# BAYLINER

160/170/180/190 Bowriders

Owner's Manual Supplement

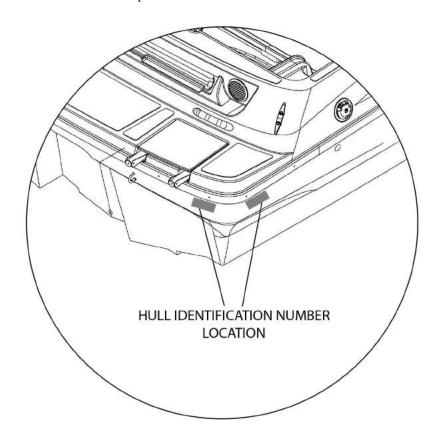
Engine Serial Number:	
Hull Identification Number:	

#### **Hull Identification Number**

The Hull Identification Number (HIN) will be located either on the starboard side of the transom or on the aft, starboard side of the gunwale and is your boat's most important identifying factor.

Record the HIN (and the engine serial number) in the space provided above.

This number must be included in all correspondence and orders.



#### © 2012 Bayliner Technical Publications. All rights reserved.

No part of this publication may be reproduced, stored in any retrieval system, or transmitted in any form by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of Bayliner.

Printed in the United States of America.

#### **General Notes**

The material in this document is for information only and is subject to change without notice. While reasonable efforts have been made in the preparation of this document to assure its accuracy, Bayliner assumes no liability resulting from errors or omissions in this document, or from the use of information contained herein.

Due to our commitment to product improvement, Bayliner reserves the right to make changes in the product design, specifications, and equipment at any time without notice or obligation. Illustrations and/or photos may show optional equipment.

All Bayliner products meet or exceed USCG (United States Coast Guard) and/or NMMA (National Marine Manufacturers Association) construction standards. Manufactured with 1,1,1 Trichloroethane, a substance which harms public health and environment during the manufacturing process by destroying ozone in the upper atmosphere.

#### **Proprietary Rights**

This document discloses subject matter in which Bayliner has proprietary rights. The information and design disclosed herein were originated by and are the property of Bayliner. Neither receipt nor possession thereof confers or transfers any right to reproduce, copy, alter or disclose the document or any part thereof, any information contained therein, or to construct boats or any item from it, except by written permission from or written agreement with Bayliner. This document is to be returned upon request to Bayliner.

# Contents

Chapter 1: Welcome Aboard!	1
Dimensions and Tank Capacities	1
Dealer Service	1
Warranty Information.	2
Boating Experience	2
Engine, Accessory Guidelines and Literature	3
Qualified Maintenance	
Special Care for Moored Boats	4
Safety Standards	5
Carbon Monoxide (CO)	6
CO Facts	6
Factors that Increase the Effects of CO Poisoning	6
Where and How CO Can Accumulate	7
How to Protect Yourself and Others From CO	7
CO Checklists	8
More Information	8
Warning Labels	9
Helm Warning Labels	12
Chapter 2: Locations	13
Exterior Views.	
Hull Views	
Deck Views	
Helm Views	
Component Locations	
Bilge Components	
Battery	
Port Hull Components	20
Chapter 3: Propulsion and Related Systems	21
Engine	
Gasoline Fuel System	
Fuel System Layouts	22
Chapter 4: Controls and Gauges	24
Steering	
Shift/Throttle Controls	
Power Trim and Tilt	
Gauges	
Chapter 5: Navigation Equipment	
Depth Finder (If Equipped)	
Chapter 6: Plumbing  Bilge Pump.	
Bilge Pump Testing	
Drain System	
Deck Drains	
Livewell System 170/180/190 BR	
	,

Chapter 7: Deck Equipment	29
Cleats and Bow/Stern Eyes	
Ski-Tow Pylon (If Equipped)	29
Ski-Tow Tower (If Equipped)	30
Canvas (If Equipped)	31
Bimini Top: Option A (If Equipped)	31
Bimini Top: Option B (If Equipped)	31
Convertible Top (If Equipped)	32
Bow Cover (If Equipped)	33
Canvas Care	34
Chapter 8: Entertainment System	35
Audio System (If Equipped)	35
Chapter 9: Convertible Seats	36
Sleeper Seats (If Equipped)	
Operating Positions	36
Lounge Positions	
Removable Fishing Seat (If Equipped)	37
Chapter 10: Lights	38
Care and Maintenance	
Interior and Exterior Lights	38
Navigation Lights	38
Chapter 11: Electrical System	39
12-Volt DC System	
Battery	40
Fuses and Circuit Breakers	40
12-Volt DC Accessory Outlet (If Equipped)	40
Alternator	40
DC Wiring Schematics	41
Electrical Routings	47
12-Volt DC Deck Harnesses	47
12-Volt DC Hull Harnesses	51
Battery Cable Routings	53

### **Hazard Boxes and Symbols**

The hazard boxes and symbols shown below are used throughout this supplement to call attention to potentially dangerous situations which could lead to either personal injury or product damage. Read all warnings carefully and follow all safety instructions.

# **DANGER**

DANGER - Immediate hazards which WILL result in severe personal injury or death if the warning is ignored.

# **! WARNING**

WARNING - Hazards or unsafe practices which MAY result in severe personal injury or death if the warning is ignored.

# **!** CAUTION

CAUTION - Hazards or unsafe practices which COULD result in minor injury, product or property damage if the warning is ignored.

### **NOTICE**

Information which is important to proper operation or maintenance, but is not hazard related.

# **Chapter 1: Welcome Aboard!**

This *Owner's Manual Supplement* provides specific information about your boat that is not covered in the *Sport Boat Owner's Manual*.

- The *Sport Boat Owner's Manual* contains general information about safe operating practices, general boating regulations, and general maintenance techniques.
- Before using your boat, study this *Owner's Manual Supplement*, the *Sport Boat Owner's Manual*, and all engine and accessory literature carefully. If similar instructions are found in more than one manual, always refer to the specific manufacturer's manual (such as the engine manual) for the most complete and accurate information.
- Keep this *Owner's Manual Supplement* and the *Sport Boat Owner's Manual* on your boat in a secure, yet readily available place.

### **Dimensions and Tank Capacities**

#### 160BR

	Bridge Clearance	Bridge Clearance with Tower			Draft (Maximum)	Fuel Capacity
16' 2"	3' 5"	N/A	7' 2"	1' 2"	2' 7"	18 Gallons

#### 170BR

	Bridge Clearance	Bridge Clearance with Tower			Draft (Maximum)	Fuel Capacity
17' 5"	3' 2"	6' 7"	7'	1' 6"	2' 11"	21 Gallons

#### 180BR

	Bridge Clearance	Bridge Clearance with Tower			Draft (Maximum)	Fuel Capacity
18'	3' 5"	7' 2"	7' 8"	1' 8"	2' 10"	28 Gallons

#### 190BR

	Bridge Clearance	Bridge Clearance with Tower			Draft (Maximum)	Fuel Capacity
19' 5"	3' 7"	7' 5"	7' 11"	1' 6"	3'	32 Gallons

#### **Dealer Service**

Your dealer is your key to service.

- Ask your dealer to explain all systems before taking delivery of your boat.
- Contact your dealer if you have any problems with your new boat.
- If your dealer cannot help, call our customer service hotline: 865-971-6311.
- Bayliner advises that all rigging, installation and prep work on any Bayliner product be done by an authorized dealer at the authorized dealer's location.
- Buy replacement parts from any authorized Bayliner dealer.
- You can access additional information by logging on to http://www.bayliner.com.



### **Warranty Information**

- Bayliner offers a Limited Warranty on each new Bayliner purchased through an authorized Bayliner dealer.
- A copy of the Limited Warranty was included in your owner's packet.
- If you did not get a copy of the Limited Warranty, please contact your Bayliner dealer or call 865-971-6311 for a copy.

### **Boating Experience**

# ! WARNING

#### **CONTROL HAZARD!**

An experienced operator MUST be in control of your boat at ALL times. Do NOT operate your boat while under the influence of alcohol or drugs.

If this is your first boat or if you are changing to a type of boat you are not familiar with, for your own comfort and safety, get handling and operating experience before assuming command of your boat.

Take one of the boating safety classes offered by the United States Power Squadrons® or the United States Coast Guard Auxiliary. For more course information, including dates and locations of upcoming classes, contact the organizations directly:

- U.S. Power Squadrons: 1-888-FOR-USPS (1-888-367-8777) or www.usps.org
- U.S. Coast Guard Auxiliary: 1-800-368-5647 or www.cgaux.org
- In Canada, for CPS courses: 1-888-CPS-BOAT

Outside the United States, your selling dealer, national sailing federation, or local boat club can advise you of local sea schools or competent instructors.



### **Engine, Accessory Guidelines and Literature**

### NOTICE

- Before starting or working on your engine(s), read the engine manual.
- Before using the accessories on your boat, read the accessory manuals.
- Before storing your boat, refer to your engine and accessory manuals for storage/winterization instructions.

### NOTICE

Certain modifications to your boat will result in cancellation of your warranty protection. Always check with your dealer before making any modifications.

- Your boat's engine and accessories were selected to provide optimum performance and service.
- Installing a different engine or adding accessories may affect your boat's running trim.
- If you choose to install a different engine or add accessories that may affect your boat's running trim, have a trained marine technician perform a safety inspection and handling test before using your boat again.
- The engine and accessories on your boat have their own manuals. Read these manuals before using the engines and accessories.

Unless noted otherwise, all engine and accessory literature referred to in this supplement is included in your owner's packet.

While the topics listed below may be included in this supplement and in the *Sport Boat Owner's Manual*, always refer to the engine manual first for specific information on these important subjects:

- Engine Break-in Procedure
- Engine Starting and Stopping
- Gear Shifting

- Fuel and Oil Recommendations
- Engine Maintenance
- Engine Storage/Winterization

### Propeller

# ! CAUTION

#### **ENGINE DAMAGE HAZARD!**

The factory standard propeller may not be the best for your particular boat and load conditions. Refer to the engine manual RPM ratings. The engine should reach, but not exceed its full rated RPM when full-throttle is applied. Immediately contact your local Bayliner dealer if:

- The engine cannot reach its full rated RPM when full-throttle is applied
- The engine exceeds its full rated RPM when full-throttle is applied
- Keep the propeller in good repair and at the correct pitch for your particular situation.
- A slightly bent or nicked propeller will adversely affect the performance of your boat.



### **Qualified Maintenance**

# ! WARNING

To maintain the safety of your boat, allow ONLY trained personnel to work on, or change, in any way, the following:

- Steering system
- · Environmental control system
- Propulsion system
- Electrical system
- Engine control system
- Navigation system
- Fuel system

Failure to maintain your boat's systems (listed in the warning above) as designed could violate the laws in your jurisdiction and could expose yourself and others to the danger of bodily injury or accidental death.

Follow the maintenance instructions in:

- This Owner's Manual Supplement
- The Sport Boat Owner's Manual
- The engine owner's manual
- · All accessory literature

### **Special Care for Moored Boats**

### **NOTICE**

- To help seal the hull bottom and reduce the chance of gel coat blistering while your boat is moored, apply an epoxy barrier coating.
- The barrier coating should be covered with several coats of anti-fouling paint.
- Many states regulate the chemical content of bottom paints in order to meet environmental standards. Check with your local dealer about recommended bottom paints, and about the laws in effect in your area.
- Whether moored in saltwater or freshwater, your boat will collect marine growth on its hull bottom.
- This will detract from your boat's beauty, greatly affect its performance, and may damage the gel coat.
- Periodically haul your boat out of the water and scrub the hull bottom with a bristle brush and a solution of soap and water.



# **A** DANGER

### **FALLING and ROTATING PROPELLER HAZARD!**

- NEVER allow anyone to ride on parts of your boat not designed for such use.
- Sitting on seat-backs, lounging on the forward deck, bow riding, gunwale riding or occupying the transom platform while underway is especially hazardous and WILL cause personal injury or death.

