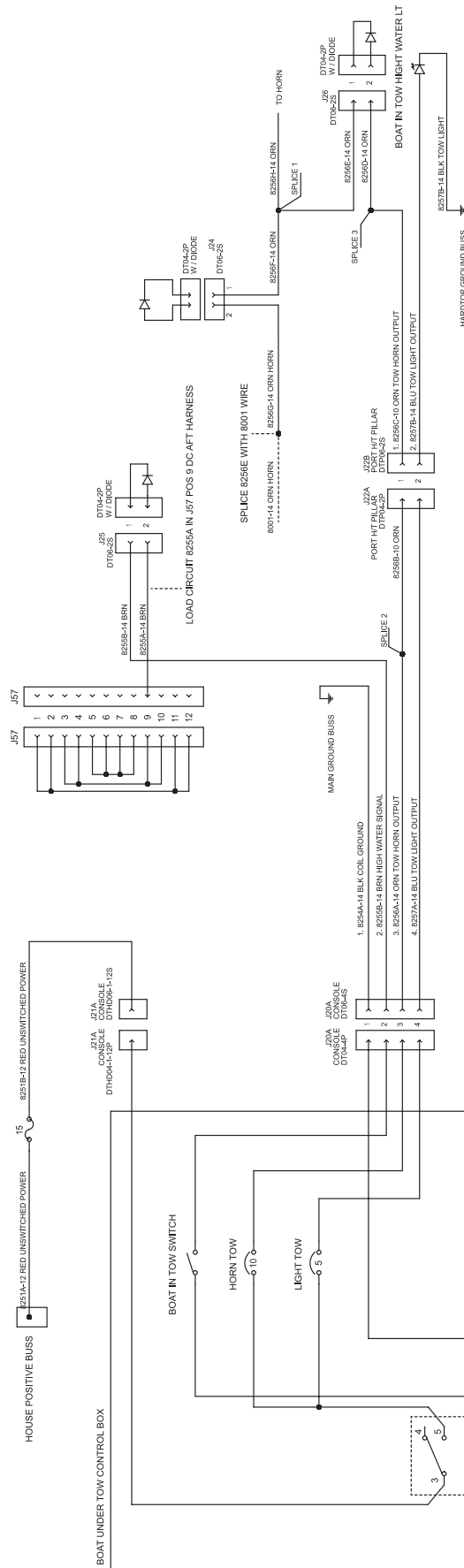
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Electric Reels/Downrigger  
Figure 4.74.1



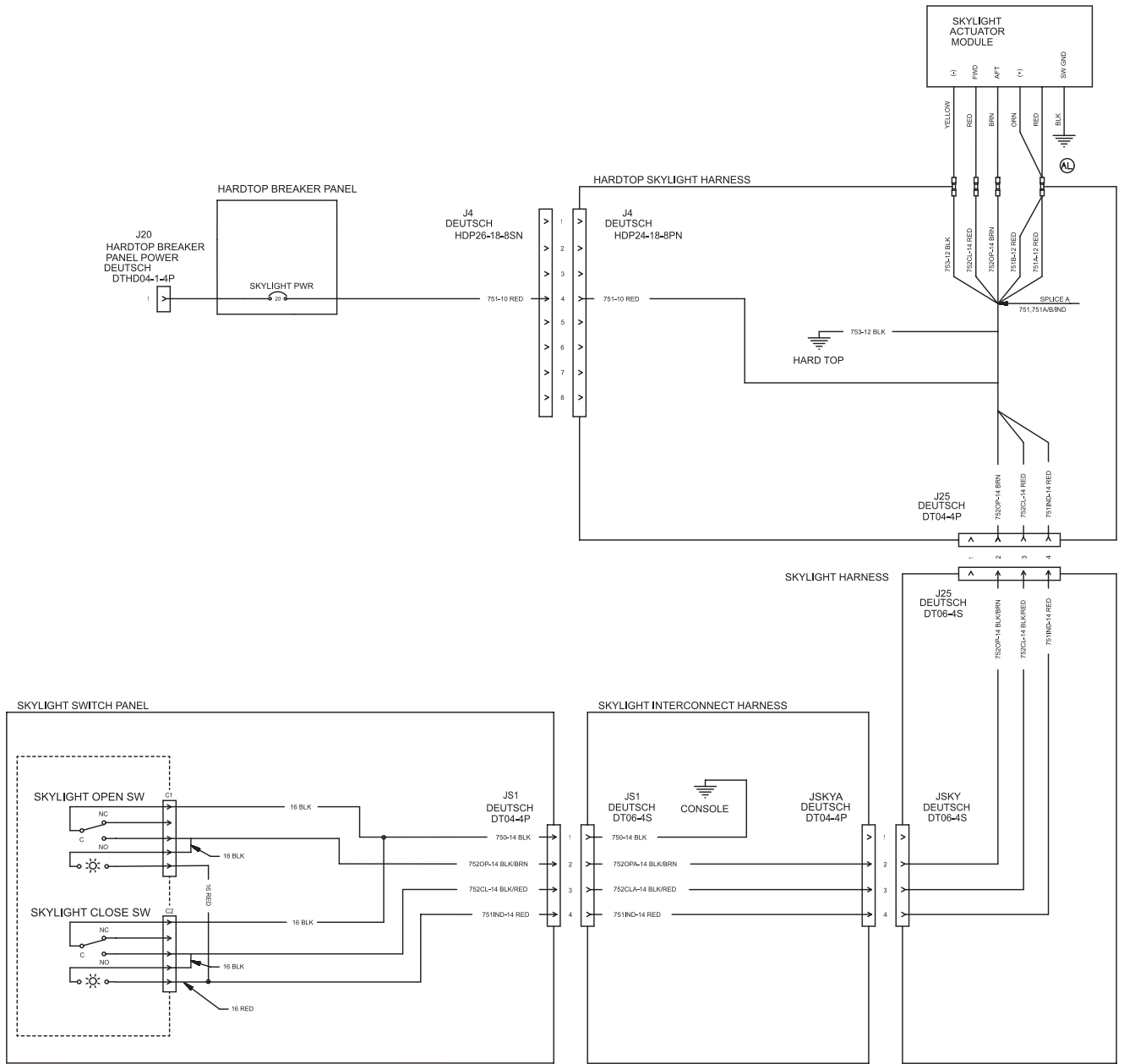
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Tow Package  
Figure 4.75.1



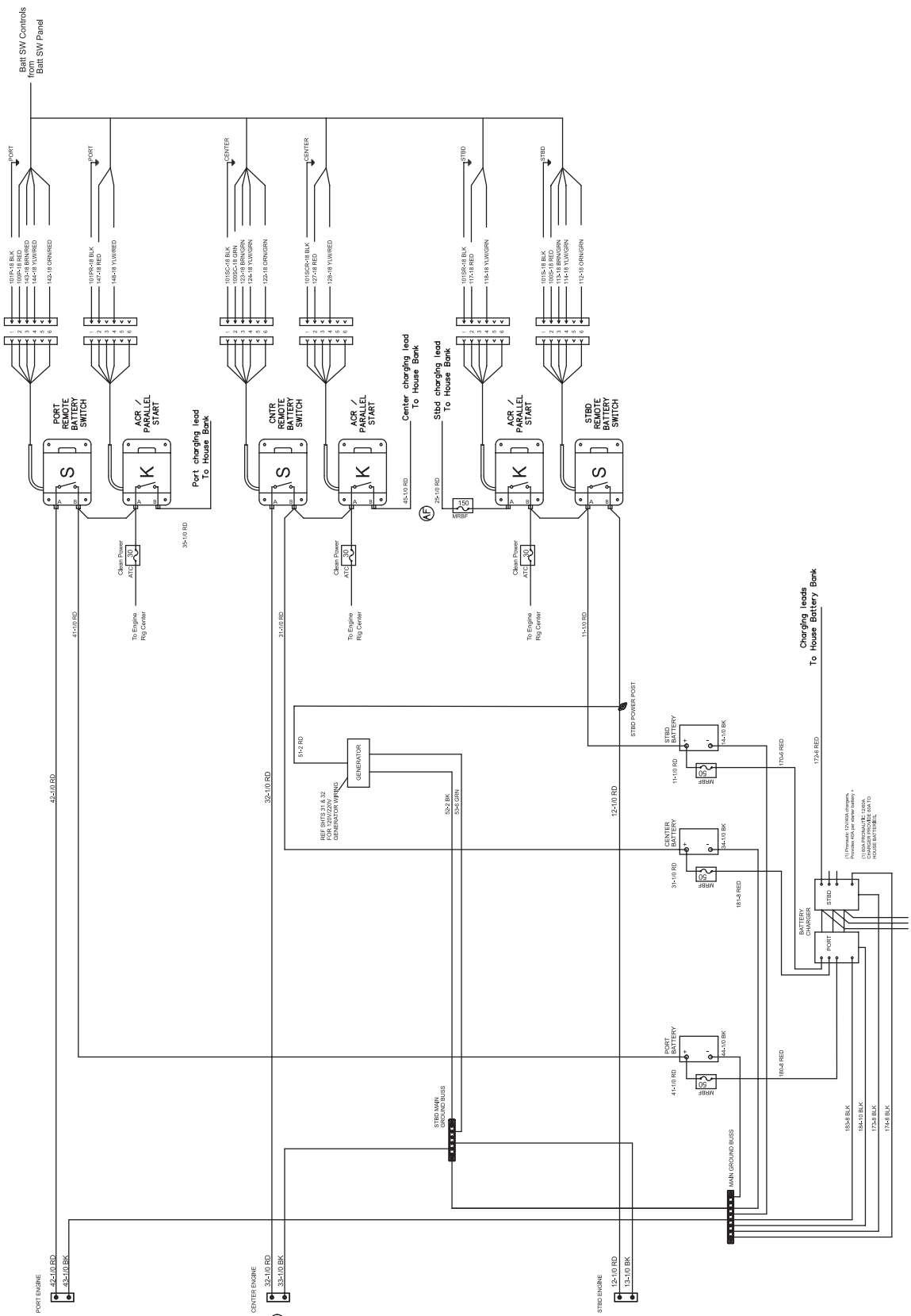
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Skylight (Option)  
Figure 4.76.1



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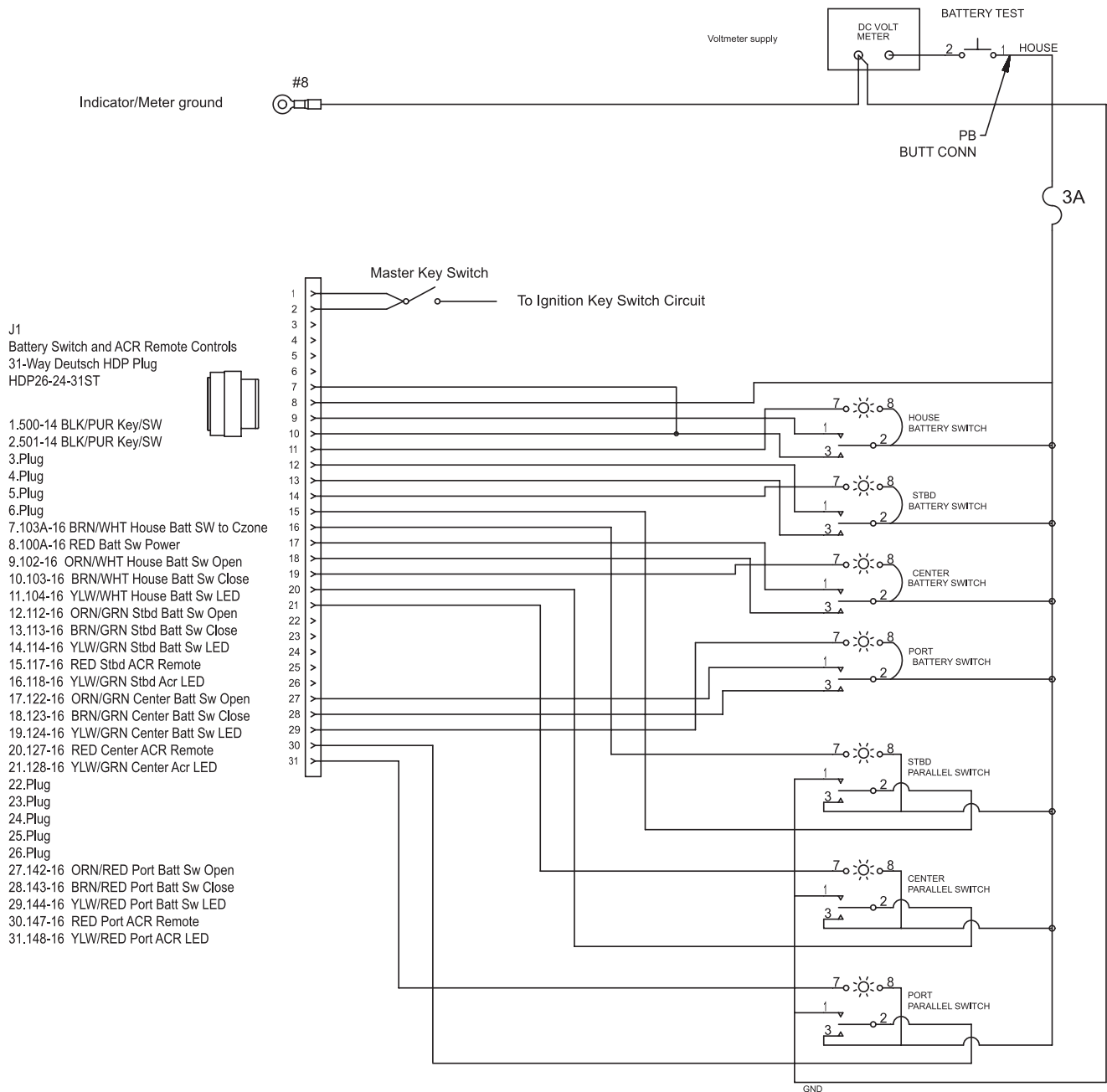
Starter Battery Arrangement, Joystick Triple Engine  
Figure 4.77.1



