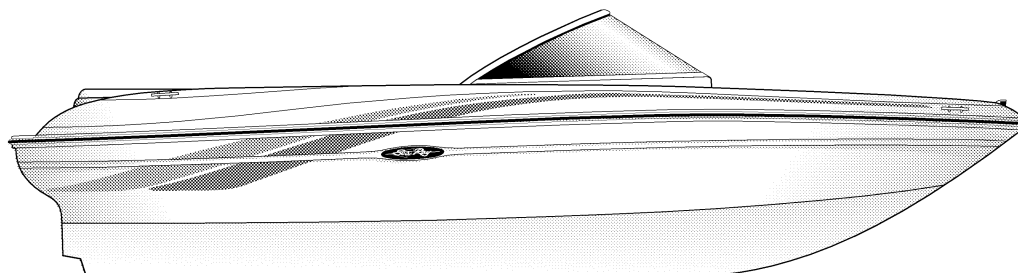


Owner's Manual Supplement

180 Bow Rider



Sea Ray®

Sea Ray® • Owner's Manual Supplement • 180 Bow Rider • MRP #1013912
Printed in the U.S.A. August 1997. Revised in June 1998, Revised May 2002, © Sea Ray Boats, Inc.
Sea Ray Boats, Inc. 2600 Sea Ray Blvd., Knoxville, TN 37914.

For information call 1-800-SRBOATS, or fax 1-314-213-7878 Domestic/International

Internet address: <http://www.searay.com>

Note: Not all accessories shown in pictures or described herein are standard equipment or even available as options.
Options and features are subject to change without notice.

INTRODUCTION & TABLE OF CONTENTS

This owner's manual supplement has been written to provide additional specific information about your boat and should be read carefully. Keep this booklet with the owner's manual in the owner's manual packet.

The owner's manual packet has been compiled to help you to operate your craft with safety and pleasure. It contains details of the craft, the equipment supplied or fitted, its systems and information on its operation and maintenance. Please read the information in it carefully, and familiarize yourself with the craft before using it.

If this is your first craft, or you are changing to a type of craft you are not familiar with, for your own comfort and safety, please ensure that you obtain handling and operating experience before "assuming command" of the craft. Your dealer or yacht club will be pleased to advise you of local sea schools, or competent instructors.

PLEASE KEEP THIS OWNER'S MANUAL PACKET IN A SECURE PLACE, AND HAND IT OVER TO THE NEW OWNER WHEN YOU SELL THE CRAFT.

Warranty Information	4	Fire Extinguisher Discharge Port	11
Construction Standards	4	Anchoring	11
Hull Identification Number	4	Anchoring Arrangement	12
Servicing Your Sea Ray®	4	Life Saving Equipment (PFD)	12
Owner's Manual Packet Contents	5-6	Boat Storage	12
General Arrangements, Specifications & Dimensions	7	Troubleshooting	12
Seating Plan Options	7	List of Reference Manuals and Drawings	12
Supplemental General Information	8	Repair and Parts Facilities	12
Bilge Pumping System	8	Docking / Lifting / Trailering	12-13
Propulsion System	8	Canvas Information	13
Propellers	8	Canvas Care & Maintenance	14
Fuel System	8-9	Installation Tips	14
Fuel Vent & Fuel Fill	9	Trailering With Canvas	15
Exhaust System	9	Bilge Layout	15
Engine Cooling System	9	Dash Layout	16
Electrical Installations	9	Location Of Through-Hull Fittings	16
Battery	10	Wiring Harness Construction	17
Ventilation System / Bilge Blower	11	Electrical Schematics	18-19
Steering System	11	International Homologations	20
Fire Extinguishing System	11		

(This book contains 20 pages.)

Information in this publication is based upon the latest product specifications available at printing. Sea Ray Boats, Inc. reserves the right to make changes at any time, without notice, in the colors, equipment, specifications, materials and prices of all models, or to discontinue models. Should changes in production models be made, Sea Ray® is not obligated to make similar changes or modifications to models sold prior to the date of such changes.

The following are registered trademarks of the Brunswick Corporation: Sea Ray®, The SR Wave Logo.



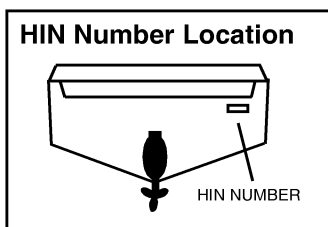
WARRANTY INFORMATION

Sea Ray's® warranty is better than ever. Find the warranty information card in your owner's manual packet for complete details. If for some reason the card is missing, contact your Sea Ray® dealer for a new one.

CONSTRUCTION STANDARDS

Sea Ray's® commitment - Excellence by Design - has enabled us to create a superior craft providing you with comfort, performance, safety and dependability. All our boats comply with the safety standards set by the United States Coast Guard and are designed, engineered and manufactured in accordance with applicable recommendations and guidelines of the American Boat and Yacht Council (ABYC) certified by the National Marine Manufacturers Association (NMMA).

HULL IDENTIFICATION NUMBER (HIN)



The "Hull Identification Number," located on the starboard side of the transom, is the most important identifying factor and must be included in all correspondence and orders. Failure to include

it only creates delays. Also of vital importance are the engine serial numbers and part numbers when writing about or ordering parts for your engine. Refer to the engine owner's manual for locations.