# **A** DANGER

# FALLING, ROTATING PROPELLER and CARBON MONOXIDE POISONING HAZARD!

- NEVER allow anyone to occupy, or hang from, the back deck or transom platform while the engine is running.
- Teak surfing, dragging or water skiing within 20 feet of a moving watercraft can be fatal.

# DANGER

#### PERSONAL SAFETY HAZARD!

- ALWAYS secure the anchor and other loose objects BEFORE getting underway.
- The anchor and other items that are not properly secured can come loose when your boat is moving and cause personal injury or death.

## **! WARNING**

A wide variety of components used on this vessel contain or emit chemicals known to the State of California to cause cancer and birth defects and other reproductive harm.

Examples include:

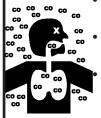
- Engine and generator exhaust
- Engine and generator fuel, and other liquids such as coolants and oil, and especially, used motor oil
- Cooking fuels
- · Cleaners, paints, and substances used for vessel repair
- Waste materials that result from wear of vessel components
- Lead from battery terminals and other sources such as ballast or fishing sinkers To Avoid Harm:
- Keep away from engine, generator, and cooking fuel exhaust fumes.
- Wash exposed skin thoroughly with soap and water after handling the substances above.
- Your boat's mechanical and electrical systems were designed to meet safety standards in effect at the time it was built.
- Some of these standards were mandated by law, and all of them were designed to insure your safety and the safety of other people, vessels and property.

Read this supplement, the *Sport Boat Owner's Manual*, the engine owner's manual, and all accessory instructions for important safety standards and hazard information.



### Carbon Monoxide (CO)

# **▲** DANGER



- Carbon monoxide gas (CO) is colorless, odorless, tasteless, and extremely dangerous.
- ALL engines, generators, and fuel burning appliances produce CO as exhaust.

Prolonged exposure to low concentrations or very quick exposure to high concentrations WILL cause BRAIN DAMAGE or DEATH.

 Teak surfing, dragging, or water skiing within 20 feet of a moving watercraft can be fatal.

#### **CO Facts**

- CO poisoning causes a significant number of boating deaths each year.
- Called the "silent killer", CO is an extremely toxic, colorless, odorless and tasteless gas.
- CO can harm or even kill you inside or outside your boat.
- CO can affect you whether you're underway, moored, or anchored.
- CO symptoms are similar to seasickness or alcohol intoxication.
- CO can make you sick in seconds. In high enough concentrations, even a few breaths can be fatal.
- Breathing CO blocks the ability of your blood to carry oxygen.
- The effects are cumulative. Even low levels of exposure can result in injury or death.

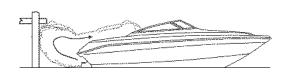
### Factors that Increase the Effects of CO Poisoning

- Age
- Smokers or people exposed to high concentrations of cigarette smoke
- Consumption of alcohol
- Lung disorders
- Heart problems
- Pregnancy

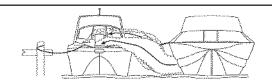


#### Where and How CO Can Accumulate

Stationary conditions that increase CO accumulations include:



**A.** Using engine, generator, or other fuel burning device when boat is moored in a confined space.



**B.** Mooring too close to another boat that is using its engine, generator, or other fuel burning device.

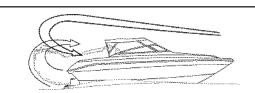
To correct stationary situations A and/or B:

- Close all windows, portlights and hatches.
- If possible, move your boat away from source of CO.

Running conditions that increase CO accumulations include:



**C.** Running boat with trim angle of bow too high.



**D.** Running boat without through ventilation (station wagon effect).

To correct running situations C and/or D:

- Trim bow down.
- Open windows and canvas.
- When possible, run boat so that prevailing winds help dissipate exhaust.

### **How to Protect Yourself and Others From CO**

- Know where and how CO may accumulate in and around your boat (see above).
- Always maintain fresh air circulation throughout your boat.
- Know where your engine and generator exhaust outlets are located and keep everyone away from these areas.
- Never sit on, or hang onto, the back deck or transom platform while the engine is running.
- Never enter the areas under transom platforms where exhaust outlets are located.
- Although CO can be present without the smell of exhaust fumes, if exhaust fumes are detected on your boat, take immediate action to dissipate these fumes.
- Treat symptoms of seasickness as possible CO poisoning. Get the person into fresh air immediately. Seek medical attention—unless you're sure it's not CO.
- **Install and maintain CO monitors inside your boat**. Never ignore any alarm. Replace monitors as recommended by the monitor manufacturer.
- Follow the checklists provided on the next page.
- Get a Vessel Safety Check.

For information on how to get a free VESSEL SAFETY CHECK, visit www.vesselsafetycheck.org or contact your local U.S. Coast Guard Auxiliary or U.S. Power Squadrons:

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



#### **CO Checklists**

Trip Checklist
<ul> <li>□ Make sure you know where the exhaust outlets are located on your boat.</li> <li>□ Educate all passengers about the symptoms of CO poisoning and where CO may accumulate.</li> <li>□ When docked, or rafted with another boat, be aware of exhaust emissions from the other boat.</li> <li>□ Listen for any change in exhaust sound, which could mean an exhaust component failure.</li> <li>□ Test the operation of each CO monitor by pressing the test button.</li> </ul>
Monthly Checklist
<ul> <li>□ Make sure all exhaust clamps are in place and secure.</li> <li>□ Look for exhaust leaking from exhaust system components. Signs include rust and/or black streaking, water leaks, or corroded or cracked fittings.</li> <li>□ Inspect rubber exhaust hoses for burned, cracked, or deteriorated sections. All rubber hoses should be pliable and free of kinks.</li> </ul>
Annual Checklist
Have a Trained Marine Technician:
<ul> <li>□ Replace exhaust hoses if cracking, charring, or deterioration is found.</li> <li>□ Ensure that your engines and generators are properly tuned, and well maintained.</li> <li>□ Inspect each water pump impeller and the water pump housing. Replace if worn. Make sure cooling systems are in working condition.</li> <li>□ Inspect all metallic exhaust components for cracking, rusting, leaking, or loosening. Make sure they check the cylinder head gasket, exhaust manifold, water injection elbow, and the threaded adapter nipple between the manifold and the elbow.</li> </ul>
□ Clean, inspect, and confirm proper operation of the generator cooling water anti-siphon valve (if equipped).

#### **More Information**

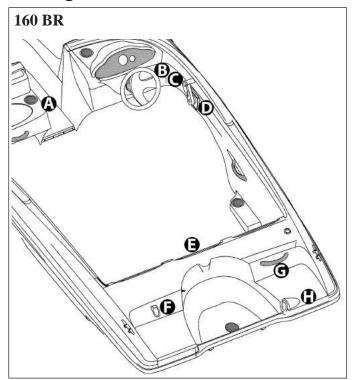
For more information about preventing carbon monoxide poisoning on recreational boats and other boating safety tips, contact:

United States Coast Guard Office of Boating Safety (G-OPB-3) 2100 Second Street SW Washington, DC 20593 www.uscgboating.org 1-800-368-5647

National Marine Manufacturers Association (NMMA) 200 East Randolph Drive Suite 5100 Chicago, IL 60601-9301 www.nmma.org 312-946-6200 American Boat & Yacht Council, Inc. (ABYC) 613 Third Street Suite 10 Annapolis, MD 21403 www.abycinc.org 410-990-4460



### Warning Labels





THE UNITED STATES COAST GUARD (USCG)
RECOMMENDS THAT ALL
OCCUPANTS WEAR APPROVED PERSONAL
FLOATATION DEVICES (PFDs).

#### **DANGER**

PROPELLER(S) MAY CAUSE SERIOUS INJURY OR DEATH

Shut-off engine(s) when near swimmers, prior to using sunpads, swim platform, or boarding ladder.

#### **! WARNING**

AVOID COLLISIONS-

- Maintain lookout as required by the "Rules of the Road"
- Visibility can be limited by high boat trim angles, persons, gear, weather and atmospheric conditions.
- At all times proceed at a safe speed, in order to take proper and effective action to avoid hazardous conditions.

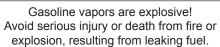
SUCH ISSUES ARE UNDER THE CONTROL OF THE OPERATOR!

AVOID SKI LINES AND TOW ROPES-Ski lines and tow ropes can backlash into the cockpit when released.

#### **! CAUTION**

AVOID INHALATION OF TOXIC FUMES-If fire extinguishing system discharge occurs, ventilate space before entering.

#### **! WARNING**



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).

Open flame appliances can ignite gasoline vapors causing death or injuries from the fire or explosion. Turn off all open flame appliances when refueling.





### **↑** WARNING

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

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

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

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

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

#### **↑** DANGER



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

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

Carbon monoxide will be around the back of the boat when engines or generators are running.

Move to fresh air, if you feel nausea, headache, dizziness, or drowsiness.



O

### MAXIMUM CAPACITIES

### 5 PERSONS OR 650 LBS

1260 LBS. PERSONS, MOTOR GEAR 100 H.P. MOTOR

THIS BOAT COMPLIES WITH U.S. COAST GUARD SAFETY STANDARDS IN EFFECT ON THE DATE OF CERTIFICATION MANUFACTURER: BAYLINER MARINE LAKE FOREST, IL MODEL: 160 BR

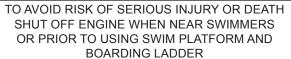
DESIGN COMPLIANCE WITH NMMA REQUIREMENTS IS VERIFIED



NATIONAL MARINE MANUFACTURERS ASSN

MEETS U.S. EPA EVAP

#### **▲** DANGER





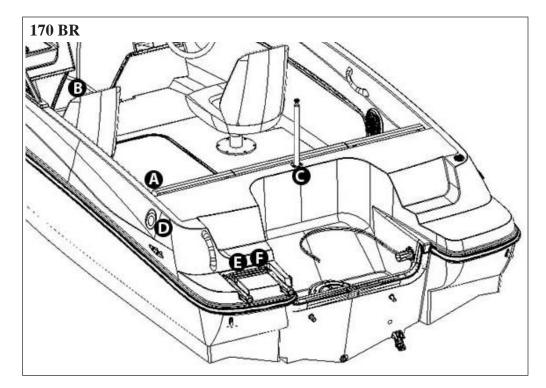
STANDARDS USING CERTIFIED COMPONENTS Bayliner Marine, Lake Forest, IL



#### **! WARNING**

LEAKING FUEL IS A FIRE AND EXPLOSION HAZARD. INSPECT SYSTEM REGULARLY. EXAMINE FUEL TANKS FOR LEAKS OR CORROSION AT LEAST ANNUALLY.





A

#### **! WARNING**

LEAKING FUEL IS A FIRE AND EXPLOSION HAZARD. INSPECT SYSTEM REGULARLY. EXAMINE FUEL TANKS FOR LEAKS OR CORROSION AT LEAST ANNUALLY.

₿

#### **!** CAUTION

IF SWITCH IS TURNED OFF WHILE ENGINE IS RUNNING ALTERNATOR WILL BE DAMAGED.

0

#### ! WARNING

USE CAUTION WITH SKIER IN TOW AS TOW ROPE MAY BACKLASH INTO COCKPIT WHEN RELEASED 0

#### ! WARNING

Gasoline vapors are explosive! 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).

Open flame appliances can ignite gasoline vapors causing death or injuries from the fire or explosion. Turn off all open flame appliances when refueling.