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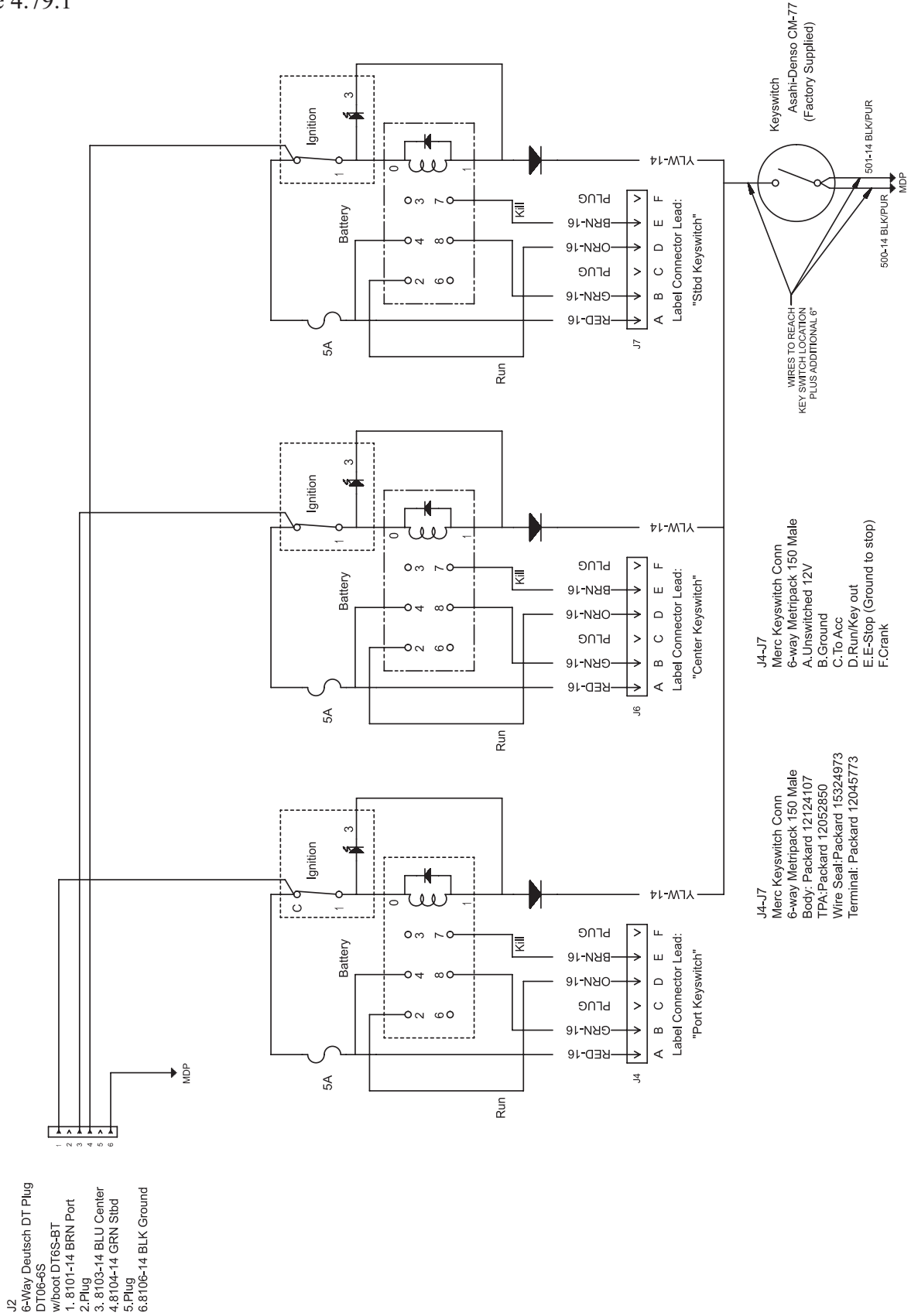


Battery Switch Control, Triple Engine  
Figure 4.78.1



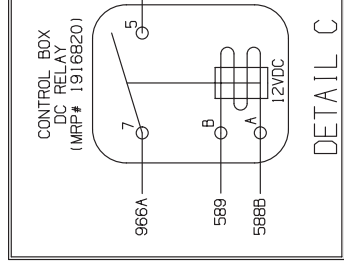
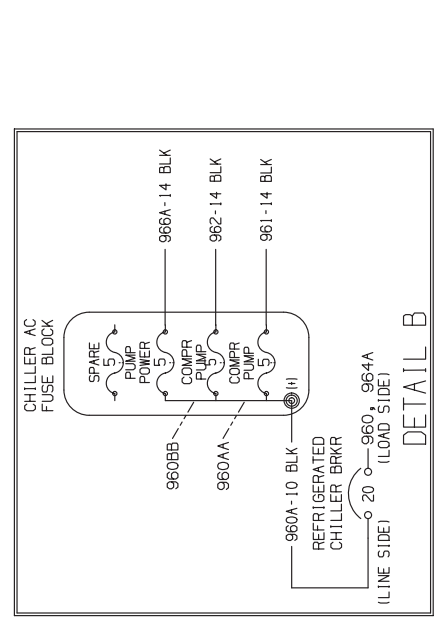
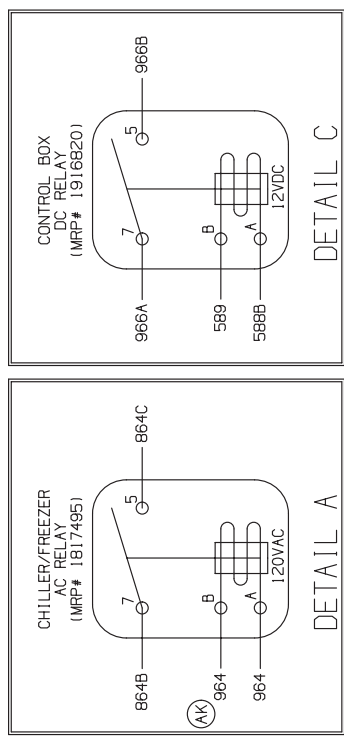
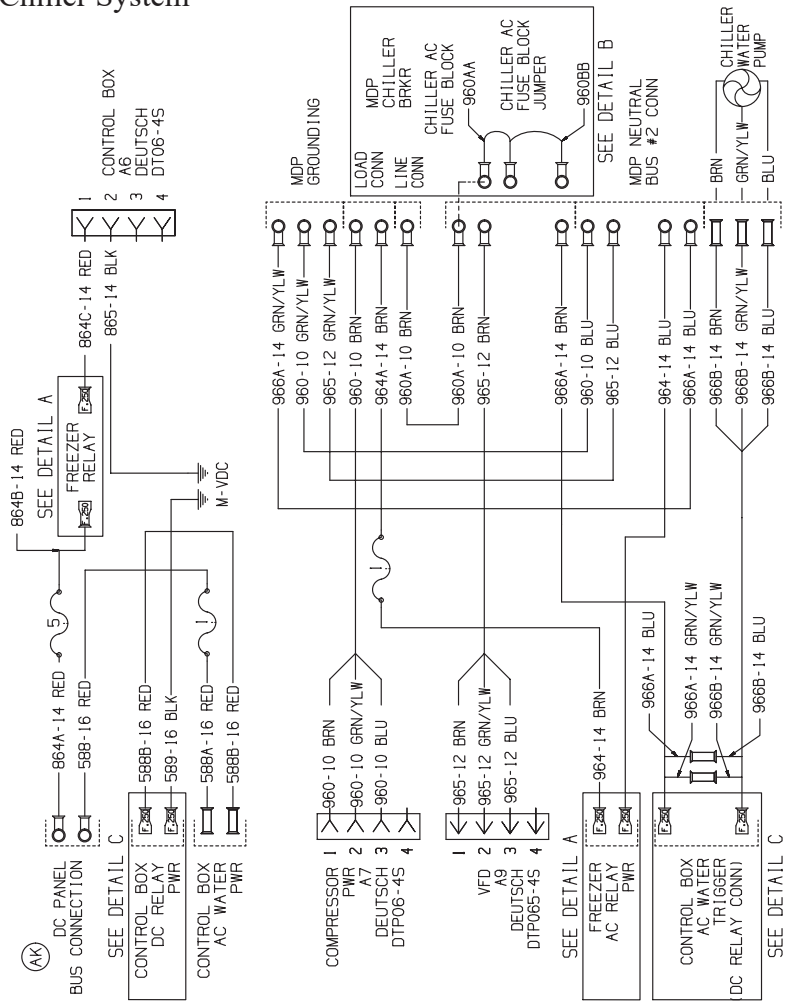
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Master Ignition Key Switch, Triple Engine  
Figure 4.79.1