SERVICING YOUR SEA RAY®

When your boat needs service beyond regular maintenance it should be taken to an authorized Sea Ray® dealer.

To find a dealer in your area call:

1-800-SRBOATS

Fax: 1-314-213-7878

Domestic/International

If a problem is not handled to your satisfaction:

1. Discuss any warranty-related problems directly with the service manager of the dealership or your sales person. Give the dealer an opportunity to help the service department resolve the matter for you.
2. If a problem arises that has not been resolved to your satisfaction by your dealer, contact Sea Ray Boats at 1-800-SRBOATS and the appropriate customer service department information will be provided for you.

OWNER'S MANUAL PACKET CONTENTS

	Sea Ray® Owner's Manual	Sea Ray® Owner's Manual Supplement	Sea Ray® Specification Sheet	Sea Ray® Parts Manual	Engine Operator's Manual	Original Equipment Manuals	Owner's Packet Insert
Accident Reporting	X				X	X	X
Alarms					X		
AM/FM Cassette Stereo						X	
Anchoring	X	X	X				X
Battery	X	X			X	X	
Bilge Blower				X			
Bilge Layout				X			
Bilge Pump	X	X		X		X	
Canvas	X	X	X	X		X	
Capacity Plate	X			X			
Carbon Monoxide	X						
Certifications		X	X				
Cleaning	X					X	
Cockpit				X			
Communication Equipment	X					X	
Console				X			
Construction Standards		X					
Controls	X			X		X	
Decals				X			
Dimensions		X	X				
Drains (Through Hull Fittings)		X					
Education	X						
Electrical System	X	X		X			
Electrolysis	X						
Emergency Engine Shutdown	X				X		
Emergency Procedures	X						
Engine					X		
Environmental Considerations	X						
Equipment:							
• Recommended	X						
• Required	X						X
• Standard			X				
• Optional			X				
Fire	X						
Fire Suppression Equipment	X	X				X	X
Flame Arrestor					X		X
Flooding, Swamping	X						
Fuel System	X			X	X		
Gauges	X	X		X			
Gear Shift	X			X	X		
Graphics				X			
Head System							
Homologations (International)		X					
Hotlines	X					X	X
Identification Numbers	X	X					

To replace any material from the Owner's Manual Packet, contact your Sea Ray® dealer.

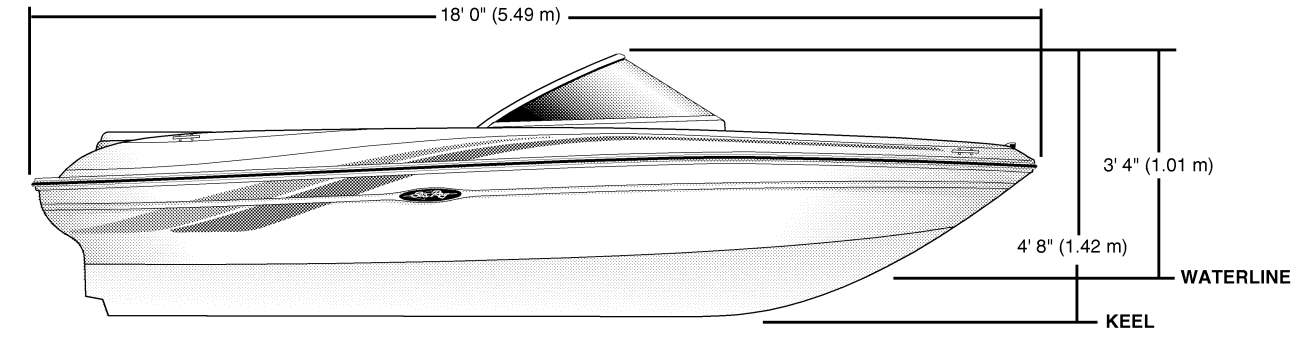
OWNER'S MANUAL PACKET CONTENTS

	Sea Ray® Owner's Manual	Sea Ray® Owner's Manual Supplement	Sea Ray® Specification Sheet	Sea Ray® Parts Manual	Engine Operator's Manual	Original Equipment Manuals	Owner's Packet Insert
Ignition	X				X		
Ignition Protection	X				X		
Impaired Operation	X						X
Instrument Use & Operation	X					X	
Layout		X	X	X			
Lifesaving Equipment	X						X
Lifting	X	X					
Lightning Protection	X						
Lights	X	X		X			
Load Capacity	X	X					
Maintenance	X				X	X	
Maneuvering	X						X
Monitors						X	
Nautical Terms	X						
Navigation	X						X
Operation	X						
Optional Systems			X			X	
Personal Flotation Devices (PFDs)	X					X	X
Power Capacity	X						
Powertrain	X				X		
Propeller	X	X					
Propulsion					X		
Registration	X						X
Safety	X					X	X
Seating		X					
Seaworthiness Inspection	X						
Service Schedule					X	X	
Spare Parts				X			
Specifications		X	X				
Stability	X						
Start-In-Gear Protection	X						
Steering	X	X		X			
Symbols	X	X					
Switches		X					
Tank Capacities		X	X				
Throttle	X				X		
Through-Hull Fittings		X					
Troubleshooting	X				X	X	
Upholstery	X			X			
Ventilation	X	X		X			
Warning Labels	X			X			
Warranty		X					X

To replace any material from the Owner's Manual Packet, contact your Sea Ray® dealer.