**(3**)

#### **A** DANGER

TO AVOID RISK OF SERIOUS INJURY OR DEATH SHUT OFF ENGINE WHEN NEAR SWIMMERS OR PRIOR TO USING SWIM PLATFORM AND BOARDING LADDER

G

#### **▲** DANGER

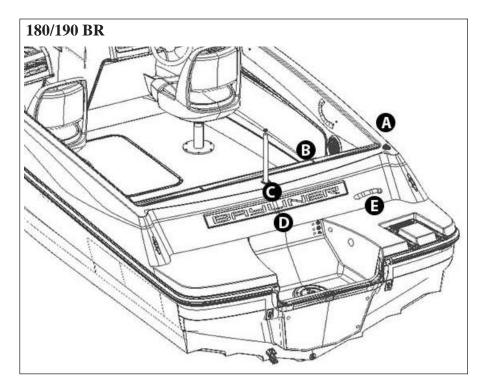
Carbon monoxide (CO) can cause brain damage or death.

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

Carbon monoxide will be around the back of the

boat when engines or generators are running. Move to fresh air, if you feel nausea, headache, dizziness, or drowsiness.





A

#### **! WARNING**

Gasoline vapors are explosive! 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).

Open flame appliances can ignite gasoline vapors causing death or injuries from the fire or explosion. Turn off all open flame appliances when refueling.

**3** 

#### DANGER

TO AVOID RISK OF SERIOUS INJURY OR DEATH SHUT OFF ENGINE WHEN NEAR SWIMMERS OR PRIOR TO USING SWIM PLATFORM AND BOARDING LADDER

**B** 

#### **! WARNING**

LEAKING FUEL IS A FIRE AND EXPLOSION HAZARD. INSPECT SYSTEM REGULARLY. EXAMINE FUEL TANKS FOR LEAKS OR CORROSION AT LEAST ANNUALLY.



#### ! WARNING

USE CAUTION WITH SKIER IN TOW AS TOW ROPE MAY BACKLASH INTO COCKPIT WHEN RELEASED

O

#### **↑** DANGER

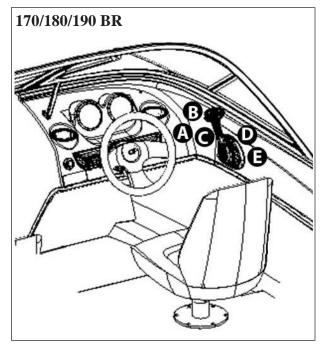
Carbon monoxide (CO) can cause brain damage or death.

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

Carbon monoxide will be around the back of the boat when engines or generators are running. Move to fresh air, if you feel nausea, headache, dizziness, or drowsiness.



### **Helm Warning Labels**



#### Fish and Ski Option

#### **! WARNING**

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

#### 



A

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

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

Signs of carbon monoxide poisoning include

nausea, headache, dizziness, drowsiness, and lack of consciousness.

Get fresh air if anyone shows signs of carbon

monoxide poisoning.

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

#### 170 BR

# MAXIMUM CAPACITIES



PERSONS OR 860 LBS

LBS. PERSONS, MOTOR GEAR H.P. MOTOR

THIS BOAT COMPLIES WITH U.S. COAST GUARD SAFETY STANDARDS IN EFFECT ON THE DATE OF CERTIFICATION MANUFACTURER: BAYLINER MARINE LAKE FOREST, IL MODEL: 170 BR

DESIGN COMPLIANCE WITH NMMA REQUIREMENTS IS VERIFIED. MANUFACTURER RESPONSIBLE FOR PRODUCTION CONTROL.



NAL MARINE MANUFACTURERS ASSN

#### 180 BR

### MAXIMUM CAPACITIES



PERSONS OR 1087 LBS

LBS. PERSONS, MOTOR GEAR H.P. MOTOR

THIS BOAT COMPLIES WITH U.S. COAST GUARD SAFETY STANDARDS IN EFFECT ON THE DATE OF CERTIFICATION MANUFACTURER: BAYLINER MARINE LAKE FOREST, IL MODEL: 180 BR

DESIGN COMPLIANCE WITH NMMA REQUIREMENTS IS VERIFIED MANUFACTURER RESPONSIBLE FOR PRODUCTION CONTROL.



NATIONAL MARINE MANUFACTURERS ASSN

#### 190 BR

### MAXIMUM CAPACITIES



PERSONS OR 1087 LBS

LBS. PERSONS, MOTOR GEAR H.P. MOTOR

THIS BOAT COMPLIES WITH U.S. COAST GUARD SAFETY STANDARDS IN EFFECT ON THE DATE OF CERTIFICATION MANUFACTURER: BAYLINER MARINE LAKE FOREST, IL MODEL: 190 BR

DESIGN COMPLIANCE WITH NMMA REQUIREMENTS IS VERIFIED MANUFACTURER RESPONSIBLE FOR PRODUCTION CONTROL.



NATIONAL MARINE MANUFACTURERS ASSN

0

THE UNITED STATES COAST GUARD (USCG)
RECOMMENDS THAT ALL
OCCUPANTS WEAR APPROVED PERSONAL
FLOATATION DEVICES (PFDs).

#### **DANGER**

PROPELLER(S) MAY CAUSE SERIOUS INJURY OR DEATH

Shut-off engine(s) when near swimmers, prior to using sunpads, swim platform, or boarding ladder.

#### ! WARNING

AVOID COLLISIONS-

- Maintain lookout as required by the "Rules of the Road"
- Visibility can be limited by high boat trim angles, persons, gear, weather and atmospheric conditions.
- At all times proceed at a safe speed, in order to take proper and effective action to avoid hazardous conditions.

SUCH ISSUES ARE UNDER THE CONTROL OF THE OPERATOR!

AVOID SKI LINES AND TOW ROPES-Ski lines and tow ropes can backlash into the cockpit when released.

#### ! CAUTION

AVOID INHALATION OF TOXIC FUMES-If fire extinguishing system discharge occurs, ventilate space before entering.



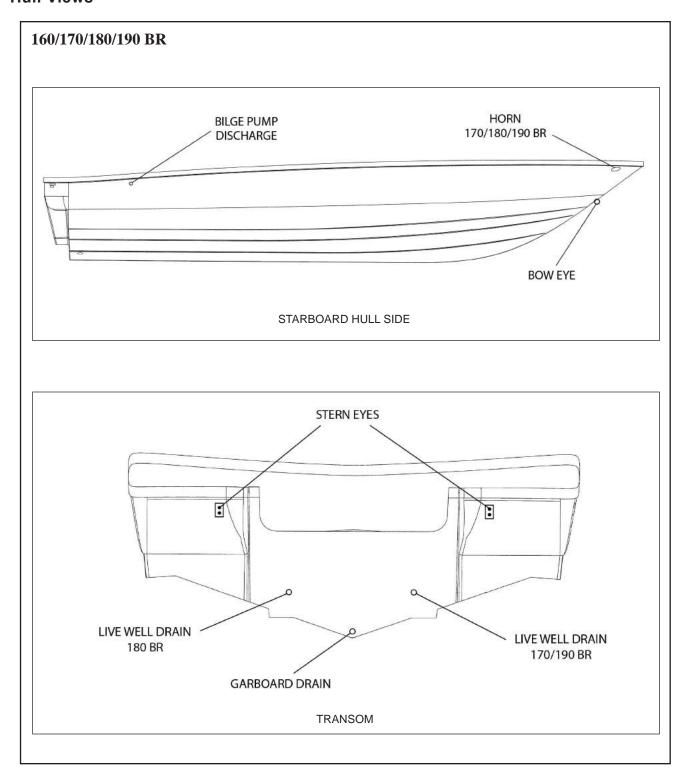
MEETS U.S. EPA EVAP STANDARDS USING CERTIFIED COMPONENTS Bayliner Marine, Lake Forest, IL