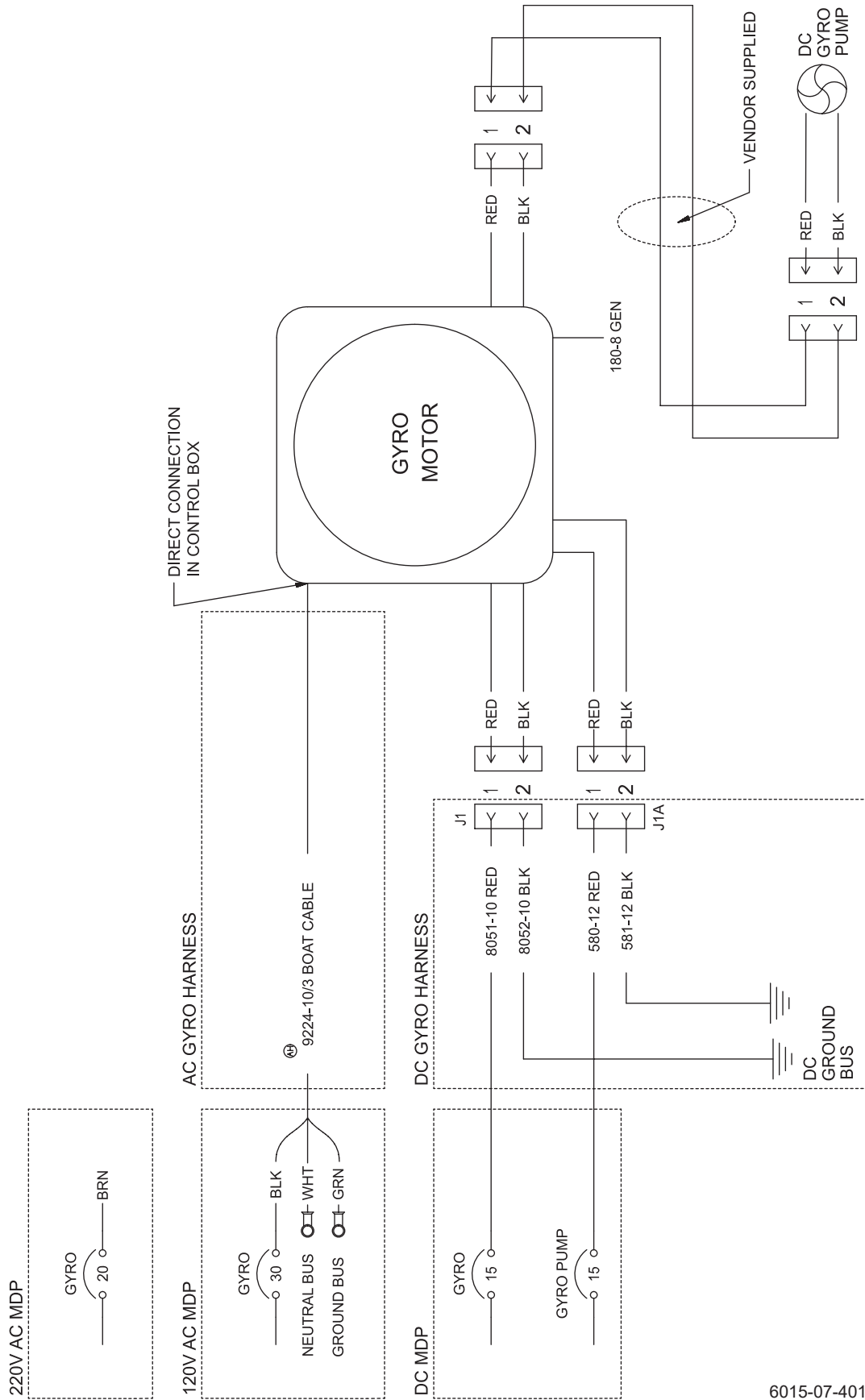
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Refrigerated Chiller System  
Figure 4.80.1



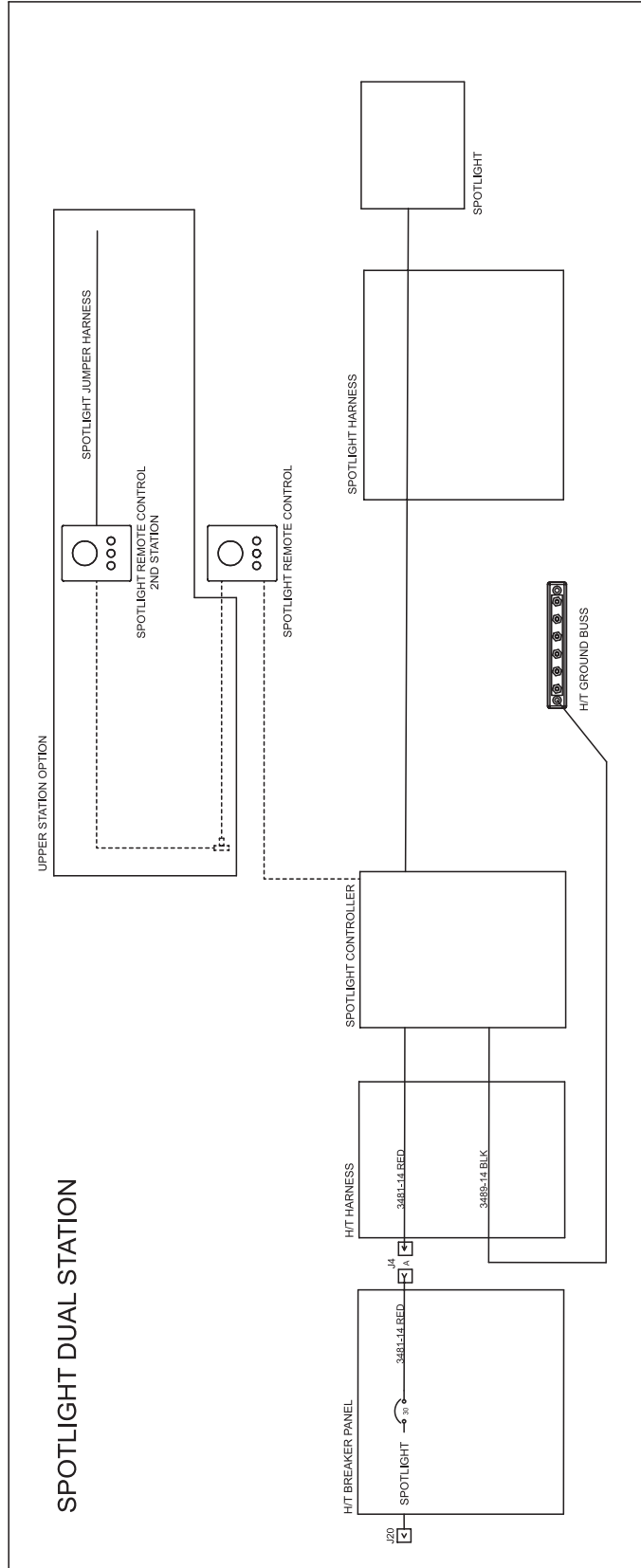
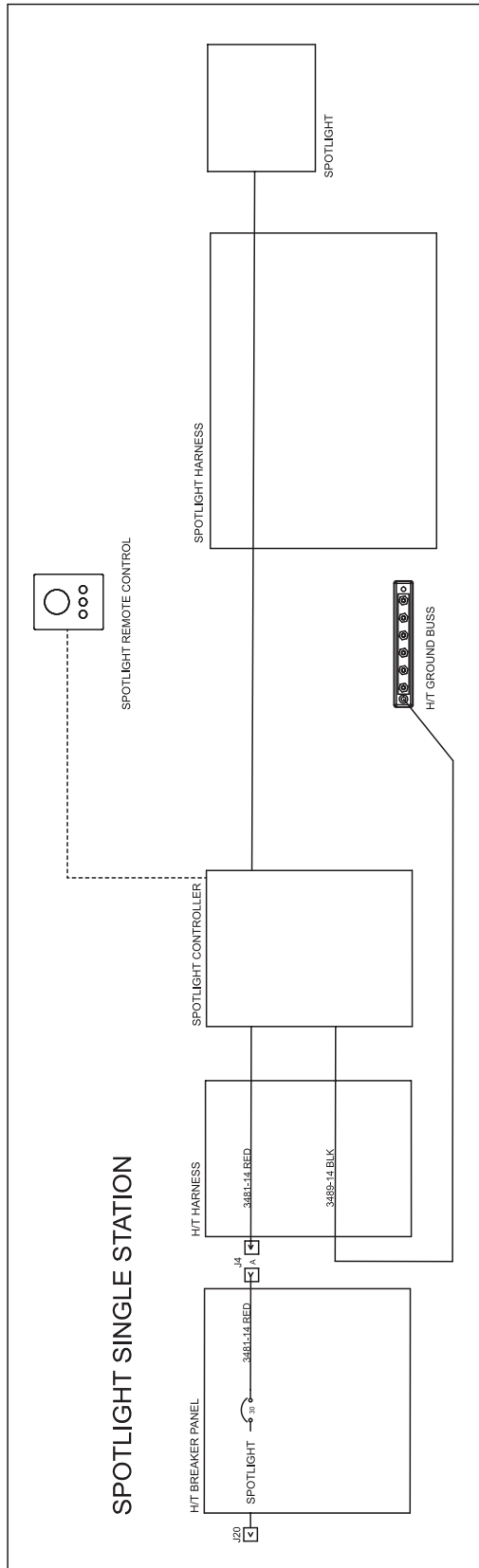
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Gyroscopic Stabilizer Wiring (Option)  
Figure 4.81.1



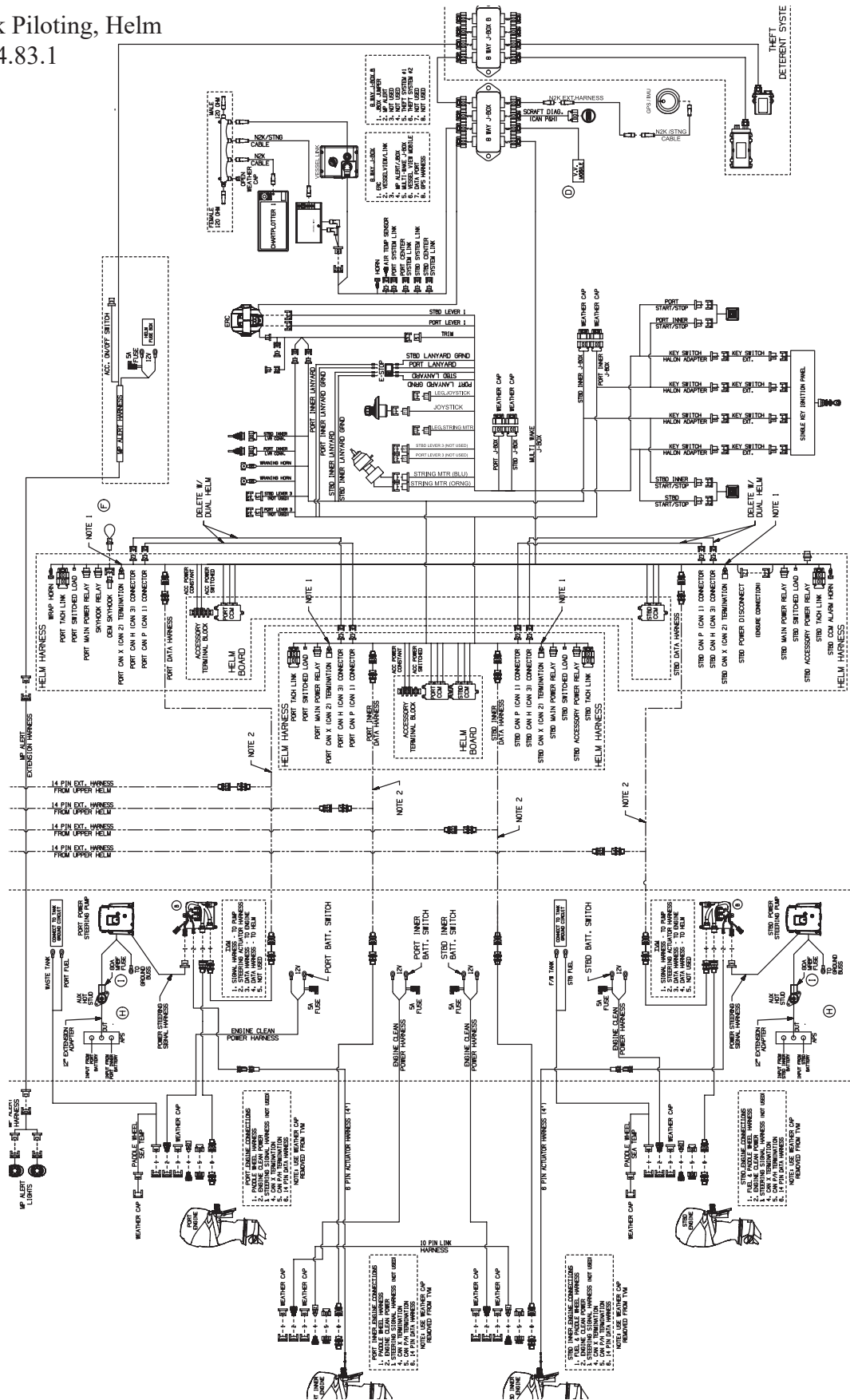
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Spotlights  
Figure 4.82.1



