



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

# 

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.



 $T H E U N S I N K A B L E L E G E N D^{TM}$ 

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

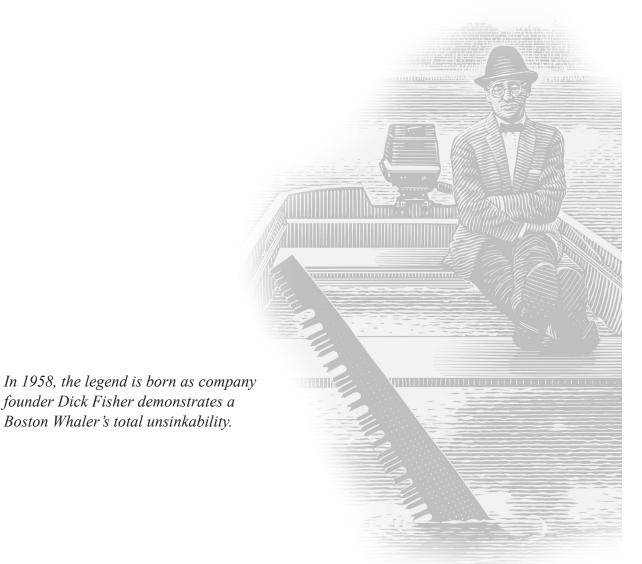
WHALER

### History

Since our founding more than six decades ago, 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<sup>®</sup> 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.

In 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.



## **Table of Contents**

### Introduction

Welcome Letter Intro-1
History Intro-2 Preface Intro-5
Limited Warranty (US and Canada)Intro-6
Limited Warranty (Non-US or Canada) Intro-11
CARB Warranty Statement Intro-15
Privacy Statement Intro-16
Owner's Packet Intro-17
Contact UsIntro-17
Boating Information Intro-17

### Chapter 1 • Safety

Safety Labels	1-1
Safe Boating Means	
Maintaining Control	
Boarding	
Impaired Operation	
Operator's Responsibilities	
Legally Mandated Equipment	
Personal Flotation Devices (PFDs)	
Fire Extinguisher	
Sound Producing Devices	1-5
Visual Distress Signals	
Carbon Monoxide (CO)	
Lifesaving Equipment	
Emergency Situations	
Fire	-
Flooding, Swamping and Capsizing	1-9
Propulsion, Control or Steering Failure 1	L-10
	L-10
Distress Signals 1	
	L-11
Weather 1	
Swimming, Diving and Water Skiing 1	
	L-14
	L-14
	L-15
	L-15
	L-16
	l-16
America's Waterway Watch 1	
Safety Label Locations 1	
Symbols Key 1	-20

### Chapter 2 • General Information

Construction Standards	2-1
Hull Construction	
Hull Identification Number	
Servicing	
Manufacturer's Certification	
Certification Plates	
Certification Design Category	
Power Capacity	
Specifications	
Öccupancy	
Recommended Occupant Locations	
Navigation Lighting	
Thru-hull Fittings	
Features	
Deck	
Console Area	2-11
Helm	
Console Storage	2-13
T-top (Option)	
Hardtop (Option)	
Deluxe Leaning Post (Option)	2-16
Competition Leaning Post (Option)	2-17
Canvas (Option)	
Storage	

### **Chapter 3 • Systems Overview and Operation**

Learn Safe Boating Starting the Engine Engine Warm Up Shut-down Procedure	3-1 3-3 3-3
Throttle and Shift Control	
Engine Trim	
Active Trim (Option)	
Trim Tabs	3-4
Gauges	3-6
VesselView Mobile (Option)	3-7
Bilge Pump	3-8
Power Steering	3-9
Fuel System	3-10
Navigation Lighting	
Freshwater System (Option)	3-14
Raw Water System (Option)	
Raw Water Washdown (Option)	
Livewell	
Head	

Bow Table (Option)3-20Trolling Motor (Option)3-21Shallow Water Anchor (Option)3-22Reboarding Ladder3-23Ski Tow Pylon (Option)3-23All Activity Tower (Option)3-23Seating3-25Pedestal Fishing Seats (Option)3-26Anchoring3-27Anchor Roller (Option)3-28Bow Shade (Option)3-29Entertainment System (Option)3-29TowingDockingJacking3-29	Dockside Waste Pumpout 3-1	9
Trolling Motor (Option)3-21Shallow Water Anchor (Option)3-22Reboarding Ladder3-23Ski Tow Pylon (Option)3-23All Activity Tower (Option)3-23Seating3-25Pedestal Fishing Seats (Option)3-26Anchoring3-27Anchor Roller (Option)3-28Bow Shade (Option)3-29Entertainment System (Option)3-29	Bow Table (Option) 3-2	20
Shallow Water Anchor (Option)3-22Reboarding Ladder3-23Ski Tow Pylon (Option)3-23All Activity Tower (Option)3-23Seating3-25Pedestal Fishing Seats (Option)3-26Anchoring3-27Anchor Roller (Option)3-28Bow Shade (Option)3-29Entertainment System (Option)3-29		
Reboarding Ladder3-23Ski Tow Pylon (Option)3-23All Activity Tower (Option)3-23Seating3-25Pedestal Fishing Seats (Option)3-26Anchoring3-27Anchor Roller (Option)3-28Bow Shade (Option)3-29Entertainment System (Option)3-29		
Ski Tow Pylon (Option)3-23All Activity Tower (Option)3-23Seating3-25Pedestal Fishing Seats (Option)3-26Anchoring3-27Anchor Roller (Option)3-28Bow Shade (Option)3-29Entertainment System (Option)3-29		
All Activity Tower (Option)3-23Seating3-25Pedestal Fishing Seats (Option)3-26Anchoring3-27Anchor Roller (Option)3-28Bow Shade (Option)3-29Entertainment System (Option)3-29	-	
Seating		
Pedestal Fishing Seats (Option)3-26Anchoring3-27Anchor Roller (Option)3-28Bow Shade (Option)3-29Entertainment System (Option)3-29		
Anchor Roller (Option)3-28Bow Shade (Option)3-29Entertainment System (Option)3-29		
Anchor Roller (Option)	Anchoring 3-2	27
Bow Shade (Option) 3-29 Entertainment System (Option) 3-29		
	Entertainment System (Option) 3-2	9
$10$ wing, Ducking, Litting and Hallering $3^{-23}$	Towing, Docking, Lifting and Trailering 3-2	
Securing Boat to Trailer		
-	Securing Trailer to Tow Vehicle	

## Chapter 4 • Electrical

DC Electrical System	4-1
Batteries	4-1
Battery Trays and Boxes	4-1
Battery Switch	4-2
Automatic Charging Relay	4-3
Battery Charging System (Option)	4-4
Fuse Block	4-5
Main DC Circuit Breaker	4-6
Transducer	4-7
Rigging Pull	4-8
Electrical Schematics	4-9

## Chapter 5 • Care and Maintenance

Deutine Caus and Maintenance	<b>-</b> 1
Routine Care and Maintenance	2-T
Hull	5-1
Aquatic Invasive Species (AIS)	5-1
Waxing Gel Coat Surfaces	
Hull Blistering	
Bottom Painting	
Rubrails	
Fiberglass and Non-Skid	
Stainless Steel	5-4
Seats	
Aluminum	
Cushions	
Cool Technology Vinyl Cushions (Option)	
Instrumentation	
Canvas	
Powder Coat Touch-up	5-7
Long-term Storage and Winterization	5-8

Engine5-	-8
Fuel System 5-	-8
Electrical System 5-	-8
Batteries 5-	
Deck 5-	-9
Cover 5-	-9
Trailer Storage	-9
Environment 5-	
Freshwater System 5-	-9
Raw Water System 5-1	0
Bilge Pump 5-1	
Livewell	0
Trim Tabs 5-1	0
Sacrificial Anodes 5-1	0
Reinforcement Locations 5-1	



## 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.

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

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.

## **BOSTON WHALER<sup>®</sup> • A BRUNSWICK COMPANY**

© February 2021 Brunswick Corporation



WHALER

Boston Whaler, Inc. ("Boston Whaler") provides the following Limited Manufacturer Warranty to the original retail owner of its 2025 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. <u>Ten-Year Structural Hull Limited Warranty:</u> 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. <u>Three-Year Limited Warranty on Components Manufactured or Installed By Boston Whaler:</u> (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. <u>One-Year Limited Warranty on Accessory Components for the 13 Super Sport and 16 Super</u> <u>Sport Models:</u> Boston Whaler provides the following Limited Warranty to the original retail owner of any factory-authorized accessory for the 2025 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. <u>One-Year Limited Warranty on Upholstered Items, Canvas, Teak, and Powder Coating</u>: 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. <u>Limited Engine Warranty:</u> 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:

Expenses for hauling out or transportation to and from the dealer or Boston Whaler factory for warranty service.
 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

WHALER

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 forprofit 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.

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,

VHALER

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

NHALER

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.

#### 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. 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

VHALER

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

World Headquarters 100 Whaler Way, Edgewater, FL 32141 (386) 428-0057 www.bostonwhaler.com

Intro-10

WHALER

**220 Dauntless** 

Boston Whaler, Inc. ("Boston Whaler") provides the following Limited Manufacturer Warranty to the original retail owner of its 2025 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 2025 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.

220 Dauntless

NHALER

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 forprofit 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.

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.

#### **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

VHALER

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. 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

Intro-14

WHALER

#### 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 2025 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 antismog 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 1- 877-294-5645.

#### SIMW EVAPORATIVE EMISSIONS WARRANTY PARTS:

Fuel tankGrade ValvesFuel feed hosesFuel Fill Deck Plate w/Cap and Pressure Relief ValveFuel Line FittingsHose Clamps on Fuel System ComponentsFuel Demand ValvesFuel Level Vent ValveAll other parts not listed that many effect the componential system

All other parts not listed that may affect the evaporative emissions control system.

11:1:14=1:

## Introduction

### **PRIVACY STATEMENT**

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 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 your request information about our companies and from surveys, promotions, contests, correspondence, your e-mails, telephone inquiries, web forms, and other communications. How We Use 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 relates 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!



## Introduction

### **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 rules of the road
٠	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
BoatUS Foundation	boatus.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	ccg-gcc.gc.ca	800-267-6687
Canadian Power and Sail Squadrons	cps-ecp.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.



THIS PAGE INTENTIONALLY LEFT BLANK



### **Safety Labels**

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

Mounted at key locations throughout this vessel are safety labels which advise the operator of imperative safety precautions to follow when operating and/or servicing equipment. Label categories are broken down by color and type.

## ▲ 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.

## **A**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.

Below are black and white examples of safety labels which appear throughout this manual and must be observed when operating or servicing this vessel. Learn to recognize the label category and understand the explanations before reading this manual.

## 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.

## **A**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.

WHALER

### Safe Boating Means:

- Knowing the limitations of this vessel.
- Following navigational rules (rules of the road).
- Be aware of people and objects in the water.
- Not boating in water or weather conditions that are beyond the boat's and operator's capability.
- Never operating the boat while under the influence of drugs or alcohol.
- Being aware of passenger safety at all times.
- Reducing speed when there is limited visibility, rough water, boats or structures.

## NOTICE

As boat owner or operator, you are responsible for safety of you, your passengers, and other boaters.

Boating in beautiful weather and calm water conditions can be a wonderful experience. But boating requires considerably greater skills than operating a land vehicle. Taking a boating course is the best way to prepare for a safe and enjoyable experience on the water.

- Take a USCG, U.S. Power Squadron or equivalent boating safety course. Call the BoatUS Foundation at 800-336-2628 for information on available courses, or go to: www.boatus.org
- Get hands on training on how to operate this vessel properly.

## Safe Boating Checklist

#### **Before Departure**

- $\Box$  Check weather forecast
- $\Box$  Check required documents are on board
- $\hfill\square$  Check navigation charts are on board
- $\Box$  Check safety equipment is on board
- □ Ensure passengers and crew have received safety instructions on procedures, location, and use of safety equipment.
- $\Box$  Check drain plugs are installed
- $\hfill\square$  Check bilge pumps are working and clean
- $\Box$  Check blower is working
- □ Check navigation lights are working
- $\Box$  Check horn is working
- $\hfill\square$  Check fuel system has no leaks or fumes
- $\hfill \Box$  Check fuel filter is tight and clean
- □ Check power steering fluid is full (if applicable)
- $\hfill\square$  Check steering system is working smoothly
- □ Battery connections and fluid levels (if applicable)
- $\hfill\square$  File float plan with friend or relative

### Trailering (if applicable)

- $\Box$  Check boat position is secure on trailer
- $\Box$  Check tiedowns are tight
- $\Box$  Check winch is locked
- $\Box$  Check trailer hitch is connected
- □ Check engine clearance in trailering position
- $\Box$  Check safety chains are attached
- $\Box$  Test lights, brake lights, and turn signals
- $\hfill\square$  Adjust mirrors for trailering

#### **After Return**

- □ Dry and stow PFDs and other safety gear
- □ Fill fuel tanks (allow for expansion) to prevent condensation
- $\Box$  Check fuel system for leaks
- $\Box$  Check bilge pump is operating properly
- $\Box$  Check bilge is clean and leak free
- $\hfill\square$  Check in with float plan notification person

BOSTON WHALER

#### **General Considerations**

- Know how this vessel 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 this vessel 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.

### **Maintaining Control**

High performance boats require intimate knowledge of each vessel's handling characteristics for safe, high speed operation. Learn the effects of trim, steering and throttle changes at gradually increasing levels of speed. Also, 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 a variety of navigational hazards in the water including partially submerged debris, 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 or 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.
- Load gear after 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**

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 react 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.

WHALER

### **Operator Responsibilities**

- 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 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 proper operation of all vessel features prior to departure.
- Always maintain a safe speed.
- When underway, always be aware of conditions in every direction.
- 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, haze, etc.

## 

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 this vessel 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 allows you plenty of time to avoid dangerous situations.

## **A**WARNING

### **STABILITY HAZARD**

- Load boat properly. The manufacturer's load rating is the maximum weight 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 in the water.
- Do not allow passengers to ride on the stern cushion or gunwales.
- Do not overload the stern.
- Observe manufacturer's recommended onplane 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 devices (PFDs) for every passenger on board. Boats must have at least one throwable life preserver.

Slip hazard - Wet decks are slippery. Wear proper footwear and use extreme caution on wet surfaces.

### **Legally Mandated Equipment**

Consult your national boating law enforcement agency. The following equipment is the minimum required by the United States Coast Guard (USCG) for boats with a length less than 26 feet (7.9 meters).

### Personal Flotation Devices (PFDs)

One USCG approved Type I, II or III is mandatory for each person aboard. One throwable Type IV device



is also required to be onboard and located so that it is immediately available.

A Type V device is acceptable (see *PFD Classifications*, later in this chapter) if worn for approved use. Always wear a PFD when boating.

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

#### **Sound Producing Devices**

Ensure a sound producing device such as a horn or whistle is on board. Navigation rules require that a sound made by an audible device be capable of a four second blast, and be audible for 1/2 mile (.80 km).

#### **Visual Distress Signals**

If you operate this vessel in coastal waters or on the Great Lakes, you must have visual distress signals for day and night use on board. At least three day/night combination pyrotechnic devices must be carried, readily accessible, in serviceable condition, and not be expired. Non-pyrotechnic substitutes include one orange flag for day-use and one electric S-O-S signal light for night-use. Store all pyrotechnic signals in a well marked, waterproof container.

#### **Additional Required Equipment**

This vessel comes equipped with other mandated equipment such as navigation lights, and certified marine sanitation device (Option).

#### Additional Safety Equipment

In addition to the legally mandated equipment, the following items are necessary for safe boating, especially if this vessel will be out of sight of land.

•

•

- First Aid kit
- GPS
- Marine VHF radio
- Moisture repellent
- Mooring lines
- Fenders
- Moisture repellent
- Waterproof flashlights
- High power spotlight
- Spare propeller
- Tool kit
- Instruction manuals Lubricating oil

Radio beacon

Extra batteries

Boat hook

Anchor

Compass

Spare keys

Manual bilge pump

**EPIRB** emergency

positioning indicating

- Screwdrivers (Phillips and flat)
- Pliers (regular, Vise-grip, tongue and groove)
- Wrenches (box, open end, Allen and adjustable)
- Socket set (metric and U.S.)
- Electrical tape and duct tape
- Hammer
- Spare parts kit (spark plugs, fuses, etc.)

### Carbon Monoxide (CO)

Carbon monoxide (CO) is an odorless, colorless, and 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 concentrations 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
- Unconsciousness

If symptoms are detected, get medical attention as soon as possible. Symptoms of carbon monoxide

Nausea

WHALER

## Chapter 1 • Safety

(CO) poisoning may be confused with seasickness or intoxication, potentially delaying the seeking of medical attention. The poisoning victim's skin often turns cherry red. If CO poisoning is suspected, have the victim breath fresh air deeply. If breathing stops, resuscitate. A victim often revives, then relapses because organs are damaged by lack of oxygen. CO can accumulate in dangerous concentrations anywhere in or around your boat including on back decks, swim platforms, or in water around generator exhaust. CO can remain in or around the boat at dangerous levels even if the engine is no longer running (see Figure 1.6.1). Remember:

- If you smell exhaust you are inhaling CO.
- Change course/speed to improve ventilation.
- Adjusting the canvas enclosure and/or vents and other opening devices can improve ventilation.

To minimize the danger of carbon monoxide accumulation:

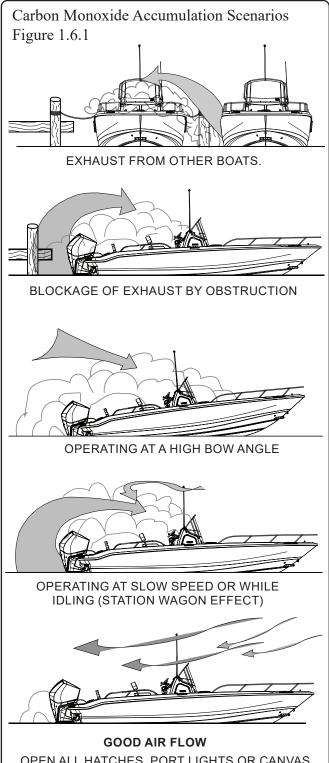
- Do not idle the engine without moving the boat for more than 15 minutes at a time.
- Inspect the exhaust system regularly.
- Operate all fuel burning appliances, such as charcoal, propane, LPG, or CNG cooking devices in areas where fresh air can circulate.

## 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 CO 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 requires a working carbon monoxide detection system, preferably in each sleeping quarter.

## DANGER

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



OPEN ALL HATCHES, PORT LIGHTS OR CANVAS TO LET FRESH AIR CIRCULATE.



## 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) allows a person that has fallen overboard to remain afloat with far less effort and body heat loss, extending the survival time required to find them.

### Personal Flotation Devices (PFD)

One USCG approved PFD, Type I, II or III for each person aboard or being towed on water skis, tubes, etc. The law requires that PFDs must be readily accessible, if not worn. Readily accessible means removed from storage bags and unbuckled.

## NOTICE

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

### **PFD Classifications**

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



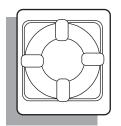
**Type I**, The off-shore life jacket is considered the most buoyant, it is designed to turn an unconscious person face up. Use in all types of waters where rescue may be slow, particularly in cold or rough water conditions.



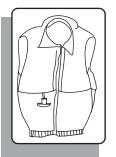
**Type II**, Near-shore life vest, a keyhole vest with flotation filled head and neck support is also designed to turn a person face up, but the turning action is not as pronounced. Use in calm inland waters or where quick rescue is likely.



**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 PFDs, ensure that there is an attached tag indicating they are approved by the USCG or by your boating law enforcement agency.

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

## **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 appropriately.

WHALER

### **Medical Emergency**

You may be far from professional medical help when you are boating. At least two 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 can help in some areas, but they are limited and unreliable and should not be used in the place of a 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°F (21.1°C). There are three steps that must be taken when a person has fallen overboard:

#### 1. Return to the Victim

- Immediately make everyone onboard aware that someone is overboard and keep the 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 serves as another marker.

#### 2. 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.

#### 3. Get 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 reboarding 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. Have the proper fire fighting equipment close at hand, and in good working order to respond quickly.
- Small fire extinguishers have short 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:

WHALER

- 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 an automatic fire extinguisher has discharged in the compartment, wait 15 minutes before opening the compartment. Have extinguisher handy in case of a flare up.
- If possible, signal for help. Radio, visual, and audible signal should be used as needed. Also understand, that you must render assistance to any boater requesting help.
- If fire is out of control, grab all necessary survival gear, distress signals, put on personal flotation devices (PFDs) and prepare to abandon ship.
- If you do abandon ship, ensure the passengers have PFDs. 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 a PFD, or have one 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 a 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 also be caused by an overloaded boat.

- If the bilge pump(s) have not automatically turned on, switch them on immediately.
- The deck scuppers on this vessel are designed to drain deck of water.
- Keep the bilge pumps running until 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).

If the boat will not right itself, get out of the water and climb onto the exposed hull.

- Take a head count of 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 engine(s)
- Check on passengers
- If bilge pump(s) have not automatically turned on, switch them on immediately.
- Determine amount of damage to boat 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 USCG 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 engine, (shut off at ignition or pull on Engine emergency stop switch).
- Drop anchor outside of channel, if possible, to prevent drifting.
- Determine if problem can be fixed or is assistance needed.
- Call for assistance if needed.

When loss of propulsion or steering is noticed, your quick reaction is required to prevent damage to your boat or injury 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; reversing your boat before this is done may cause more damage.

## **Distress Signals**

### Visual Distress Signals (VDS)

• USCG regulations require boats in coastal waters and the Great Lakes to carry a 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 16 feet (4.8 meters), open sailboats less than 26 feet (7.9 meters) 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 and not be expired.
- Carry three signals for day use and three for night. Some pyrotechnic devices meet both day and night use requirements.
- Store pyrotechnic signals in a cool, dry location. Prominently mark an orange or red watertight container *distress signals*.

Other recognized visual distress signals include:

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

### Audible Distress Signals, (ADS)

USCG regulations require one hand, mouth or power operated whistle or horn, audible for at least half a mile. Other audible distress signals include:

- Radio communications
- 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 Communications**

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.

## 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 (see Figure 1.12.1). Television, radio, and internet can give you access to NOAA weather reports that will help you make a determination on where and when to get underway. The following are some weather related rules:

- Understand the design limitations of this vessel.
- Check the weather forecast and water conditions before leaving and while underway.
- Wear a personal flotation device (PFD)
- If bad weather is approaching, immediately seek a safe harbor.
- If bad weather is approaching, immediately seek safe harbor. If bad weather hits, seat passengers in cabin or cockpit deck. Head 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. Stay out of the water during a lightning storm. If caught swimming during a storm, get back into the boat and remain there until the storm passes. Remember that lightning can strike several miles away from the storm itself. Be aware of the storm location relative to your location and the direction the storm is moving.

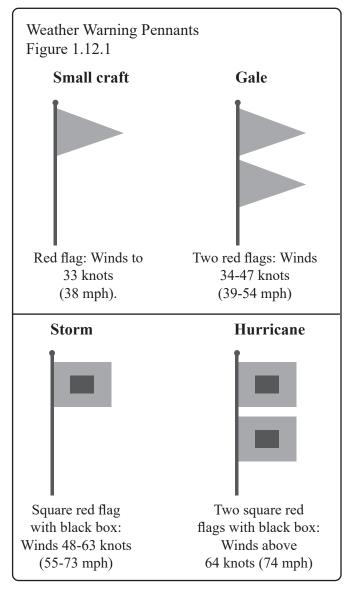
## **WARNING**

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.

WHALER



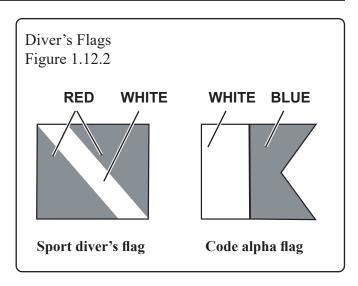
## Swimming, Diving and Water Skiing

#### Swimming

- Do not swim near 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 (see Figure 1.12.2). Keep at least 100 feet (30 meters) away.



**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.

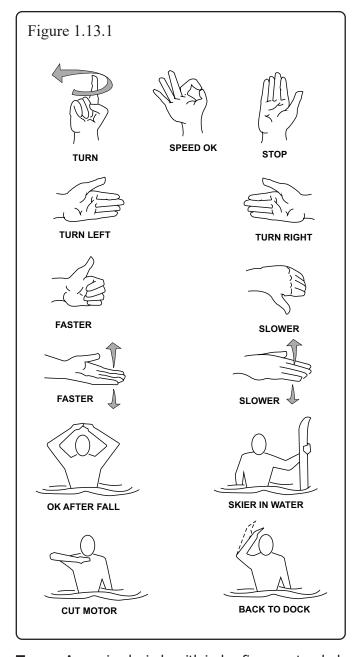
#### Water Skiing

- Always have two persons in the boat, one at the controls and one continuously look at the skier.
- 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 boat directly behind a water skier. At 22 knots (25 MPH), 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 towline length.
- Learn the signals to communicate with a skier. The skier is to control the boat through hand signals (see Figure 1.13.1).
- This vessel handles differently while towing a skier; carefully 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 person in the water.