# **Chapter 2: Locations**

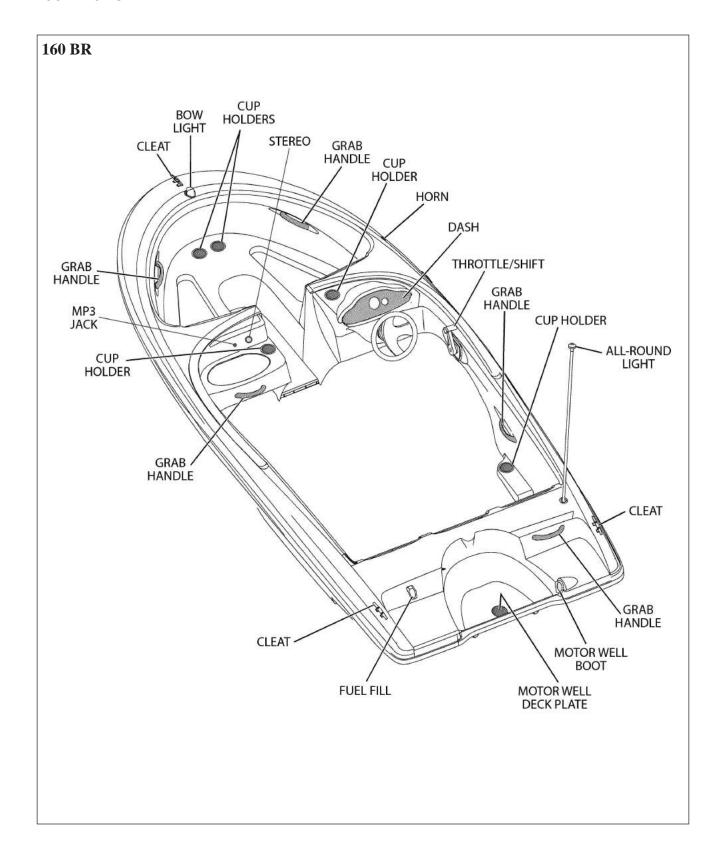
### **Exterior Views**

### **Hull Views**

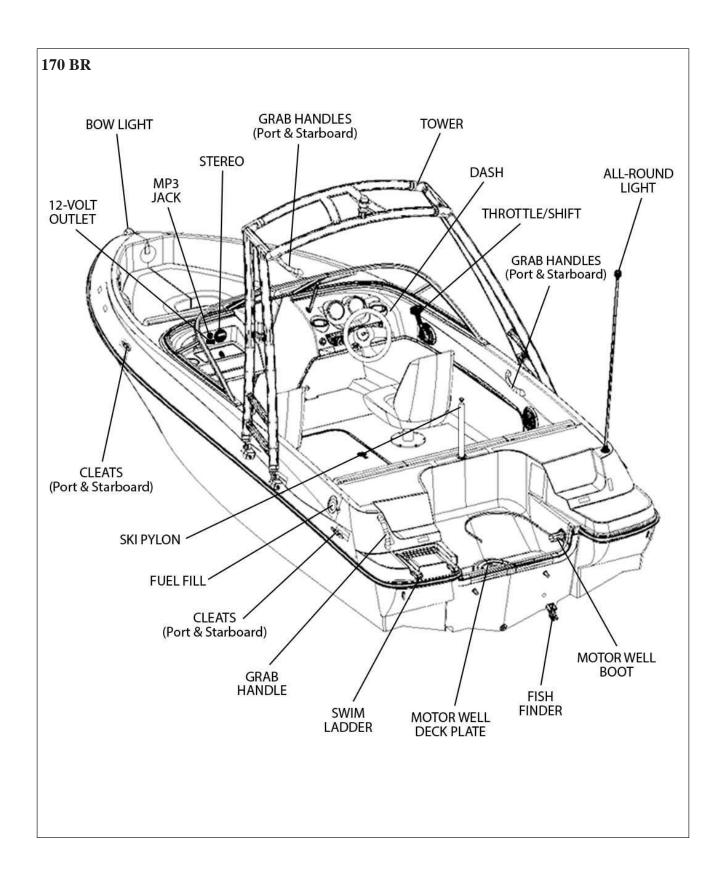




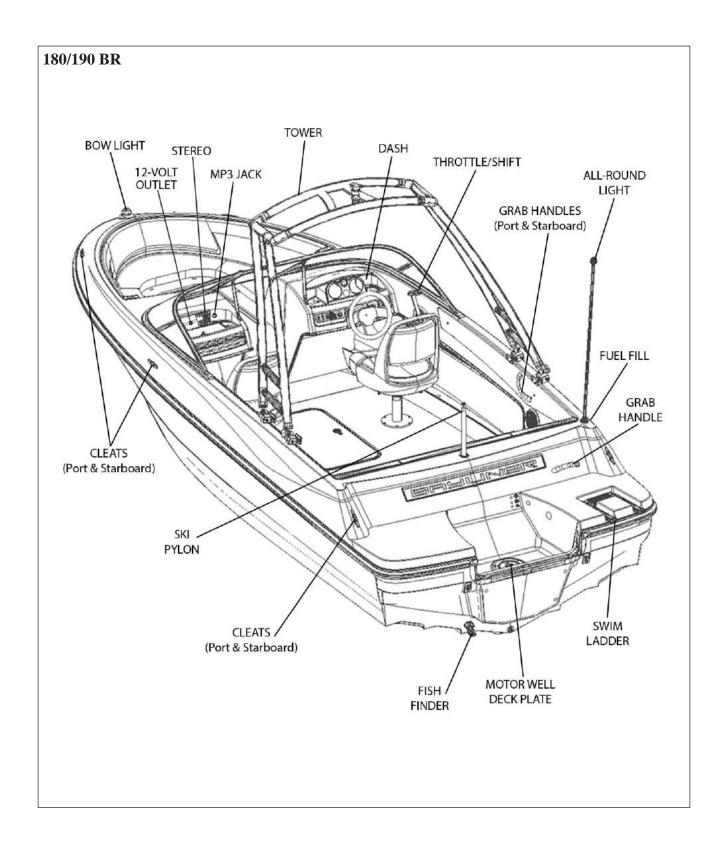
### **Deck Views**



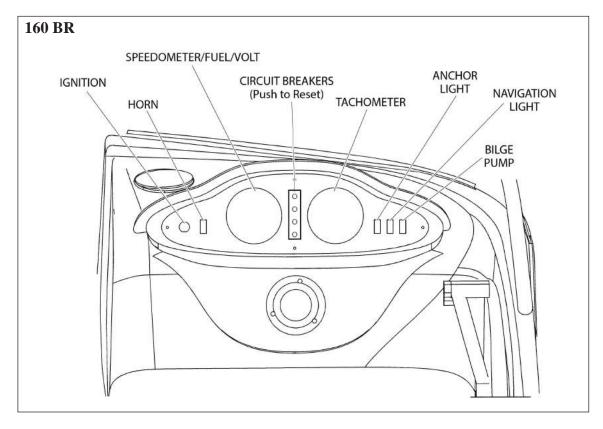


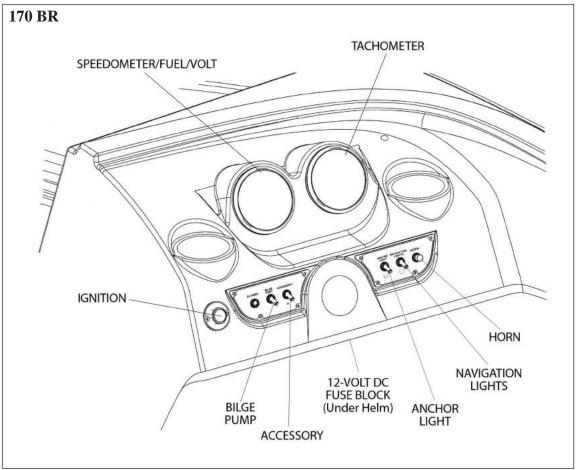




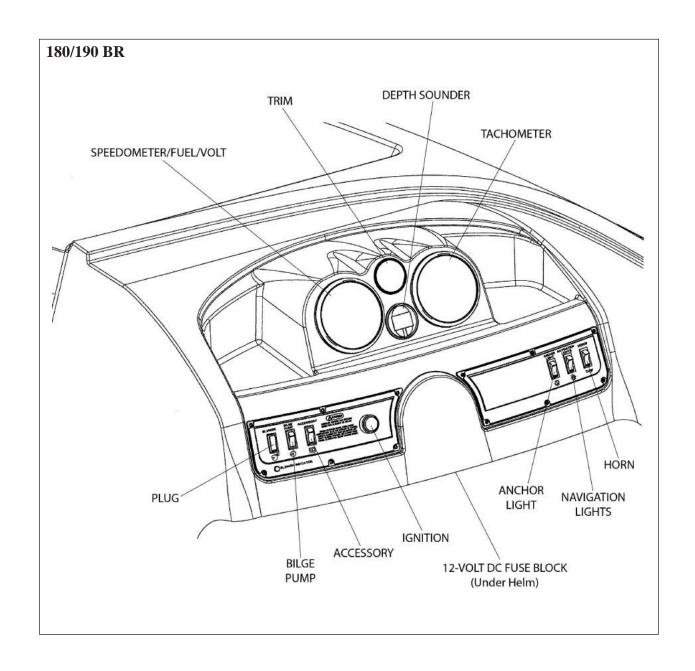


### **Helm Views**



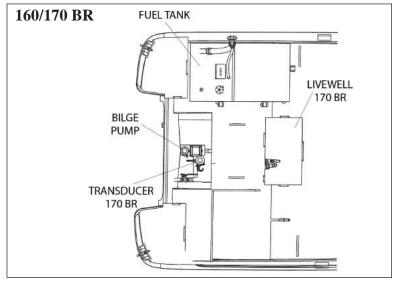


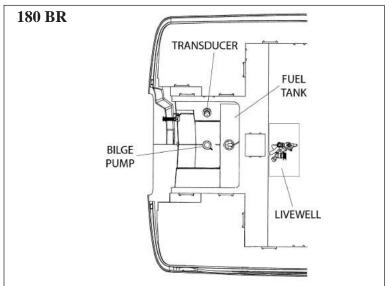


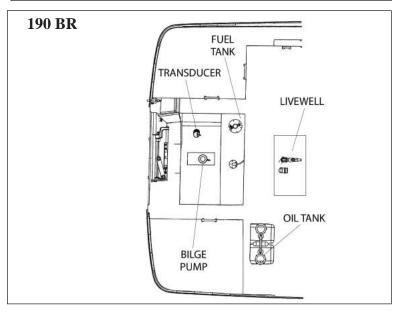




# **Component Locations Bilge Components**

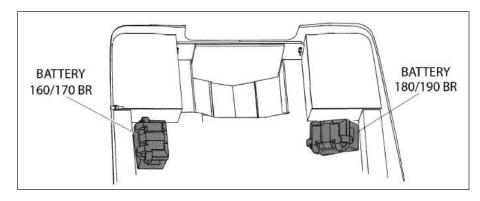


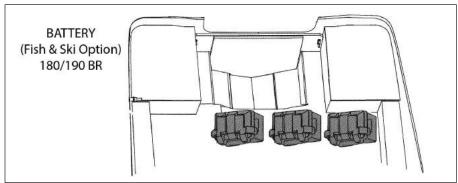




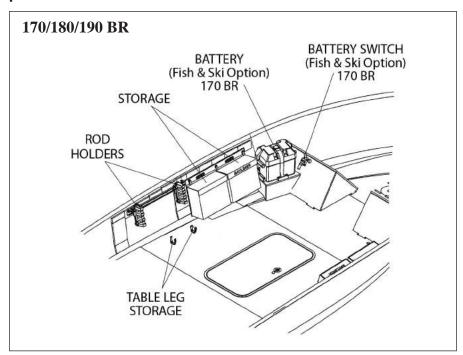
### **Battery**

- Located as shown on either the starboard or the port side of the aft cockpit storage compartment.
- Access is through the opening in the aft cockpit seat.





### **Port Hull Components**



# **Chapter 3: Propulsion and Related Systems**

### **Engine**

### **NOTICE**

Read the engine manual BEFORE starting or working on your engine.

While the topics listed below may be included in this supplement and in the *Sport Boat Owner's Manual*, always refer to the engine manual first for specific information on these important subjects:

- Engine Break-in Procedure
- Engine Starting and Stopping
- · Gear Shifting
- Fuel and Oil Recommendations
- Engine Maintenance
- Engine Storage/Winterization

### **Gasoline Fuel System**

The gasoline fuel system consists of a fuel tank, fuel tank vent, anti-siphon valve, engine fuel supply line and fuel fill. Your vessel contains a new EPA certified fuel system. The system prevents spit back when filling the tank and lowers the out gassing emissions through the tank and vent.

# ! W

### **WARNING**

### FIRE, EXPLOSION, and OPEN FLAME HAZARD!

- Thoroughly inspect the fuel system for leaks every time you take on fuel.
- Follow both the *Sport Boat Owner's Manual* fueling instructions and the engine operation manual fuel recommendations.

# ! CAUTION

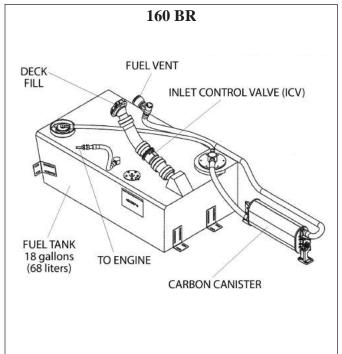
Avoid the storage or handling of gear near the fuel lines, fittings and tank.

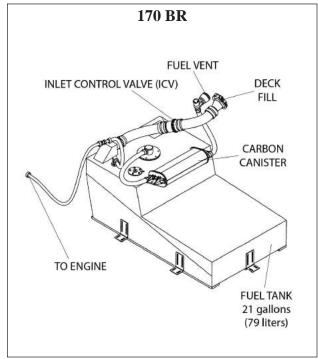
### NOTICE

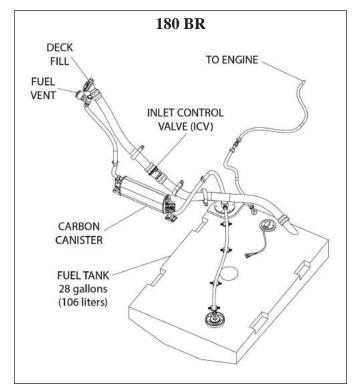
Carefully read the fuel section of both the *Sport Boat Owner's Manual* and the engine operation manual, paying special attention to the subject of fuel recommendations.

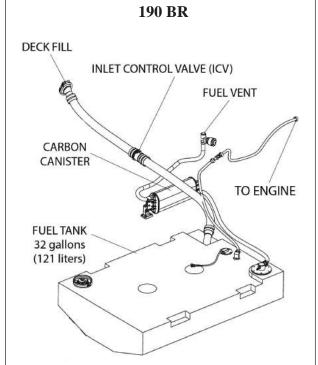


### **Fuel System Layouts**









#### Fuel Tank Vent and Fuel Fill

Your boat is equipped with a fuel tank vent for each tank which serves as a pressure/vacuum release. Periodically check the vents to assure that they are not clogged.

The fuel fill deck fitting is marked GAS. If you have problems filling the fuel tank, see if the fuel fill hose or fuel tank vent hose is kinked or collapsed. If there are no visible signs of a problem, contact your local dealer.

### Anti-Siphon Valve

### NOTICE

- If an engine running problem is diagnosed as fuel starvation, check the anti-siphon valve.
- If the valve is stuck or clogged, turn Off the engine and then repair or replace the valve.
- Except in an emergency, NEVER run the engine without the anti-siphon valve.

The anti-siphon valve is a vital fuel system part.

If the fuel line ruptures, this valve prevents the siphoning of fuel from the tank. The valve is located on the fuel tank, where the fuel feed line attaches to the tank. The valve is spring loaded and is opened by the fuel pump vacuum.

### Carbon Canister Venting System

Your boat is equipped with a carbon canister. This canister filters all the hydrocarbons that pass through the canister. If the carbon canister is mounted in the engine compartment, the canister will have a heat shield. Periodically check that the shield has not become damaged.