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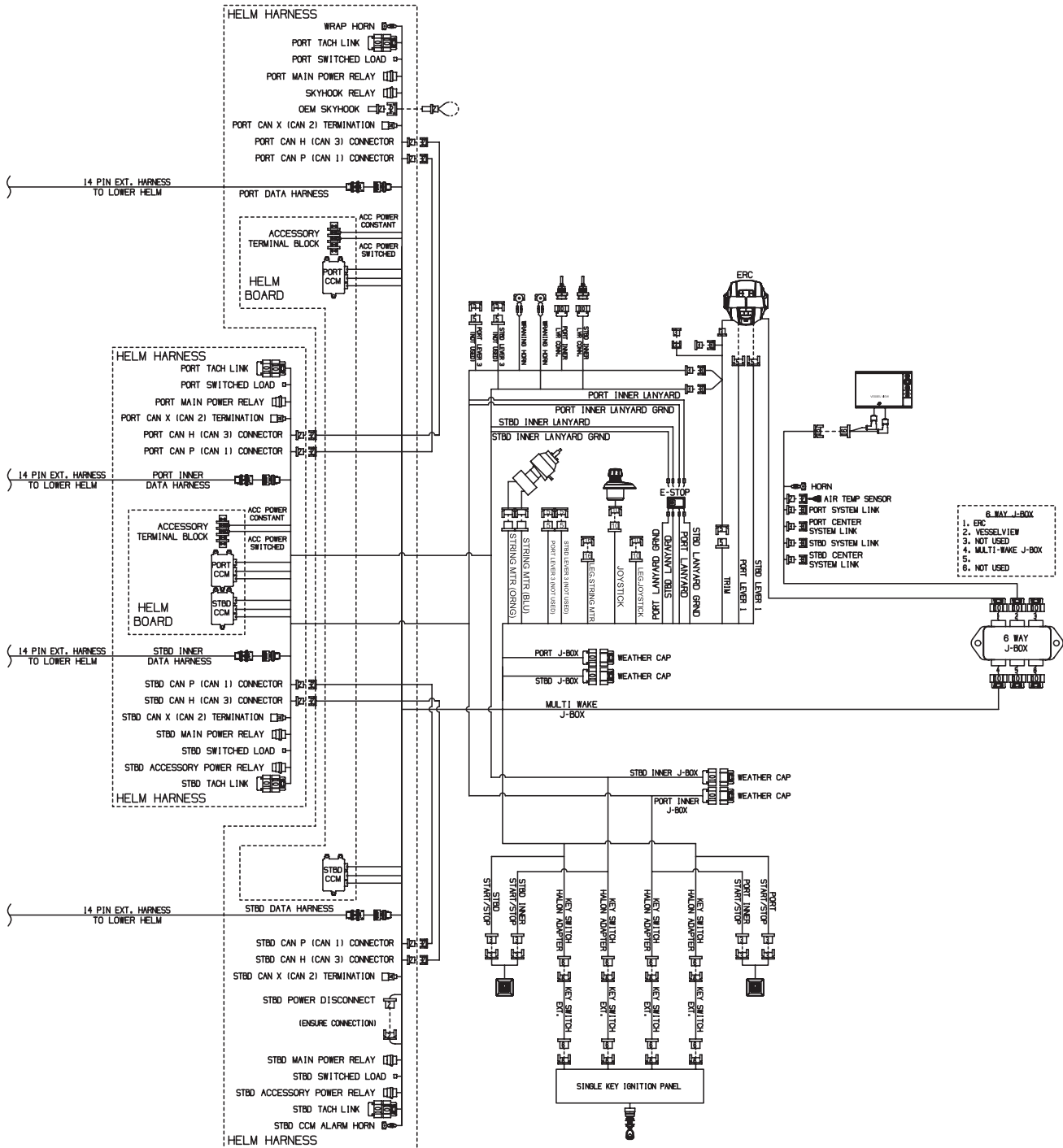
Joystick Piloting, Helm  
Figure 4.83.1



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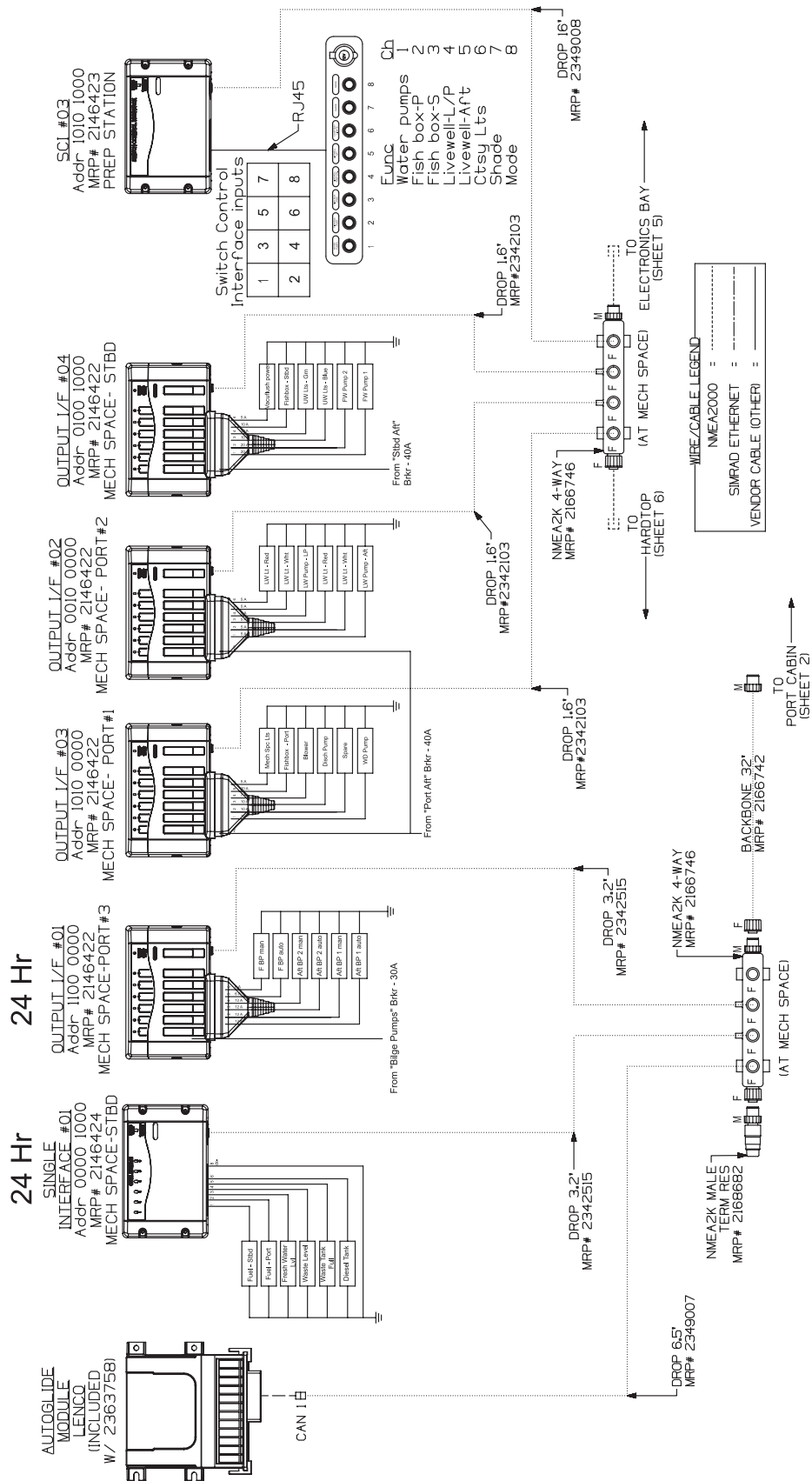


Joystick Piloting, Dual Helm  
Figure 4.84.1



6015-07-223\_2\_I

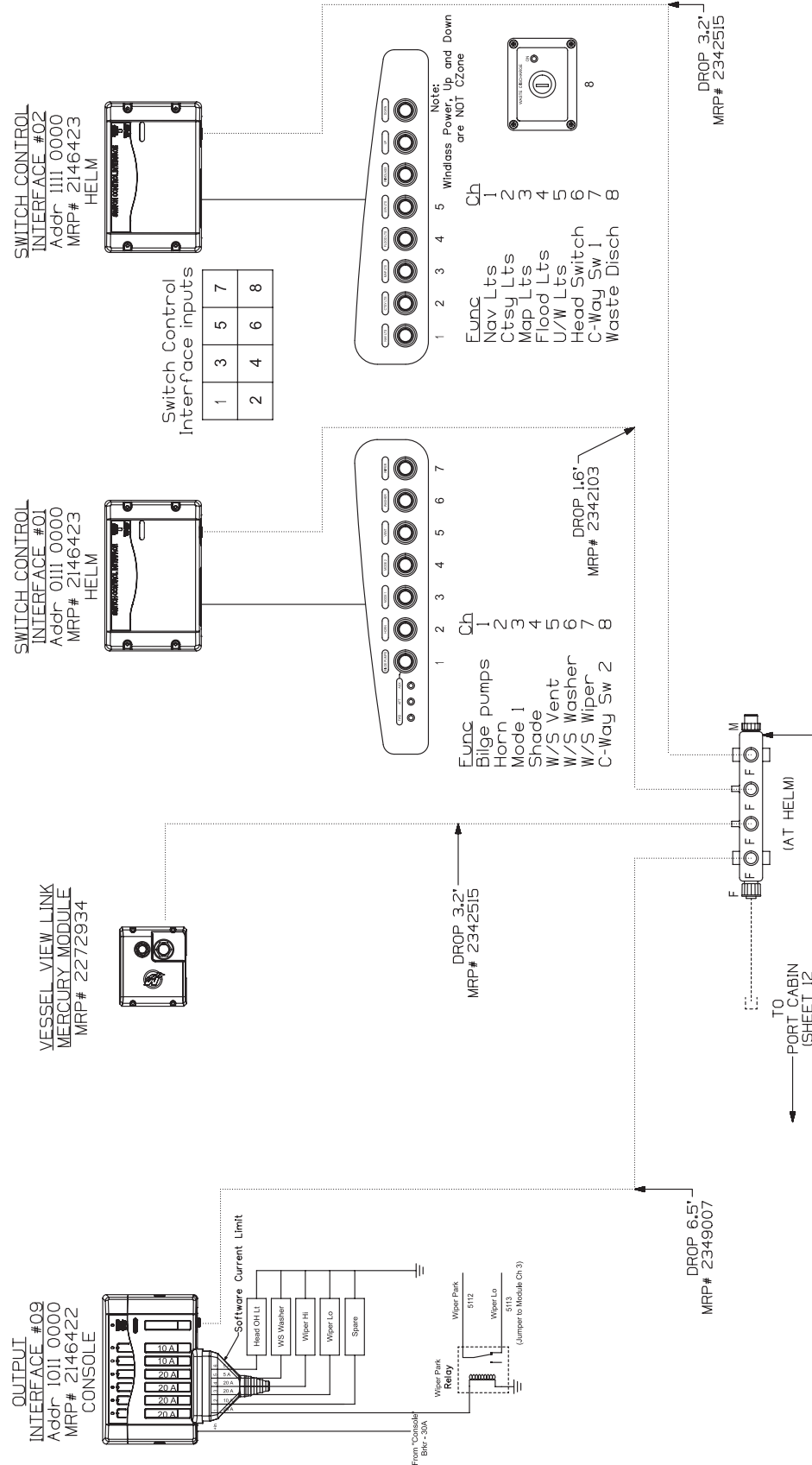
Electronics Navigation Package, Mechanical Access Hatch  
Figure 4.85.1