- Turn off engine before picking up skier.
- If the skier suddenly releases tow rope, it can backlash into cockpit. Spotters watching the skier must be aware of this fact and be prepared to take appropriate action to avoid injury.

#### Water Skiing Signals



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 up or palm up, move hand up and down.

**Speed OK** – Raise arm and make OK symbol with thumb and index finger

**Slow Down** – Thumb 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.

## **A**WARNING

#### SWIMMING/DIVING HAZARD

- Keep clear of areas designated/marked for only swimmers and divers only.
- Never swim when there is lightning.

#### **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 100 feet from other objects.
- Never follow directly behind a water skier.
- A competent observer must watch 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

WHALER

## **A** DANGER

#### **PROPELLER SAFETY**

- Before starting the 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 the boat from the water when engines are on.
- Educate passengers about propeller danger.
- Be alert when operating in congested areas; never enter swimming zones.
- Take extra precautions near boats that are towing skiers or tubers.
- Never permit passengers to ride on the bow, gunwale, transom, seatbacks, or other locations where they may fall overboard.
- Stop! If someone falls overboard. Slowly turn the boat around, and keep the person in sight as you approach. Turn engine off with boat in gear before bringing the person aboard.
- Never reverse this vessel to pick someone up out of the water.

#### **Towed Inflatables**

## ATTENTION

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 if misused. When towing inflatables/ tubes, use both stern eye strong points with a tube tow harness to attach the tube tow rope.

Towed inflatable types, aka tubes, produce tremendous stress on the tow point and rope, far greater than devices like waterskis, kneeboards or wakeboards. 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.

### **Engine Emergency Stop Switch**

## **A**WARNING

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

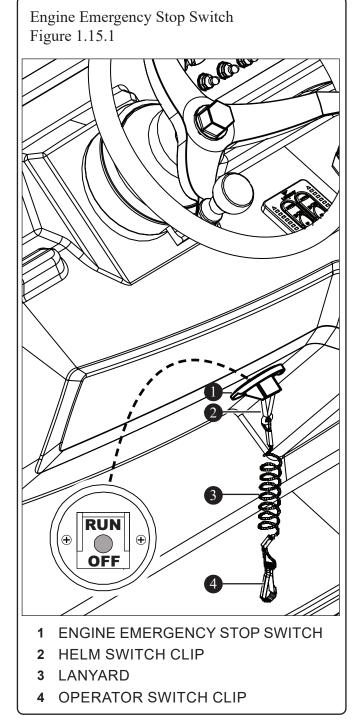
This vessel is equipped with an engine emergency stop switch located at the helm. The engine emergency stop switch incorporates a shut-off switch, switch clip, lanyard and lanyard clip, which is clipped to the operator when running (see Figure 1.15.1).

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

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

The lanyard should be long enough to prevent accidental activation. Do not let the lanyard become entangled. Accidental loss of power can be hazardous, particularly while docking or in heavy seas, strong current or high winds. Passengers and crew may lose balance and the boat may lose steering control.

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



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

The 1st 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 THE OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

#### **Float Plan**

Float plans are important to you should you encounter problems on the water. A float plan should contain a description of this vessel along with any distinguishing features. It should describe where you will be boating, your departure time and estimated return. The number and names of passengers, and destination should also be noted. The float plan should be given to a friend or relative, so they can give the information to a national boating agency like the USCG, 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. Upon return, notify the contact to let them know you are back.

#### **Chart 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.

## **A**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 bottom grade before moving off, (damage to the hull and propellers could be worsened).
- Determine the tides and whether that change will help or hinder your situation.
- Do not have anyone other than a trained and competent service tow your boat.

## **Environmental Considerations**

#### **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 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.

#### **Excessive Noise**

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

## Wake

## WARNING

Speed hazard, watch your wake. It might capsize a smaller craft. You are responsible for damage caused by your wake.

## 

Reduce speed in a congested waterway. Be alert for no wake markers.

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.

## **Homeland Security Restrictions**

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

- Do not approach within 100 yards, and slow to minimum speed within 500 yards of any U.S. Navy vessel.
- 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 2005, the United States 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 or 877-24WATCH (877-249-2824). If there is immediate danger to life or property call 911 or the USCG on marine channel 16.

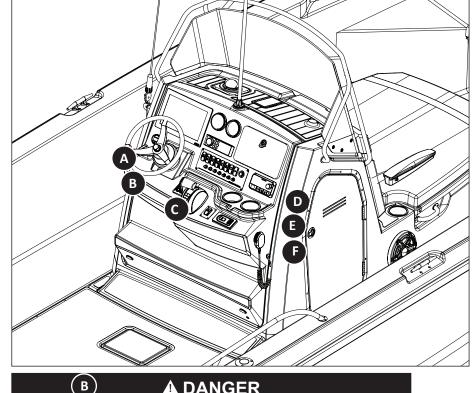
## **Safety Label Locations**

Mounted at key locations throughout the boat, safety labels advise the owner/operator of imperative safety precautions to follow when operating and/or servicing equipment. Do not remove or obstruct any label. Replace any label which becomes illegible (see *Label Locations* section next in this chapter).



#### **IMPORTANT: Replace any damaged or illegible** labels. Contact your dealer to obtain replacements.





#### A DANGER

CONTACT WITH A SPINNING PROPELLER WILL CAUSE SERIOUS INJURY OR DEATH.

2175076

- 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.

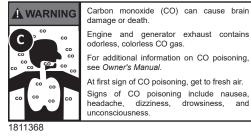


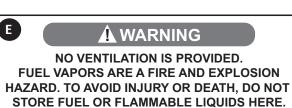
For Canadian vessels

2417275

drowsiness,

and

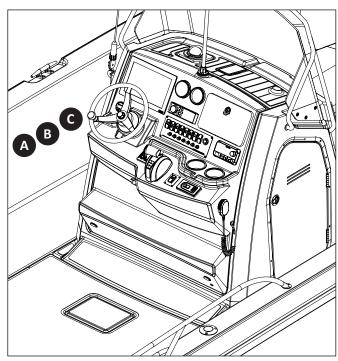




1691003

D 🚹 WARNING DOOR MUST BE SECURED IN THE CLOSED POSITION WHILE VESSEL IS UNDERWAY. 2063402 AVERTISSEN F) **NE STOCKEZ PAS D'ESSENCE OU AUTRES LIQUIDES INFLAMMABLES À** CET ENDROIT. LA VENTILATION N'A PAS ÉTÉ PRÉVUE POUR LES VAPEURS EXPLOSIVES.

WHALER



# A

Vessel's certification plate (see chapter 2, *General Information*).

#### **EMISSIONS CONTROL SYSTEM INFORMATION**

MEETS 2025 MY CALIFORNIA EVAP EMISSIONS REGULATIONS FOR SPARK-IGNITION MARINE WATERCRAFT (SIMW) MANUFACTURER: BOSTON WHALER CALIFORNIA EVAP FAMILY: SBNWPVSSLTB2 EMISSION CONTROL SYSTEM: SM

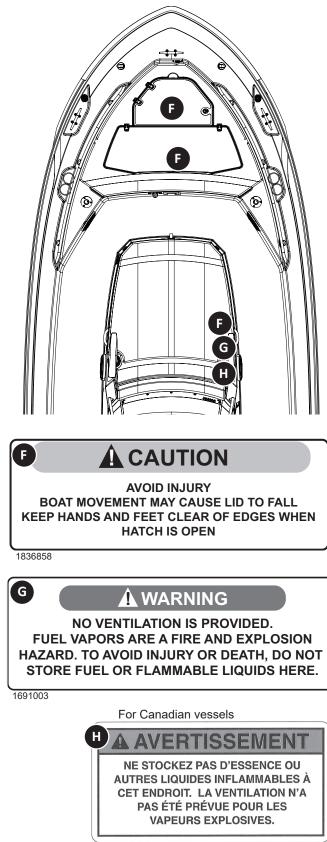
2431705

#### THIS BOAT HAS BEEN DESIGNED FOR A MAXIMUM OUTBOARD ENGINE WEIGHT OF

550 lb / 249 kg

2369412

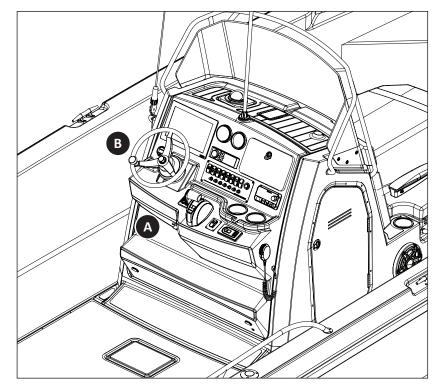
**IMPORTANT:** Replace any damaged or illegible labels. Contact your dealer to obtain replacements.



2175076



# **IMPORTANT:** Replace any damaged or illegible labels. Contact your dealer to obtain replacements.



## A

#### 

- Failure to follow these warnings could cause SEVERE INJURY or DEATH.
- CHECK WEATHER FORECAST BEFORE DEPARTING DOCK
  and heed all weather advisories.
- WEAR SAFETY LANYARD at all times while operating boat to prevent unmanned boat operation.
- NEVER OPERATE WHILE UNDER THE INFLUENCE of drugs or alcohol.
- DO NOT OVERLOAD THE BOAT. ENSURE THAT WEIGHT IS PROPERLY AND EVENLY DISTRIBUTED fore and aft and on both sides of the boat to avoid poor handling, sudden loss of control, swamping and/or capsizing.
- PASSENGERS SHOULD WEAR U.S. COAST GUARD APPROVED LIFE
  JACKETS.
- MAKE SURE THAT ALL PASSENGERS ARE PROPERLY SEATED WHILE UNDERWAY. To avoid passengers failing overboard or being ejected from the boat, do not allow passenger to sit on seat backs, gunwales or outermost deck edges while boat is moving.



- REDUCE SPEED BEFORE ATTEMPTING SUDDEN OR SHARP TURNS, AND MAINTAIN SAFE SPEEDS for water conditions and environment at all times. Maneuverability at high speeds is limited, and sudden turns may cause loss of boat control.
- KEEP PROPER LOOKOUT AND SAFE DISTANCE for the conditions at all times to avoid collisions.
  - OBEY APPLICABLE NAVIGATION RULES AND BOATING LAWS.
- USE CAUTION AND PROPER LIGHTING during nighttime boating and boating in adverse weather.
- READ THE OWNER'S MANUAL AND COMPLETE THE BOATER'S PRE-OPERATION CHECKLIST prior to boat operation.

#### 2420526

#### **WARNING**

Failure to follow these warnings could cause SERIOUS INJURY or DEATH.
REMAIN PROPERLY SEATED AND HOLD ON to available handrails while boat is moving to avoid falling overboard or being ejected from the boat. Do not sit on seat backs, gunwales or outermost deck edges.
WEAR U.S. COAST GUARD APPROVED LIFE JACKETS.
DO NOT OVERLOAD THE BOAT. OCCUPANTS AND GEAR MUST BE PROPERLY AND EVENLY DISTRIBUTED fore and aft, and on both sides of the boat. Improper loading and/or overloading may result in poor handling, sudden loss of control, swamping and/or capsizing.
REFER TO AND OBEY THE DESIGNATED OCCUPANT SEATING POSITIONS that are indicated by the manufacturer for your specific model.
OBEY THE OPERATOR at all times.
DO NOT RESTRICT THE OPERATOR'S VISION.
DO NOT DEPART THE VESSEL without informing the operator.

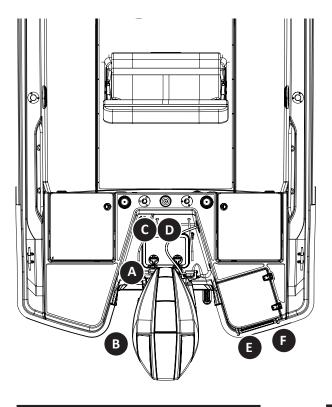
#### 2420527

В

**220 Dauntless** 

WHALER

#### **IMPORTANT:** Replace any damaged or illegible labels. Contact your dealer to obtain replacements.





## 🚹 WARNING

Avoid serious injury or death from fire or explosion resulting from leaking fuel. Inspect system for leaks at least once a year.

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).

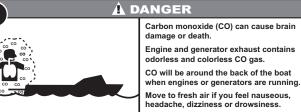
2096004



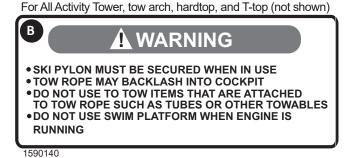
2175077







1811367





Although not used in this manual, some of these symbols may be found on this vessel's controls, gauges, and hardware.





THIS PAGE INTENTIONALLY LEFT BLANK

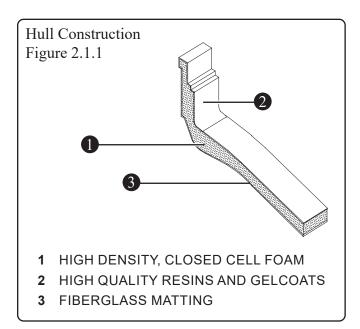
BOSTON WHALER

## **Construction Standards**

Boston Whaler<sup>®</sup> is dedicated to creating a superior product which provides comfort, performance, safety, and reliability. All boats comply with United States Coast Guard safety standards and are designed, engineered, and manufactured in accordance with applicable recommendations and guidelines from the American Boat and Yacht Council (ABYC) and certified by the National Marine Manufacturers Association (NMMA).

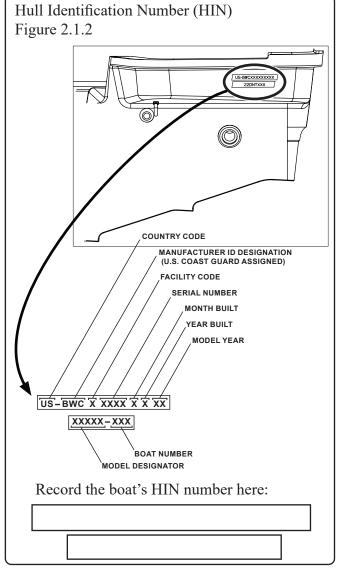
## **Hull Construction**

Boston Whaler hulls are constructed with our patented unibond-construction process (see Figure 2.1.1). 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 (see Figure 2.1.2). This is the most important identifying factor on this vessel, followed by the engine serial number. Be sure to reference these numbers when contacting Boston Whaler about the vessel or engine.



## Servicing

For service or maintenance work, contact an authorized Boston Whaler dealer. To find a dealer call 800-942-5379. 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. Please 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, where applicable. 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.



# A DANGER

Never carry more weight or passengers than indicated for this vessel, regardless of the weather or water conditions.

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

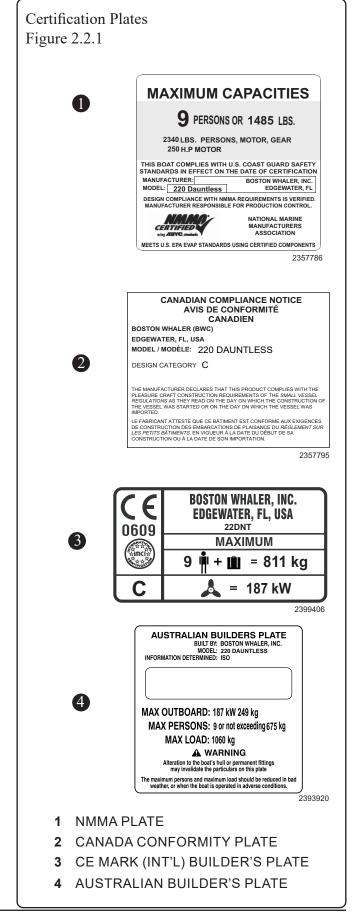
## Certification Plates (see Figure 2.2.1)

An **NMMA Certification** means that this Boston Whaler 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.

A **Canada Compliance Notice** means that this Boston Whaler has been certified to comply with construction standards for small vessels by Transport Canada.

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

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



## **Certification Design Category**

## NOTICE

#### The 220 Dauntless is design category C

Boats are classified into four categories depending on their propensity to withstand both the force of the wind and height of the waves. The categories (A, B, C, D) are designed to sensitize the boat operator to navigate safely. The Beaufort Scale is used to classify the force of the wind ranging from 0 (calm) to 12 (hurricane). Devised by Francis Beaufort of the British Navy, the scale offers a uniform description of the effect of different winds at sea.

A: A recreational craft given design category A is considered to be designed for winds that may exceed wind force 8 (on 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 meters.

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

**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 meters, with occasional waves of 0.5 meters.

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.

## **Power Capacity**

The *Specifications and Dimensions* information on the following page includes the maximum rated power listed for this vessel. Do not exceed this rating. The various engine types offered today are more powerful and require constant maintenance to stay at optimal performance. The operator must read all information regarding the safety features, warning notices and maintenance schedules for safe operation of the engine.

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

If you are re-powering this Boston Whaler, you should pay particular attention to the maximum/minimum horsepower and maximum safe engine weight load this vessel is rated for. There is a maximum engine weight label located starboard of the helm seat.

# NOTICE

The 220 Dauntless is designed for a maximum outboard engine weight of 550 lbs (249 kg).

# **WARNING**

- Do not exceed maximum engine power rating stated on certification plate.
- Use caution while accelerating. Make sure passengers are safely seated in designated areas of boat and all gear is stowed securely.

# NOTICE

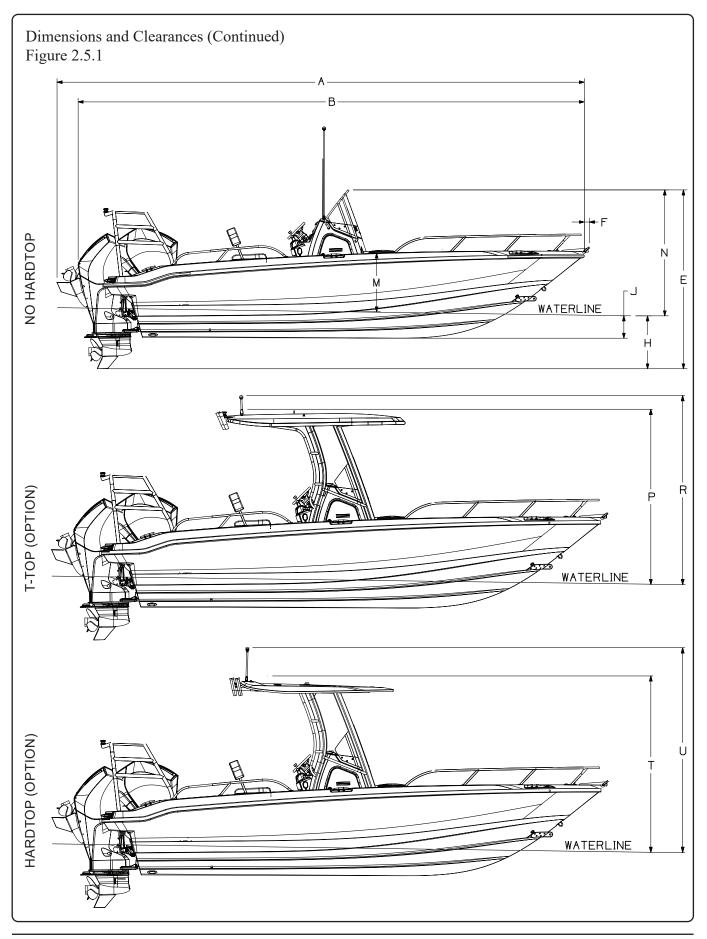
Always adjust vessel speed and direction according to sea conditions.

WHALER

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

	mensions and Clearances gure 2.4.1 Overall length (engine up) Overall length (engine down) Hull length (bow to transom) Hull length (bow to swim platform) Overall height Bow to anchor roller Beam Draft (engine down) <sup>1</sup>	25' 6" (7.77 m) 24' 7" (7.49 m) 22' (6.70 m) 23' 4" (7.11 m) 8' 8" (2.64 m) 3" (.076 m) 8' 6" (2.59 m) 2' 9" (.84 m)	
М	Freeboard (midship)	2'10" (.89 m)	
Ν	Bridge clearance	5' 11" (1.8 m)	
Ρ	Bridge clearance (T-top)	7' 10" (2.39 m)	
R	Bridge clearance (T-top light up)	8' 7" (2.61 m)	
Т	Bridge clearance (Hardtop)	7' 10" (2.39 m)	
U	Bridge clearance (Hardtop light up)	9' 3" (2.82 m)	
	Swamped capacity <sup>2</sup>	4125 lbs (1871 kg)	
	Maximum engine weight	550 lbs (249 kg)	
	Max weight (passengers, engines, gear <sup>3</sup> )	2340 lbs (1060 kg)	
	Maximum persons' capacity	9	
	Maximum horsepower	250 HP (187 kW)	
	Minimum horsepower	200 HP (149 kW)	
	Fuel capacity	80 gal (303 L)	
	Weight (fuel, water, engine)	4135 lbs (1875 kg)	
Foll max <sup>2</sup> Sv	otional equipment and loading of the boat af low the recommendations listed on the cap kimum amount of weight this vessel can s vamped capacity is the amount of combin sons and gear the boat can support and sti	pacity plate regarding the afely carry. ed weight from dry	
	cceeding maximum weight affects boat pe eed the weight listed on the capacity plate		
			ب ب س ت

BOSTON WHALER



WHALER

## Occupancy

Deck Figure 2.6.1

## **Working Deck**



This area is intended for occupation only while mooring, anchoring, loading/unloading or when the boat is at rest.

## Accommodation Deck

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.

## Stay Off



Do not stand or walk in this area. Serious injury could result. If necessary, stand or walk only where non-skid is applied.

## **Custom Working Deck**

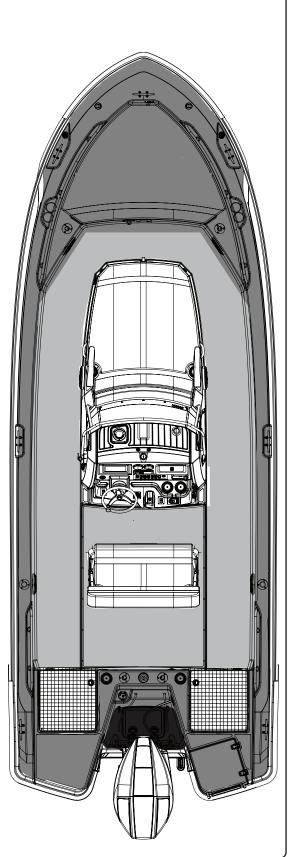
When stern seats are in the stowed position this area is intended for occupation only while mooring, anchoring or when boat is at rest.

# 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.

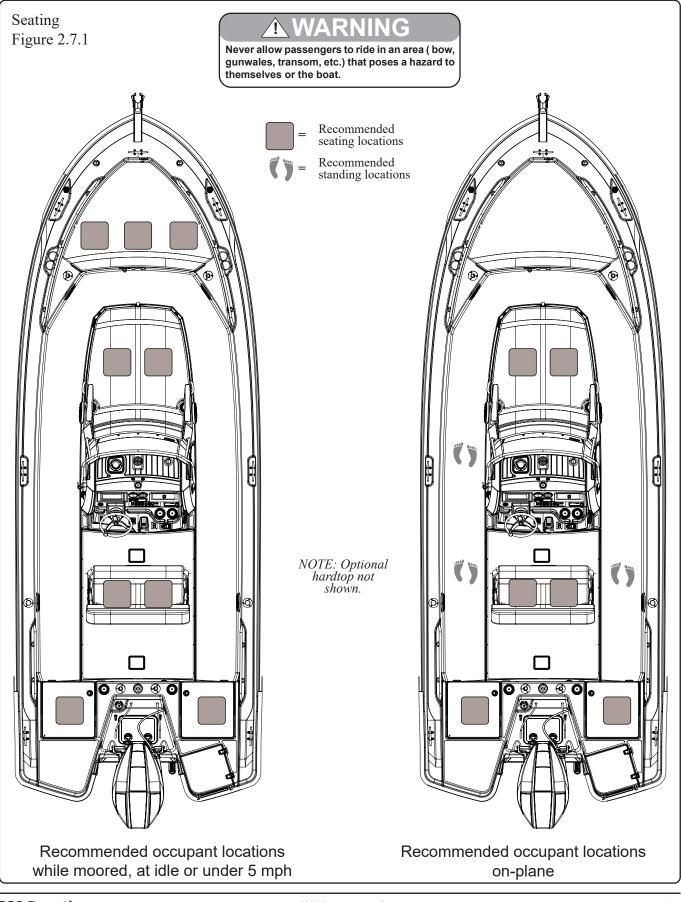
# 

- 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 slippery.