#### Fuel Recommendations

The quality of the fuel is very important for satisfactory engine performance and long engine life. Care should be taken to select fuels having the octane rating recommended for the engine, as indicated in the owner's manual, for proper operation. Fuel should be clean and free of contamination. Your fuel tanks should be kept full of fuel whenever possible. This will reduce the amount of water condensation and reduce the possibility of contamination.

When filling the tank, do NOT attempt to top off the tank. When the fill nozzle shuts off, the tank is full. Continuing to fill past the fuel fill shut off will cause the system to spit back.



# **Chapter 4: Controls and Gauges**

### **Steering**

- Boat steering is not self-centering.
- Your boat features either mechanical rack-and-pinion steering or manual hydraulic steering.
- Check the fluid level in the hydraulic steering reservoir every time you use your boat.
- Refer to the engine manual for steering system details.

#### **Shift/Throttle Controls**

# ! WARNING

### LOSS OF CONTROL HAZARD!

Improper maintenance of the shift/throttle hardware may cause a sudden loss of control.

Read all of the information about the shift/throttle controls in the shift/throttle manual, the engine operation manual, and the *Sport Boat Owner's Manual*.

### **Power Trim and Tilt**

- The outboard engine on your boat is equipped with power trim and tilt.
- Trim and tilt instructions are provided in the engine operation manual and the shift/throttle manual.

### Gauges

### Cleaning the Gauges

# ! CAUTION

#### PRODUCT or PROPERTY DAMAGE HAZARD!

- Use only mild soap and water to clean the gauge lenses and bezels.
- Use of other cleaners, including common window cleaning solutions, may cause the lenses to crack.
- Lenses cracked in this manner will NOT be covered by our warranty.

### Gauge Fogging

- Moisture may occasionally find its way into the gauges causing lens fogging.
- Turning On the gauge lights will help dry the lenses.
- Fogging will not harm the gauges.

### Radio Transmission Interference

VHF or other radio transmissions may cause brief erratic readings on the tachometer. This will not damage the tachometer gauge or affect its accuracy when not transmitting.

### Fuel Gauge

It is normal for the pointer on your fuel gauge to bounce as fuel sloshes back and forth in the fuel tank.



# **Chapter 5: Navigation Equipment**

Read the manuals for all navigation and communication equipment before using these systems.

### **Depth Finder (If Equipped)**

# ! WARNING

- Do NOT use the depth finder as a navigational aid to prevent collision, grounding, boat damage or personal injury.
- When your boat is moving, submerged objects will NOT be seen until they are already under your boat.
- Bottom depths may change too quickly to allow time for your boat to react.
- If you suspect shallow water or submerged objects, run your boat at very slow speeds.



# **Chapter 6: Plumbing**

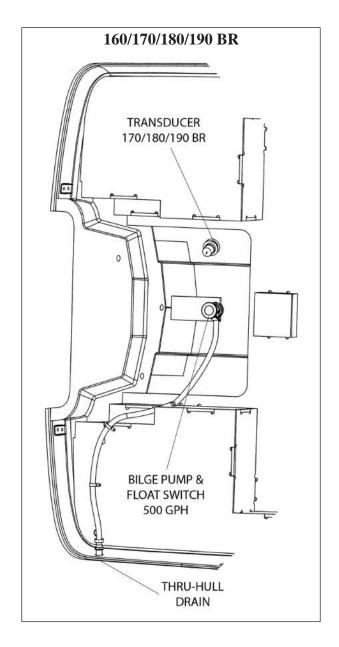
### **Bilge Pump**

Your boat has a bilge pump for pumping water out of the bilge.

# **NOTICE**

Discharge of oil, oil waste, or fuel into navigable waters is prohibited by law. Violators are subject to legal action by the local authorities.

- The pump's built-in float switch turns On the bilge pump if bilge water rises above a preset level. Small amounts of water in the bilge are normal.
- You can also turn On the bilge pump using the switch at the helm.
- The bilge pump is wired directly to the battery. Unless the battery is dead, the bilge pump should work even when your boat is unattended.

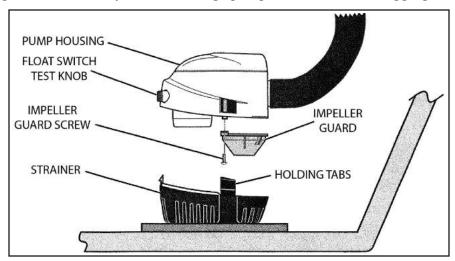




### **Bilge Pump Testing**

The bilge pump is vital to the safety of your boat. Test the bilge pump often as follows:

- 1. Turn On the bilge pump switch at the helm.
- 2. Make sure that water in the bilge is pumped overboard.
- 3. If there is water in the bilge and the pump motor is running but not pumping water, inspect the discharge hose for a kink or collapsed area.
- 4. If the discharge hose looks okay, check the bilge pump and strainer for clogging debris.



# **Drain System**

### **Deck Drains**

Water on the deck is drained overboard through the deck drains. Keep the deck drains free of debris.



### Livewell System 170/180/190 BR

## ! WARNING

### FLOODING and SWAMPING HAZARD!

- Close the seacocks when leaving your boat unattended for any length of time.
- If a seacock is left open, a hose failure could flood the bilge, swamp the batteries, and even sink your boat.
- BEFORE using any system that has a seacock, make sure that the system's seacock is Open.
- Inspect and lubricate all seacocks annually.

### Filling and Using the Livewell

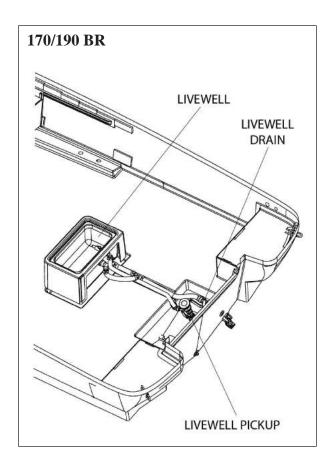
- 1. Insert the plug into the drain fitting at the bottom of the tank.
- 2. Open the seacock.
- 3. On the switch panel, turn On the Accessory switch.

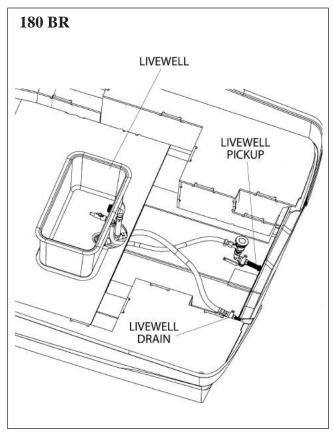
The tank should now be filling with water. If water is not pumping into the tank, possible causes are:

- A collapsed hose or clogging debris in the system.
- The seawater intake seacock is Closed.
- The livewell fuse is blown.

To Drain the Livewell

Remove the plug to drain the livewell.





# **Chapter 7: Deck Equipment**

### Cleats and Bow/Stern Eyes

# **! WARNING**

# PERSONAL INJURY and/or PRODUCT or PROPERTY DAMAGE HAZARD!

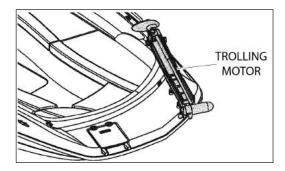
NEVER lift your boat using the bow/stern eyes or the cleats.

Read the section on towing in the Sport Boat Owner's Manual before:

- Towing anything behind your boat
- · Being towed by another vessel

### **Bow Mount Trolling Motor (If Equipped)**

Read the manufacturer's instruction manual before using the trolling motor.



### **Ski-Tow Pylon (If Equipped)**

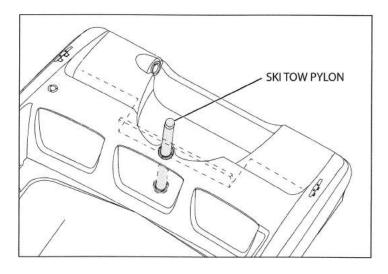
## ! WARNING

#### PERSONAL INJURY and/or PRODUCT or PROPERTY DAMAGE HAZARD!

Failure to follow these guidelines can result in injury or death:

- ONLY tow water skis, wakeboards, or recreational towables.
- Do NOT tow parasails, kites, or other boats.
- Do NOT tow more than two persons at one time.
- Use caution with skier in tow as tow rope may snap back into cockpit when released.

Before using the ski-tow pylon, read the Waterski Safety Guidelines.





### **Ski-Tow Tower (If Equipped)**

# ! WARNING

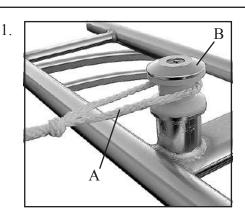
### PERSONAL INJURY and/or PRODUCT or PROPERTY DAMAGE HAZARD!

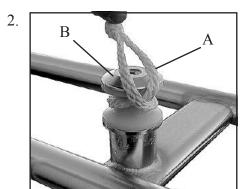
Failure to follow these guidelines can result in injury or death:

- Read ALL warning labels on ski-tow tower.
- BEFORE each use of the boat and BEFORE each use of the folding ski-tow tower, make sure the lock-down bolts are tightened firmly.
- ONLY tow water skis, wakeboards, or kneeboards.
- Do NOT exceed the MAXIMUM tow weight of 400 pounds.
- Do NOT tow parasails, kites, tubes, rafts or other boats.
- Do NOT tow more than one person at a time.
- Do NOT climb on, sit on, stand on, jump off or dive off tower.
- NEVER allow passengers to sit behind tow rope attachment point.
- Use caution with skier in tow as tow rope may snap back into cockpit when released.
- NEVER allow loose tow rope ends to dangle off tower.
- When tower is up, watch for low obstacles such as tree limbs, bridges, or power lines.

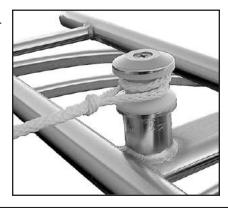
### Attaching the Ski-Tow Rope

- 1. Place the ski-tow rope's loop (A) over the ski-tow pylon (B).
- 2. Put a twist in the ski-tow rope's loop (A) and slide the loop over the ski-tow pylon (B) again.
- 3. Pull firmly on the ski-tow rope to tighten.





3.



### **Canvas (If Equipped)**

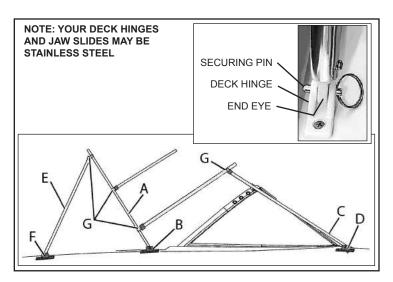
# ! CAUTION

#### PRODUCT or PROPERTY DAMAGE HAZARD!

Take down and securely stow ALL canvas and vinyl BEFORE your boat is transported by road.

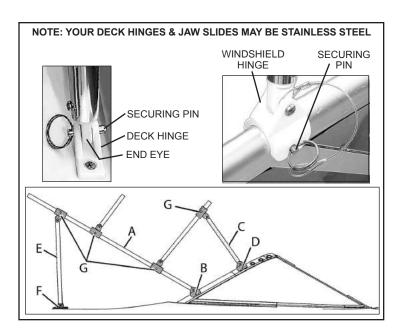
#### **Bimini Top: Option A (If Equipped)**

- 1. Insert the end eyes of the main bow (A) into the middle deck hinges (B) and insert the securing pins.
- 2. Unfold the canvas and insert the end eyes of the forward braces (C) into the forward deck hinges (D) and insert the securing pins.
- 3. Insert the end eyes of the aft braces (E) into the aft deck hinges (F) and insert the securing pins.
- The jaw slides (G) should not need to be adjusted.
- If you decide to adjust the jaw slide positions, obtain the correct measurements from your selling dealer.