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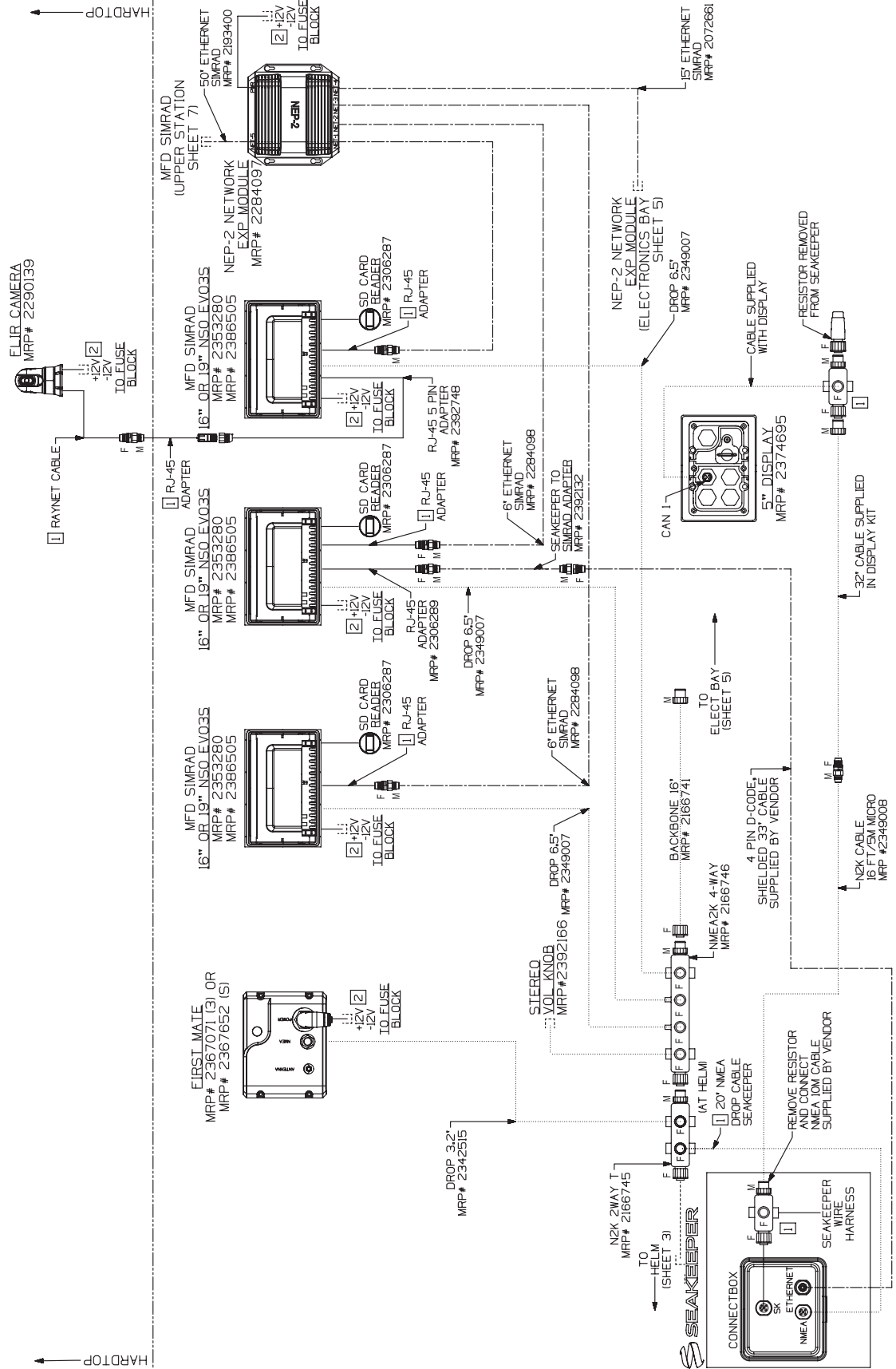


Electronics Navigation Package, Helm/Console (1 of 2)  
Figure 4.87.1



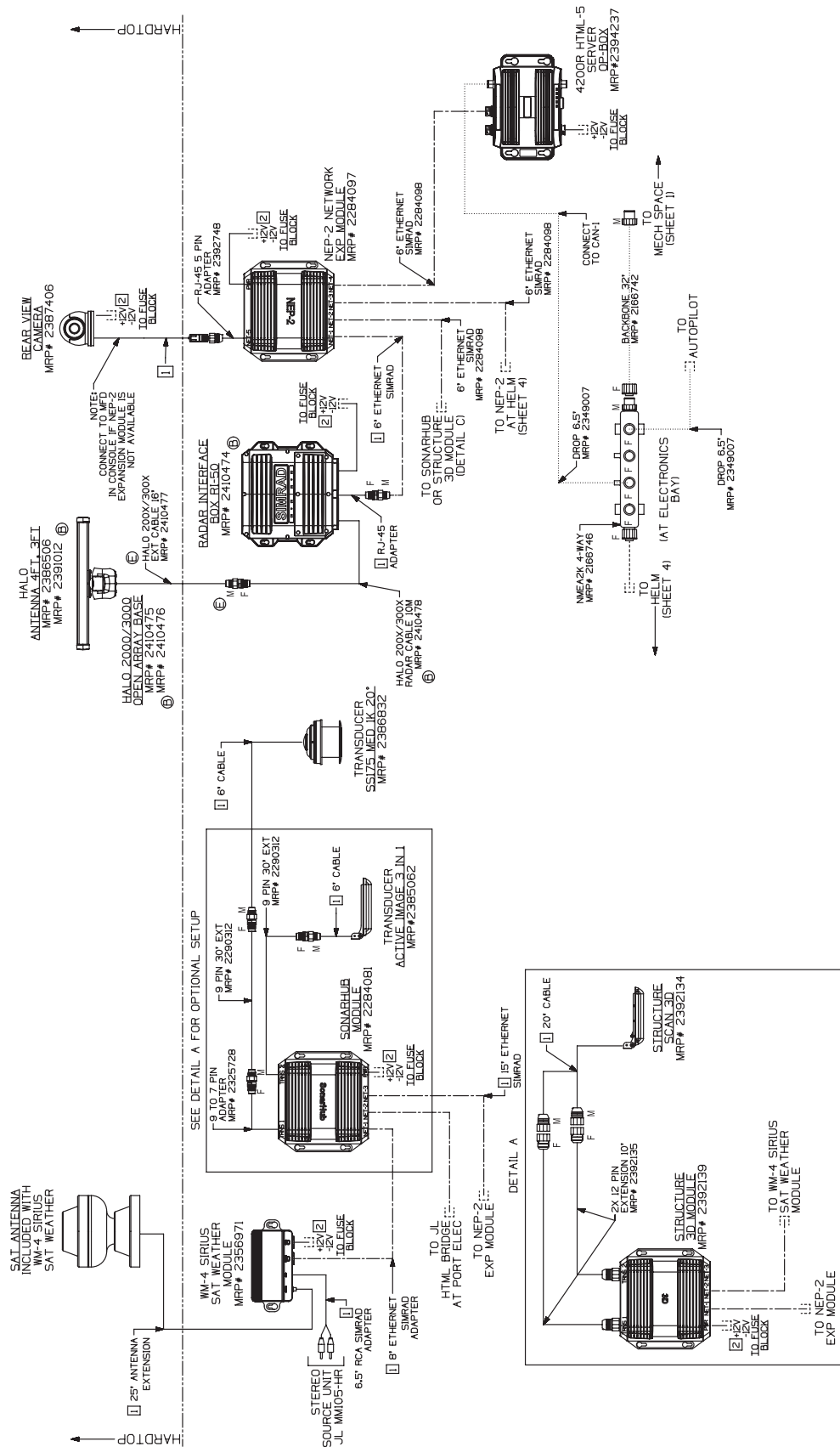
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Electronics Navigation Package, Helm/Console (2 of 2)  
Figure 4.88.1



6015-07-505\_4\_F

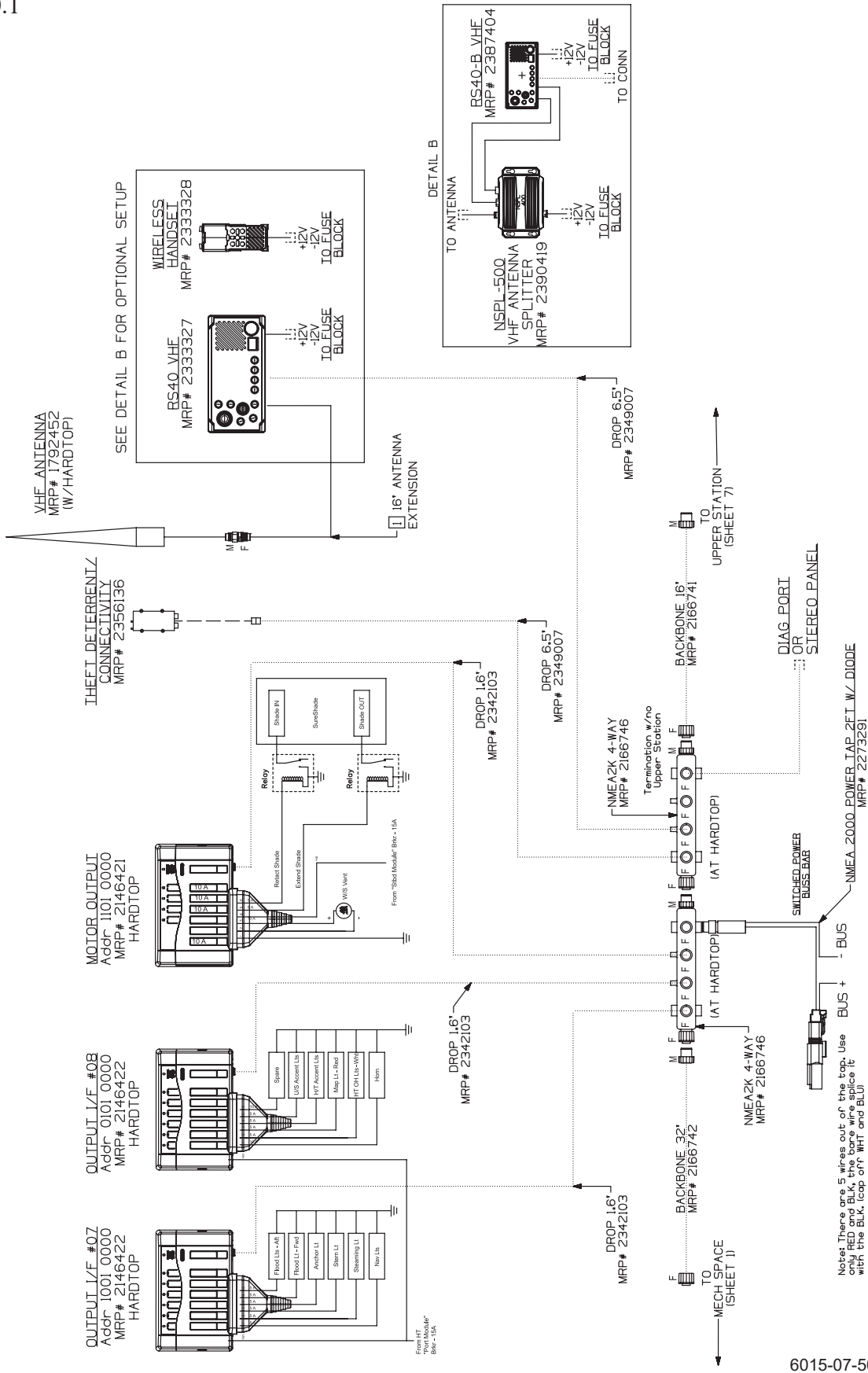
Electronics Navigation Package, Aft Cabin (Electronics Bay)  
 Figure 4.89.1