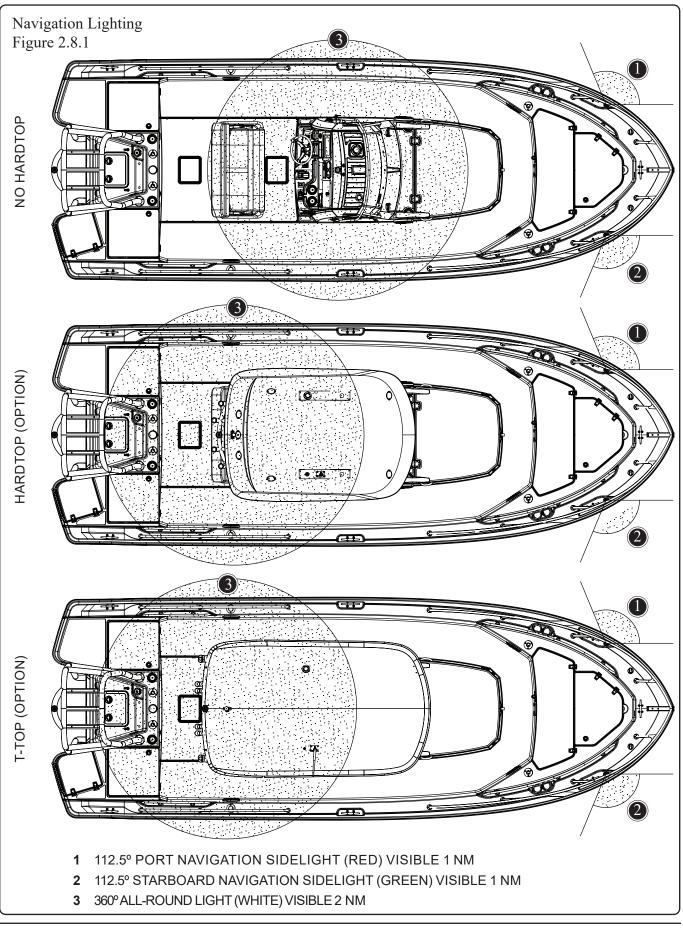




## **Recommended Occupant Locations**

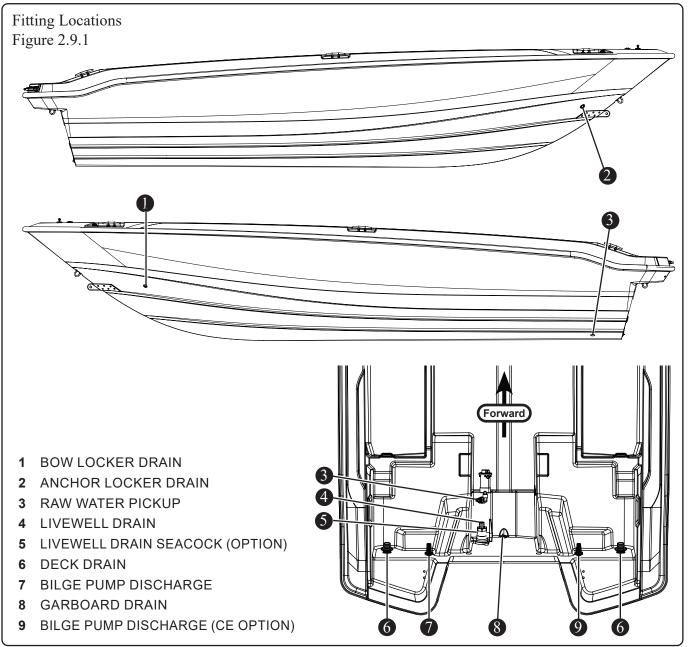


WHALER



WHALER

## Thru-hull Fittings

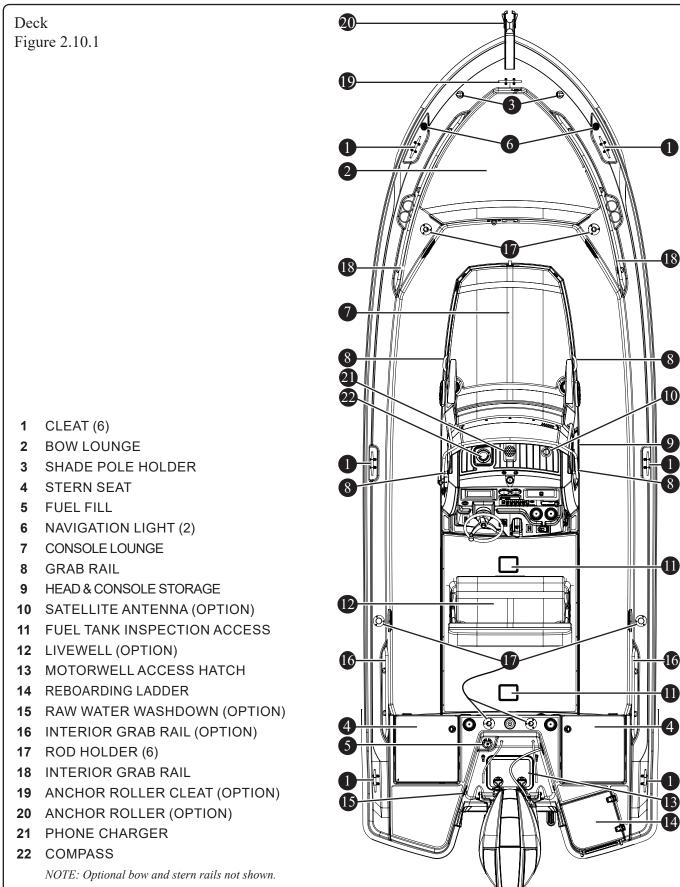


# NOTICE

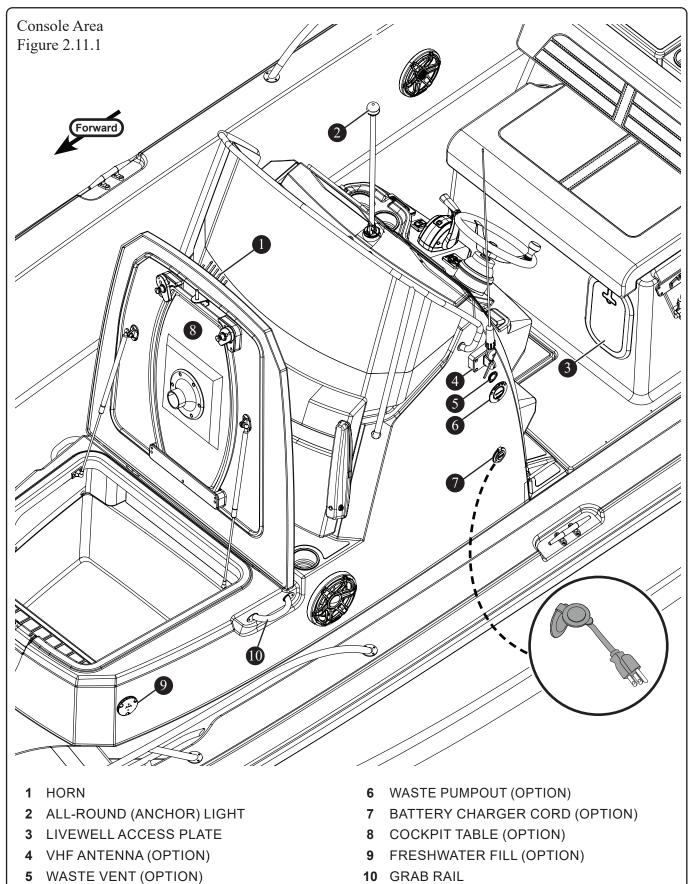
- The deck drain provides self bailing capabilities while boat is static in the water and no passengers. This feature prevents accumulation of water in the cockpit.
- Depending on boat type, underwater fittings may require drain plugs. Garboard and fishbox drain plugs must be in place before boat enters the water. Any submerged fitting must be plugged or seacock needs to be closed.
- Check thru-hull fittings and deck drain scupper flaps annually for proper seal. When boat enters the water, check fittings for dripping. Clean, remove, and reseal underwater fittings biannually.
- If thru-hull fittings need replacing, visit a Boston Whaler dealer. Thru-hull fittings that are improperly installed can cause premature hull failure and may void the limited warranty.
- A standard 1" Snap-tite plug can be used to replace the drain plug(s) in this vessel. Always carry spare plugs to be used in the event that the drain plug(s) become lost or damaged.

**220 Dauntless** 

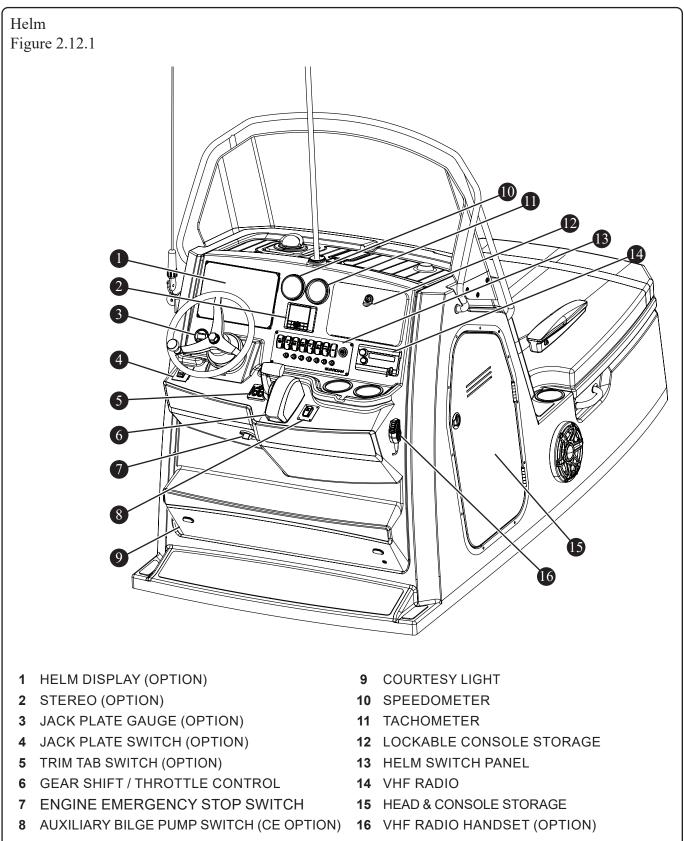
WHALER







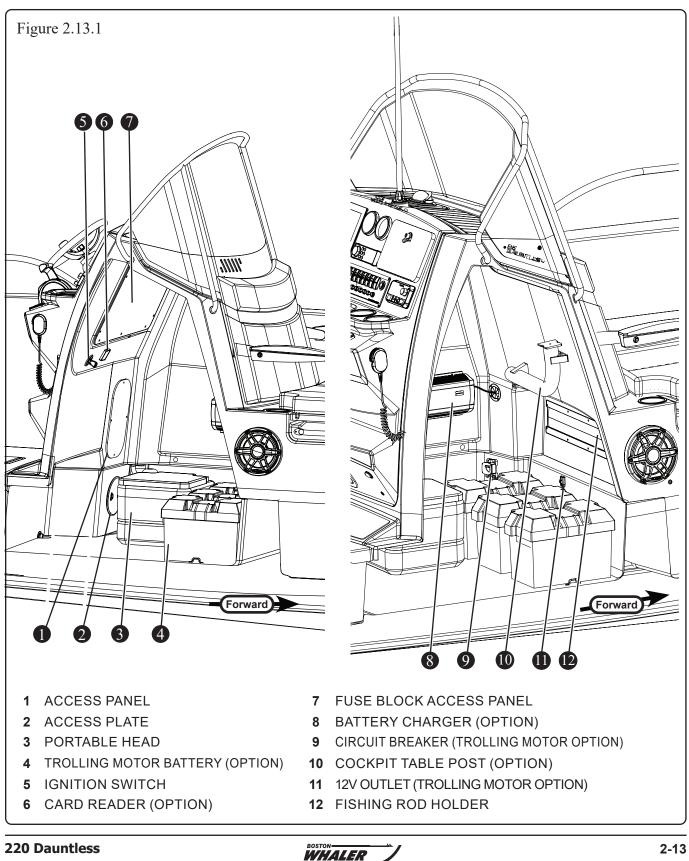
WHALER



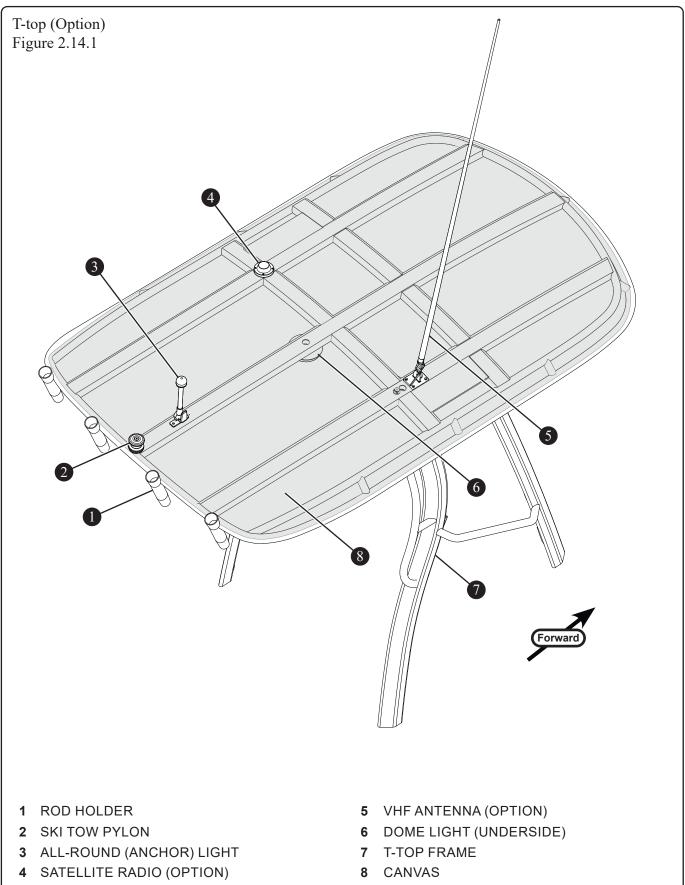
WHALER

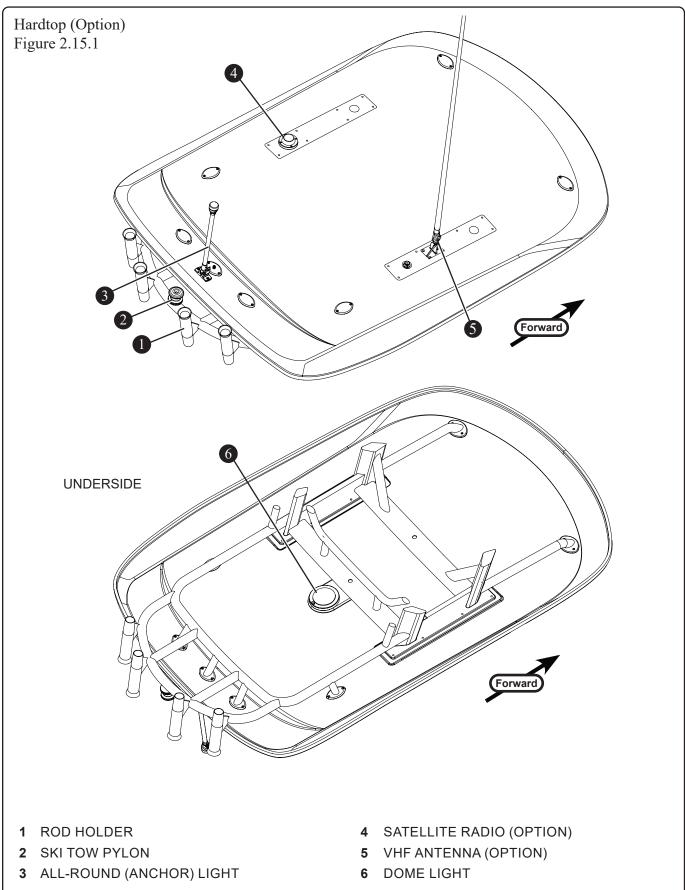
## **Console Storage**

In addition to standard and optional equipment (see Figure 2.13.1), the helm console storage area can be used to store boat fenders or personal flotation devices.





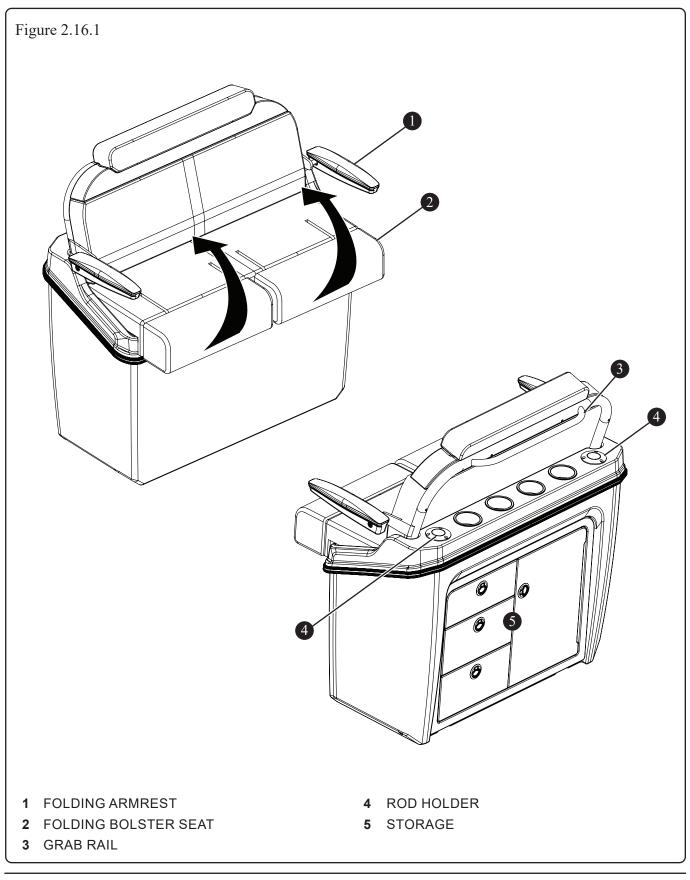




BOSTON WHALER

## **Deluxe Leaning Post (Option)**

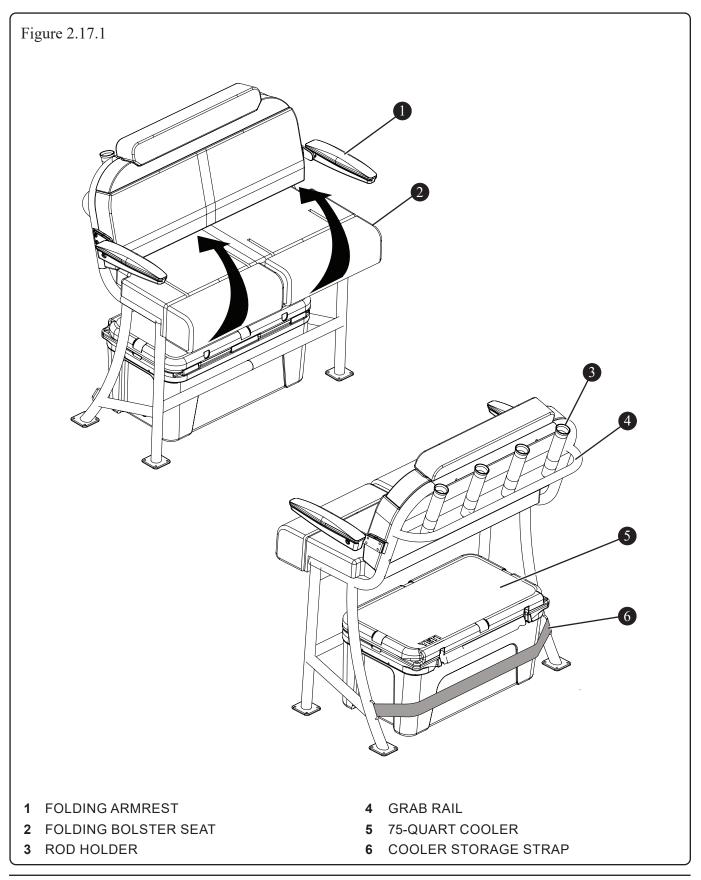
If equipped, the leaning post allows the operator to stand and navigate the vessel (see Figure 2.16.1).





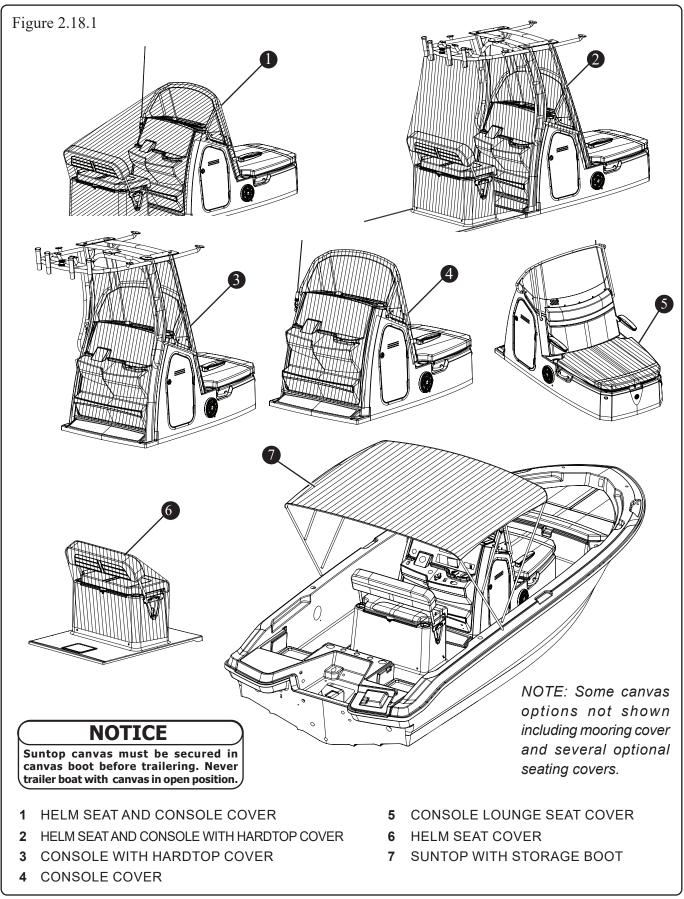
## **Competition Leaning Post (Option)**

If equipped, the leaning post allows the operator to stand and navigate the vessel (see Figure 2.17.1).



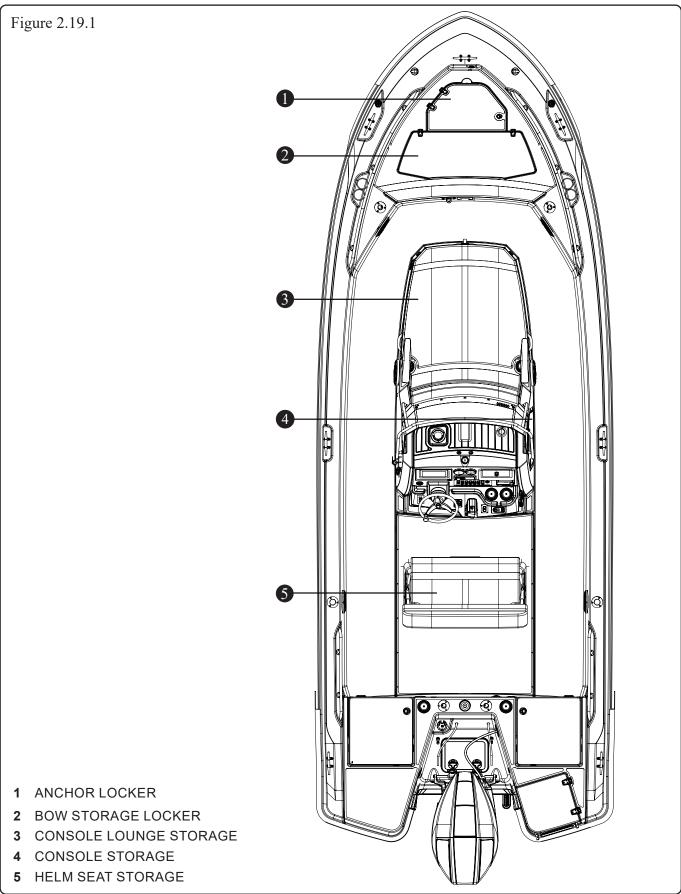
WHALER

## **Canvas (Option)**





## Storage



WHALER

THIS PAGE INTENTIONALLY LEFT BLANK

BOSTON WHALER

## Learn Safe Boating

Boating requires considerably greater skills than operating a land vehicle. The boat operator should know boating safety, safe navigation, and safe boat operating procedures. Taking a boating course is the best way to prepare for a safe and enjoyable experience on the water. For further information see *Boating Courses* in the *Introduction* chapter.

## ATTENTION

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.

## ATTENTION

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 spin-out. Do not attempt to turn boat when the engine is trimmed extremely down, under or in.

## **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.

## ATTENTION

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.

## 

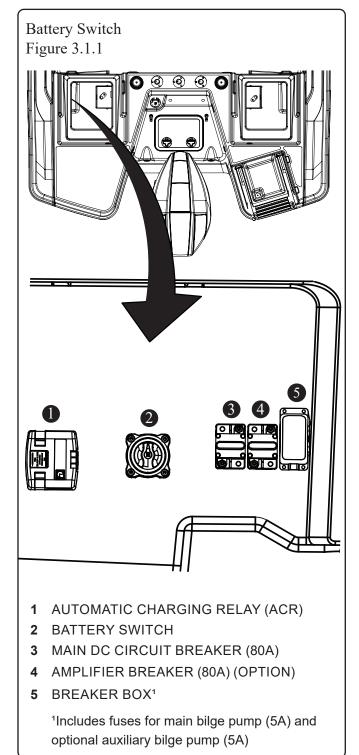
Remove engine steering brackets before starting engines.