GENERAL ARRANGEMENTS / SPECIFICATIONS & DIMENSIONS

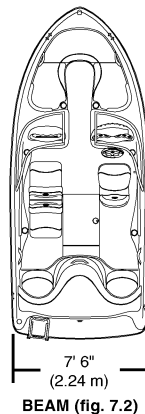
PROFILE
(FIG. 7.1)



SPECIFICATIONS

Overall Length	18' 0" (5.49 m)
Beam	7' 6" (2.24 m)
Draft (Stern Drive Down)	36" (91.4 cm)
Draft (Stern Drive Up)	17" (43.2 cm)
Dry Weight (Lbs.)	2,100 (953 kg)
Fuel Capacity (Gallons)	22 (83.3 liters)
Usable Fuel (Gallons)	21 (79 liters)
Dead Rise	19°

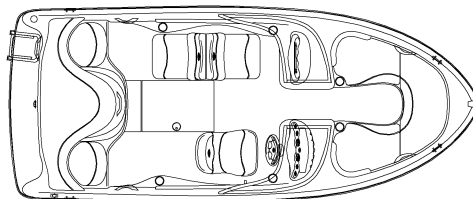
The specification measurements and locations are approximations and subject to variance.



HEIGHT DIMENSIONS

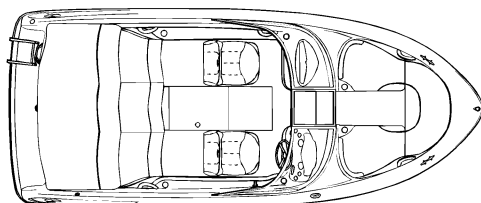
Waterline To Top Of Windshield	3' 4" (1.01 m)
Keel To Top Of Windshield	4' 8" (1.42 m)

SEATING PLAN (INTERIOR PLAN)



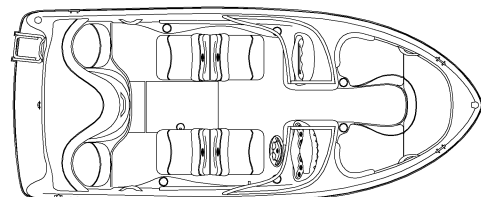
STANDARD SEATING PLAN

(Swivel Bucket Helm Seat, Port Back to Back Lounger Seat, Hi-Lo Aft Jump
Seats w/Fiberglass Base – Forms Sun Pad In Hi Position, Fiberglass Motor Box)
(fig. 7.3)



OPTIONAL SEATING PLAN

Twin Swivel Bucket Seats
(w/Aft Bench Seat & Sun Pad)
(fig. 7.4)



OPTIONAL SEATING PLAN

(Hi-Lo Aft Jump Seats w/Fiberglass Base – Forms Sun
Pad In Hi Position, Fiberglass Motor Box)
(fig. 7.5)

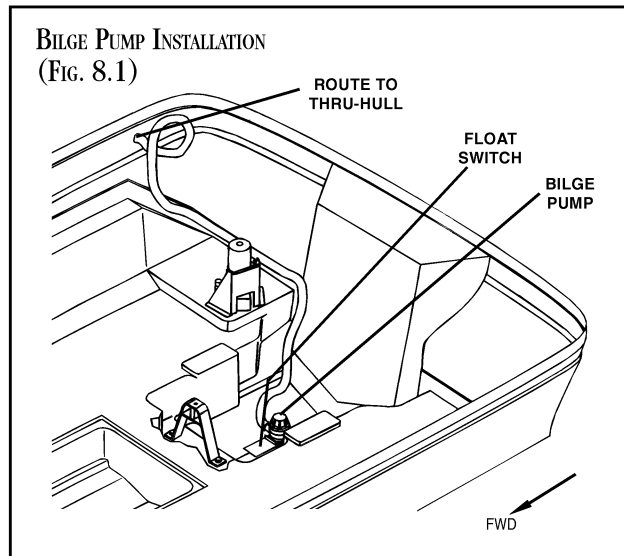
SUPPLEMENTAL GENERAL INFORMATION

BILGE PUMPING SYSTEM



The 180 BR is equipped with an electric bilge pump system.

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



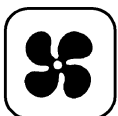
PROPULSION SYSTEM



The 180 BR is equipped with a stern drive type propulsion system also known as an inboard-outboard engine. This type of propulsion system has the engine secured to the hull's stringers at the aft end of the hull and covered by a engine box. The drive unit, also called the lower unit because it hangs below the hull, is the part of the propulsion system that attaches to the outside of the hull or transom. The entire unit pivots to steer the boat.

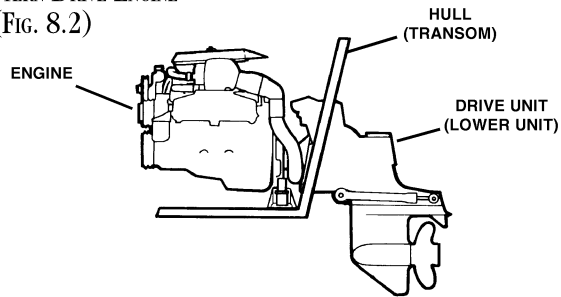
REFER TO THE OWNER'S MANUAL AND ENGINE OWNER'S MANUAL FOR OPERATING INSTRUCTIONS AND WARRANTY INFORMATION.