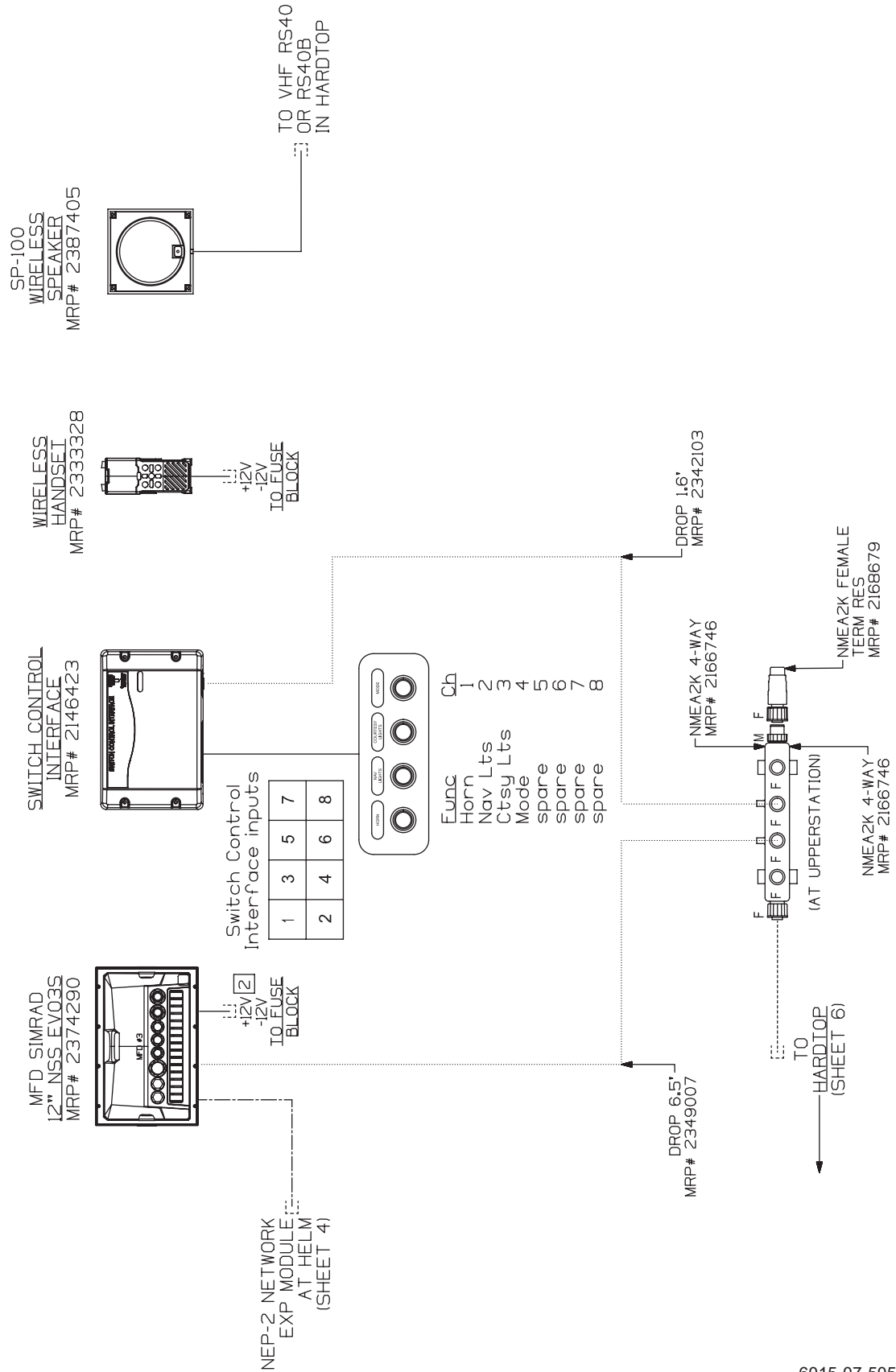
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Electronics Navigation Package, Hardtop (Option)  
Figure 4.90.1



Electronics Navigation Package, Upper Station (Option)  
Figure 4.91.1



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### Routine Care and Maintenance

#### NOTICE

**Refer to the individual manufacturers' manuals for important information regarding service, care, and maintenance of this vessel's equipment and components. Failure to do so may in some cases void the warranty.**

REFER TO THE OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

#### ⚠ DANGER

**When using solvents read all information from the solvent manufacturer regarding safe 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.**

#### ⚠ WARNING

**Regularly inspect and test hardware, fittings, windshields, hatches, seams, etc., for proper seal. Reseal and/or readjust/tighten as needed.**

Routine inspection, service, and maintenance of this vessel, systems, and components are vital to assure your safety, as well as prolonging the life of this vessel. Develop regular routines for inspecting and servicing this vessel.

The interval between necessary service or maintenance is highly variable, depending on the environment where the vessel is used. For example, corrosion of boat parts and components occurs more rapidly in a salt water environment than in fresh water.

This chapter provides only general guidelines for the care and cleaning of this vessel. It is your responsibility to determine whether maintenance and care intervals need to be accelerated due to boat usage and/or operating environment.

### Hull

Fresh water, saltwater, and water temperature can all affect the types of growth on this vessel's hull.

Any growth affects 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 boat's surface. 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 a Boston Whaler® dealer for recommendations on a compatible rubbing compound for this vessel or a professional hull cleaning service.

### Aquatic Invasive Species (AIS)

Aquatic invasive species (AIS) are plants and animals that occur in waters in which they are not native and whose introduction causes or is likely to cause economic or environmental damage or harm to human health. AIS have a negative impact on the waterway, its native species, and recreational and commercial uses of the waterway.

As responsible boaters and citizens, each boat owner should do their part to prevent the spread of these aquatic hitchhikers. In many cases, it is also required by law. Check local regulations for any waterway where you will boat.

After each boating trip, follow these three simple steps before you leave the water access to stop the spread of AIS: Clean, Drain, and Dry. This is the boater's way to help protect the environment from the damage that AIS can cause.

#### Clean

Inspect and remove all aquatic plants, animals, mud, and debris from the boat, engine, trailer, anchor, and any watersports equipment.

Rinse, scrub or wash, as appropriate, away from storm drains, ditches, or waterways.

Rinse watercraft, trailer, and equipment with hot water, when possible.

Flush motor according to owner's manual.

### Drain

Completely drain all water from the boat and its compartments, including but not limited to the bilge, wells, lockers, ballast tanks or bags, bait containers, engines, and outdrives.

### Dry

Allow the boat to completely dry before visiting any other bodies of water.

NOTE: Some localities may require inspection or decontamination before and/or after launching. Check state and local laws and regulations for requirements prior to traveling to go boating.

### Waxing Gel Coat Surfaces

## NOTICE

**Waxing of the exterior surfaces is recommended to be done at least twice a year to protect the gel coat of this vessel.**

Waxing is necessary to provide added protection to the gel coat. A periodic good cleaning and waxing will also ensure that this vessel will be protected and look good longer.

Do not wax over dirt. Make sure the surface of this vessel 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 are free of compound residue. Use a good quality carnauba wax or a high-quality wax designed for marine gel coat. Apply several coats.

### Hull

If using a pressure washer to clean the hull and deck surfaces of this vessel it is important to 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.

Do not pressure wash the helm console as this may compromise the integrity of the electronics and gauges as well as other equipment installed on this vessel. Also avoid pressure washing all caulk seams.

When staining from build-up does occur, use only cleaning agents recommended for use on marine gel coat. Never use an abrasive cleaner to wash this vessel'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 this vessel. Use care when covering this vessel'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 raised and allow air to circulate.

### Hull Blistering

Due to the quality of the materials used in the hull, blistering is rarely ever seen. Blistering is caused by water soluble materials in the hull laminate. The fiberglass and resin structure of this vessel 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. Damage can range from cosmetic to catastrophic, although the latter is very rare. Studies seem to point to 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 hulls, 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 this vessel stays in the water also helps prevent hull blisters from forming. Use of a trailer or boat lift reduces 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 a Boston Whaler dealer for more information on hull blister prevention and treatment.

### Sacrificial Anodes



#### CAUTION

**Do not paint over sacrificial anodes. This action renders them useless and leads to deterioration of the underwater metal parts of this vessel.**

Sacrificial anodes are installed on this vessel's hull, trim tabs, and engines to protect metallic parts from corrosion damage.

Anodes must be replaced regularly. Inspect anodes often and replace when the anode is approximately 50 percent deteriorated. If an increase in anode consumption is noticed, there may be an electrical issue that needs to be addressed on your vessel or a neighboring boat at the dock. Contact a qualified marine electrician.

### Deck

Clean up any oil spills on the deck with soap, hot water, and a stiff brush.

### 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 this vessel's hull.**



#### CAUTION

**Some bottom paints contain metals that can cause corrosion of outboard engines. Leave a minimum of 3/4" unpainted surface around all engine parts. Use only paints specifically designed for aluminum engines as anti-fouling protection.**

## NOTICE

**If blisters are present in the hull, they need to be properly cleaned and dried out before any barrier protection can be applied.**

If this vessel will spend most of its time in the water, painting the bottom of this vessel's hull is a good way to slow the formation of hull blisters and to keep bottom growth (fouling) under control. Conversely, if you will be trailering the boat to and from the water, you might want to forgo the painting.

The following is an abbreviated section on painting the hull bottom. Your Boston Whaler dealer should have information on properly painting this vessel's hull or recommendations on businesses that specialize in this area.

### Bare Hull Painting



#### WARNING

**Proper ventilation and capture of the dust created by sanding is essential. The dust created by sanding is toxic and should not be inhaled. A proper fitting respirator must be used. Do not use a paper filter mask.**

Proper preparation is the key to successful hull painting. 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.

The gelcoat must be dewaxed of mold-release wax before sanding can begin, otherwise wax will be deposited in the scratches and 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 watertight-epoxy filler.



After filler is cured, sand with 80 grit paper until smooth. Remove the sanding residue using a fiberglass solvent wash. 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 this vessel's hull.**

#### **NOTICE**

**Painting this vessel'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/manufacturer recommended operating range.**

#### **NOTICE**

**The use of masking tape is not recommended for hull-bottom paints.**

If the hull bottom is already painted, test the paint's adhesion to the 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 preparing the old painted surface. Follow the paint manufacturer's recommendations. Thin layers are better than one thick layer.

Humidity and weather play a role in how and when paint should be applied. To determine the waterline, place the boat in water with a full load of fuel and gear. Mark the waterline and measure above the marked line 1 inch 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 painting is complete.

### Rubrails

The rubrail on this vessel 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 and 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 must have the damaged section replaced. Please see a Boston Whaler dealer for this type of repair.

### Cleaning Fiberglass and Non-Skid

#### **NOTICE**

**Never use abrasive cleaners, detergents or soft scrub type cleaners to wash this vessels 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.**

To protect this vessel's 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 deck and non-skid areas the wax forms a protective non-slick surface which keeps debris from sticking. Dirt, soot, bird droppings, and fish blood rinse right off. Follow the wax manufacturer's detailed instructions.

### Stainless Steel

To ensure optimum corrosion resistance of stainless trim and fittings, clean and maintain them regularly. 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 quality cleaning wax - helps maintain the finish. To maintain:

1. Wash with mild soap and cold water.
2. Dry thoroughly.
3. Apply cleaning wax with a soft, dry cloth.
4. Allow wax to dry, then polish and buff.

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 marine-grade polish using a sponge, cloth or small bristled brush in the nooks and crannies.

### Teak Maintenance

The teak on this vessel requires some maintenance. Boston Whaler uses both natural teak and coated teak (pre-lacquered). Do not use a steel brush, steel wool, or a pressure washer on the wood. Do not use strong solvents or harsh cleaners on the caulking as these can damage or dissolve the caulk. Depending on the options selected for this vessel, different maintenance options apply:

#### Let It be (Natural Teak)

Left alone with the elements, teak changes to a silver-grey patina. To maintain, occasionally wash with soap and water. A light sanding every few years keeps the surface smooth; always sand with the wood grain.

#### Oiling

To retain or increase the darkness of the wood, apply a teak oil. There are numerous products on the market that provide a variety of different characteristics. Refer to the manufacturer's instructions for proper application.

#### Lacquering

Applying lacquer to teak may decrease the amount

of maintenance required and reduces the risk of mold. Lacquers can be tinted to change the color of the finish and can be mixed with paint thinner to reduce shine. Wood will likely darken when clear lacquer is applied. Carefully research product information to ensure it's suitable for both teak and caulk. Refer to the manufacturer's instructions for proper application.

#### Coated Teak (Pre-lacquered)

If this vessel has a coated (pre-lacquered) table(s), keep covered when not in use. Be sure to allow for air flow between the table and the cover by inserting a non-marring object between the two. Refer to the manufacturer's instructions for proper care.

#### Seats (Mechanical Parts)

Always wash metallic parts with soap and water, and rinse thoroughly with clean 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

Preventative maintenance is essential to the life of the metals on this vessel. 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 warranty protective coatings on metals in the marine environment. Proper owner maintenance is required to reduce deterioration which results 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 protectorate at least twice each year - more frequently as conditions warrant. Neglect causes surface pitting 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 adequately-sized wire.

### Standard Vinyl Cushions

Saltwater, salt residue, dirt and ultra-violet rays will take their toll on vinyl products causing them to lose their luster and texture. To clean standard cushions:

- 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. Rinse cleaned area with fresh water and dry with a clean, soft, 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, cloth or towel.



### CAUTION

**Wear rubber gloves when using any solvents. Use caution when cleaning around buttons, stitching, and wooden or decorative trim as solvents could seriously damage such areas.**

REFER TO THE OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### Cool Technology Vinyl Cushions (Option)

If this vessel is equipped with cool technology vinyl seat cushions, clean this material per the manufacturer's instructions at <https://spradling.group/en-sm>

### Water Exposure

Boat cushions are not waterproof and will absorb and hold water. Do not leave the cushions in standing water or exposed to heavy, prolonged rain. If cushions become waterlogged, remove the foam from the cushion, press out as much water as possible from the foam and allow to air dry. To prevent mildew, keep the vinyl dry and make sure that moisture does not accumulate between the cushions.