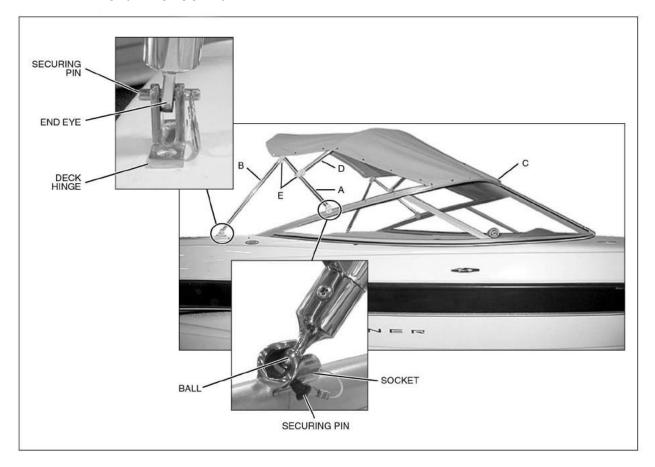
### **Bimini Top: Option B (If Equipped)**

- 1. Slide the windshield hinges of the main bow (A) over the aft pre-drilled holes (B) in the side windshield frames and insert the securing pins.
- 2. Unfold the canvas and slide the windshield hinges of the forward braces (C) over the forward pre-drilled holes (D) in the side windshield frames and insert the securing pins.
- 3. Insert the end eyes of the aft braces (E) into the deck hinges (F) and insert the securing pins.
- The jaw slides (G) should not need to be adjusted.
- If you decide to adjust the jaw slide positions, obtain the correct measurements from your selling dealer.





#### **Convertible Top (If Equipped)**



- 1. Insert the balls of the main bow (A) into the sockets on the windshield frame and secure them with the pins.
- 2. Insert the end eyes of the aft braces (B) into the deck hinges and secure them with the pins.
- 3. Unfold the canvas top and snap the front edge of the top (C) to the windshield frame.
- 4. Align the secondary bow (D) with the center seam of the canvas by loosening or tightening the top straps.
- The jaw slides (E) should not need to be adjusted.
- If you decide to adjust the jaw slide position, get the correct measurements from your selling dealer.

### **Bow Cover (If Equipped)**

- 1. Snap the two forward snaps (A) to the deck.
- 2. Snap the bow cover to the entire port side.



- 3. On the starboard side, only snap the forward half of the bow cover to the deck.
- 4. Insert the adjustable, center support pole (B) into both the bow cover and the table base (C).
- 5. Adjust the support pole so that it is just high enough to stay inserted in the bow cover.



- 6. Snap the rest of the bow cover to the deck.
- 7. Adjust the support pole to take any slack out of the bow cover.



#### **Canvas Care**

- After each use, especially in saltwater, rinse the canvas with cold freshwater.
- Before stowing, let the canvas air-dry completely.
- The canvas can be rolled or folded for stowage.

#### Cleaning the Canvas

## ! CAUTION

NEVER use detergents when washing the canvas. Detergents can destroy the water repellency, and mildew/UV resistant finish of your canvas.

Regularly clean the canvas to prevent dirt, pollen, etc. from embedding in the fabric. Generally, it is easiest to wash the canvas while it is installed on your boat.

- 1. Use a soft-bristled brush to remove all dust and loose dirt.
- 2. Hose down the canvas with freshwater.
- 3. Gently wash the canvas with a solution of lukewarm water (no more than 100° F) and non-detergent mild soap, such as Ivory Snow®, Dreft®, or Woolite®.
- 4. Rinse thoroughly to remove the soap.
- 5. Before stowing, let the canvas dry completely.

#### Stubborn Stains

## **!** CAUTION

Soaking in bleach solutions may remove the waterproof finish of the fabric and may also decrease the life of the polyester thread used in the canvas. If needed, a water repellent treatment should be reapplied to your canvas. Ask your dealer about the treatments available for your boat's canvas.

Some stubborn stains may resist normal washing and you can try the methods below. However, these methods may remove the waterproof finish of the fabric and may also decrease the life of the polyester thread used in the canvas. Reapply a water repellent treatment as needed.

#### Method 1:

- 1. Add 1/8 cup (1 oz.) of non-chlorine bleach to one gallon of water and mix thoroughly.
- 2. Thoroughly wet the canvas and then gently scrub the stained area with the weak bleach solution.
- 3. Rinse with cold water to remove all of the solution.

#### Method 2:

- 1. Add 1/2 cup (4 oz.) of non-chlorine bleach and 1/2 cup (4 oz.) Ivory Snow®, Dreft®, or Woolite® to one gallon of water and mix thoroughly.
- 2. Soak the canvas in this solution for about 20 minutes.
- 3. Rinse with cold water to remove all of the solution.



# **Chapter 8: Entertainment System**

# **Audio System (If Equipped)**

# NOTICE

AM radio reception may be impaired when the engine is running.

Read the manufacturer's instruction manual before using the audio equipment.



# **Chapter 9: Convertible Seats**

# ! WARNING

#### FALLING and PRODUCT DAMAGE HAZARD!

NEVER allow anyone to step-on or stand-on a sleeper seat in the lounge position.

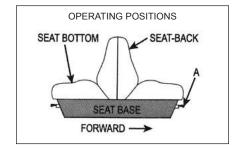
### **Sleeper Seats (If Equipped)**

- The sleeper seats can be moved forward and aft while in the upright, operating position.
- The sleeper seats can also be converted into a flat lounge or chaise lounge.

#### **Operating Positions**

To slide the seat forward and backward:

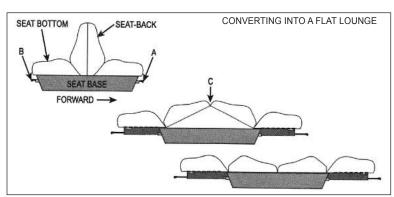
- 1. Pull up on the forward seat slider lever (A).
- 2. Slide the seats forward or aft to the desired position.



#### **Lounge Positions**

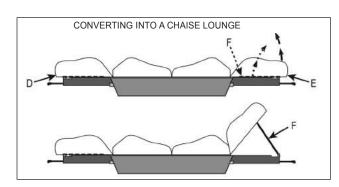
To convert into a flat lounge:

- 1. Pull up on the forward seat slider lever (A) and slide the seats all the way forward.
- 2. Push down on the aft seat slider lever (B) and slide the aft seat all the way aft.
- 3. If necessary, push down on the top of the seat-backs (C).



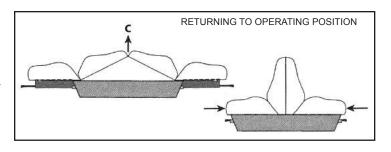
To convert into a chaise lounge:

- 1. First, convert the seats into a flat lounge as described above.
- 2. Lift the forward or aft seat bottom at point (D or E) and then lift the plastic seat support bracket (F).
- 3. Lower the seat until it rests securely on the support bracket.



To return the seats to the operating position:

- 1. Lift the seat-backs at point (C) and push the seat bottoms towards the center of the seat until the seat-backs are flush against each other and locked into place.
- 2. Push the seat bottoms towards the center of the seat until the seat-backs are flush against each other and locked into place.



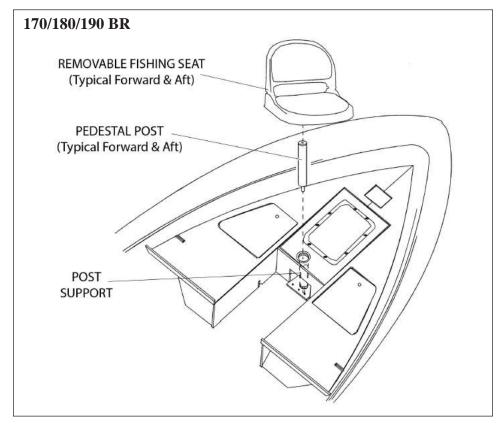
## Removable Fishing Seat (If Equipped)

# **A** DANGER

### **PERSONAL SAFETY HAZARD!**

- DO NOT allow anyone to ride on parts of the boat not designated for such use.
- Sitting on the fishing seat while underway is especially hazardous and WILL cause personal injury or death.

Remove and stow the fishing seat in a safe and secure area before getting underway or trailering your boat.





# **Chapter 10: Lights**

#### **Care and Maintenance**

All of the lights installed on your boat are of top quality, but you should be aware that failure may periodically occur for a variety of reasons:

- There may be a blown fuse *replace the fuse*.
- The bulb may be burned out carry spare replacement bulbs, making sure the wattage is correct.
- A wire may be damaged or may have come loose repair as required.
- The bulb base may be corroded *clean the base and coat it with non-conductive electrical lubricant*.

### **Interior and Exterior Lights**

# ! CAUTION

- · Be conservative in the use of battery power.
- Prolonged use of cabin interior lights (overnight) WILL result in a drained battery.
- The lights are powered by your boat's 12-Volt DC system.
- The battery switch must be turned On for the lights to work.

## **Navigation Lights**

# ! CAUTION

Avoid the storage of gear where it would block navigation lights from view.

## **NOTICE**

Running lights are legally required to show boat direction and right-of-way at night.

Read the navigation light section in the Sport Boat Owner's Manual.



# **Chapter 11: Electrical System**

# **A** DANGER

#### **EXTREME FIRE, SHOCK and EXPLOSION HAZARD!**

- NEVER install non-ignition protected switches or other arcing devices in the fuel compartment.
- NEVER substitute automotive parts for marine parts. Marine electrical, ignition, and fuel system parts were designed and manufactured to comply with rules and laws that minimize the risks of fire and explosion.
- NEVER change the electrical systems or relevant drawings.
- Allow ONLY trained personnel to install batteries and/or do electrical system work.

# ! WARNING

#### FIRE and EXPLOSION HAZARD!

Fuel vapors can explode! BEFORE turning on electrical devices or working on the electrical system:

Check the bilge areas for fuel vapors or leaking fuel. If you see leaking fuel or smell fuel vapors:

- Do NOT start the engine, do NOT turn On any electrical devices, put out ALL cigarettes, cigars, and other sources of flame or ignition.
- · Get everyone off your boat.
- Get trained help to find and fix the problem.

# **! CAUTION**

#### SHOCK and ELECTRICAL SYSTEM DAMAGE HAZARD!

When the engine is running, NEVER disconnect the battery cables. Doing so could cause damage to your boat's engine and/or electrical system.

## NOTICE

Electrical connections are prone to corrosion. To reduce corrosion-caused electrical problems:

- · Keep ALL electrical connections clean.
- Apply a spray-on protectant that is designed to protect connections from corrosion.



### 12-Volt DC System

#### **Battery**

The battery supplies electricity for lights, 12-Volt accessories and engine starting.

The Electrical section in the *Sport Boat Owner's Manual* provides battery care and maintenance instructions.

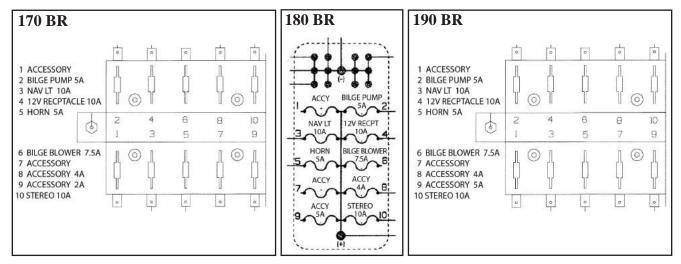
#### **Fuses and Circuit Breakers**

Replace fuse or circuit breakers ONLY with a fuse or breaker of the same rating.

- Push-to-reset circuit breakers for main accessory power are at the helm, for 160 BR.
- Fuses for the accessories are on the fuse block, for 170/180/190 BR.

See the Component Locations section in Chapter 2 for the location of the fuse block. Fuses for the engine control and gauges are on the engine. See the engine operation manual.

Some equipment may have secondary fuse protection at the unit or at the battery.