PROPELLERS



Your Sea Ray® has been equipped with a propeller which our tests have shown to be the best suited for general use under normal conditions and load. In some situations you may wish to change propellers to give your boat

STERN DRIVE ENGINE
(Fig. 8.2)



slightly different performance characteristics. In general, changing to a lower pitch propeller will increase acceleration and load-pulling ability, but with a slight decrease in top speed. Conversely, moving to a higher pitch propeller will attain higher top speed with a light load, but will sacrifice acceleration and power. Your particular requirements should be discussed with your Sea Ray® dealer. **Under no circumstances use a propeller which allows the engine to operate at higher than recommended RPM.**

FUEL SYSTEM

The boat is equipped with a gasoline fuel system. A detailed drawing of the fuel system can be found in the *Parts Manual*. Fueling instructions and precautions can be found in the *Owner's Manual*.

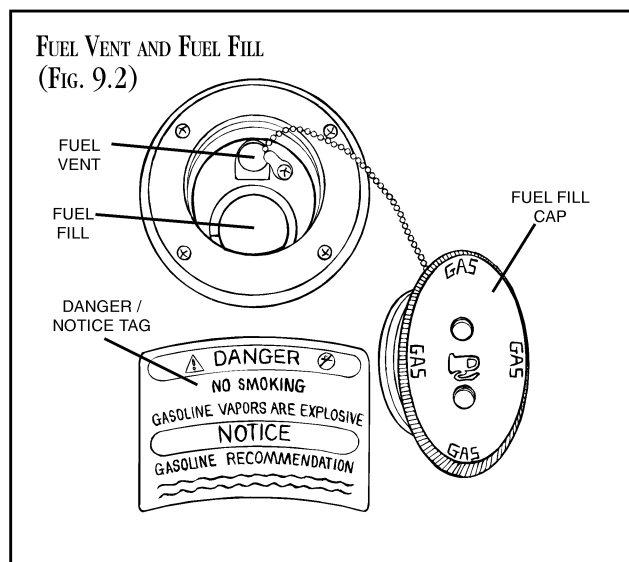
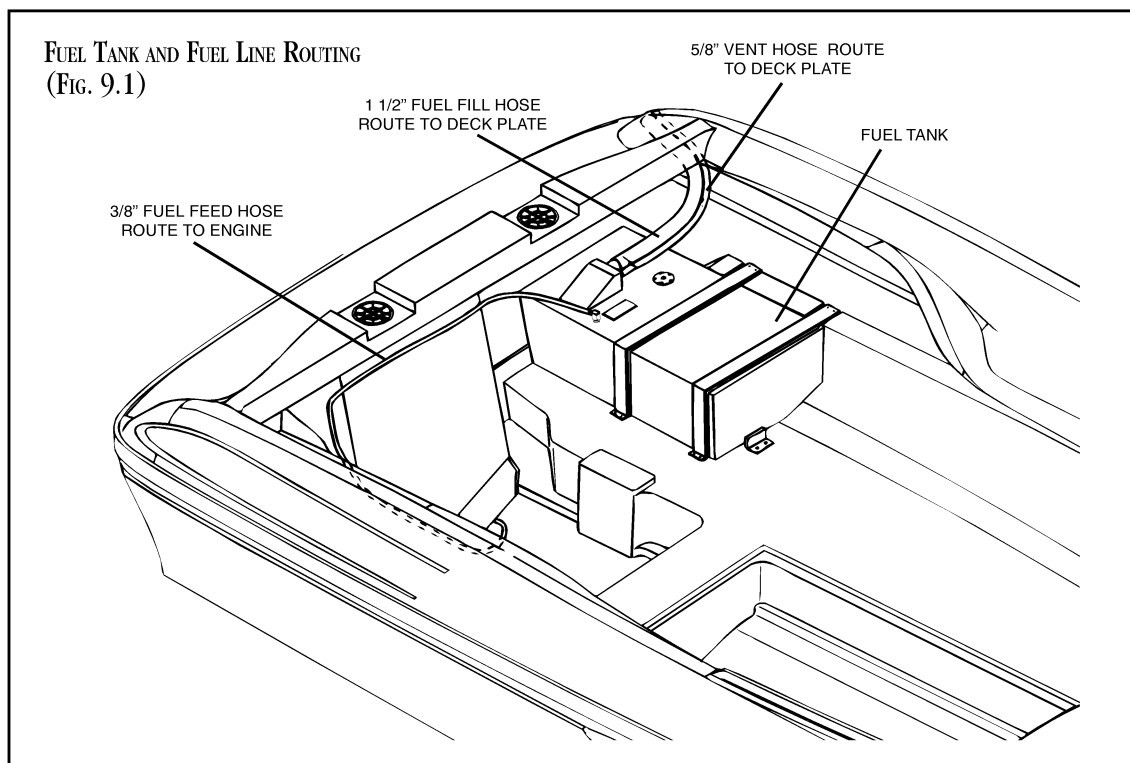
Located in the owner's packet is the *Sea Ray® Operational and Safety Manual* that contains important fueling information. Take time to read all the fuel related information in the owner's packet.