## **Pre-start Checklist**

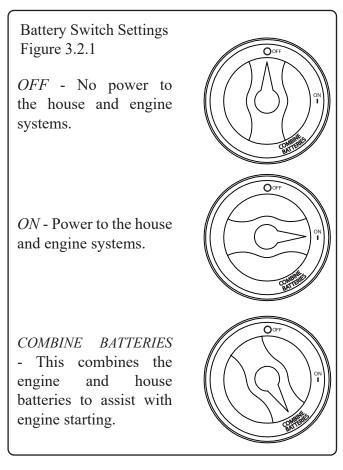
- 1. Ensure lower units of engines are in water and engine emergency stop switch is in run position. Refer to Chapter 1 *Safety, Engine Emergency Stop Switch.*
- 2. If equipped, remove steering locks from engines.
- 3. If equipped with 1st Mate theft deterrent system, press the power button on the captain's fob. A single beep indicates the captain's fob is connected and the boat is ready for operation. For more information on 1st Mate refer to

Chapter 1 Safety, 1<sup>st</sup> Mate Safety and Security System.

4. Ensure the engine(s) battery switch is in the ON position (see Figure 3.1.1 and Figure 3.2.1).



WHALER



NOTE: If the engine battery does not have enough power to start the engine, the battery can be paralleled with the house battery using the *Engine Battery Switch* (see Figure 3.2.1). Turn the switch to the *COMBINE BATTERIES* position and try to start the engine again. Return the switch back to the *ON* position even if the engine cannot be started. Operating the boat in the *COMBINE BATTERIES* position can damage the engine and batteries.

## Start-up Procedure

1. Locate ignition switch inside the *Head and Console Storage* (see Figure 3.2.2).

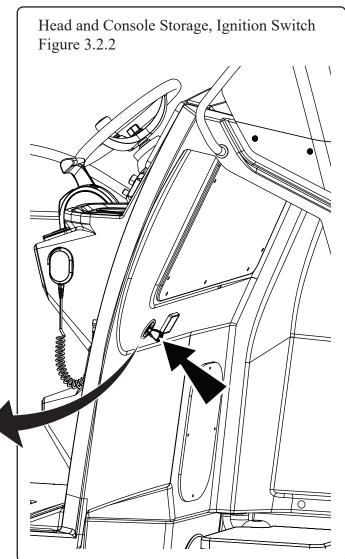
**OFF** = No power to engine, instrumentation.

ACC (accessory) = Power to instrumentation

ON = Engine power on

START = (disabled)

- 2. Turn the ignition key to the *ON* position and release the key.
- 3. Ensure *THROTTLE AND SHIFT CONTROL* lever is in the neutral position and the neutral indicator is illuminated (see Figure 3.4.1).
- 4. Using the engine trim switch (see Figure 3.4.1), ensure lower unit of engine is in the water.
- 5. Insert one end of safety lanyard into engine emergency stop switch (see Figure 3.3.1) and the opposite end attach to self (operator).
- 6. Press *START ENGINE STOP* button on throttle and shift control (see Figure 3.4.1). The electronic starting system automatically cranks engine for starting. If engine fails to start, the system stops cranking. Press start/stop button again until engine starts.





## **Engine Warm Up**

The *THROTTLE ONLY* button (see Figure 3.3.1) 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 lever is in neutral.
- 2. Press *THROTTLE ONLY* button.
- 3. Advance throttle and shift lever to increase engine RPMs to warm engines. RPMs are limited in throttle only mode to prevent engine damage.
- 4. To disengage, return port throttle and lever back to neutral position.
- 5. Press *THROTTLE ONLY* button to turn off.

## **Shut-down Procedure**

- 1. Make sure the boat is securely moored to the dock before shutting down the engine.
- 2. Move throttle and shift control to the neutral position.
- 3. Press *START ENGINE STOP* button to stop engine (see Figure 3.4.1).
- 4. Before leaving vessel be sure turn ignition switch inside *Head and Console Storage* (see Figure 3.2.2), to the *OFF* position.
- 5. Turn off battery switch located in *port aft access hatch* (see Figure 3.1.1).

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

## **Engine Trim**

The engine trim switch located on the shift control lever (see Figure 3.4.1) raises and lowers the engine to achieve optimum performance and is used for trailering, launching, and beaching.

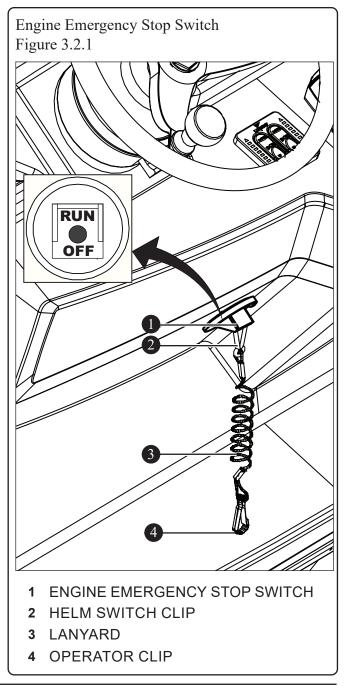
## **Active Trim**

Active Trim is a GPS, speed-based engine trim system that adjusts engine trim based on changes in boat speed and maneuvers to improve performance, fuel economy, and ease of operation. Active Trim switches, located on the side of the throttle and shift control, have several selectable trim profiles that allow the operator to compensate for changes in boat load, operator preference, and weather conditions.

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

# NOTICE

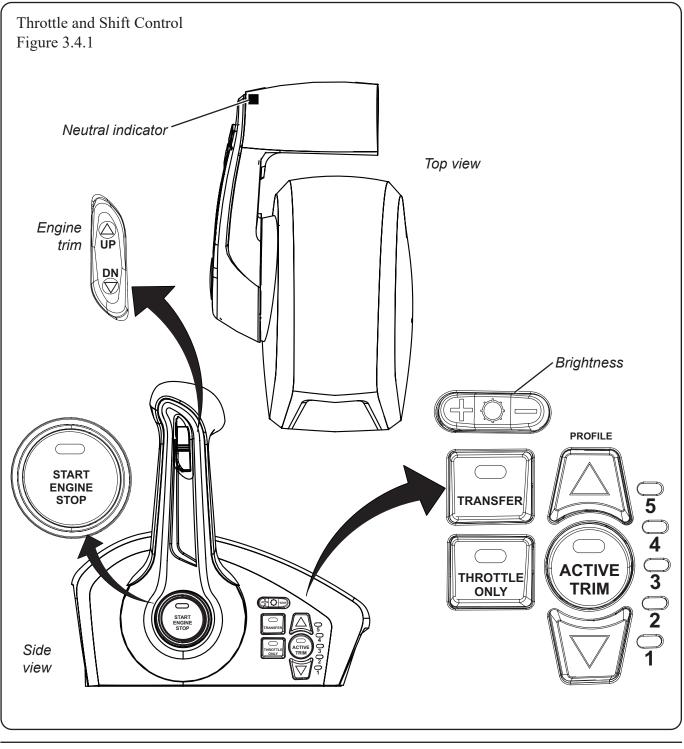
Boats can be operated in a manner and speed resulting in trim angles that cause visibility to be obscured. Motor trim, hull trim plane and speed are factors that affect a boat's trim angle.





## **Throttle and Shift Control**

The throttle and shift control is used to manage both the shifting mechanism and the throttle (see Figure 3.4.1). This control regulates engine RPMs, which controls the speed of the boat. Moving the lever 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 lever must be in the neutral position to start the engine. When in neutral, otherwise known as the idle position, the propeller is not engaged. A green neutral indicator light is illuminated atop the throttle and shift lever when in neutral.



WHALER

#### **Buttons and Switches**

Basic button/switch use on the throttle and shift control are detailed below (see Figure 3.4.1).

#### **Neutral Indicator**

Illuminates when engines are in neutral gear position.

#### **Trim Engine**

Raises and lowers engine.

#### Start/Stop Engine

Starts or stops engine.

#### Brightness

Increases and decreases brightness on control unit.

#### 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.

## **Engine Trim**

Engine trim, also referred to as power trim, allows the operator to raise and lower the engines for trailering, launching, beaching, and the bow up transition to planing. Use the engine trim switch to obtain ideal boat angle (in relation to the water surface) for a given load and water condition. In most cases the best allaround performance is obtained when the boat runs at an angle between 3 and 5 degrees. Engine trim can be done manually by Pressing the *trim all* engines switch located on the throttle and shift control. See *Throttle and Shift Control* earlier in this chapter.

## 

Visibility from the helm 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.

## ATTENTION

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.

## Active Trim

Engine trim can also be controlled automatically using active trim, a GPS, speed-based engine trim system that adjusts engine trim based on changes in boat speed and maneuvers to improve performance, fuel economy, and ease of operation. Active trim switches, located on the side of the throttle and shift control (see Figure 3.3.1), have several selectable trim profiles that allow the operator to compensate for changes in boat load, operator preference, and weather conditions.

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

## Trim Tabs (Option)

## ATTENTION

Visibility from the helm station may be limited, use of trim tabs may be 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.

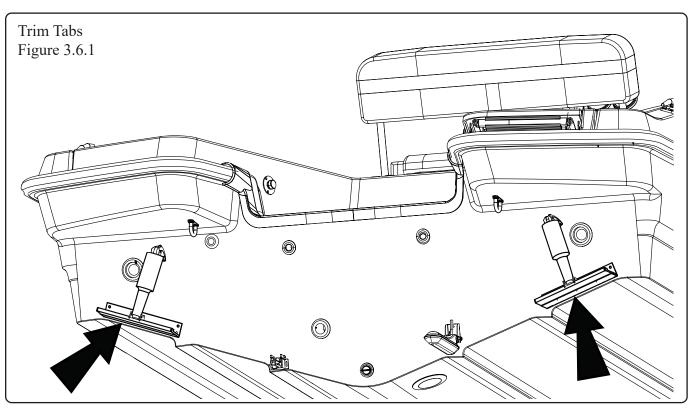
This vessel is equipped with electrically-powered trim tabs (see Figure 3.6.1) which help provide a smoother, more stable ride. Trim tabs are used to assist in leveling the vessel when there is uneven weight distribution or strong cross winds. Use of trim tabs may also increase operator visibility, particularly during initial acceleration. When the boat is not properly trimmed it reduces fuel economy and increases wear on the engine.

The unit's electrical circuit is protected with a 20A fuse located in the fuse block behind the access panel inside the console (see Figure 3.6.2).

For maintenance information refer to chapter 5, *Care and Maintenance*.



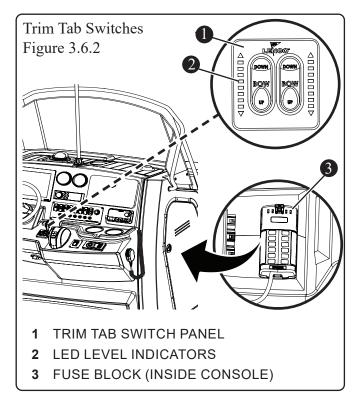




### Operation

Control the trim tabs via the trim tab switch panel at the helm (see Figure 3.6.2). Press short momentary bursts on the switches to fine tune hull angle.

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



## Gauges

The standard gauge set on this vessel include a Smartcraft tachometer and speedometer. By pressing the *MODE* button to change displays, the operator is able to gather important data critical to the safe operation of the boat and boat systems.

#### Tachometer

Information includes:

- Engine break-in time
- Water pressure
- Fuel flow
- Temperature
- Engine battery voltage
- Power trim angle-water pressure
- Power trim angle
- Digital tachometer
- Hour meter



### Speedometer

Information includes:

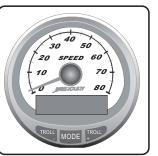
- Clock-temperature
- Fuel level
- Oil level
- Traveling range
- Fuel economy
- Trip odometer
- Digital speedometer
- Barometer

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

### **VesselView Mobile**

VesselView Mobile connects the SmartCraft data network to an Apple or android phone. VesselView Mobile enables the power of SmartCraft to be used on a mobile device with all the digital data the SmartCraft engine supports plus features such as:

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





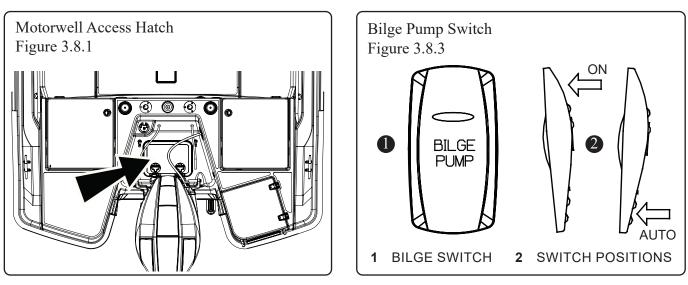
## **Bilge Pump**

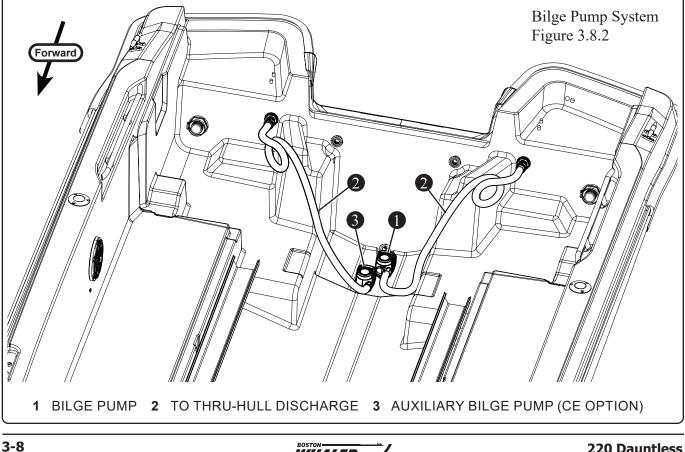
Located in the motorwell access hatch (see Figure 3.8.1), the bilge pump (see Figure 3.8.2) is activated by an internal float switch when water levels reach a predetermined level. The BILGE PUMP switch (see Figure 3.8.3) on the helm switch panel controls pump operation. The switch can be operated manually, but should remain in the auto position when not in use.

# NOTICE

If set to on position, bilge pump operates continuously and discharges battery. Bilge pump is wired directly to battery, so float switch must remain clear of debris to prevent continuous operation and battery discharge.

For maintenance information refer to chapter 5, Care and Maintenance.







## **Fuel and Oil Spills**

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

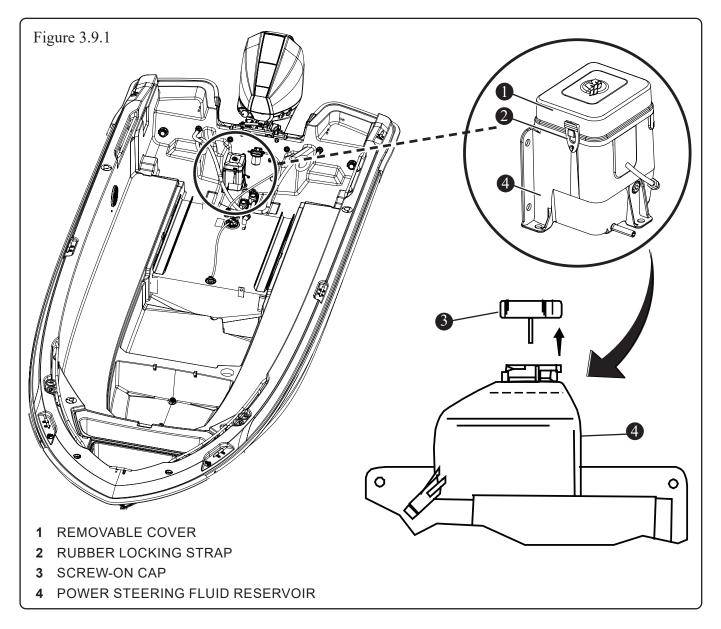
# **A**CAUTION

Oil and fuel spills can be dangerous and can subject offenders to severe penalties.

the water surface. A common violation is bilge discharge. Violators are subject to severe penalties and may also be responsible for the cost of cleanup which could be substantial. Use rags or sponges to soak up fuel or oily waste, then dispose of properly ashore. If a large quantity of fuel or oil is in the bilge, contact a dealer to remove it. Never pump contaminated bilge discharge overboard.

## **Power Steering**

The engine on this vessel incorporates power assisted steering by use of hydraulics. The reservoir is located inside the motorwell access hatch (see Figure 3.9.1). Check power steering fluid regularly and visually inspect the outside of the unit for signs of leaks or damage. Check fluid level before each trip. If necessary add SAE 0W-30 synthetic power steering fluid only.



WHALER

## **Fuel System**

# 

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

# 

Use of improper fuel can seriously damage the engine. Engine damage resulting from use of improper fuel is considered engine misuse and voids 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 the owner's packet for complete fuel and fueling information and warnings.

The fuel system (see Figure 3.11.1) is designed to meet EPA regulations using certified components to limit fuel vapor emissions. The 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 permanently attached cap with a positive closure mechanism that features an audible click, to inform you when it is sealed.

## **Fuel Tank**

The low-permeation aluminum fuel tank (see Figure 3.11.1) has a usable fuel capacity of 80 gallons (303 liters). Review and understand all fuel related information and warnings in the owner's packet and the included safety inserts. When the fuel tank is less than one-quarter full, this can cause engine stalling due to fuel starvation or by allowing sediment to enter the fuel line. Keep tank full and monitor fuel level often.

## **Fuel Vent**

The fuel tank vent is integrated into the fuel fill deck fitting. The VaporTec fuel pressure management system (fuel fill deck fitting, integrated check valve, fill limit vent valve, and grade valve) ensures that the fuel system maintains proper vapor pressure, which, if unchecked, can seriously damage a boat or engine. The vent serves as an over pressure/vacuum release with anti-surge and flame/spark arresting protection. Grade valves have been added to the tank to allow proper ventilation when the boat is stored, or trailered, on a moderate incline, without fuel seepage.

## **Fuel Distribution System**

Fuel is delivered to the engine through the fuel valve, anti-siphon valve and the fuel line. The fuel valve prevents built up tank pressure from being transferred to the engine while still allowing fuel to flow. The anti-siphon valve is a safety feature designed to prevent 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.

## Filling the Tank

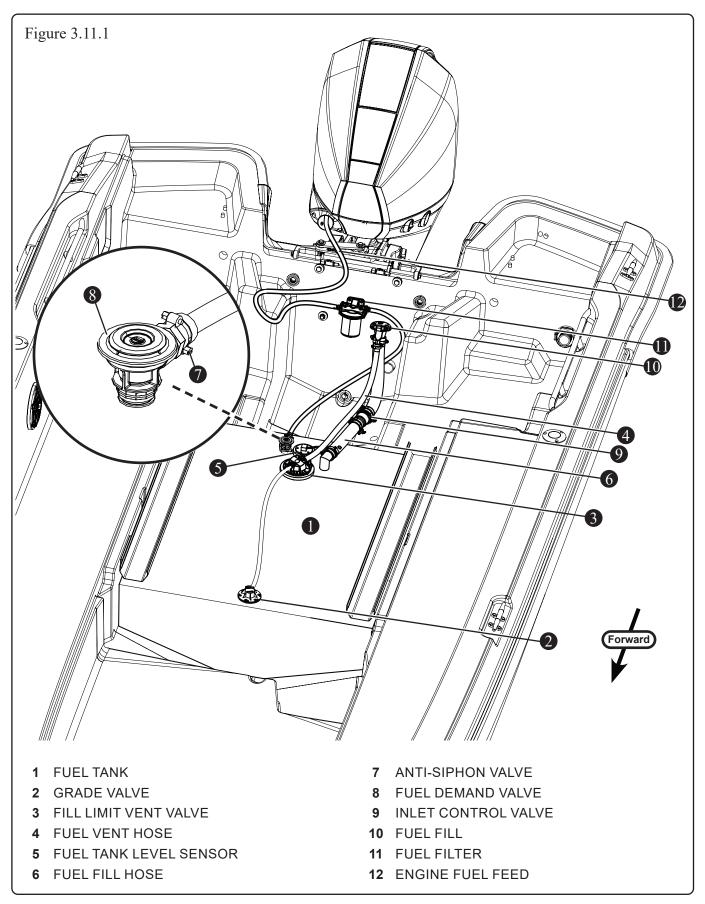
## **A** WARNING

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

The 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), ensures a clean a trouble-free fill-up. Attempting to fill the tank past this point may cause some components to malfunction.

## **Chapter 3 • Systems Overview and Operation**

#### **Fuel System**



WHALER

# **WARNING**

Use of a portable fuel container to fill fuel tank can result in overfilling and circumvent the safety features designed into fuel tank.

# A WARNING

Modification of any fuel system components or replacement of these components with unauthorized parts may result in overpressurization of fuel system and circumvent safety features designed into tank.

# NOTICE

Record this vessel's fuel capacity and consumption. Drastic changes in consumption and mileage may indicate a problem.

# DANGER

- Static electricity can ignite gasoline vapors causing serious injury, death and/or destruction of property.
- Check for leaks in tubing, connections and hoses. Avoid all forms of ignition when the fuel fumes are noticed.
- Correct the cause of leaks and ventilate the area to insure that no fumes remain prior to energizing any electrical equipment, smoking and/or starting the engine.

# NOTICE

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

## Static Electricity

Static electricity can ignite gasoline vapors. Use extreme caution when fueling from a source other than marinas and gas stations. This vessel's bonding system protects it from creating and discharging static electricity. Keep vessel in contact with the water or a land-based grounding system. To reduce static electricity while refueling:

• Never fuel 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 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 tank.
- Close all ports, windows, doors and hatches.
- Fueling should never be done at night except in well lit areas.
- Always keep fuel nozzle in contact with edge of the fuel tank opening when filling.
- Ventilate areas where gasoline vapors could collect before starting the engine.
- Wipe up any spillage completely and dispose of rags or waste on shore.
- Secure the fill cap tightly.
- Portable tanks should only be filled while on shore, never on board the boat.

REFER TO THE SAFETY INSERTS IN YOUR OWNER'S PACKET FOR MORE INFORMATION.

## **Ethanol Blended Fuels**

# NOTICE

The use of improper gasoline or additives can damage the fuel system and is considered misuse of the system. Damaged caused by improper gasoline or additives is not covered under warranty.

## **A**CAUTION

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

Ethanol's high-octane rating may be useful in increasing the octane level of unleaded gasoline. The fuel system components of Mercury engines have been tested to perform with a 10 percent maximum level of ethanol-blended gasoline. Special



precautions should be considered with the use of fuel containing ethanol in the fuel system. Fuels with ethanol can attack some fuel system components, such as tanks and lines, if they are not constructed from ethanol compatible materials. This can lead to operational problems or safety issues such as clogged filters, leaks or engine damage. This vessel was manufactured and shipped from the factory with ethanol compatible materials. Before introducing gasoline with ethanol into the fuel tank, ask the dealer if any components have been added or replaced that are not recommended by Boston Whaler, Mercury, or may not be ethanol compatible. It is best to maintain a full tank of fuel when the vessel is not in use. This will reduce air flow in and out of the tank due to changes in temperature as well as limiting ethanol exposure to humidity and condensation in the tank.

## **Phase Separation**

Humidity and condensation create water in the fuel tank which can adversely effect the ethanol blended fuel. A condition called phase separation can occur 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. 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, the only remedy is to drain the fuel, clean and dry the tank completely and refill with fresh fuel.

## **Fuel/Water Separators**

A fuel water separator (filter) is provided for the engine. The addition of another in-line filter to the system may create a possible flow restriction that can starve the engine of fuel. It is advisable to carry extra on-engine filters in case filter plugging from debris in the fuel tank becomes a problem during boating. Consult a Boston Whaler dealer for recommendations regarding filters that meet Mercury's specifications.

## 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.

## Fuel and Boat Storage

Long periods of storage and/or non-use, common to boats, create unique problems. When preparing to store a boat for a period of two months or more, it is best to completely remove all fuel from the tank. If not possible, fill tank and add fuel stabilizer per manufacturer's instructions. Maintaining a partially full tank during storage is not recommended because the void above the fuel allows air movement that can introduce water through condensation.

## NOTICE

Carry spare filters onboard as contaminated fuel can easily clog a filter.

## Navigation Lighting

# NOTICE

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

This vessel 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.

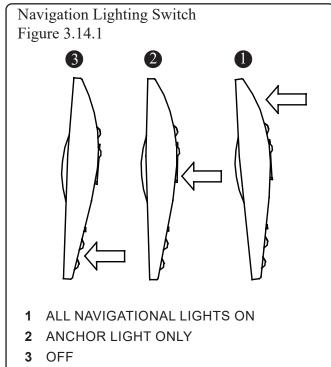
It is the operator's responsibility to ensure that the navigation lights are in good working order and that the proper lighting is shown and not obstructed in its intended arc of visibility. Do not modify navigation lights. This vessel's navigation lights may include an expiration date on the housing. 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.

Operational settings for the navigation light switches are shown in Figure 3,.14.1.