### Instrumentation Cleaning

When gauges are exposed to a saltwater environment, salt crystals may form on the bezel and plastic covers. Remove salt crystals with a soft damp cloth. Clean with a mild household detergent or plastic cleaner. Never use abrasive solvents or dirty rags 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 customer service at 920-929-5040.

### Canvas

## NOTICE

**Do not use detergents, bleach or solvents to clean your canvas.**

To keep canvas in good condition it should be cleaned regularly before dirt, pollen, etc. are allowed to accumulate on and become embedded in the fabric. Canvas can be cleaned without being removed. Chafing, fiber wear from dirt and grit and deterioration from ultraviolet light can cause your canvas to degrade over time.

### Maintaining Appearance

After each use, especially if used in salt water areas, rinse the canvas completely with fresh cold water. To maintain canvas:

- 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 canvas to soak. Do not allow soap to dry.
- Rinse thoroughly with fresh water.
- Let canvas dry completely. Do not store canvas while wet.

The effects of ultraviolet light can sometimes be reduced by chemical treatment of canvas items. Consult a Boston Whaler dealer or check the canvas manufacturer's instructions before using any chemical treatment on canvas.

REFER TO THE OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### Stubborn Canvas Stains

#### NOTICE

**Failure to remove all of the soap solution can cause deterioration of seams and prevent fabric from proper retreating.**

Soak fabric for approximately twenty minutes in a mild solution consisting of no more than 1/2 cup of bleach and 1/4 cup 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. 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.

### Canvas Zippers

Lubricate zippers and fasteners periodically with a clear silicone spray. A wax candle can also be used to lubricate the zipper track. Replace any missing or corroded fasteners.

### Vinyl Windows

#### NOTICE

**Do not use petroleum based products, such as petroleum jelly, on the zippers or fasteners.**

#### NOTICE

- **Never use window cleaners, detergents, abrasives, petroleum-based products, or alcohol to clean vinyl windows.**
- **Do not handle vinyl windows with sunscreen on your hands. Sunscreen permanently clouds vinyl where handled.**
- **Do not fold vinyl. Store flat or rolled with smooth paper or soft cloth (like a bed sheet) between layers when dry.**

The canvas on this vessel may incorporate Eisenglass or Makrolon® polycarbonate windows. Regular cleaning, utilizing compatible cleaners, coupled with proper maintenance improves the vinyl's service life.

- Rinse vinyl thoroughly with fresh water to remove any dust, dirt particles, salt water or environmental agents before applying cleaning products. This should be done frequently to avoid build up of salt water, dirt and other environmental contaminants.
- Using a soft non-abrasive cloth, wash windows inside and out with a mild soap and water solution. Rinse completely with cool water.
- Do not use detergents.
- Use separate clean, soft cloths or sponges for application of cleaners and polishes. Use a small amount of cleaner or streaking may occur. If streaking or a film occurs, follow up application with a water rinse.

REFER TO THE OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### Tempered Glass Windshield

Use commercially available glass cleaners or a mixture of fresh water and vinegar to clean glass windows, windshield or port lights. 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 re-coating.
- Expose to long periods of intense sunlight.

FOR MORE INFORMATION, CONTACT BOSTON WHALER CUSTOMER SERVICE (877-294-5645)



### Solid Surface Counter Tops

When properly cared for, your solid surface counter tops 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 dish washing 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 (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 and Winterization

#### NOTICE

**Do not use abrasives, harsh chemicals or metal scrapers on glass.**

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. Follow the guidelines on winterizing this vessel and the boat's systems. If inexperienced with the process of winterization it is best to hire the services of a professional.

REFER TO THE OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### Engines

#### CAUTION

**Never start or run an outboard engine, even momentarily, without having water circulating through water intakes in gear case. This will prevent damage to water pump (running dry) or engine overheating.**

Protecting your engine's vital moving parts from corrosion 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. To maintain:

- Check the sacrificial anodes on the lower unit. Replace if half or more of the anode is missing
- Replace engine oil and filter, running the engine to drain as much old oil as possible.
- Flush engine with fresh water using flush mufflers or similar device attached to raw water pickup.
- Let all water drain from engine.
- Fog engine while running. Spray until it stalls.
- Run fuel which has been treated with conditioner and stabilizer through engine.
- Replace lower unit gear oil. Check for moisture in old oil, a sign of deteriorating seals.
- Remove prop and grease shaft and threads.
- Treat all grease fittings with manufacturer-recommended lubricant.

- Lightly lubricate exterior of engine or polish with a good wax.
- Check engine mount bolts. Ensure they are torqued to 55 ft/lbs.
- Fill tank to capacity; add fuel stabilizer/conditioner.

REFER TO THE OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

### Fuel System

Treat tank(s), hoses, and fuel pumps 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.

Inspect your fuel system annually for leaks. You should check the fuel-tank area below the floor for liquid fuel, or a strong odor of gasoline before each outing, but at least once a year you should open each access port to any of the fuel-system components to inspect for leakage. If any leakage or seeping of fuel around any fuel-system fitting is found, or there is a strong odor of gasoline, do not turn on or off any electrical appliances or attempt to start this vessel; open all hatches to allow the compartment to ventilate, and call a qualified service/repair person for inspection and repair of the leak before using boat.

### Freshwater System

If the freshwater system won't be used for an extended amount of time it is recommended that it be drained. To drain:

- Press *Freshwater* pump switch on main distribution panel (under companion lounge seating) to start pump.
- Open all faucets, sprayers, and wash-down connections.
- Run system until tank is completely empty.
- Press *Freshwater* pump switch again to stop pump.
- Add a non-toxic antifreeze to freshwater tank per manufacturer's recommendations.
- Press *Freshwater* pump switch again to start pump.

- Run system until antifreeze is seen running out of all faucets, sprayers, and wash-down connections.
- Close all faucets, wash-down connections and sprayers.
- Press *Freshwater* pump switch again to stop pump.

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. Do not run the water heater without water in the unit.

### Freshwater System Disinfection

After initial installation of the freshwater system, component replacement, or long-term storage, it is vital that it be properly disinfected. To disinfect:

- Flush entire system thoroughly by allowing potable water to flow through it.
- Drain system completely.
- Fill entire system with a chlorine solution strength of at least 100 parts per million. Allow to stand for one hour
- Drain entire system.
- Flush system thoroughly with potable water.
- Fill with potable water.

### Head System

- Pump out holding tank at an approved facility.
- Add fresh water to bowl and flush several times while 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.

### 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 clamps.



### 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.

### 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.

### Air Conditioning (A/C) System

Each A/C unit has a reusable air filter on the front of the unit that should be removed and cleaned periodically to assure clean air circulation and reduce wear on the unit. Frequently inspect and keep clean the A/C's intake seacock strainer, located in the aft mechanical access hatch.

### Electrical System

- Check all connections and tighten if necessary.
- Spray connections with an anti-corrosion spray.

### Batteries

## NOTICE

**Follow battery manufacturer recommendations regarding long term battery storage.**

Engine and house electrical systems 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. And when the generator is on, the battery chargers. 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 and instead may result in reduced performance, damaged equipment, or battery leakage or rupture.

### Mixing Battery Brands

## NOTICE

**Remove battery from boat and store in a cool, dry location. Periodically check the battery during long term storage.**

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 cause damage, leakage or battery rupture. Use the same type of batteries throughout the boat.

### Long-term Battery Storage

- Disconnect battery cables (negative first).
- Remove battery from boat.
- Clean terminal ends of cables and battery terminals with a solution of baking soda and water. Rinse thoroughly with clean water.
- Apply a coat of dielectric grease on terminal ends of cables and battery terminals.
- Store battery in a cool, dry area.
- Use a trickle charger to keep battery charged or charge battery every 30-60 days.

### 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 without protection.**

When covering this vessel 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. 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. To help keep this vessel dry and mildew free, consider placing commercial odor and moisture absorbing products under the cover.

### Environment

Antifreeze and other winterizing fluids can be toxic to aquatic 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, and at the minimum, punishable by fines. Used antifreeze or any winterization fluids, should not be disposed of into sanitary sewers or publicly-owned treatment plants. Direct any questions regarding recycling antifreeze or other toxic fluids to your state's EPA office.

### Reinforcement Locations

This vessel has been manufactured with reinforcement in various locations throughout the deck. In the event you wish to add equipment that requires penetrating the deck with fasteners, Figure 5.11.1 illustrates the size, location, and type of the reinforcement available. The table below provides a description of the material and recommended fasteners to secure added 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 boat building 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

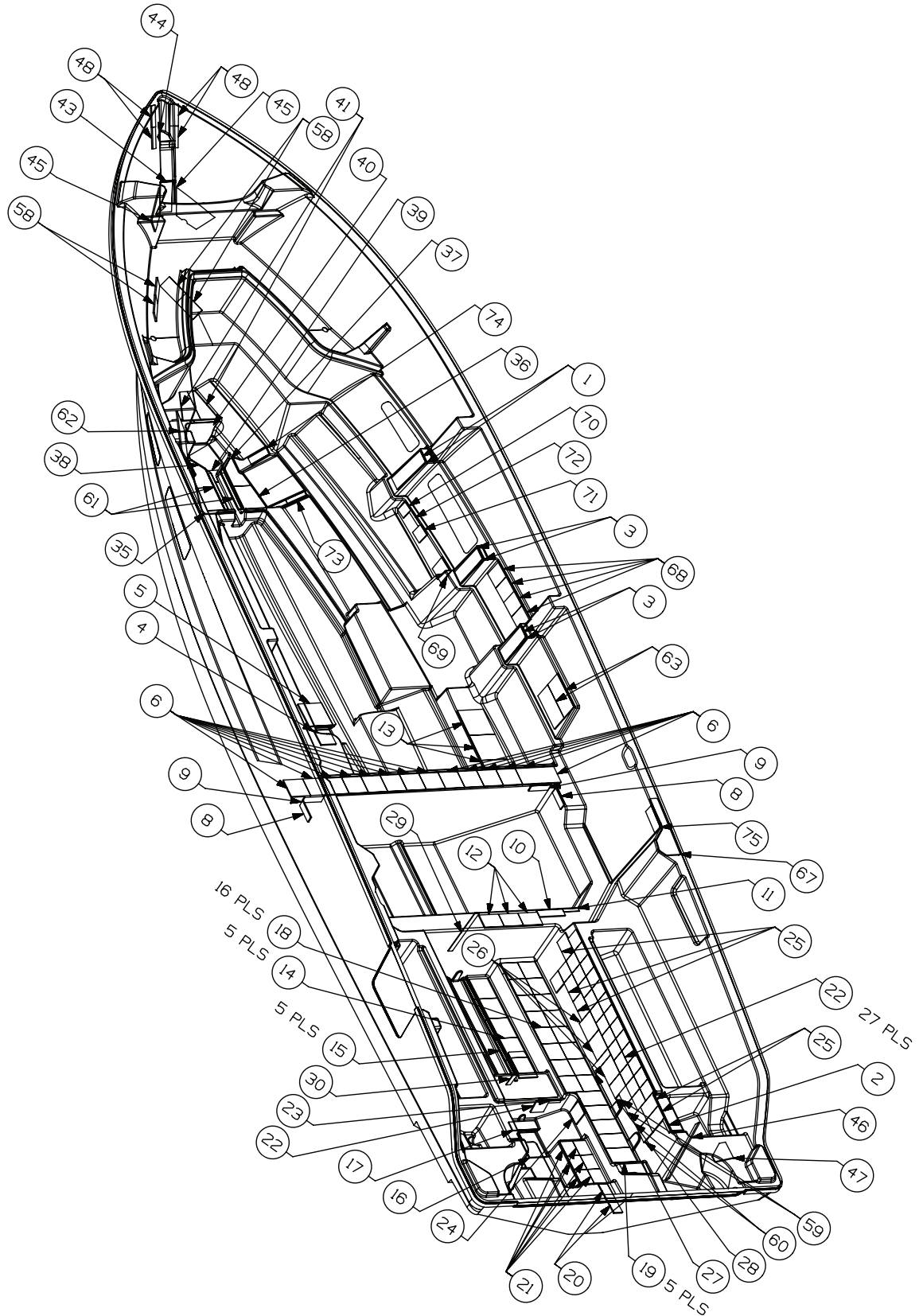
\* In all cases it is recommended to drill and countersink a pilot hole to prevent damage to the gelcoat surface.