The 180 BR's standard gasoline fuel system consists of a 22 gallon (83.3 liter) fuel tank, shut-off valve, engine fuel supply line and fuel fill with vent (see fig. 14.1).

The gasoline engine fuel pick-up at the fuel tank has a shut-off valve to prevent fuel from siphoning out in the event of fuel line failure or while performing engine maintenance.

The fuel tank vent serves as a pressure/vacuum release and safety overflow. The fuel vent is located at the fuel fill under the fuel cap. Periodically check the vent to assure that it is not clogged.

SUPPLEMENTAL GENERAL INFORMATION



EXHAUST SYSTEM

The boat's exhaust system is an integral part of the propulsion system.

REFER TO THE ENGINE OWNER'S MANUAL FOR INSTRUCTIONS AND WARRANTY INFORMATION.

ENGINE COOLING SYSTEM

The engine cooling system is an integral part of the propulsion system.

REFER TO THE ENGINE OWNER'S MANUAL FOR INSTRUCTIONS AND WARRANTY INFORMATION.

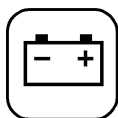
ELECTRICAL INSTALLATIONS

This owner's manual supplement contains electrical schematics for your boat. These electrical schematics were generated by technicians at the engineering division for technical reference and service technicians. Sea Ray® does not recommend that you attempt to work on the boat's electrical system yourself, instead we recommend that you take your

SUPPLEMENTAL GENERAL INFORMATION

boat to your authorized Sea Ray® dealer for service. Sea Ray® reserves the right to change or update the electrical system on any model at any time without notice to the consumer and is NOT obligated to make any updates to units built prior to changes.

BATTERY



Refer to the owner's manual for battery disconnect and maintenance. When replacing a battery, refer to your engine operation and maintenance manual to find the recommended battery for the engine installed in your boat.

Batteries are available through your Sea Ray® dealer.

ALWAYS DISCONNECT BATTERY CABLES BEFORE DOING ANY WORK ON THE ENGINE'S ELECTRICAL SYSTEM OR ALTERNATOR WIRING TO PREVENT ARCING OR DAMAGE TO THE ALTERNATOR.

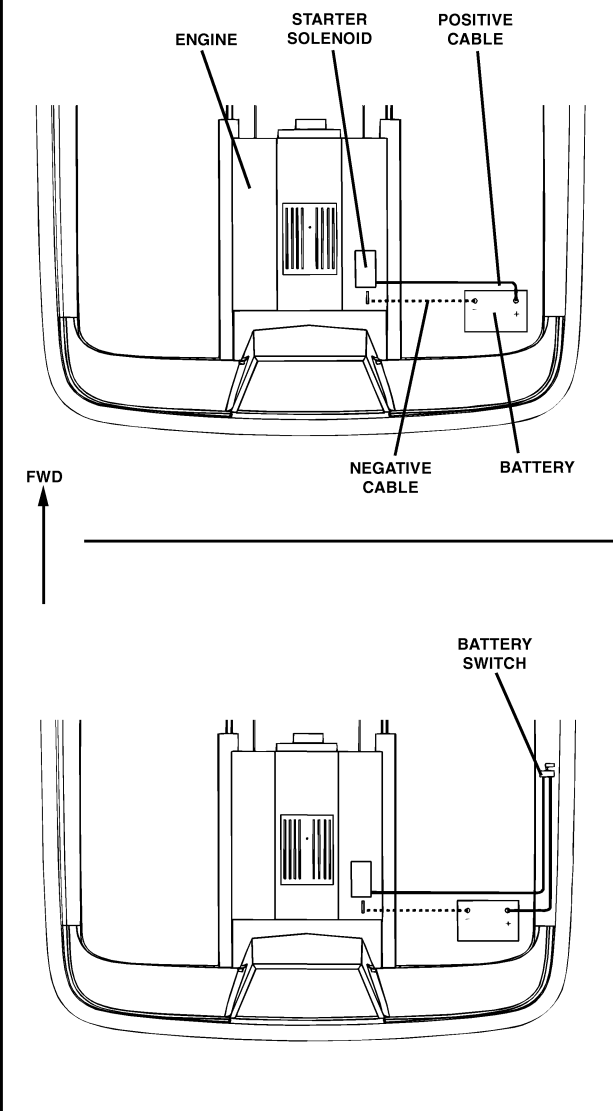
DANGER

- Never use an open flame in the battery storage area.
- Avoid striking sparks near the battery.
- A battery will explode if a flame or spark ignites the free hydrogen given off during charging.

CAUTION

While the engine is running, the battery terminal clamps must not be loosened or detached nor should the battery switch(es) be turned off, otherwise the alternator and other electronic units will be damaged.