## Freshwater System (Option)

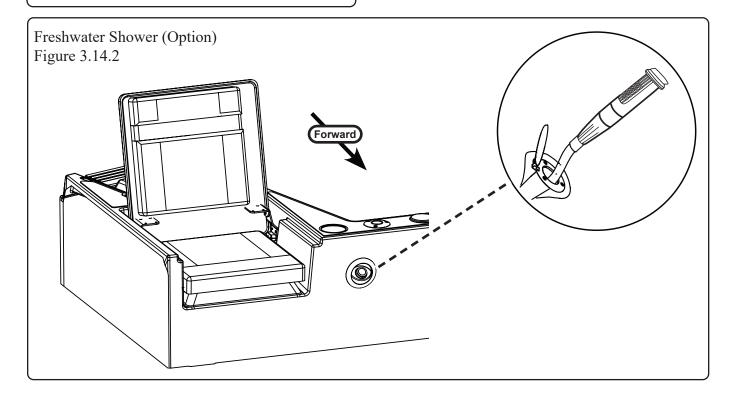
# NOTICE

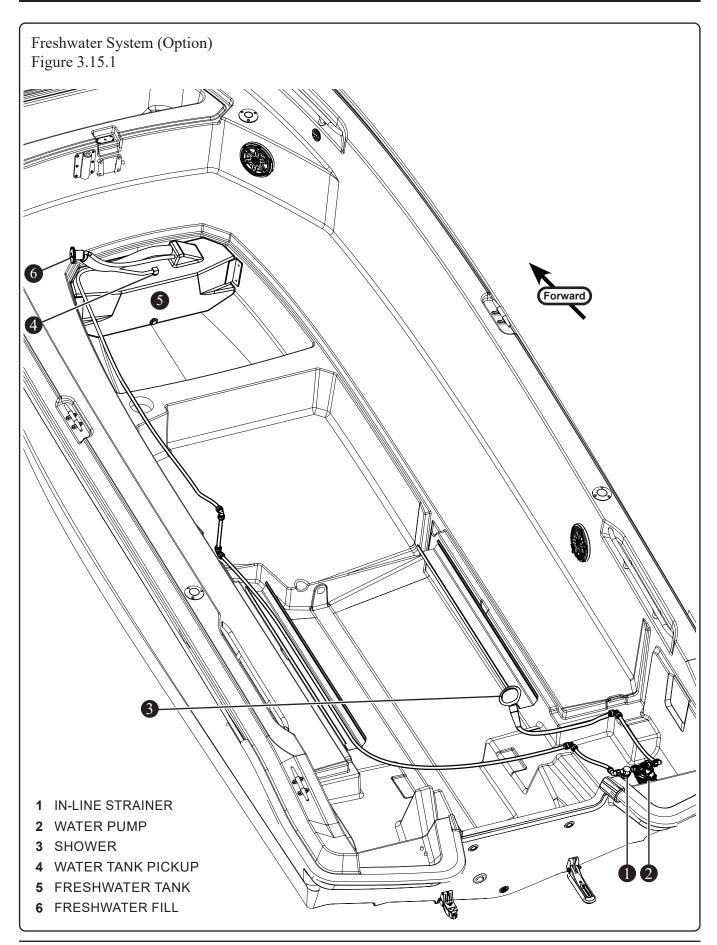
- Be sure to fill water tank from a source known to provide safe, pure drinking water.
- If freshwater system is not used for long periods of time or is used only seasonally, disinfect system before using it.

The freshwater system includes the tank, pump, filter, freshwater fill (see Figure 3.15.1), and a pullout shower. The shower is located in the stern seating area (see Figure 3.14.2).

The 12 gallon (45 liter) freshwater tank's fill cap is located on the port side of the console lounge seat.

Only fill the freshwater tank from a source known to provide safe, pure drinking water. Use a plastic hose to fill the water tank as a rubber hose may give the water a disagreeable taste. Before filling the freshwater system it is vital that it be properly disinfected. Ask a dealer if this has been done. For more maintenance information refer to chapter 5, *Care and Maintenance*.





BOSTON WHALER

## Raw Water System (Option)

The raw water system includes the livewell, pumps, seacock, and washdown connection (see Figure 3.16.1 and Figure 3.17.1). The livewell is located under the helm seat (see Figure 3.18.1). For maintenance information refer to chapter 5, *Care and Maintenance*.

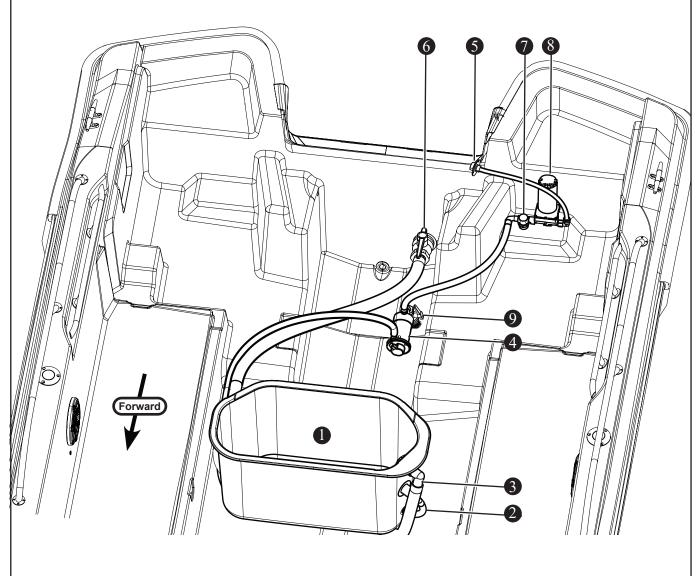
Figure 3.16.1

## NOTICE

If seacock and flow control valve are left open while vessel is underway, water may enter livewell.

# ATTENTION

Seacock must be in open position when livewell and washdown are in use. Running pump dry may damage unit.



- 1 LIVEWELL TANK
- 2 LIVEWELL FILL HOSE
- 3 OVERFLOW DRAIN
- 4 LIVEWELL PUMP
- 5 RAW WATER WASHDOWN CONNECTION (OPTION)
- 6 LIVEWELL SEACOCK DRAIN
- 7 IN-LINE STRAINER (OPTION)
- 8 RAW WATER PUMP (OPTION)
- 9 INTAKE SEACOCK

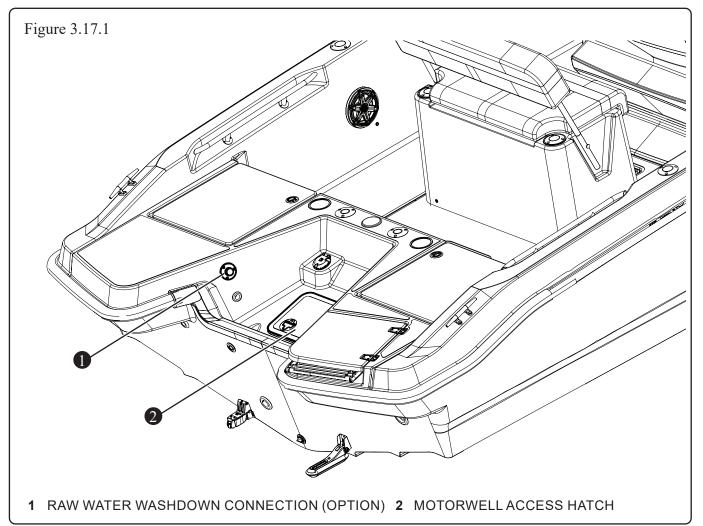


#### Raw Water Washdown (Option)

The raw water washdown connection is located on the port side of motorwell (see Figure 3.17.1). The fitting allows for connection of a common garden hose. The cap is tethered to the fitting and should be closed when not in use.

#### Operation

The raw water washdown pump is activated by the WASHDOWN switch on the helm switch panel.



## **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 (40 CFR, 140.3).

## Livewell (Option)

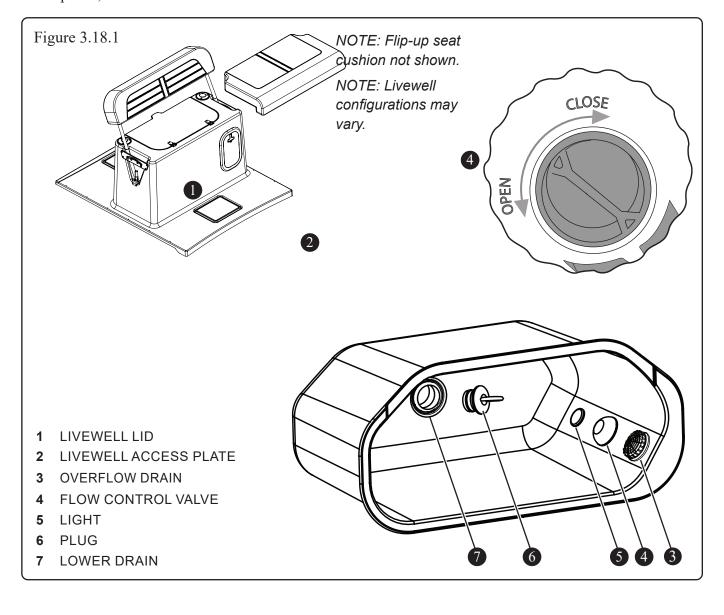
If equipped, the livewell keeps baitfish alive by circulating fresh seawater through the tank, located under the helm seat (see Figure 3.16.1 and Figure 3.18.1). Before operating the system, ensure the intake seacock and drain seacock are in the open position. Both seacocks can be accessed through the motorwell access hatch (see Figure 3.17.1). The flow control valve (see Figure 3.18.1) is used to regulate water flow into the livewell tank. Turn the valve clockwise to stop the flow of water. Fill the livewell by pressing the switch marked *LIVEWELL* on the helm switch panel. For maintenance information refer to chapter 5, *Care and Maintenance*.

## NOTICE

If seacock/flow control valve are left open while vessel is underway, water may enter livewell.

## ATTENTION

Seacock must be in open position when livewell and washdown are in use. Running pump dry may damage the unit.



## Head

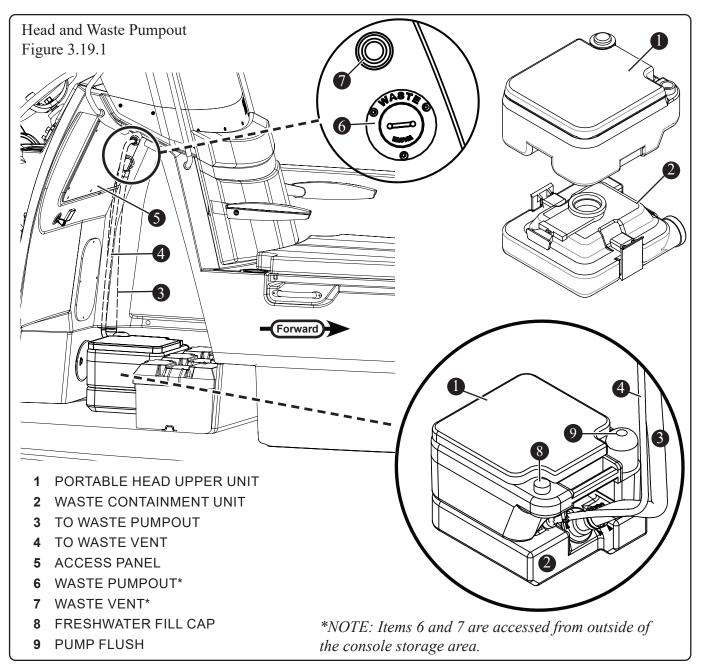
This vessel is equipped with a portable head (see Figure 3.19.1). The two-part head unit holds freshwater for flushing in the upper half and waste in the lower half. The waste containment tank holds 2.8 gallons (10.6 liters). The two-piece head unit can be manually removed from the boat for emptying. REFER TO THE OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

#### **Dockside Waste Pumpout (Option)**

If equipped, connect the head unit's waste pumpout to a dockside waste pumping station for emptying of the waste containment tank (see Figure 3.19.1). Open the waste pumpout cover using the multi-pin key (included in owner's packet). Dockside discharge is always the preferred method of waste disposal.

## NOTICE

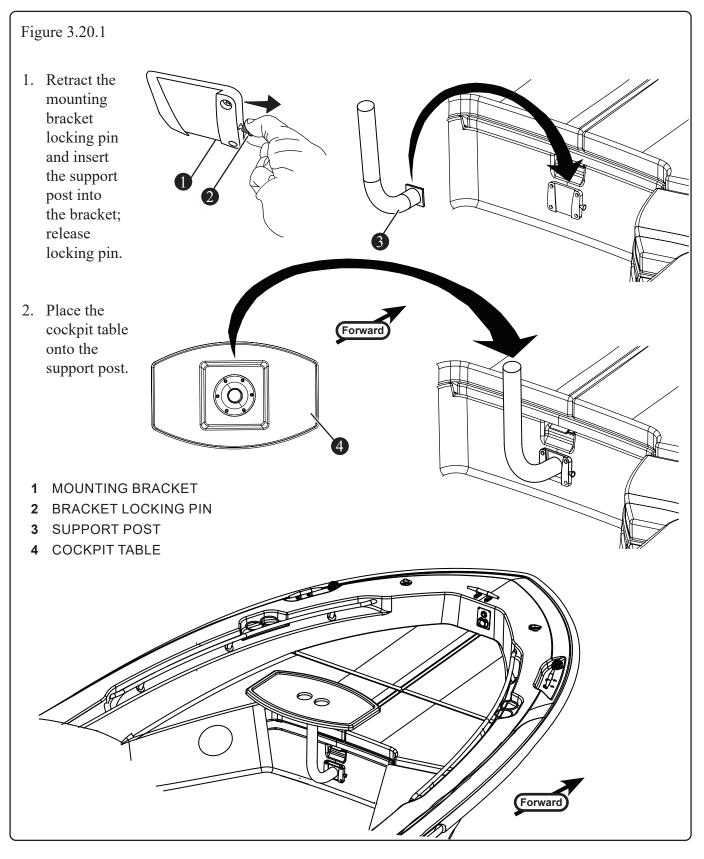
Severe state and federal penalties are levied for discharging raw sewage and/or solid waste in waters where it is not permitted.





## Bow Table (Option)

If equipped, the bow table is assembled in the bow lounge area (see Figure 3.20.1). The table is stored in the console lounge storage and the support post is stored in the console storage. To assemble the table:



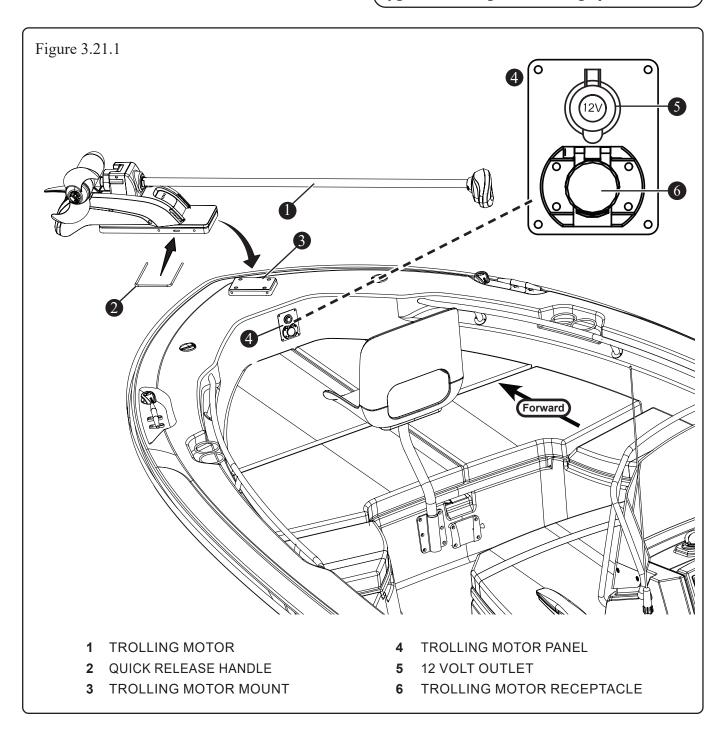


## Trolling Motor (Option)

If equipped, the trolling motor serves as a secondary means of propulsion mounted on the bow (see Figure 3.21.1). The trolling motor package includes a motor, panel, battery boxes, and a battery charger. Consult a Boston Whaler dealer for installation information. REFER TO THE OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

## **A**WARNING

There is a risk of electrical shock. Always have a qualified marine electrician install any system upgrades that are not already on this vessel. There are a variety of wiring configurations up to 36V. Incorrect wiring adversely affects trolling motor performance. Always use correct circuit protection and wire gauge when installing an upgraded trolling motor wiring system.

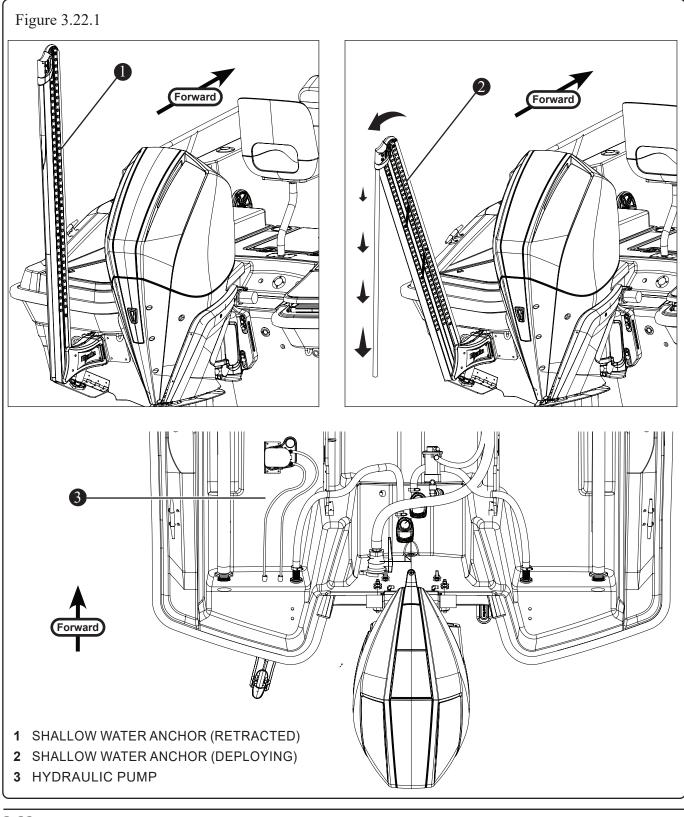


WHALER

## **Shallow Water Anchor (Option)**

If equipped, the optional shallow water anchor assists with keeping the vessel in position in the water (see Figure 3.22.1).

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

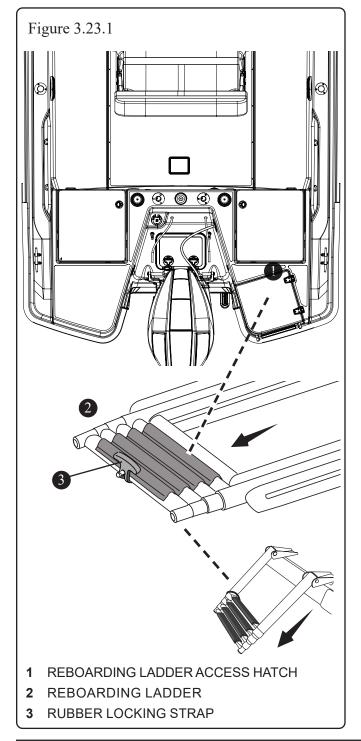




## **Reboarding Ladder**

The reboarding ladder is located under the ladder access hatch on the aft starboard deck of the boat (see Figure 3.23.1). The ladder can be accessed without the cover raised. To deploy the reboarding ladder:

- 1. Release ladder's locking strap.
- 2. Pull ladder out and extend down.
- 3. Extend ladder rungs.

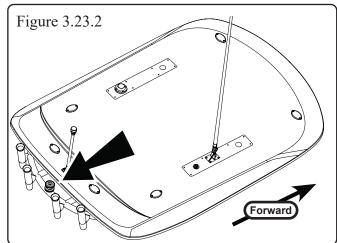


## Ski Tow Pylon (Option)

## 

# Do not use ski tow pylon with any equipment tied to the tow rope.

The ski tow pylon is used for skiing or wakeboarding only (see Figure 3.23.2 and Figure 2.24.1). If engaging in tubing or other activities requiring watersport equipment be tied to the boat, attach the tow rope to both stern eyes at the transom (see Figure 3.24.2) using a tube tow harness. Read and understand the safety rules for recreational activities in Chapter 1, *Safety*.



All Activity Tower (Option)

# **A**WARNING

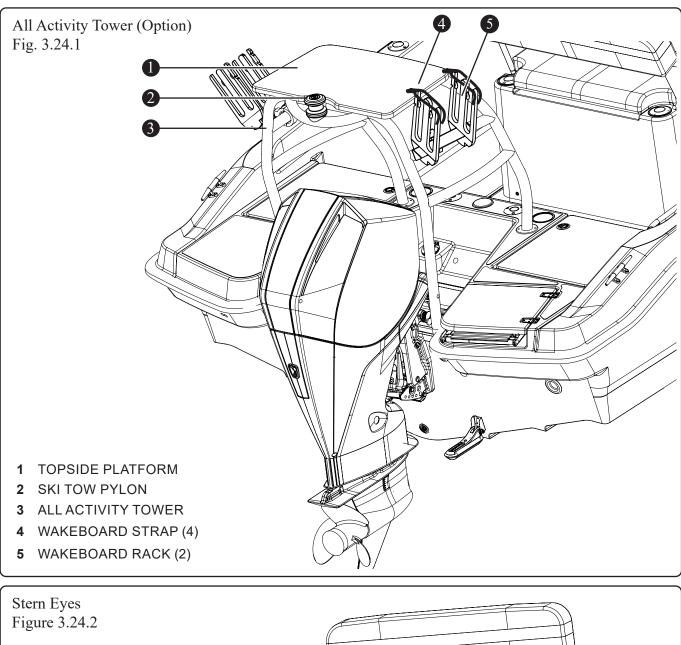
Do not use All Activity Tower's topside platform when engine is running. Wait for propeller to completely stop before occupying the platform.

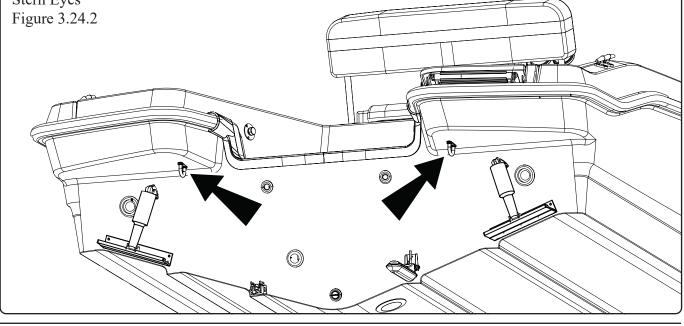
## **A**CAUTION

Do not use ski tow pylon with any equipment tied to the tow rope.

Read and understand the safety rules for recreational activities in Chapter 1, *Safety*. The all activity tower includes an integrated ski tow pylon used for skiing or wakeboarding only (see Figure 3.24.1). If engaged in tubing or such other recreational towing, attach the tow rope to the stern eyes at the transom (see Figure 3.24.2). The large topside platform provides a solid non-skid footing for fishing or poling through shallow waters (see Figure 3.24.1).









220 Dauntless

## Seating

Helm Seat Figure 3.25.1

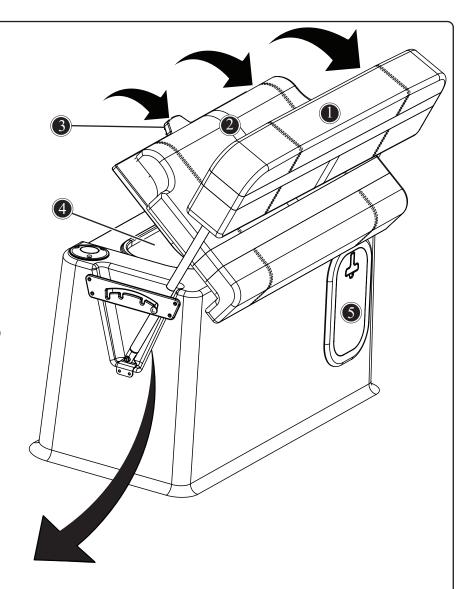
## NOTICE

Always wash metallic parts with soap and water and rinse 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.

- 1 SEAT BACK
- 2 FLIP-UP SEAT CUSHION
- 3 STORAGE OR LIVEWELL<sup>1</sup> LID
- 4 STORAGE OR LIVEWELL<sup>1</sup>
- 5 LIVEWELL ACCESS PANEL<sup>2</sup>

<sup>1</sup>*Livewell is optional.* 

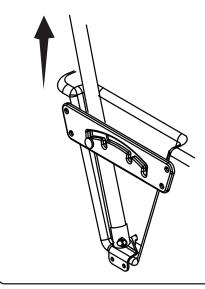
<sup>2</sup>*Included with livewell option only.* 

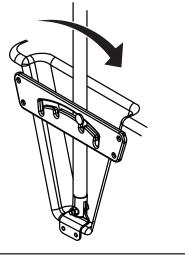


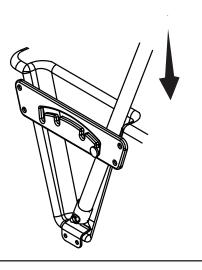
## Operation

Change seat position as follows:

- 1. Lift up seat back.
- 2. Shift to desired position. 3. Lower seat back and engage in slot.