#### 12-Volt DC Accessory Outlet (If Equipped)

# ! CAUTION

Do NOT use the 12-Volt DC accessory outlet with a cigarette or cigar lighter. High temperatures may melt the outlet.

- The 12-Volt DC accessory outlet can be used with any 12-Volt device which draws 10-amps or less.
- The 12-Volt DC accessory outlet is protected by a 10-amp fuse on the fuse block, for 170/180/190 BR.

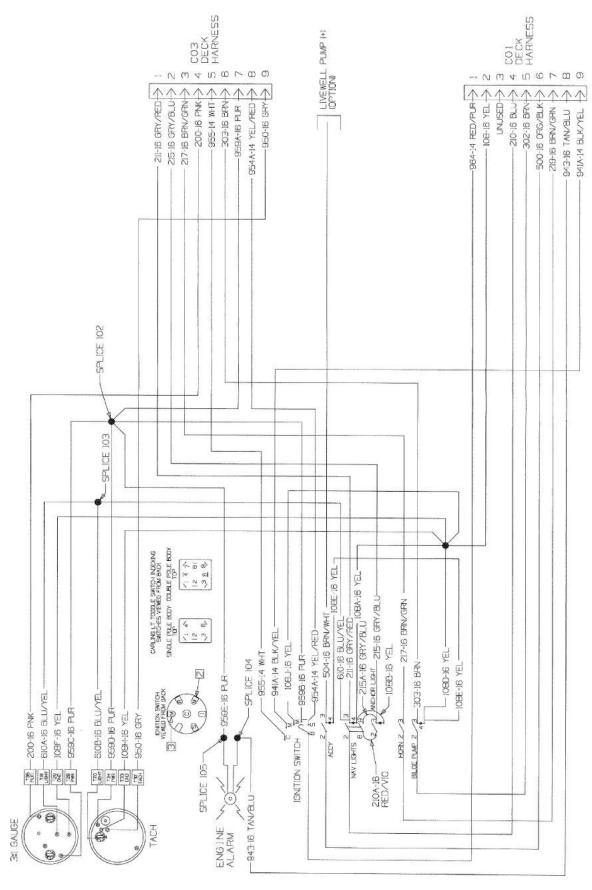
See the Component Locations section in Chapter 2 for the location of the 12-Volt DC accessory outlet.

#### **Alternator**

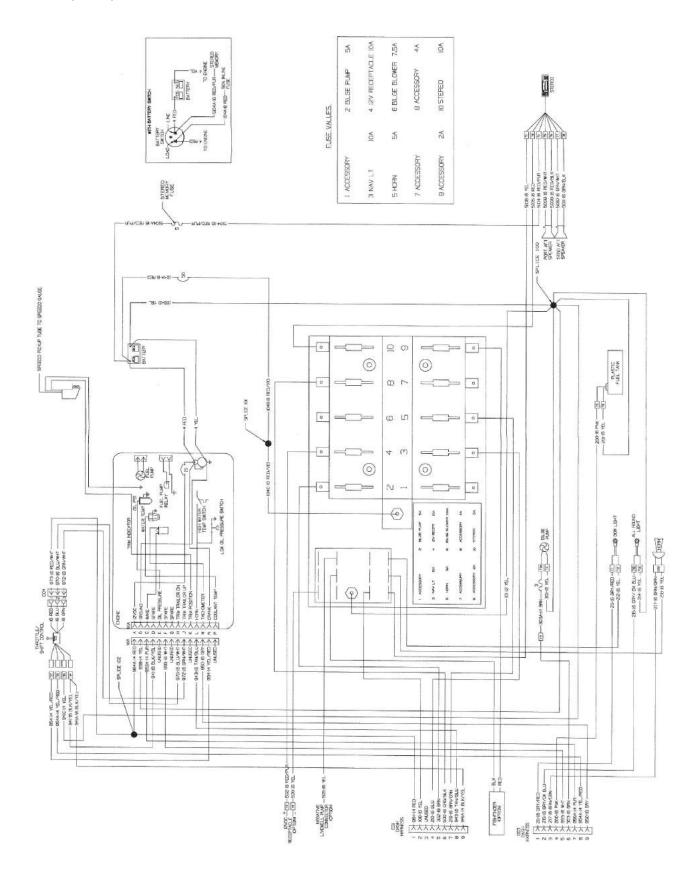
The alternator will keep the battery properly charged when the engine is running at, or above, cruising speeds.



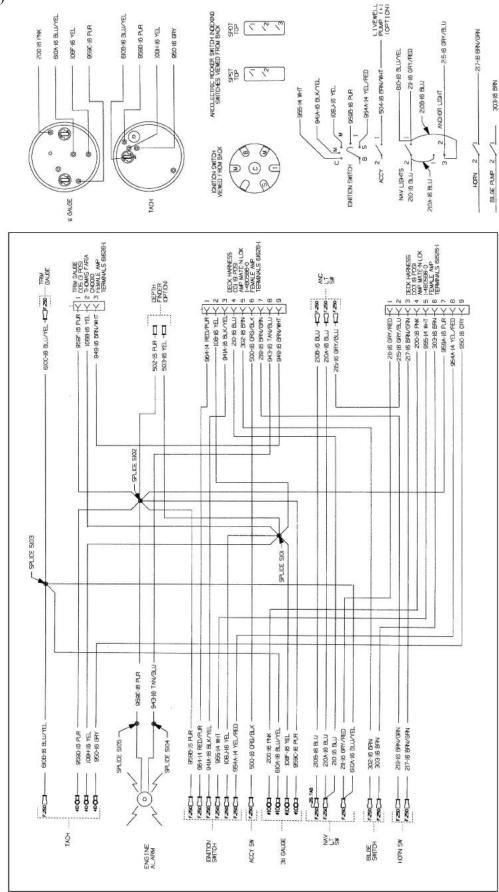
# DC Wiring Schematics 170 BR (1 of 2)



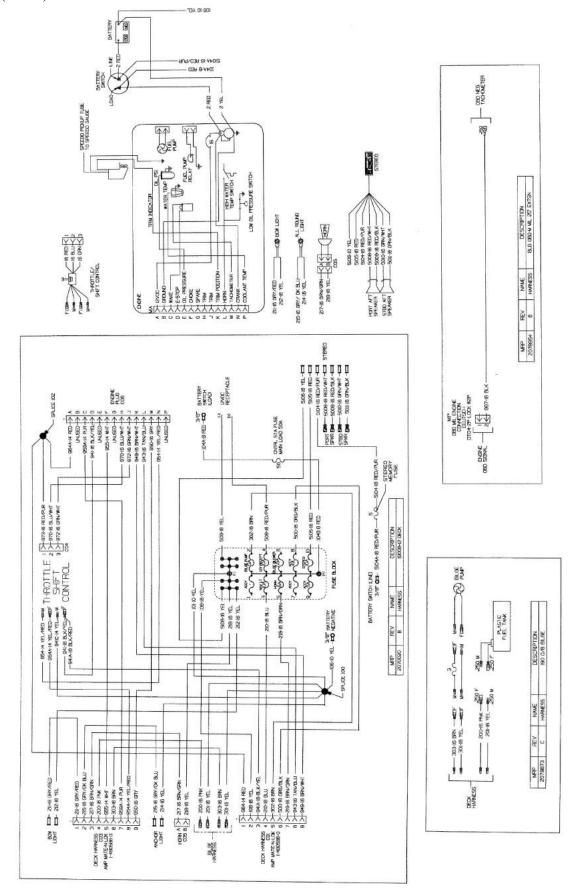
# DC Wiring Schematics 170 BR (2 of 2)



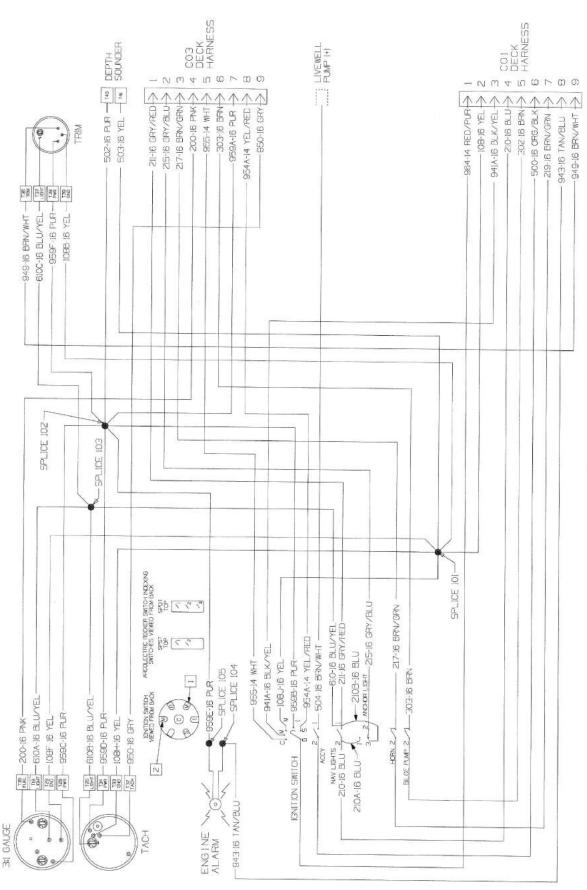
# DC Wiring Schematics 180 BR (1 of 2)



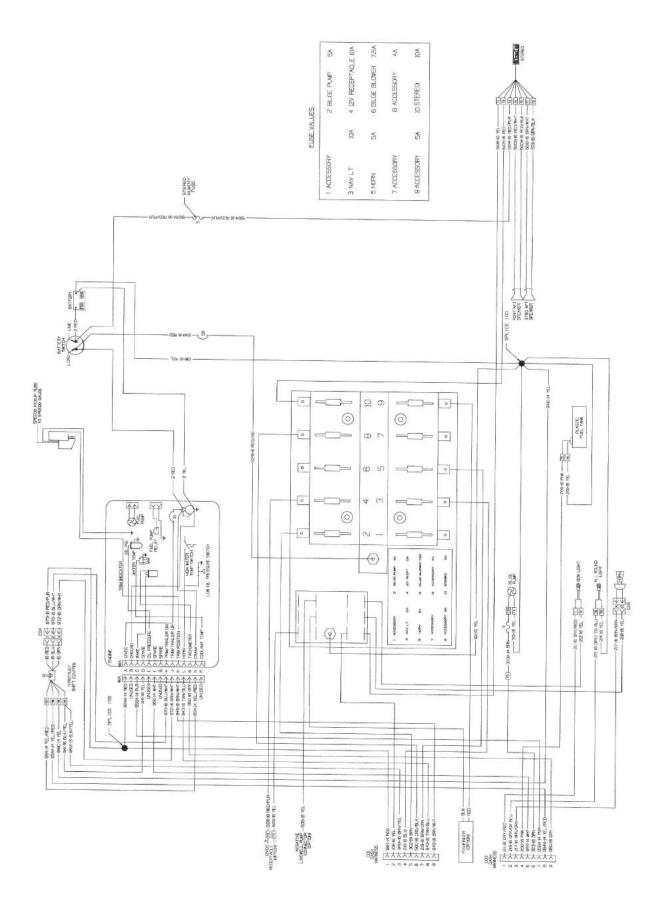
# DC Wiring Schematics 180 BR (2 of 2)