BATTERY CABLE ROUTING & CE OPTION
(Fig. 10.1)



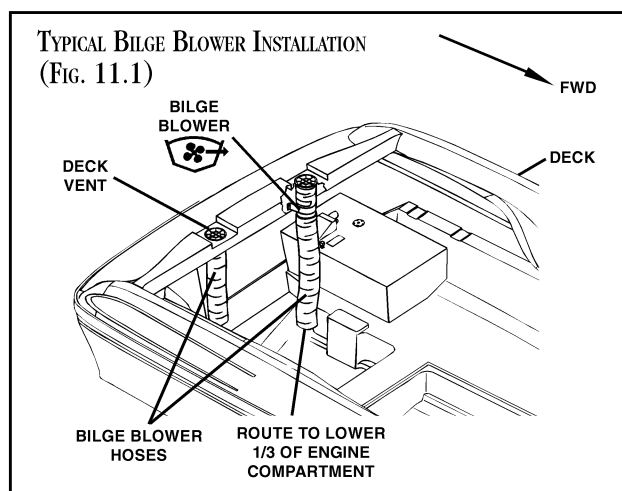
SUPPLEMENTAL GENERAL INFORMATION

VENTILATION SYSTEM / BILGE BLOWER



Sea Ray® Sport Boats are equipped with an electric bilge blower to remove fumes from the engine compartment and provide ventilation through the deck vents before starting the engine and when operating below cruising speeds. The bilge blower is located inside the port side of the transom.

REFER TO OWNER'S MANUAL AND OWNER'S PACKET FOR OPERATING INSTRUCTIONS AND SAFETY PRECAUTIONS.



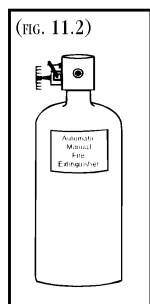
STEERING SYSTEM

The boat is equipped with a power steering system.

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

FIRE EXTINGUISHING SYSTEM

(EURO OPTION ONLY)



(FIG. 11.2) The 180 BR is offered with the optional automatic fire extinguishing system. If your boat is not equipped with this option you must carry an approved fire extinguisher.

Following are United States Coast Guard (USCG) requirements and American Boat & Yacht Council (ABYC) recommendations for boats not equipped with the automatic fire extinguishing system option for open boats over 16 feet (4.9 meters) but less than 26 feet (7.9 meters).

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

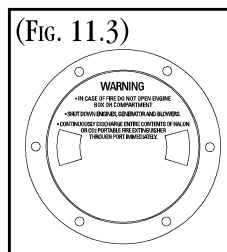
<u>Standard</u>	<u>Boat</u>	<u>Qty.</u>	<u>*Qty.</u>	<u>Type</u>
USCG	180 BR	1	0	B1
ABYC	180 BR	2		B1

*Boats with approved fixed extinguishing system, (automatic fire extinguisher system).

Location: Steering position and galley or passenger cockpit.

Note: To be ABYC compliant Sea-Ray Boats, Inc. follows ABYC construction standards and recommendations.

FIRE EXTINGUISHER DISCHARGE PORT



(FIG. 11.3) Your sport boat is equipped with a fire extinguisher discharge port. This port is located on the port side of the motor box. In the event of a fire, the access plate on the engine compartment can be removed to allow the operator to discharge a fire extinguisher into the engine compartment without having to open the engine box. Do not open the engine compartment immediately! This feeds oxygen to the fire and flashback could occur.

WARNING

- In case of fire **DO NOT** open engine box or compartment.
- Shut down engines, generator and blowers
- Continuously discharge entire contents of portable fire extinguisher through port immediately.

ANCHORING

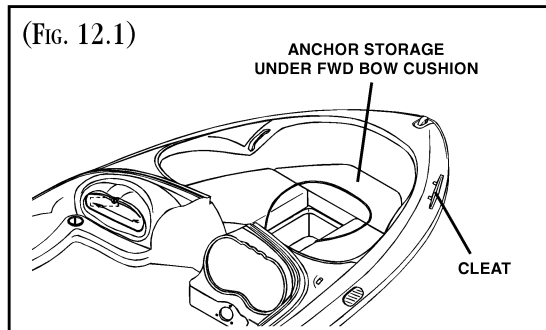


To anchor, bring the bow into the wind or current and put the engine in neutral. When the vessel comes to a stop, lower, do not throw, the anchor over the bow. The anchor line should be 5 to 7 times the depth of water.

SUPPLEMENTAL GENERAL INFORMATION

ANCHORING ARRANGEMENT

The 180 BR is equipped with an anchor storage compartment under the forward bow seat cushion. Note: Before using the anchor, be sure the anchor line is secured to the boat – to the bow eye or bow cleat.



LIFE SAVING EQUIPMENT

(Personal Flotation Device (PFD))

STORAGE: The 180 BR offers storage under the bow cushions and floor storage.

OPERATION: Wear PFD according to manufacturer recommendations. See pamphlet *Federal Requirements And Safety Tips For Recreational Boats* in the owner's packet or get one from your dealer.

MAINTENANCE: Rinse with fresh water and let dry thoroughly. Do not store in a damp compartment. Avoid the possibility of mildew.

BOAT STORAGE

WET STORAGE PROCEDURES: Special care for boats that are moored: If permanently moored in salt water or fresh water, your boat will collect marine growth on its bottom. This will detract from the boat's beauty and greatly affect its performance. There are two methods of preventing this:

- Periodically haul the boat out of the water and scrub the bottom with a bristle brush and a solution of soap and water.
- Paint the hull below the waterline with a good grade of antifouling paint. DO NOT paint the engine drive surfaces.

NOTE: There are EPA regulations regarding bottom paint application. Consult your marine paint dealer for proper application methods.