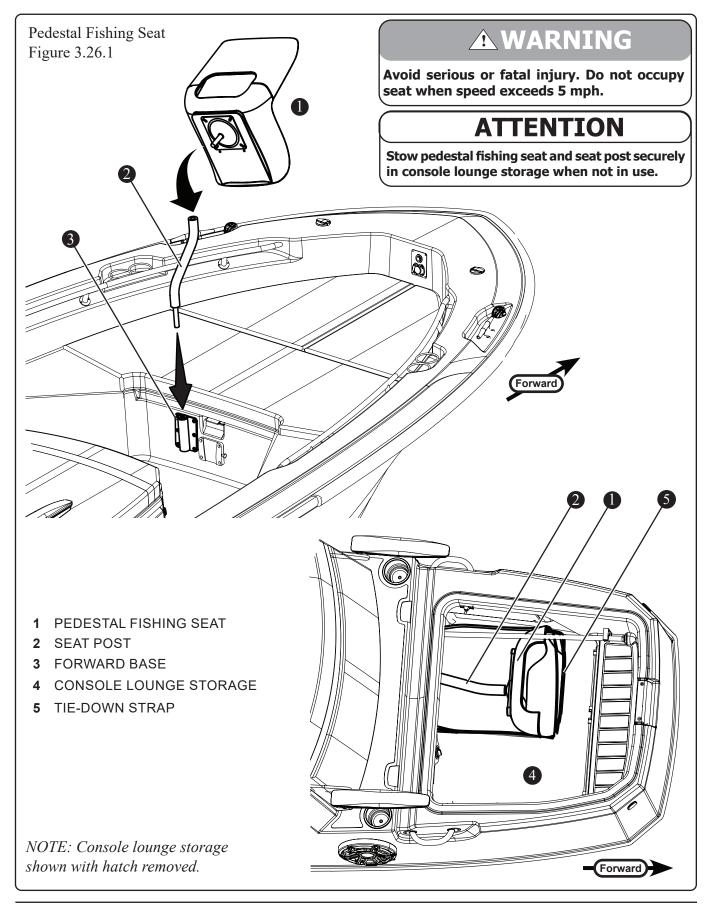








## Seating (Continued)





## Anchoring

To anchor, turn bow into the wind or current and put the engine in neutral. When the boat comes to a stop, lower the anchor from the bow (see Figure 3.28.1). Proper anchoring requires knowledge of rode and scope and understanding the relationship between rode, scope and anchor performance.

**Rode:** 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 help set the anchor more easily.

**Scope:** The scope is 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. To determine how much rode to use when anchoring, use this common formula: Rode length = (bow height + water depth) × scope. The minimum is 5:1 for calm conditions; normal is 7:1, and severe conditions may require 10:1.

#### Example:

Rode length =  $(3 \text{ feet} + 10 \text{ feet}) \times 7^*$ Rode length =  $13 \text{ feet} \times 7^*$ Rode length = 91 feet

## 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. Because there are a variety of anchors with different uses, discuss with a dealer the right anchor for this vessel.

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

**Rode length** = (bow height + water depth) × scope

## Lowering the Anchor

• Be sure there is adequate rode.

• Stop completely before lowering the anchor.

Keep feet clear of lines.

• Secure rode to both the anchor and the boat.

## Setting the Anchor

There is no ideal way to set an anchor. Experiment to see how it performs. One method is to turn the rode around a bitt or a cleat and slowly pay out as the boat backs from the anchor site. When the proper scope has been reached snub the rode quickly, causing the anchor to dig in to the sea bottom.

•

- Reverse the engine slowly to drive the anchor in and to prevent it from dragging
- Secure the rode to a bitt or cleat

# 

Swamping hazard - Anchor from bow if using one anchor. A small current can make a sternanchored boat unsteady. A heavy current can drag a stern-anchored boat underwater.

Collision hazard - Anchor only in areas where vessel will not disrupt other boats. Do not anchor in a channel or tie up to navigational aids as it is both dangerous and illegal.

# **A**WARNING

Keep hands, feet, hair and loose clothing clear of moving parts (anchor, rode, etc.). Entanglement may cause severe bodily injury.

## **A**CAUTION

Be careful trailing lines do not foul the propeller.

**A**CAUTION

To avoid property damage, engage gypsy lock and ensure anchor is secured with lanyard before getting underway.

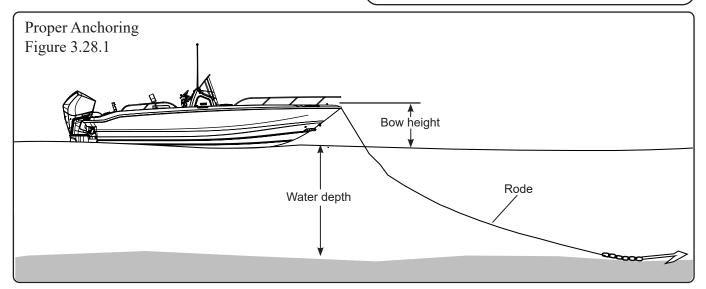
REFER TO THE OWNER'S PACKET FOR COMPLETE INSTRUCTIONS AND WARRANTY INFORMATION.

## NOTICE

Turn on anchor light when at anchor or drifting (not under power) at night or in low visibility.

# NOTICE

Before using the anchor be sure the anchor line is securely attached to the eye in the bottom of the anchor locker and to the anchor itself.

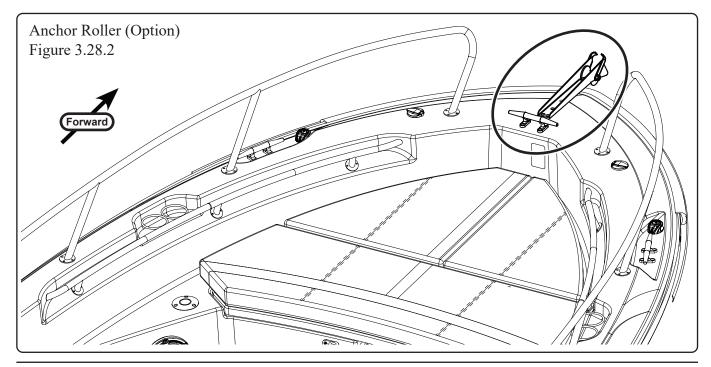


## Weighing the Anchor

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. The bow storage compartment located in the starboard bow should be used to stow the anchor line.

## Anchor Roller (Option)

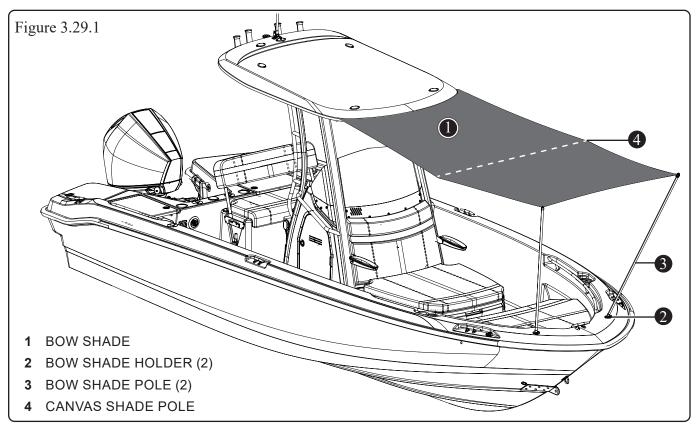
If equipped, the anchor roller (see Figure 3.28.2) allows deployment or retrieval of the anchor rode without damage to the rub rail or other equipment on the boat. This option includes a cleat for tying off the anchor rode.





## **Chapter 3 • Systems Overview and Operation**

## Bow Shade (Option)



## WARNING

Bow shade is intended for use while boat is anchored or moored, not while underway. Obstruction of navigation sidelights, damage to boat or personal injury could occur if shade is used while underway.

If equipped, set up shade as shown in Figure 3.29.1:

- 1. Insert two bow shade poles into bow shade pole holders.
- 2. Assemble two-piece canvas shade pole and insert into canvas.
- 3. Attach bow shade with provided clips on bow poles and the hardtop or T-top.

Follow the canvas care instructions in chapter 5, *Care and Maintenance*.

## **Entertainment System (Option)**

The entertainment system consists of a stereo radio, waterproof speakers, and USB input. The bluetoothenabled stereo is located at the helm.

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

## Towing, Docking, Lifting and Trailering Towing

## 

Towing or being towed places extreme tension on tow lines and strong points (cleats, bow stern/eyes). Do not stand directly in line with tow line. Serious injury or death and/or vessel damage may occur if towing gear fails.

If it becomes necessary to have this vessel towed, the U.S. Coast Guard or a private salvage company experienced in this type of operation are better equipped to perform this service. Only use another recreational boat as a last resort as doing so may cause damage to one or both boats due to operator inexperience or other conditions such as weather and/ or current. The other boat may assist by standing by and keeping the disabled boat's bow at the proper angle until help arrives.

When towing is necessary, create a bridle with a line around the hull or use spring lines to secure the disabled vessel to the towing vessel (see Figure

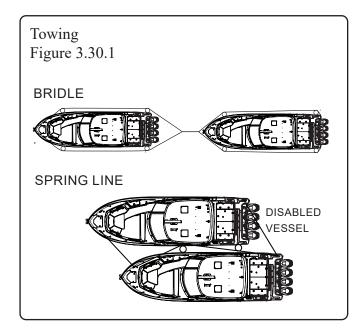


## **Chapter 3 • Systems Overview and Operation**

3.27.1), whenever possible. Either of these methods distributes the load over a wide area. Be sure to use fenders or other chafe protection at pressure points.

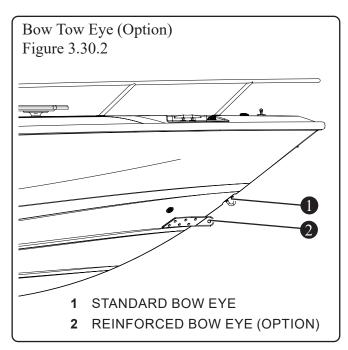
The standard bow eye (see Figure 3.30.2) is typically used to haul out and hold this vessel on a trailer. Before operating with a boat in tow, seek professional advice and/or training (e.g., USCG Auxiliary, US Power Squadrons, or BoatUS) to master towing fundamentals. While operating with a boat in tow there are several regulations and guidelines that must be followed:

- Display the proper markings and navigation lights on towing vessel and disabled vessel.
- Disabled vessel should never be larger or heavier than towing vessel.
- Ensure all tow lines/bridle are adequately sized and in good condition.
- Only secure tow lines to strong points designed for towing (bow/stern eyes, reinforced cleats).
- Designate experienced crew to monitor, identify, and manage risks.
- Always monitor WhalerWatch while towing, when installed.
- While underway, be prepared to adjust tow line length and speed to meet current conditions.



## Bow Tow Eye (Option)

The optional bow tow eye, which is located on the front hull of the boat, is reinforced with a steel-backing plate (see Figure 3.30.2).



## **Docking and Cleats**

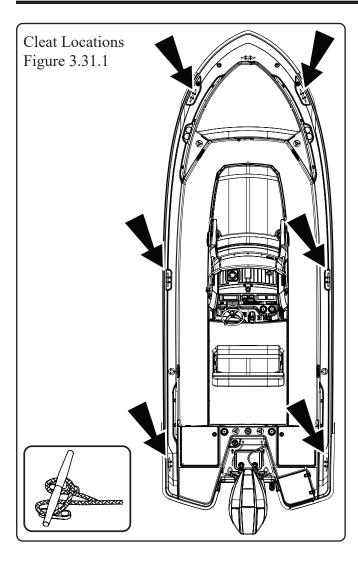
This vessel has six cleats to use for tying up to a dock, two located at the bow, two located midship, and two located at the stern (see Figure 3.31.1). There is an additional cleat installed at the bow with the anchor roller option. While loading/unloading or mooring, learn the proper way to secure the boat and how best to use the boat's mooring points. Figure 3.31.2 shows the correct method for tying a belaying knot, commonly used to secure a boat to a dock. This knot holds fast and is simple to release when needed.

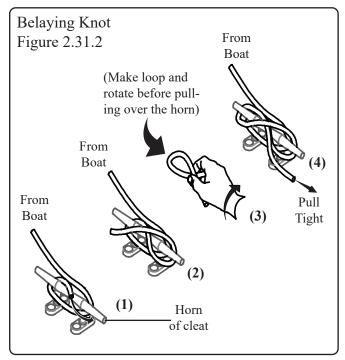
# 

Use lifting points specified only. Using cleats for lifting could cause serious injury or death.

## **A**CAUTION

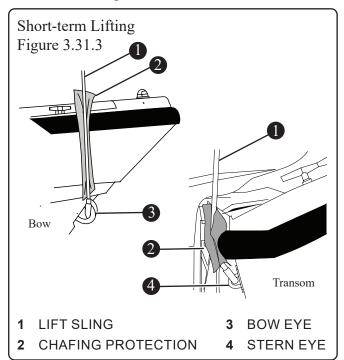
Do not lift with bow and stern eyes as this places significant stress on fiberglass and gel coat.





## Lifting

The bow eye is used to haul this vessel out of the water onto a trailer and hold it there. The stern eyes are used as tie down points while trailering. The bow and stern eyes may be used only for short-term lifting of the boat such as servicing (see Figure 3.31.3). For long-term lifting or storage, use flat, wide belt-type slings and spreaders long enough to keep pressure from gunwales. Do not allow slings to contact underwater fittings.



Whether lifting this vessel out of the water for routine maintenance or long-term storage, consider the following:

- If using a professional lifting service, check all credentials and ask for proof of insurance.
- Use a wide, flat, belt-type sling for lifting to minimize stress on the gunwales. Careful location of the sling is required. Sling labels are installed at four spots on the gunwale that should be used as a guide for sling placements.
- If using a lifting hook, attach to bow and stern lifting eyes.
- Use a spreader bar on the stern eyes and use chafing protection on the top of the transom.
- All drain plugs should be removed and bow positioned slightly higher than stern for draining.



## Trailering

## NOTICE

The warranty may be void if a trailer with rollers is used. Use a trailer with bunks only.

This vessel has the option of being fitted with an aluminum trailer matched to the boat's length and width. If a trailer is not provided by Boston Whaler, then the following design considerations must be followed to not void your structural hull warranty:

- Trailers equipped with rollers can damage the hull of this vessel and should never be used to support the hull bottom.
- A single roller at *WINCH STAND/ASSEMBLY* (see Figure 3.33.1) is permitted.
- Hull bottom must be solely supported by a fixed *BUNK STYLE ASSEMBLY* (see Figure 3.33.1).

## Securing Boat to Trailer

# DANGER

Never use only tie down straps to secure boat to trailer. A safety chain must also be used to secure bow eye to winch stand.

#### Winch

The trailer is equipped with a cable/strap winch with hook. Attach the winch hook to the bow eye and use the winch to pull the boat on to the trailer. When the bow eye reaches the winch cable/strap roller engage the winch lock and leave the hook secured to the bow eye. Secure the bow eye safety chain/cable.

#### Bow Eye Safety Chain/Cable

Attach the trailer's safety chain/cable to the bow eye to prevent the boat from sliding off the trailer should the winch strap or cable break. Attach the safety chain before attaching the winch strap. Do not secure the safety chains to the bumper of the towing vehicle.

## Aft Tie-Down Straps

Tie-down straps are needed to secure the boat from the stern. The tie-down straps must be secured to the trailer frame and to the stern eyes or aft cleats. Padding or similar chafe protection should be used wherever the tie-down straps come in contact with the hull.

#### Securing Trailer to Tow Vehicle

## 

Never use improperly matched hitch ball and coupler. Do not secure chains to bumper of tow vehicle.

#### Vehicle Safety Chains/Cables

Safety chains/cables (see Figure 3.33.1) are connected to the trailer and should be of sufficient length to reach the frame of the tow vehicle and should be long enough to allow the tow vehicle to turn without binding or tensioning. Do not secure the safety chains to the bumper of the towing vehicle.

## **Trailer Hitch**

A properly matched trailer hitch ball and coupler is important. Ensure the coupler and the hitch ball are the same size and properly seated and locked.

#### **Swing Tongue**

Before attaching the trailer hitch, lock the swing tongue in place with the safety pin. Sucure the safety pin with the cotter pin to prevent the safety pin from backing out while pulling the trailer (see Figure 3.33.1).

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

## **Engine Trailering**

# 

Do not rely on power trim/tilt system or tilt support lever on the outboard to maintain proper ground clearance for trailering. The outboard tilt support lever is not intended to support the outboard for trailering.

## NOTICE

Refer to the engine manual in your owner's manual packet for proper engine support while trailering.

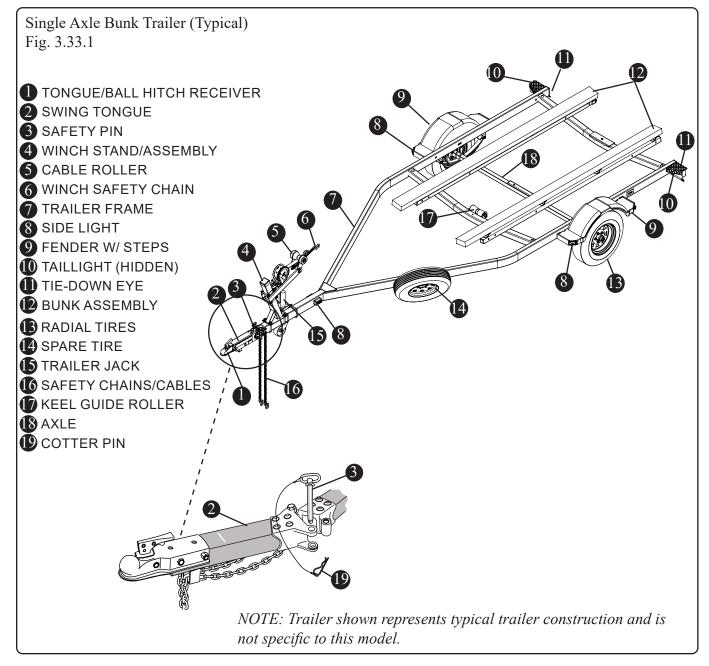
Trailer the boat with the outboard tilted down in a vertical operating position. However, if additional road clearance is required due to railroad crossings, driveway clearance, trailer bounce, etc., the outboard



should be tilted up and supported using an accessory outboard support device. Consult a Boston Whaler dealer for engine support recommendations.

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

## Trailer description



WHALER

THIS PAGE INTENTIONALLY LEFT BLANK



## **DC Electrical System**

This vessel's electrical system is powered by a series of batteries that are charged when the vessel is running. Battery power is used for engine ignition, switches, lighting, livewell, as well as for the trim/ tilt, freshwater, raw water, and stereo systems.

#### **Batteries**

## A DANGER

Batteries contain hazardous substances which can cause serious injury. Avoid contact with skin, eyes, and clothing. If contact occurs, immediately flush with large quantities of water and obtain medical assistance.

## NOTICE

Always store the batteries in the battery trays. Use the retaining straps to keep the batteries secure while underway.

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

House and Engine Batteries

The following table is for reference purposes only. Use only AGM batteries with Mercury engines.

Application	Group	Volts	MCA*	RC 25	Qty.**
USA (SAE)	31	12	800	135 min	2

\* Marine Cranking Amps \*\* Trolling motor option adds three more batteries

Application	Group	Volts	CCA*	Reserve	Qty.**
Int'l (EN)	31	12	975	65Ah	2
* Cold Cranking Amps					

\*\* Trolling motor option adds three more batteries

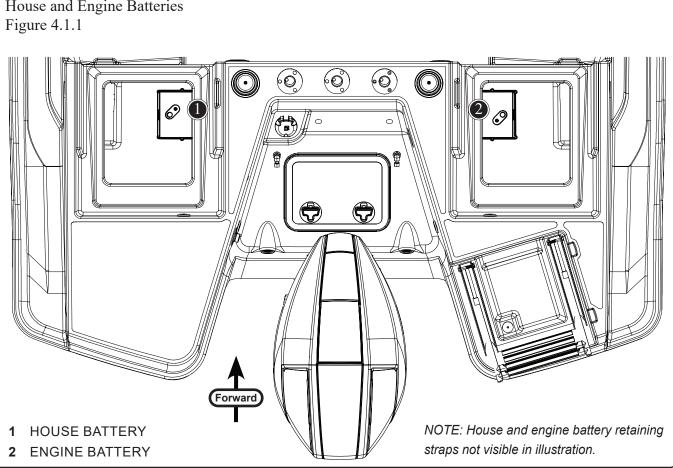
NC	<b>T</b> ]	Ε	

Ensure batteries meet Mercury's AGM and CCA requirements.

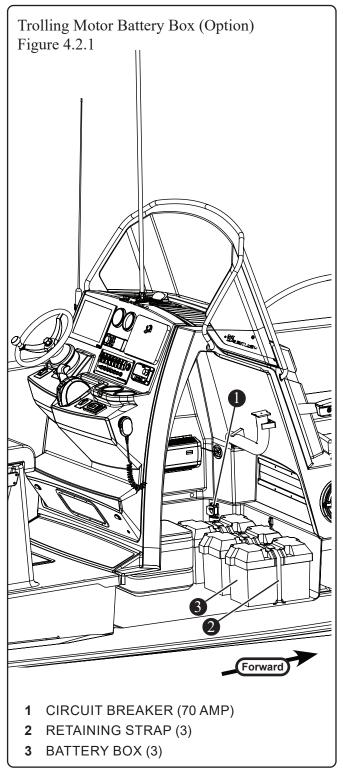
#### **Battery Trays and Boxes**

The house and engine batteries are located under the stern seats (see Figure 4.1.1) in battery trays. If the trolling motor option is included, three battery boxes are installed inside the console (see Figure 4.2.1).

To remove a battery, remove the retaining straps (from battery tray or battery box); disconnect cable from negative terminal first, followed by positive cable.

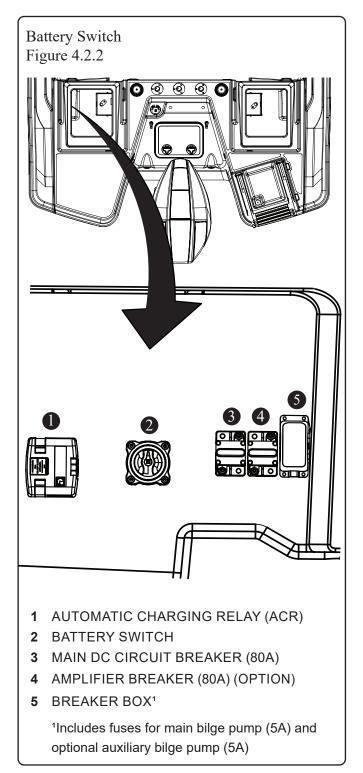






## **Battery Switch**

This vessel uses a battery switch (see Figure 4.2.2). to control delivery of DC power from the house and engine batteries. The battery switch is located under the port stern seat. The battery switch settings are detailed in Figure 4.3.1.

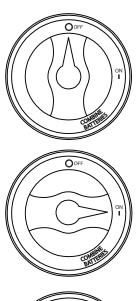




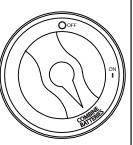
Battery Switch Settings Figure 4.3.1

*OFF* - No power to the house and engine systems.

*ON* - Power to the house and engine systems.



*COMBINE BATTERIES* - This combines the engine and house batteries to assist with engine starting.



## **A** WARNING

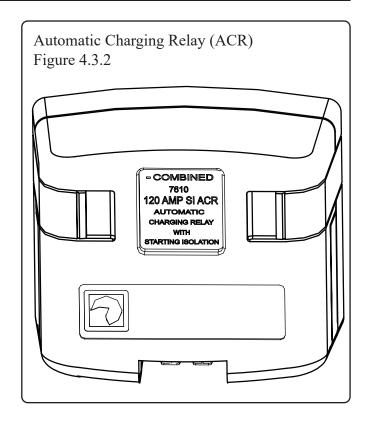
Do not operate boat with batteries in combined batteries position once the engine is started or serious engine electrical damage may result.

## 

Use combined batteries position only if all batteries are near the same voltage. If one battery is strong and another weak, high current could cause battery damage.

## Automatic Charging Relay (ACR)

Batteries are automatically connected in parallel through the use of an automatic charging relay (see Figure 4.2.2 and Figure 4.3.2) when a sufficient charging source is present. The battery locations are automatically isolated when the charging source falls below a certain voltage level for a predetermined amount of time. Using an automatic charging relay eliminates the need to monitor battery voltage and manually parallel multiple batteries.

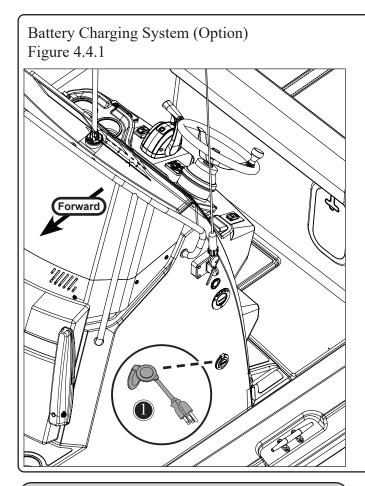




## Battery Charging System (Option)

This vessel may be equipped with a battery charging system (see Figure 4.4.1) which is available with the trolling motor option, and only charges the trolling motor batteries. Connect the battery charger cord to a dockside GFCI outlet to charge batteries. Completely draining the batteries before recharging shortens battery life. For maintenance information refer to chapter 5, *Care and Maintenance*.