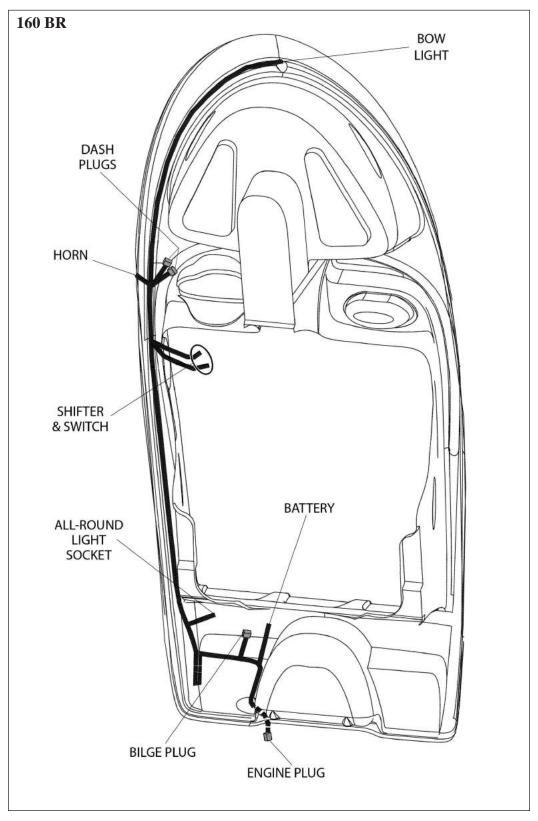
# DC Wiring Schematics 190 BR (1 of 2)



# DC Wiring Schematics 190 BR (2 of 2)

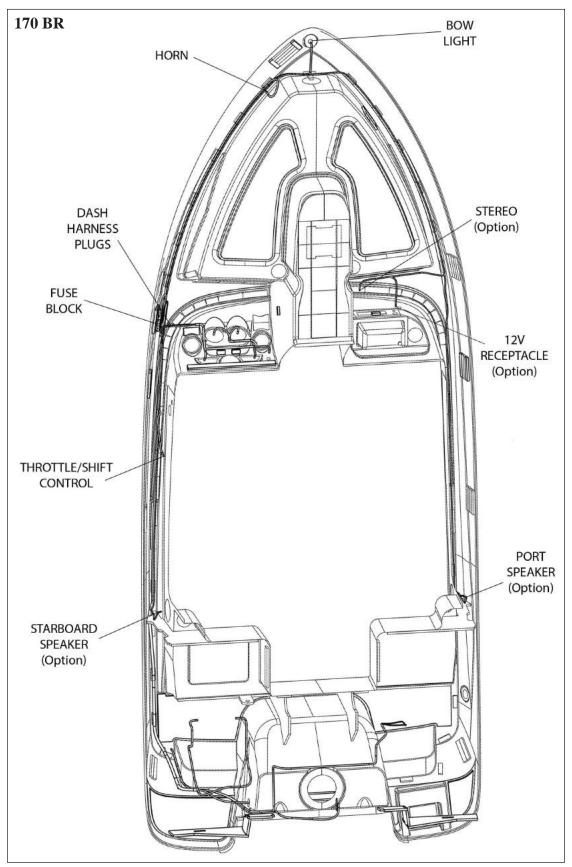


# Electrical Routings 12-Volt DC Deck Harnesses

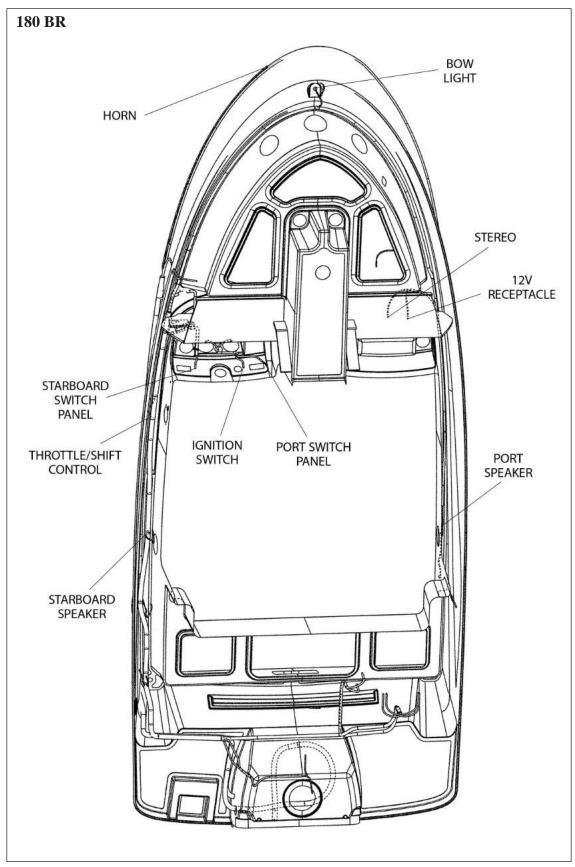


DECK UNDERSIDE



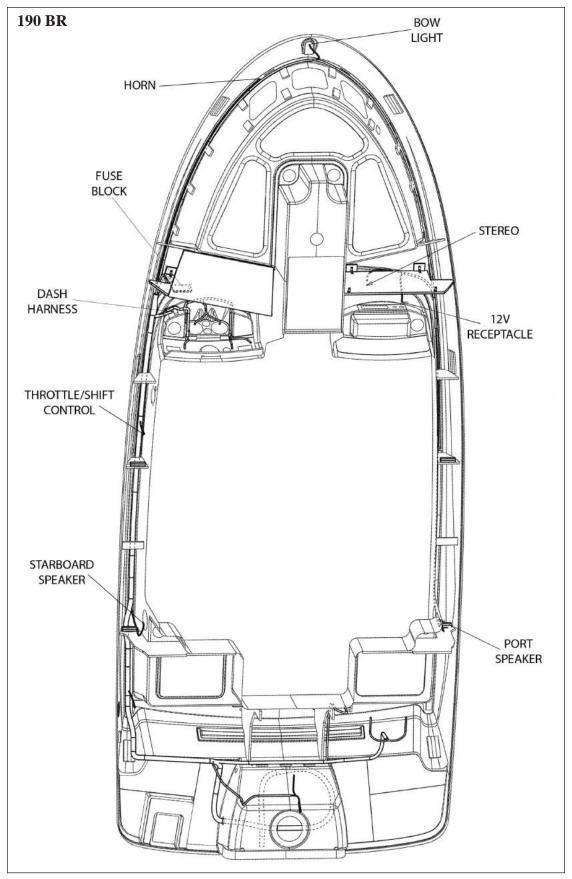


DECK UNDERSIDE



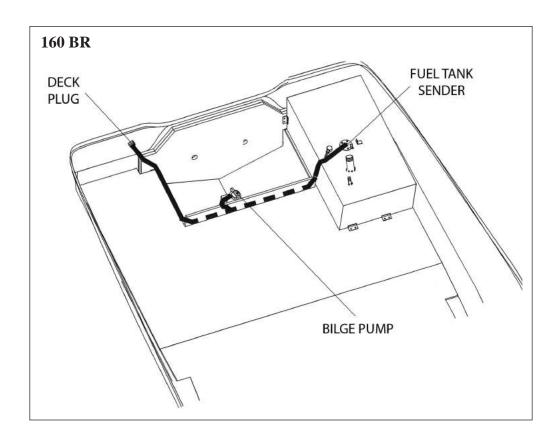
DECK UNDERSIDE

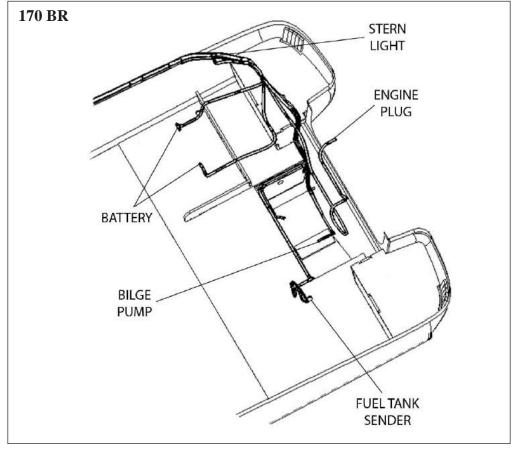




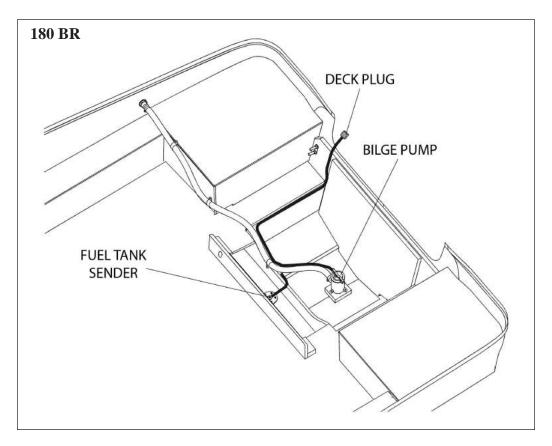
DECK UNDERSIDE

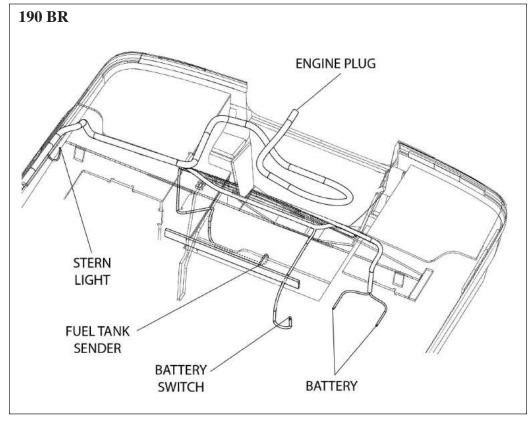
### 12-Volt DC Hull Harnesses



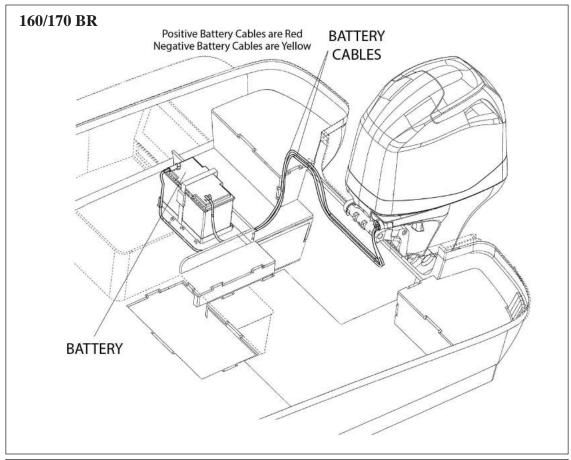


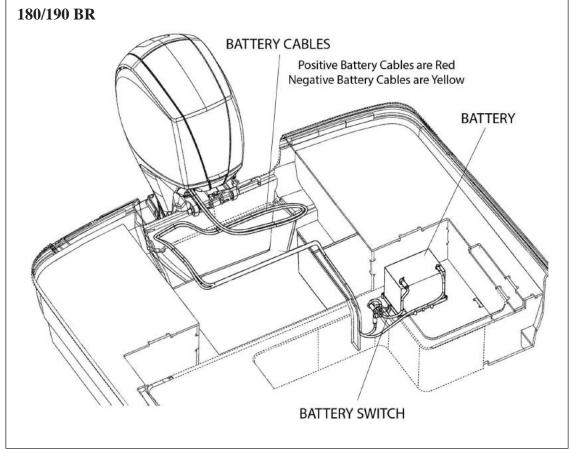






### **Battery Cable Routings**







# **Important Records**

Name Of Dealership		Ignition	Other
	ddress		
	uuless	Electronics	
Phone	/FAX/E-mail	Liectionics	
Sales	s Manager	Manufacturer	Model Name/Number
Service	e Manager	Seria	l Number
		Manufacturer	Model Name/Number
Engine		Seria	I Number
Manufacturer	Model Name/Number	ī.	
Engine 5	Serial Number	Manufacturer	Model Name/Number
Oil Type/SAE Quarts	per Engine Filter Type	Seria	I Number
		<u> </u>	
Propeller		Manufacturer	Model Name/Number
Manufacturer	Pitch	Seria	l Number
Mode	el Number	Manufacturer	Model Name/Number
		Seria	l Number
	3	Manufacturer	Model Name/Number
		Seria	I Number