SECURITY CONSIDERATIONS: Be conscious of the security of your boat. Always remove the key from the ignition, store your boat in a secure place, put a lock on the trailer and if location permits, chain your trailer to a pole or other permanently fixed object. Remove and stow any removable electronic gear (fishfinders, LORAN, etc.) and personal gear (fishing poles, skis, etc.) normally left aboard your boat.

TROUBLE SHOOTING

List of Reference Manuals and Drawings

PERFORMANCE: Refer to the owner's manual.

ENGINE: Refer to the owner's manual and/or the engine manual.

ELECTRICAL: Refer to electrical section of the owner's manual and electrical schematics in this owner's manual supplement. Only a qualified marine electrical technician may service the boat's electrical system.

Repair and Parts Facilities

To find a Sea Ray® dealer in your area, call: Sea Ray® Customer Service: 1-800-SRBOATS
FAX: 1-314-213-7878
Domestic/International

To find repair and parts facilities for equipment installed on your boat, refer to the original equipment manuals (OEMs) found in the owner's manual packet.

DOCKING / LIFTING / TRAILERING

CLEATS: Cleats must not be used for lifting the boat, they are intended for mooring use only.

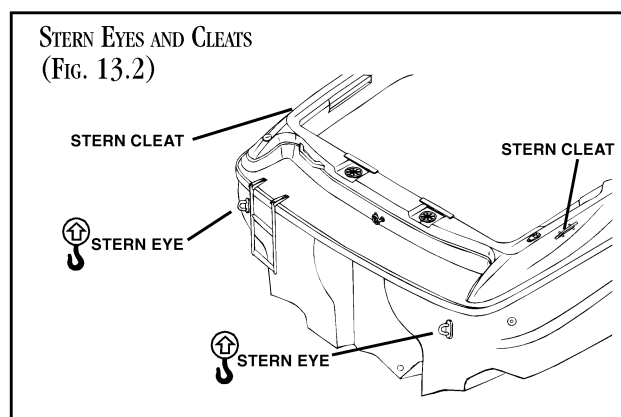
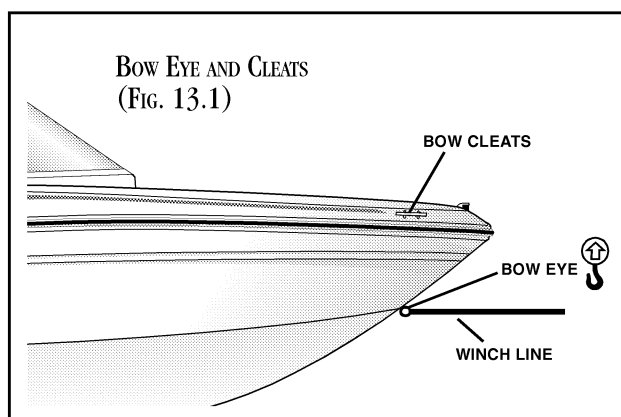


BOW AND STERN EYES: The bow eye should be used to haul the boat onto a trailer. The stern eyes should be used as tie down points for trailering the boat. The bow and stern eyes may be used for short term lifting of the boat such as for service. Long term lifting with the bow and stern eyes may cause stress on the fiberglass and gel coat.

For long term storage, use flat, wide belt-type slings and spreaders long enough to keep pressure from gunwales. Do not place slings where they may lift on underwater fittings.

REFER TO OWNER'S MANUAL.

SUPPLEMENTAL GENERAL INFORMATION



CANVAS INFORMATION

REFER TO OWNER'S MANUAL PACKET FOR CANVAS MANUFACTURER INSTRUCTIONS AND WARRANTY INFORMATION.

Sea Ray's® commitment to boating safety will refer you to the Owner's Operational and Safety Manual located in the Owner's Packet. One area in particular is *Exhaust Emissions* and *Emergency Procedures*. Read and understand the effects of carbon monoxide and how to ventilate your Sport Boat to prevent the built-up of this invisible gas.

Attached to the inside of the bimini top is a DANGER tag for Carbon Monoxide Gas (CO) buildup and a WARNING tag for excessive speeds while canvas is installed. The Aft Curtain also has a WARNING tag stating "The Aft Curtain is not designed to be used while engine is running or boat is underway". If your canvas does not have these tags, become lost or are unable to be read, contact your dealer for replacement labels.

! DANGER
EXHAUST FUMES FROM ENGINES
CONTAIN DEADLY
CARBON MONOXIDE GAS (CO)
BOATS WITH CANVAS OR POOR
VENTILATION ARE MOST LIKELY TO
COLLECT FUMES. CO SICKNESS
SYMPTOMS INCLUDE HEADACHE,
NAUSEA AND DIZZINESS. DO NOT
MISTAKE FOR SEA SICKNESS.
VENTILATE BOAT. SEE BOAT OWNER'S
MANUAL FOR MORE DETAILS.

! WARNING
SUNSHADE SHOULD
NOT BE USED WHEN
VESSEL SPEED EXCEEDS
45 MPH

! WARNING
THE AFT CURTAIN IS NOT
DESIGNED TO BE USED
WHILE ENGINE IS RUNNING
OR BOAT IS UNDERWAY

The Canvas manufacturer has provided the canvas piece name, and position on each canvas piece with a sewn on white label. Do not remove these tags. They will help you with identification and position for easier installation procedures.