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



# 

- 1 BATTERY CHARGER CORD (OPTION)
- 2 CONSOLE STORAGE (DOOR NOT SHOWN)
- **3** BATTERY CHARGER

# DANGER

To avoid serious injury or death from fire explosion or electrical shock, only connect charger to a GFCI-protected outlet.

# NOTICE

Use a heavy duty UL-approved extension cord to connect dock to battery charger cord. After connecting extension cord to charger cord, plug extension cord into 120VAC GFCI outlet. When charging is complete, always disconnect extension cord from 120VAC outlet before disconnecting charger cord.

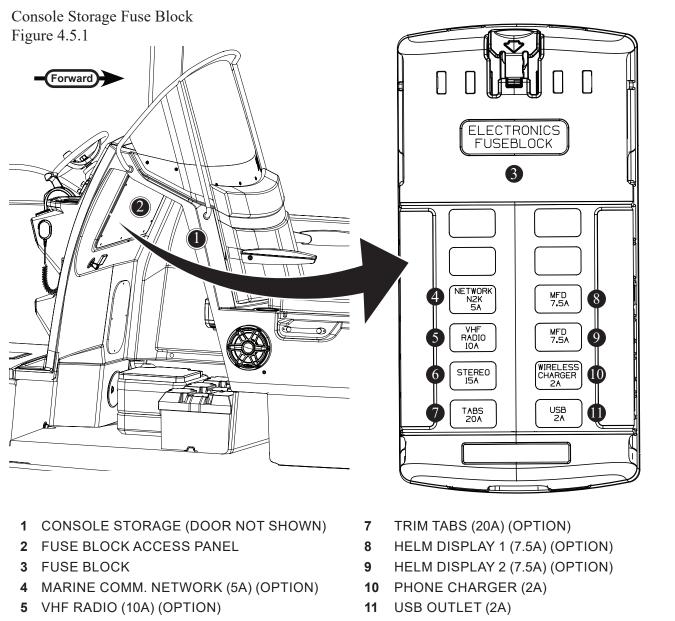
# **A**CAUTION

- No open flame in battery storage area.
- Avoid striking sparks near the battery.
- A battery will explode if flame or spark ignites hydrogen given off during charging.
- Battery should always be disconnected before doing any work or maintenance on the electrical system.
- Never reset a circuit breaker without first determining and correcting trip cause. Should a circuit repeatedly trip, have a qualified electrician determine and correct the cause.
- If battery switch equipped, stop engine before moving switch to off position.



## **Fuse Block**

The fuse block can be accessed through the fuse block access panel in the console interior (see Figure 4.5.1). In the event fuse replacement is required, only replace with one of the same amperage. 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 blow the fuse. 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.



6 STEREO (15A) (OPTION)

220 Dauntless

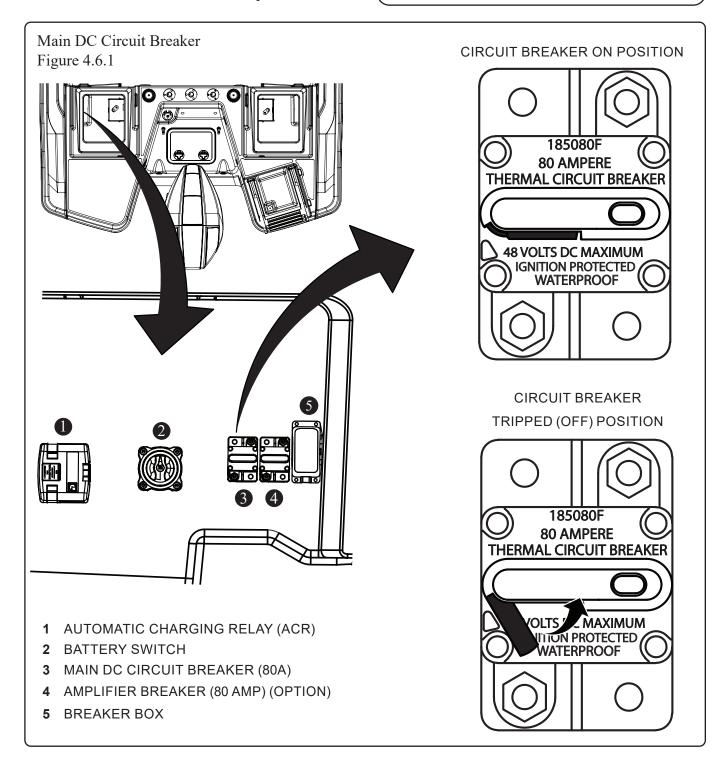
WHALER

## **Main DC Circuit Breaker**

The main DC circuit breaker switch is located under the port stern seat (see Figure 4.6.1). If the circuit breaker trips, determine and correct the problem prior to resetting the circuit breaker. To reset the circuit breaker, rotate the switch to the *ON* position.

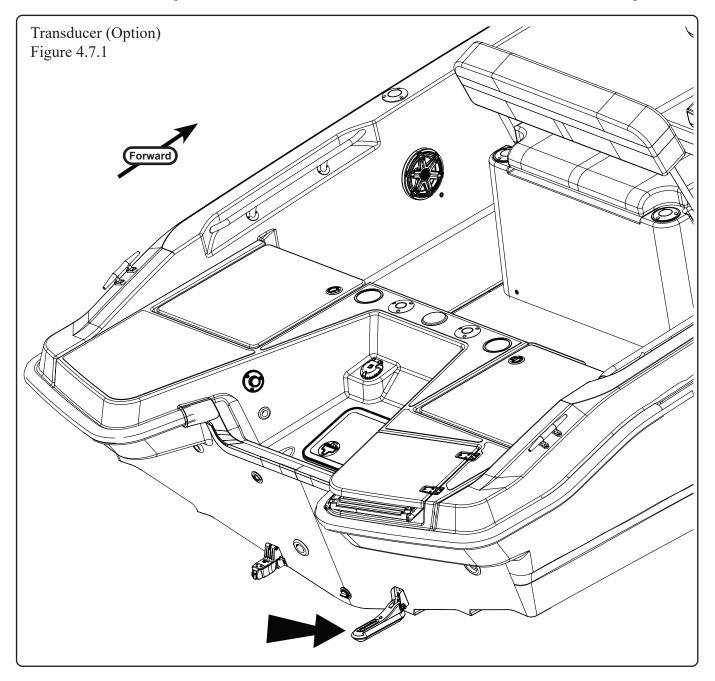
## **A**WARNING

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.



## Transducer (Option)

If equipped, the transducer is located on the transom and acts as an antenna for the sonar system, sending sound waves through the water, bouncing off objects, and returning a signal (see Figure 4.7.1). Should after market installation be required, contact a Boston Whaler dealer for details on the correct mounting location.

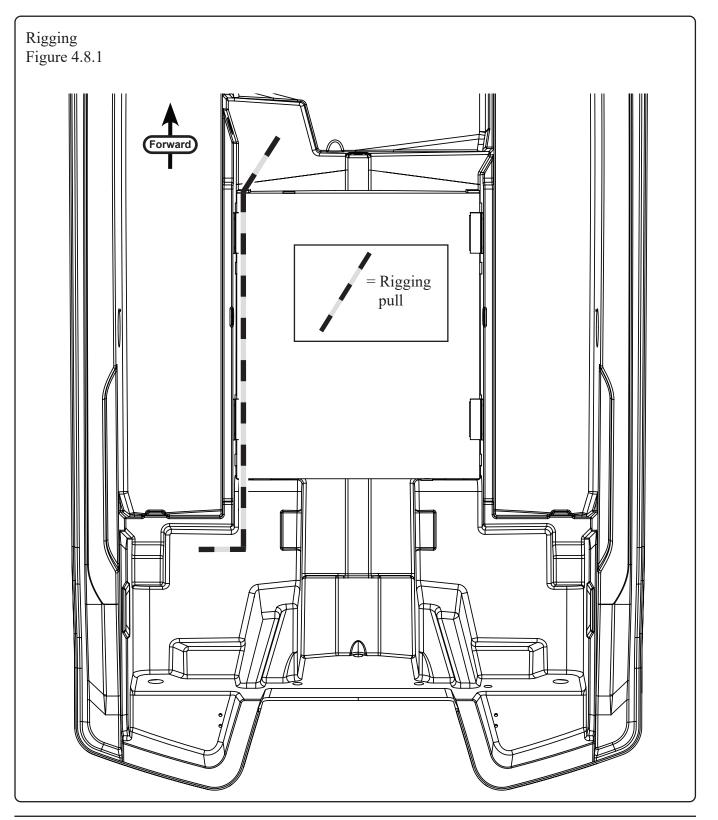


WHALER

## **Rigging Pull**

A factory-installed rigging pull is provided to assist with the running of new wiring (see Figure 4.8.1). This vessel is equipped with a rigging pull tied off at either end of the rigging trough. When using a rigging pull, be sure to attach a cord to each run of the new wiring to ensure a new pull is in place for future use.

For further information on rigging pulls, contact your dealer or Boston Whaler.



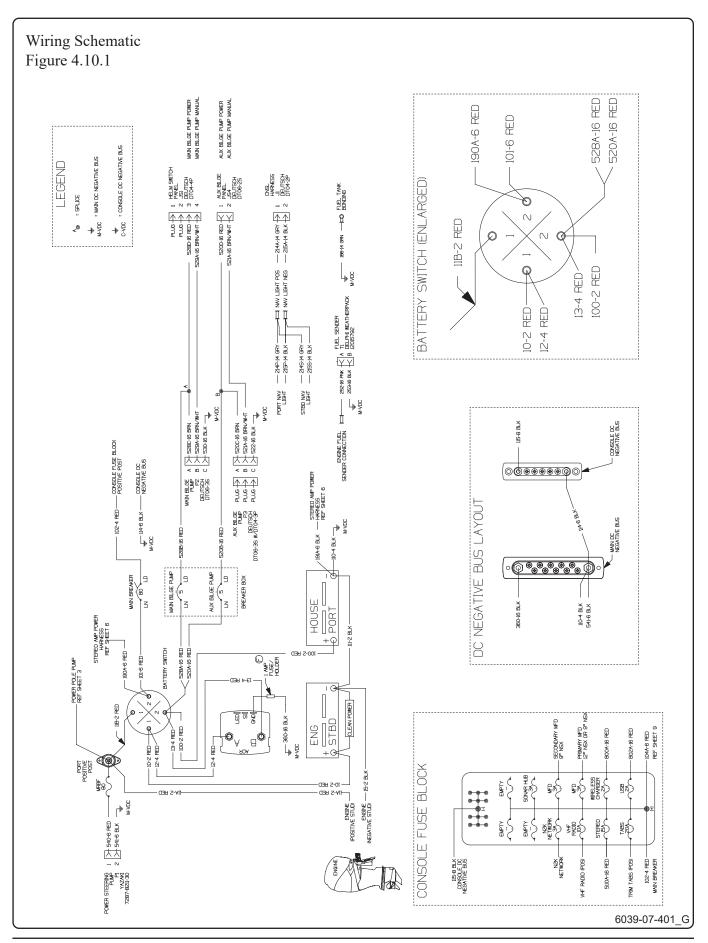
WHALER

## **Electrical Schematics**

Boston Whaler adheres to electrical wiring requirements that meet ABYC E-11 standards. The schematics on the following pages are for reference and use by Boston Whaler service technicians. Boston Whaler reserves the right to change or update the electrical system on any model at any time without notice. In addition, Boston Whaler is not obligated to make any updates to units built prior to a change. Contact Boston Whaler customer service for current electrical schematics.

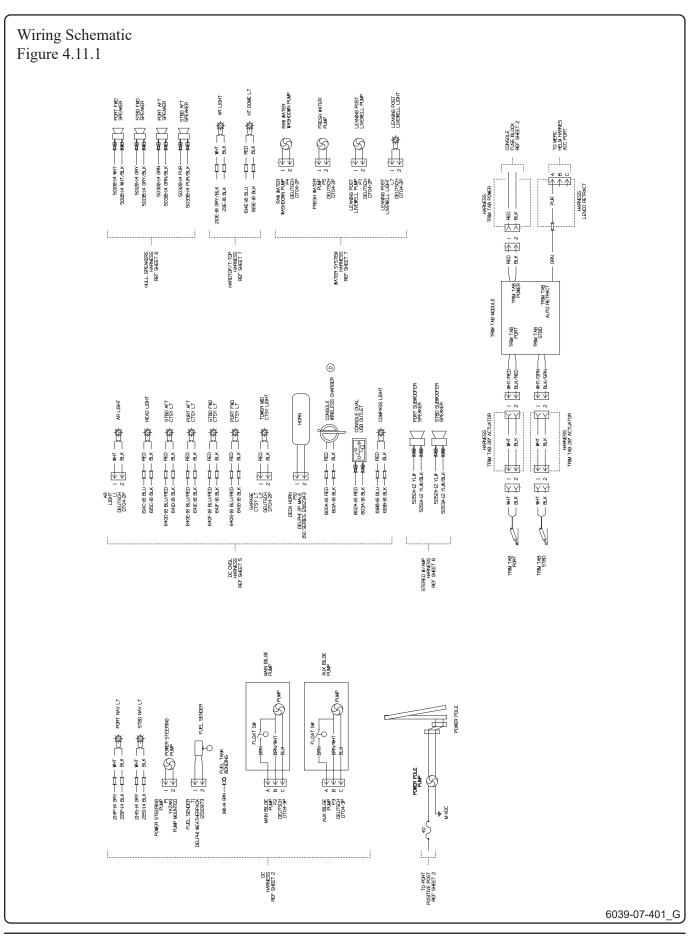
BOSTON WHALER

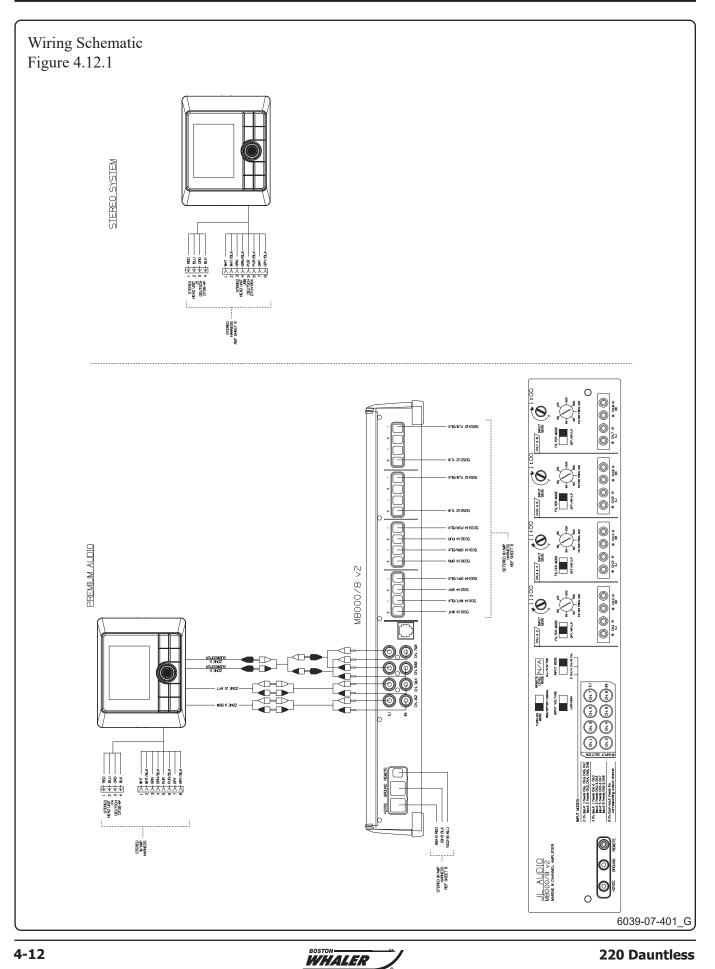
## **Chapter 4 • Electrical**

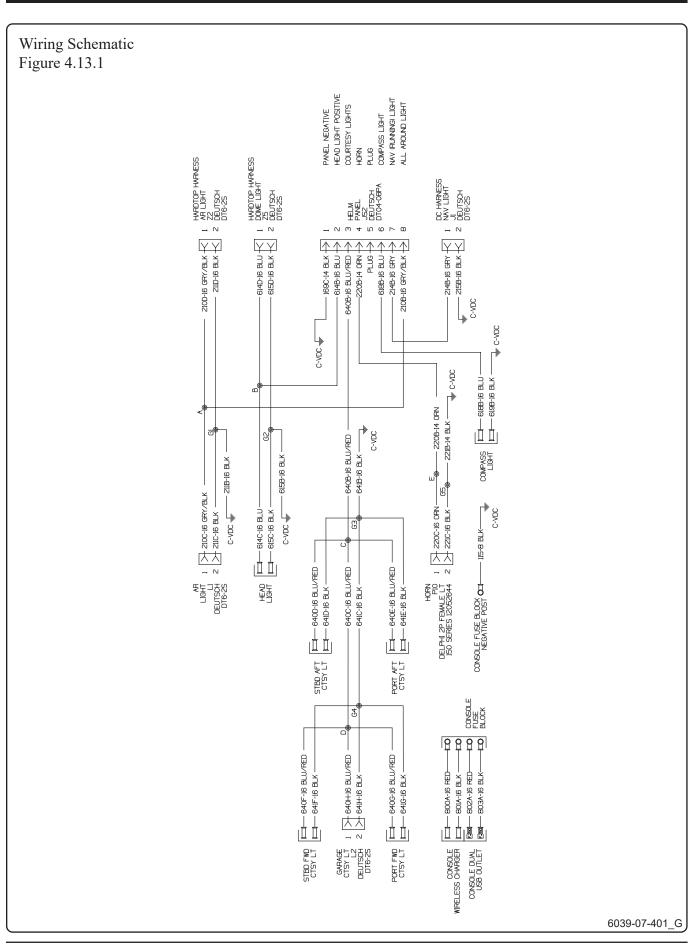




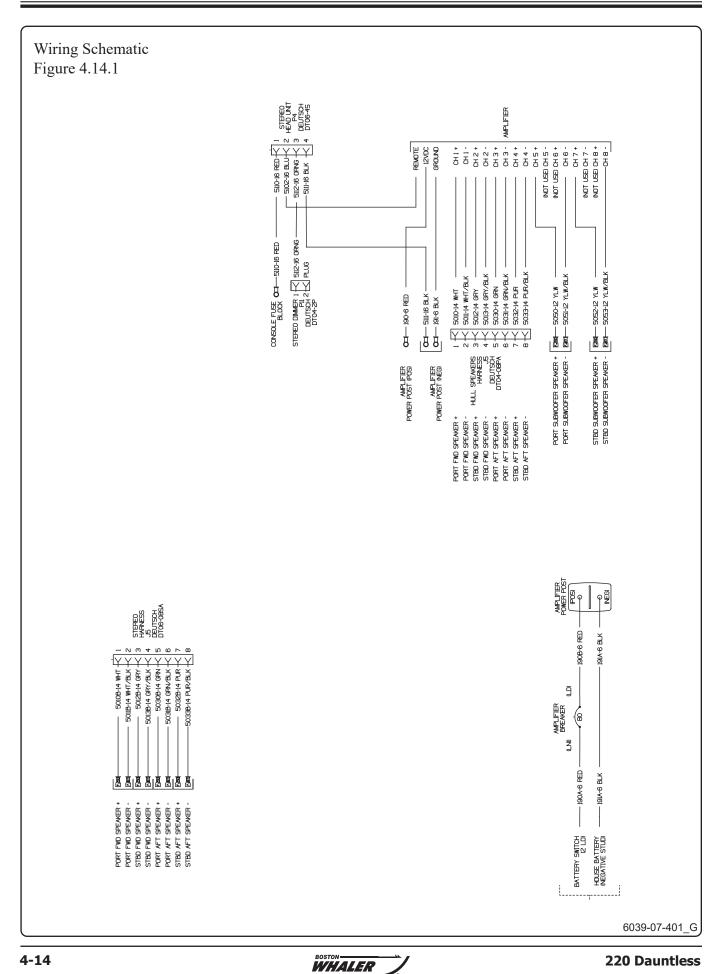
## Chapter 4 • Electrical

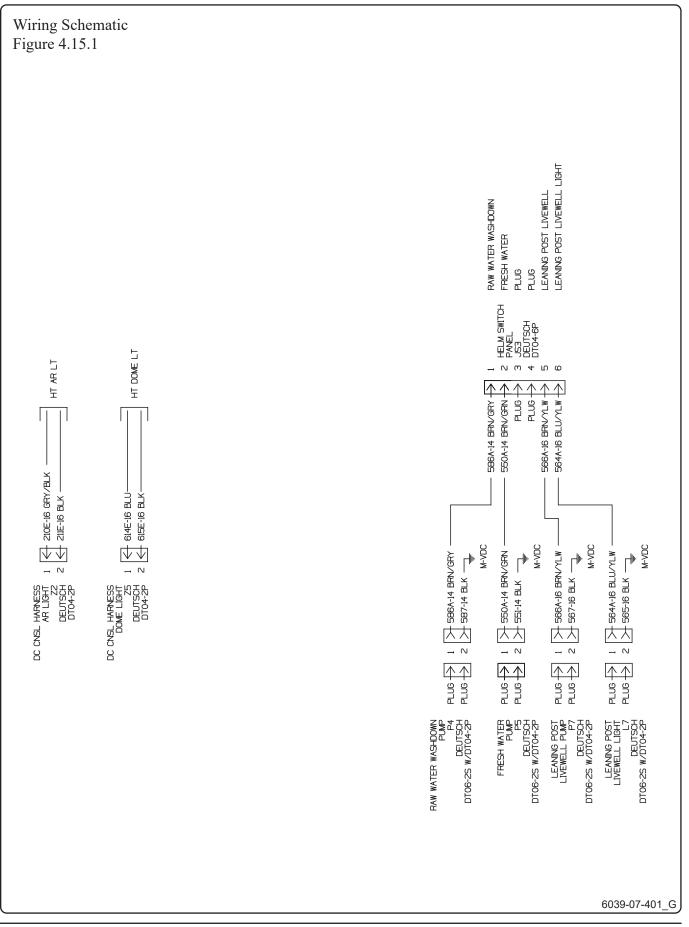




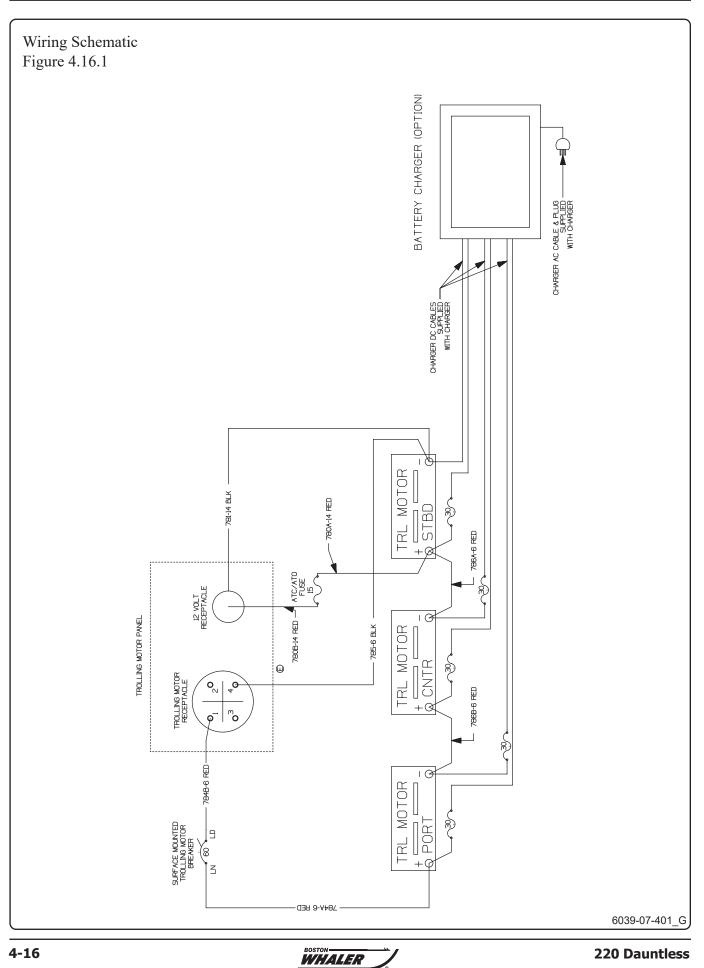


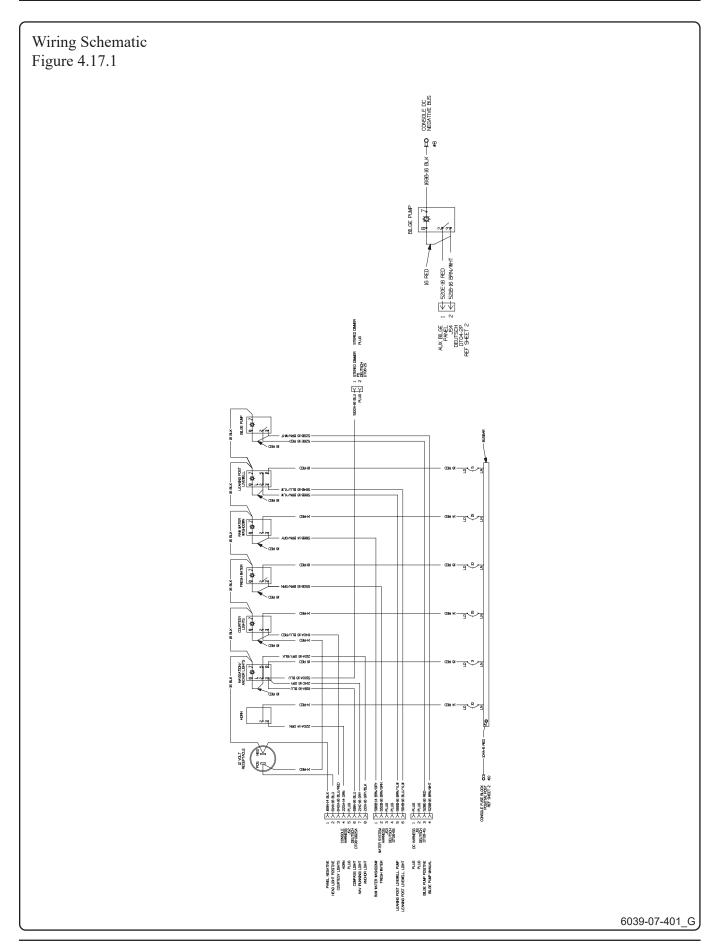
WHALER





BOSTON WHALER







THIS PAGE INTENTIONALLY LEFT BLANK

BOSTON WHALER

#### **Routine Care and Maintenance**

## NOTICE

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

# DANGER

When using solvents read all information from the solvent manufacturer regarding safety and handling of the material.