\*\*Also known as Whaleboard

## Reinforcement Location Diagram

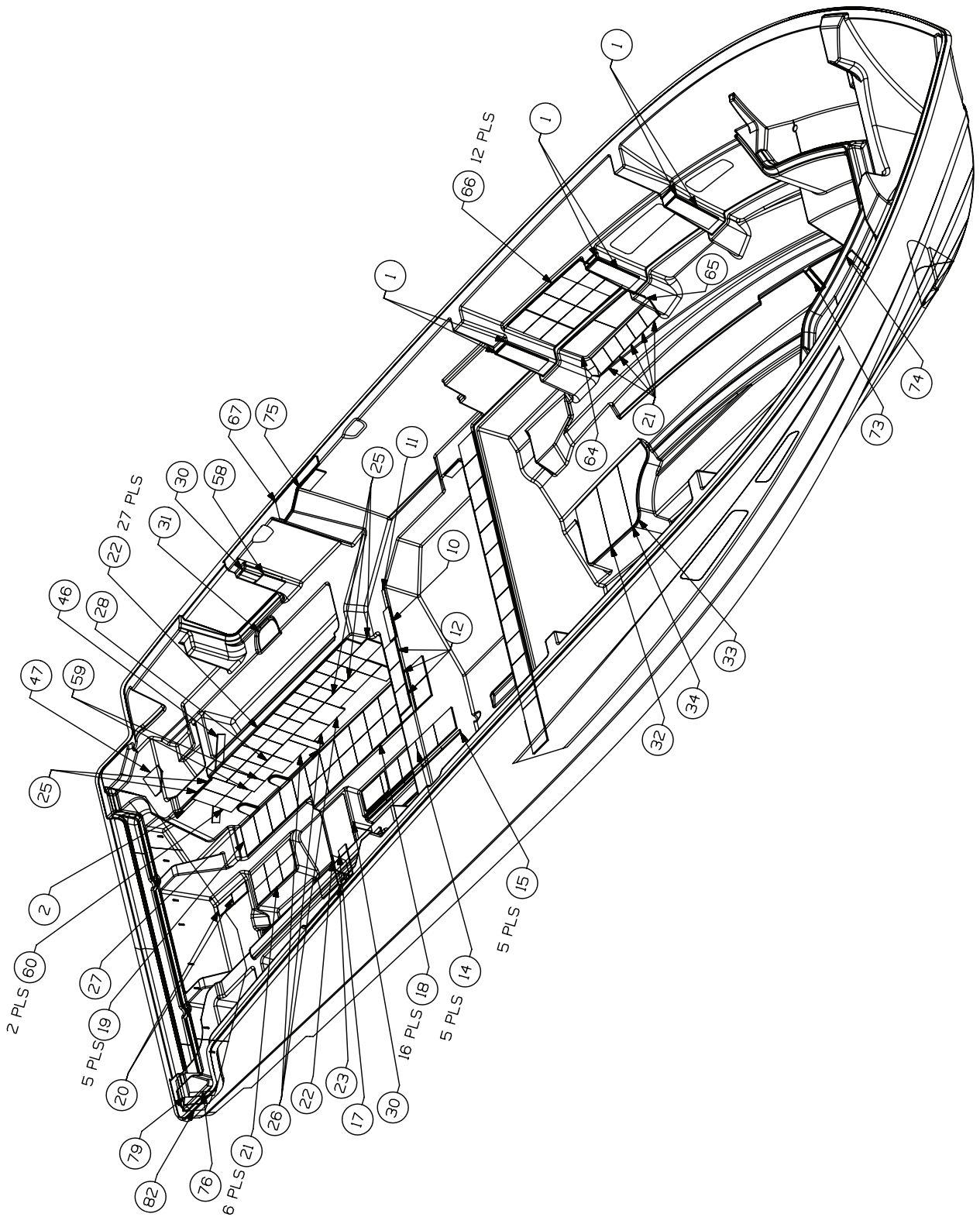
Hull -Port Side View

Figure 4.12.1



Reinforcement Location Diagram (Con't)

Hull - Starboard Side View  
Figure 4.13.1



## Reinforcement Location Diagram (Con't)

Hull  
Figure 4.14.1

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)

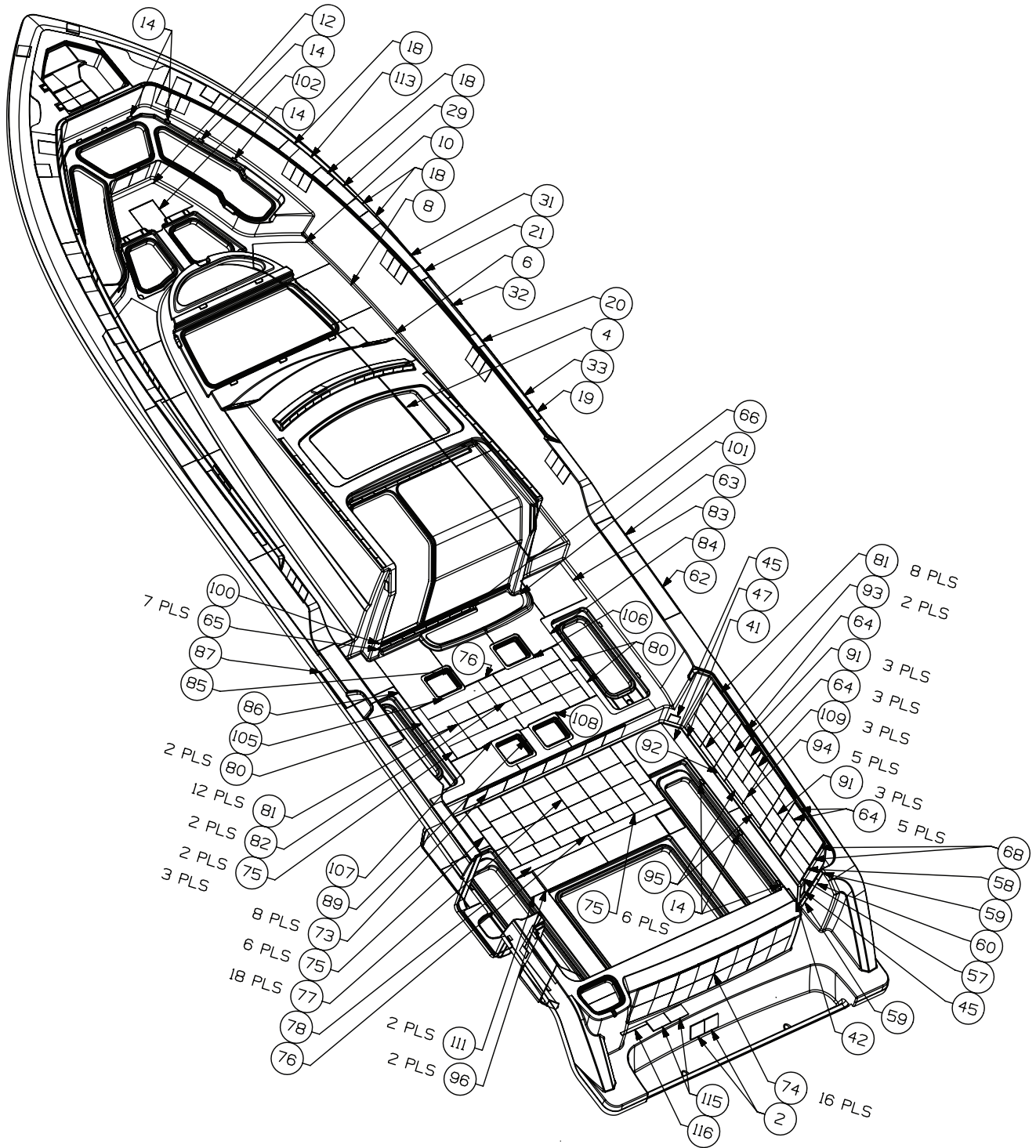
Hull  
Figure 4.15.1

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



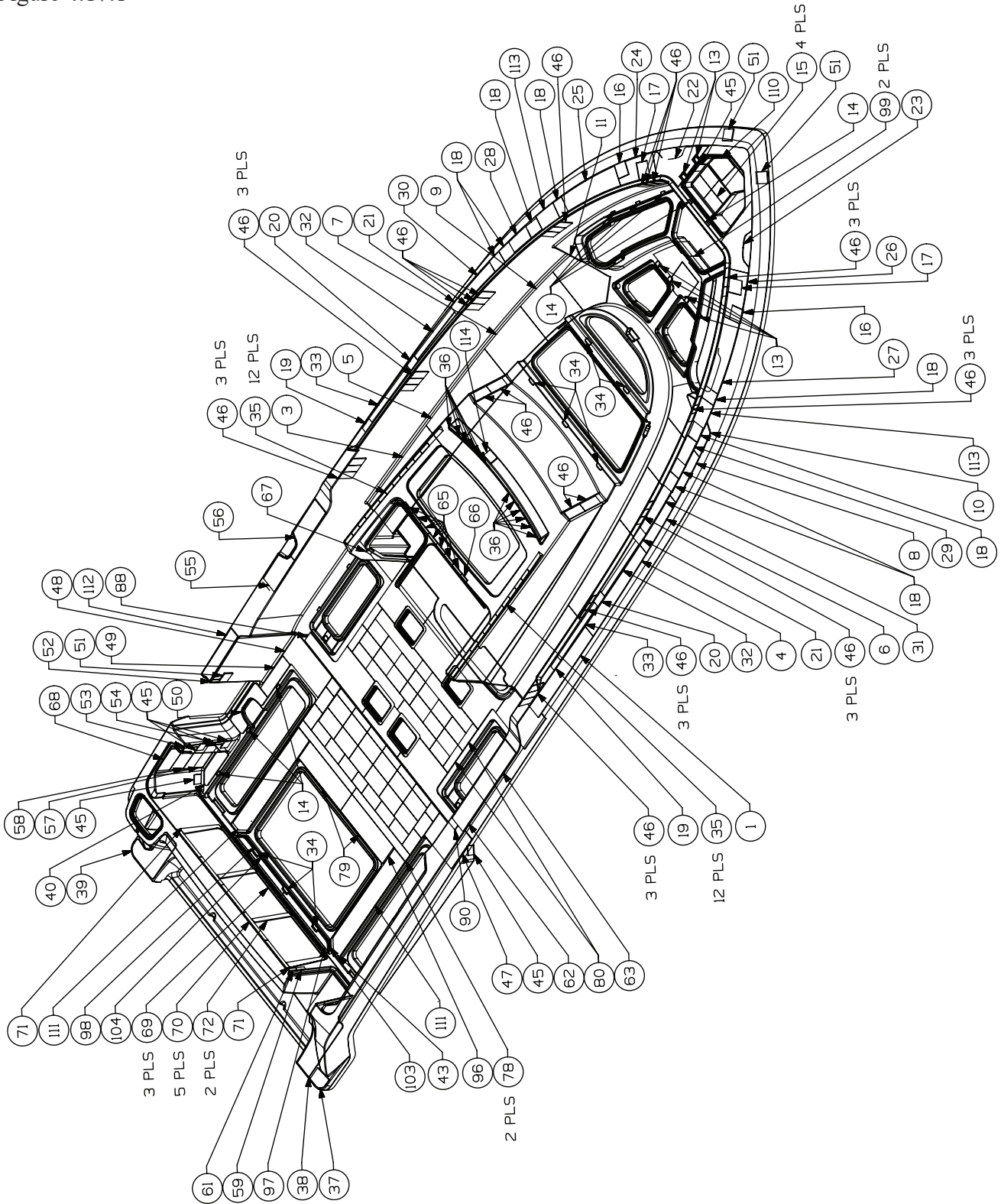
Reinforcement Location Diagram (Con't)

Deck -Port Side View  
Figure 4.16.1



Reinforcement Location Diagram (Con't)

Deck - Starboard Side View  
Figure 4.17.1



## Reinforcement Location Diagram (Con't)

DECK  
Figure 4.18.1

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

Figure 4.19.1

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

Figure 4.20.1

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