Wear proper protective equipment to ensure your personal safety.

Only use solvents in a well ventilated area and keep all solvents away from open flame and any other forms of ignition.

## **A**WARNING

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

Routinely inspect, service and maintain your boat. Boat systems and components are vital to assure your safety, as well as prolonging the life of the vessel.

How often necessary service or maintenance is required varies greatly depending on the environment the boat is used in. For example, corrosion of boat parts and components occur far faster in a salt water environment than on a boat which is used in freshwater.

This section provides only general guidelines for the care and maintenance of your boat. 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 that can occur on the boat's hull. Any growth affects the boat's performance and overall appearance. If it has been a while between inspections you might notice algae or slime growth on the hull. This can be cleaned with a coarse towel or soft bristle brush. The growth should be cleaned immediately after the boat has been removed from the water. If the growth is allowed to dry it will be much harder to remove.

Compounding may be necessary to remove more stubborn stains and chalking from the surface of your boat. If compounding is necessary it must be done after a thorough washing and prior to waxing. If the growth is more severe, you may need to enlist the services of a professional hull cleaning company. Contact your Boston Whaler<sup>®</sup> dealer for recommendations on a compatible rubbing compound or a professional hull cleaning company in your area.

## 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.

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.

## Clean

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

### Waxing Gel Coat Surfaces

# NOTICE

Wax the exterior surfaces at least twice a year to protect gel coat.

# NOTICE

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

Waxing is necessary to provide added protection to the gel coat. Periodic cleaning and waxing ensures your boat is protected and looks good longer.

Do not wax over dirt. Make sure the surface of your boat has received a thorough washing and rinsing and is clean before waxing. If a rubbing compound has been necessary, make sure that any minor scratches or surface pitting is cleaned of compound residue. Use a good quality carnauba wax or a high quality wax designed for marine gel coat. Apply several coats.

If using a pressure washer to clean the hull and deck surfaces of your boat it is important that you use the wide fan nozzle only and move the spray head in a continuous motion. Do not concentrate the high pressure on a small area of the boat surface and never use the fine pinpoint nozzle as the concentrated stream can damage the boat surface.

Refrain from pressure washing the console as high pressure may compromise the integrity of the electronics and gauges as well as other equipment. Also avoid pressure washing any caulked seams.

When staining from build-up does occur, use cleaning agents that are recommended for stubborn stains on marine gel coat. Never use an abrasive cleaner to wash your boat's hull. Never use an abrasive pad to attempt to remove stubborn stains. Never use strong solvents to clean.

Never apply tape or any other type of adhesives directly to the painted surfaces on your boat.

Use care when covering your boat's painted surfaces as tarps and other such covers can trap dirt and cause chafing. It is best to use either an aluminum or wood frame to keep the cover raised off the surface, thus allowing air to circulate.

### Hull Blistering

Due to the quality of the materials used in Boston Whaler hulls, blistering is rarely ever seen. Blistering is caused by water soluble materials in the hull laminate. The fiberglass and resin structure of your boat is porous. However, intrusion of water into the gel coat will take some time. The effect of osmotic pressure allows water to impregnate below the gel coat and substrate thus forming a blister.

There have been extensive university studies funded by the United States Coast Guard regarding the cause and effect of blistering in the gel coat of fiberglass boats. Fiberglass blisters can form anywhere from near surface layers of the gel coat to very deep into the fiberglass structure. The damage can range from cosmetic to catastrophic. The studies seem to indicate long term immersion of the hull in warm water as a primary cause of hull blisters. Stress cracks on the hull below the waterline also contribute to the formation of hull blisters.

#### Prevention

There are a variety of ways to prevent the formation of hull blistering. Epoxy coatings can be applied



to the hull, followed by hull painting. An alkydurethane-silicone marine paint can also be used to aid in the prevention of hull blisters.

Reducing the amount of time that your boat stays in the water also helps prevent hull blisters from forming. Use of a trailer or boat lift reduces the likelihood of hull blisters forming. Be sure to use a bunk-type lift or trailer for out of water storage.

Contact a Boston Whaler dealer for more information on the prevention and treatment of hull blisters.

## **Bottom Painting**

# DANGER

There are risks and dangers inherent with the use of paints and solvents. Dispose all rags, rollers, and trays properly. Follow all precautions and regulations listed by the manufacturer before and after painting boat's hull.

# NOTICE

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

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

The following is an abbreviated section on bottom hull painting. A Boston Whaler dealer should have information on properly painting your boat's hull or recommendations on qualified hull painters.

#### **Bottom Painting a Bare Hull**

# 

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

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

## **A**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.

## **A**WARNING

Bottom paint is designed to resist algae growth which means it has chemicals embedded in the paint that are harmful if ingested. Take all necessary precautions required before painting or repainting your boat's hull.

# NOTICE

Painting your boat's hull will adversely affect the boat's speed and performance and may require re-propping if the maximum engine RPMs drop below the engine model/mfg recommended operating range.

Since the boat has never been painted, preparation is the key to successful hull painting. Take extra care and time in preparation before proceeding to paint. Begin by scrubbing the surface thoroughly with a stiff brush using an all-purpose marine soap and water to remove loose dirt and contamination. Flush with fresh water to remove all soap residue.

The gelcoat must be dewaxed of mold release wax before sanding can begin, otherwise the wax will be dragged into the scratches and will reduce the adhesion properties of the paint.

Remove any mold release wax that may be present using fiberglass surface prep solvent and a scrub pad. Scrub only a few square feet at a time. Flush with fresh water. If the water beads up or separates, continue scrubbing the surface. When the water sheets off, the wax contaminate has been removed.

After the dewaxing is complete, application of a primer coat is recommended. Pay close attention to scratches, nicks and dings in the surface. If necessary, fill any repair areas with a watertight epoxy filler. After filler is cured, sand with 80 grit



paper until smooth. Remove the sanding residue using a fiberglass solvent wash. The paint can be applied after sanding and cleaning is complete. Follow the paint manufacturer's recommendations for application.

#### **Bottom Painting a Pre-painted Hull**

If the hull bottom is already painted, you must be sure to test the paint's adhesion to the already painted surface. If the paints are incompatible, the new paint will not adhere to the hull bottom or the paint will lift off the old paint. Never apply paint without first preparing the old painted surface following the paint manufacturer's recommendations.

Follow the paint manufacturer's recommendation for applying the paint. Humidity and weather will play a role in how and when the paint is applied. Several thin layers are better than one thick layer.

To determine the waterline, you will need to place the boat in water with a full load of fuel and gear. Mark the waterline and measure above the marked line 1" to 3" for placement of the tape line.

Make sure that there is enough paint left to cover areas that were not accessible, (slings, jack stands etc.) and paint accordingly. Follow the paint manufacturer's recommendation for do's and don'ts after the painting is complete

## 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.

Areas which have been torn or are affected by heavy abrasion require the damaged section to be replaced.

Please see your Boston Whaler dealer for this type of repair.

## Fiberglass and Non-Skid

To protect your deck and non-skid areas from the deteriorating affects of the sun, oxidation, water spots and pollution, use a good quality fiberglass and non-skid deck wax every two to three months.

When applied to your deck and non-skid areas, as recommended by the manufacturer, the wax forms a protective non-slick surface which will keep debris from sticking. Dirt, soot, bird droppings, and even fish blood will rinse right off.

# NOTICE

Never use abrasive cleaners, detergents or soft scrub type cleaners to wash your boats surfaces.

Never use abrasive pads, brushes or sponges to attempt to remove stubborn stains.

Never use strong solvents or detergents which contain chlorine.

Never use silver cleaners.

## **Stainless Steel**

The cleaner your stainless trim and fittings can be kept, the greater the assurance of optimum corrosion resistance. Without proper care even the best stainless steel will corrode.

Stainless steel is strong and corrosion resistant, but still requires maintenance to keep its appearance. Frequent routine cleaning of your stainless steel with a mild soap and water solution and coating with a good grade cleaning wax will help maintain the finish.

- Wash with mild soap and lukewarm water.
- Dry thoroughly.
- Apply cleaning wax with a soft, dry cloth.
- Allow wax to dry, then polish and buff.

Even the finest cleaning powders can scratch or burnish a mill-rolled surface. On polished finishes, rubbing or wiping should be done in the direction of the polish lines, not across them. Crevice corrosion, a brownish coloring which occurs where two pieces of stainless hardware meet is caused by impurities in water and air. It can be easily cleaned with a marine grade polish using a sponge, cloth or small bristled brush (for nooks and crannies).

### Seats

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

## Aluminum

Preventative maintenance is essential to life of the metals on your boat. The presence of salt particles and moisture is the major cause of white spots, pitting and corrosion.

The use of harsh chemicals can also cause deterioration. Manufacturers and applicators of protective coatings will not warrant protective coatings on metals in the marine environment. Proper owner maintenance is required to reduce deterioration which will result in most cases by failure to wash down and wipe dry after each use and/or the use of abrasive, acidic or other improper cleaners.

Wash completely using a soft cloth and mild detergent to remove salt particles. Hosing alone will not dislodge all particles. Do not allow soap to dry as it may stain coated surfaces. Make sure to wash and dry the full circumference of aluminum parts.

Apply an aluminum protectant at least twice a year, more frequently as conditions warrant. Neglect will cause pitting of the surface that cannot be reversed.

Inspect and repair or replace all damaged nylon bushings, washers or other hardware designed to prevent contact with dissimilar metals. Whenever electrical or electronic changes are made to the boat, a qualified marine technician should check aluminum parts for stray currents. Make sure all electronic equipment is properly grounded with adequate sized wire.

## Cushions



Solvents are flammable. Exercise proper care. Wear rubber gloves during all cleaning activity.

Use caution when cleaning around buttons, stitching and wooden or decorative trim as these solvents could seriously damage such areas.

Saltwater, salt residue, dirt, ultra-violet rays etc. will take their toll on vinyl products causing them to lose their luster and texture. To clean 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 (isopropyl alcohol). Rinse cleaned area with fresh water and dry with a clean, soft, lint-free cloth or towel.
- Seemingly permanent stains like ballpoint ink can be cleaned with active solvents such as nail polish remover when applied with a soft cloth or damp sponge and rubbed. Rinse with fresh water and dry with a clean, soft, lint-free cloth or towel.
- The vinyl material and finish have been tested to resist heavy abrasion. Complete cleaning instructions are included in the owner's packet.
- Cushions are not waterproof. They are constructed of open-cell foam and will absorb and hold water. Do not leave the cushions in standing water or exposed to heavy, prolonged rain.

If, in the event your cushions become waterlogged, remove the foam from the cushion, press as much water as you can from the foam and allow to air dry. To prevent mildew, keep the vinyl dry and make sure that moisture does not accumulate between the cushions.

## **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

WHALER

#### Instrumentation

When gauges are exposed to a saltwater environment, salt crystals may form on the bezel and plastic covers. Remove the salt crystals with a soft damp cloth. Clean with a mild household detergent or plastic cleaner.

Never use abrasives or rough, dirty cloths to clean plastic parts. A mild household detergent or plastic cleaner should be used. Wipe clean with a damp chamois.

FOR MORE INFORMATION, CONTACT MERCURY MARINE CUSTOMER SERVICE AT 920-929-5040.

## Canvas

# NOTICE

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

# NOTICE

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

To keep your canvas and metal parts in good working condition and in good appearance, you will need to keep them clean.

The fabric should be cleaned regularly before substances such as dirt, pollen, etc. are allowed to accumulate on and become embedded in the fabric. The canvas can be cleaned without being removed from the installation.

Chafing, fiber wear from dirt and grit and deterioration from ultraviolet light can cause your canvas to degrade over time.

#### Maintaining 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 the canvas to soak. Do not allow the soap to dry.
- Rinse thoroughly with fresh water.
- Let the canvas dry completely. Do not store any of the canvas pieces while wet.

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

#### **Stubborn Canvas Stains**

Soak fabric for approximately twenty minutes in a mild solution consisting of no more than 1/2cup (4 oz.) of bleach and 1/4 cup (2 oz.) of natural soap per gallon of lukewarm water (not to exceed  $100^{\circ}$  F /  $38^{\circ}$  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**

## NOTICE

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

Lubricate zippers and fasteners periodically with a clear silicone spray. In the absence of silicone spray, a wax candle can be used to lubricate the zipper track. Replace any missing fasteners or any fasteners showing signs of corrosion.



#### **Acrylic Windscreen**

## NOTICE

- Never use a dry cloth or duster or glass cleaning solutions on acrylic.
- Do not use solvents such as acetone, silicone spray, benzine, carbon tetrachloride, fire extinguisher fluid, dry cleaning fluid, lacquer thinner, glass cleaning solution or harsh detergents on acrylic.

Rinse windscreen thoroughly with clear water to remove any dust, dirt particles, salt water or environmental agents before applying cleaning products. Use your bare hand, with plenty of water, to feel and dislodge any stuck-on dirt or foreign particles. 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 (*Woolite*, *Joy*, *Palmolive*, etc.) and water solution. Rinse completely with cool water. Do not use detergents. Blot dry with a soft cloth or chamois to prevent water spots.

The use of a polycarbonate protective cleaner/ restorer is recommended to keep your acrylic scratch resistant, clean and minimize the deteriorating effects of sunlight.

#### **Powder Coat Touch-Up**

If it is necessary to apply touch-up paint on areas of the finish that have been scratched or damaged the powder material supplier should be contacted for their recommendation of the proper touch-up material to use. Single component acrylic enamel (spray enamel) touch-up paint is commonly used for repair of minor damage in the powder coated finish. In some cases a two-component catalyzed paint system may be required to achieve the desired repair. In all cases, perform a color and adhesion test in an inconspicuous area of the finish to assure compatibility before applying the paint to the damaged area.

#### **Touch-up Procedure**

- Clean surface of dirt, oil, grease, etc.
- Sand lightly with 400 grit wet/dry abrasive paper.
- Remove sanding dust with a lint-free cloth dampened with mineral spirits.
- Temperature of surface and paint must be at room temperature (between 70 to 90 degrees is ideal).
- Apply paint to minor scratches by spraying a small amount of paint into the container's cap. Using a small brush, carefully apply the paint sparingly to the properly prepared surface. Do not apply heavy coat all at once. Apply several light coats allowing the paint to dry until tacky between each coat.

# NOTICE

For the best results, use Orbit Industries touch-up paint, RAL 9010 Pure White.

Orbit Industries: 800-448-3885

# NOTICE

The visual, mechanical, chemical as well as corrosion protective and weather resistance properties of repaired areas are not equal to those of the original powder coating and are not suitable for long term performance.

## NOTICE

If painting over exposed or bare metal, a chemical pretreatment process and/or primer sealer is recommended. Follow manufacturer's recommendations.

## NOTICE

It is highly recommended that you do not penetrate the powder coating on your boat by securing equipment or other objects onto the coated surface. If necessary, contact the manufacturer for repair recommendations.

FOR MORE INFORMATION, CONTACT APEX POWDER COATING, INC. CUSTOMER SERVICE AT 864-288-2739.

WHALER

#### Long Term Storage and Winterization

## 

Never start or run an outboard (even momentarily) without having water circulating through cooling water intake holes in gear case. This prevents damage to water pump (running dry) or overheating of engine.

Long periods of storage, winter lay-up and/or nonuse, common to boats, create unique problems. When preparing to store a boat for extended periods of two months or more it is best to make sure that the boat and its systems are properly conditioned for such extended periods of non-usage. The guidelines presented on the following pages give basic instructions on winterizing your boat and boat systems. If inexperienced with the process of winterization it is best to hire the services of a professional. In addition, always consult the owner's manuals of the various systems and equipment on your boat for the manufacturer's recommendations on winterizing and long term storage.

#### Engine

Protecting the engine's vital moving parts from corrosion and rust caused by freezing of trapped water or excessive condensation due to climatic changes is very important. Freezing water in the engine can cause extensive damage to the internal moving parts. Internal engine parts can also be affected by rust due to lack of proper lubrication. To protect your engine:

- Replace engine oil and filter, running the engine to drain out as much old oil as possible.
- Flush engine with fresh water using flush muffs 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.

## NOTICE

Follow manufacturer's recommendations for long-term battery storage.

- Remove prop and grease shaft and threads.
- Grease all fittings with recommended lubricant.
- Lightly lubricate exterior of engine or polish with a good wax.
- Check engine mount bolts are torqued to 55 ft/lbs.
- Follow all recommendations in engine manufacturers operation manual.

#### **Fuel System**

Tank(s), hoses, and fuel pumps should be treated to help prevent the formation of varnish and gum. Temperature extremes will cause condensation to accumulate in an empty or partially filled fuel tank leading to fuel contamination and/or premature wear of your system. Fill the tank completely full and add fuel stabilizer and conditioner, following the manufacturer's recommendations, to provide fuel stability and corrosion protection.

#### After Long Term Storage

At least annually, inspect your fuel system 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 them 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 boat; 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 your boat.

#### **Electrical System**

Check all connections and tighten if necessary Apply an anti-corrosion spray on all connections.

#### **Batteries**

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 engine; or if equipped a generator and the generator is on, battery chargers. As the engine provides a charge output to the house bank through the automatic charging relays (ACRs), keep in mind the following recommendations:

#### Mixing Fresh, Used and Dead Batteries

## NOTICE

Do not use a suntop in lieu of a cover as damage and aging will occur.

A fresh battery delivers current to 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 drains energy from a 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 does not improve performance and may damage devices or cause battery leakage or rupture.

#### **Mixing Battery Brands**

Different battery brands may not have the same specifications like marine cranking amps (MCA) or cold cranking amps (CCA). This results in excessive heat, which may then cause damage, leakage or rupture in one of the batteries. Use the same type batteries throughout the boat.

#### Battery Charging System (Option)

Inspect the battery and charging system for loose connections or wiring before using. Remove batteries from the boat during cold weather or storage. Coat the terminals with dielectric grease. Keep batteries dry.

## 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 engine in an upright position to promote drainage.

#### Cover

When covering your boat it is best to use a frame of either aluminum or wood to keep the cover up. This allows air to circulate and discourages water from pooling on the cover. Vents along the entire length of the cover allow condensation to escape. Placing a series of foam pads between hull and cover also aids in circulation and reduces condensation. To help keep boat dry and mildew free, place commercial odor and moisture absorbing products under the cover.

### **Trailer Storage**

Repeatedly immersing the trailer in water during boat launching can cause a variety of problems. Water seeping into the wheel hubs will cause the grease to emulsify and can prematurely corrode the bearings. Check with the trailer manufacturer for scheduled maintenance of your trailer.

#### Environment

Antifreeze and other winterizing fluids can be toxic to aquatic life and cause harmful effects to plant life. Improper disposal of, or spillage of antifreeze and/ or any winterization fluids can cause environmental problems when allowed to empty into waterways or on the ground. Furthermore, it is illegal, punishable at minimum by fines. Used antifreeze or any winterization fluids, should not be disposed of into sanitary sewers or publicly owned treatment plants. Persons who have any questions regarding recycling antifreeze or other toxic fluids should write or call their state's EPA office.

#### Freshwater System (Option)

The following procedure is recommended to disinfect the freshwater system:

- 1. Flush entire system thoroughly by allowing potable water to flow through it.
- 2. Drain system completely.
- 3. Fill entire system with a disinfecting solution.



- 4. After disinfecting, drain entire system.
- 5. Flush entire system thoroughly several more times with potable water.
- 6. System is now ready for use; fill with potable water. Perform annually or before first use after being stored for an extended period of time.

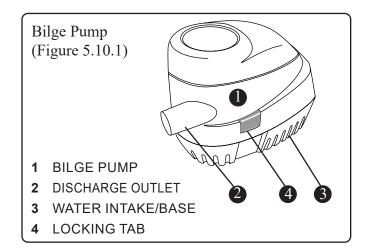
#### Raw Water System (Option)

Check fittings and hoses for system integrity to prevent leaks. The system should be run at least every other month to keep the pumps' impellers in good condition. When the boat is out of the water, clean the seacock intake(s) on the bottom aft of the hull to keep free of any debris or build-up.

#### **Bilge Pump**

Frequently inspect the area under the bilge pump's float switch to ensure it is free from debris and bilge oil. The float switch and pump strainer can be accessed by pressing the two locking tabs on the sides of the bilge pump (see Figure 5.11.1) and lifting off the cover. To clean, soak in heavyduty bilge cleaner for 10 minutes, agitating several times. Check for unrestricted operation of the float. Repeat cleaning procedure if necessary. Inspect the bilge pump water intakes and keep them free of dirt or material which may impede water flow. If water does not come out of discharge:

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



#### Livewell

Maintenance of the livewell system requires periodic inspection of the raw water intake strainer and all hose connections. Clean away debris and/or tighten hose connections as required.

#### **Trim Tabs**

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.

#### **Sacrificial Anodes**

Inspect the sacrificial anodes regularly and replace as necessary.

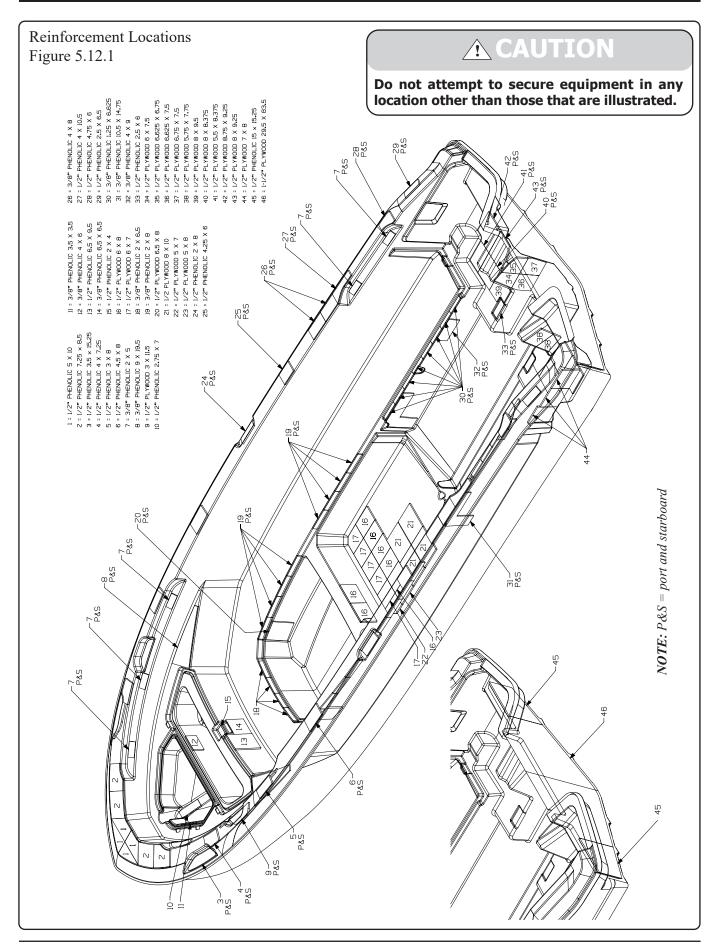
#### **Reinforcement Locations**

This vessel has been manufactured with reinforcement in various locations throughout the deck. To add equipment that requires penetrating the deck with fasteners, Figure 5.11.1 illustrates the size and type of reinforcement materials. The table below provides a description of the material and recommended fasteners to secure added equipment.

Reinforcement	Construction	Equipment Weight	Fastener Type*
Plywood	Standard boat building material	Light	Self-tapping screws
Trevira	Thick spun bound polyester fabric	Light	Sheet Metal screws
Aquaplas	High density plastic	Medium	Self-tapping screws
Phenolic	Fiberglass reinforced composite board	Heavy	Drill and tap

\* Drill and countersink a pilot hole to prevent damage to the gelcoat surface.





WHALER

THIS PAGE INTENTIONALLY LEFT BLANK

BOSTON WHALER