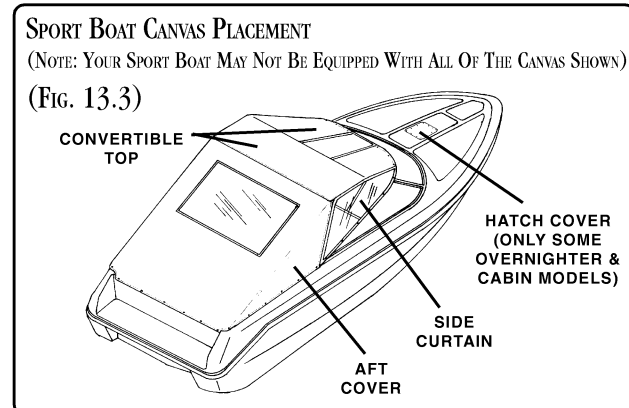
It is recommended you decide which canvas pieces you want to remove or install before you leave the boat slip or off load your Sport Boat from the trailer into the water. Removing or installing canvas on the water could be difficult as not all water conditions allow for your stability while attempting removal or installation.

Your Sea Ray® Sport Boat standard canvas set consists of the following piece:

Sunbrella® Convertible Top

Canvas options:
Bimini Top & Boot
Cockpit Cover
Tonneau Cover

Canvas Package options:
Top Boot
Side Curtains
Aft Curtains
Tonneau Cover
Canvas Storage Bag

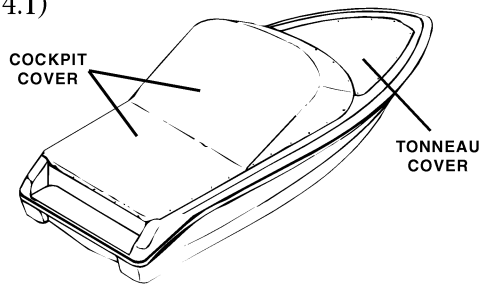


CANVAS INFORMATION

SPORT BOAT CANVAS PLACEMENT

(NOTE: YOUR SPORT BOAT MAY NOT BE EQUIPPED WITH ALL OF THE CANVAS SHOWN)

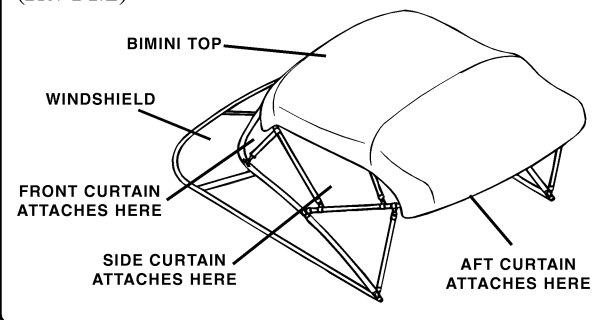
(Fig. 14.1)



SPORT BOAT CANVAS PLACEMENT

(NOTE: YOUR SPORT BOAT MAY NOT BE EQUIPPED WITH ALL OF THE CANVAS SHOWN)

(Fig. 14.2)



Storage:

- **Do not fold or store any of the canvas set pieces while wet.** All canvas should be rolled or folded when dry and stored in a clean, dry place.
- For clear vinyl pieces, the recommended methods for storage are rolling or laying down flat. The clear vinyl should never be folded or creased as cracking will result. To protect the clear vinyl from rubbing against itself while rolled or stored flat, place a piece of very soft, non abrasive cloth between the pieces. If the surface of the clear vinyl becomes scratched, the canvas manufacturer has to the convertible top, side curtains and camper aft cover must be removed when trailering. Damage will occur to canvas and bows or boat if attached to boat while trailering. provided a canvas care sheet located in your Owner's Manual Packet.
- When storing the aft curtain, fold the canvas over the clear vinyl window (do not fold clear vinyl), then roll or store flat.

CANVAS CARE & MAINTENANCE

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 fabric can be cleaned without being removed from the installation. Simply brush off any loose dirt, roof particles, etc.; hose down and clean with a mild solution of a natural soap in lukewarm water (no more than 100° F., 38° C) Rinse thoroughly to remove soap. **DO NOT USE DETERGENTS.** Allow to completely air dry.

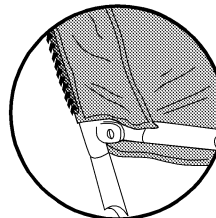
If you have stubborn cleaning cases, call your dealer for proper procedures. Do not try your own cleaning procedures as they may void any warranties.

After each use, especially in salt water areas, rinse the canvas completely with fresh cold water. Then let the canvas dry completely before stowing.

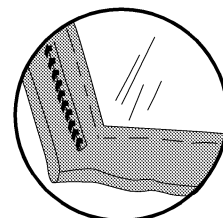
All metal components of the canvas set should be rinsed with fresh cold water and exposed components wiped dry maintain appearance and working order.

INSTALLATION TIPS:

- **Zippers** are located on each canvas piece. Make sure canvas is centered over bows. When attaching any canvas piece, zip the zippers only partially. This helps to hold the piece in place and relieves tension, helping the other sides zip or snap easier. After all the sides of the piece are secure, finish zipping all the zippers. This will ensure a tight fit.
- **Adjustable Support Poles** are located on the Convertible and Bimini Top. Take time to look at the adjustable support poles to see how they work. There is an outside tube and an inside tube. The button requires pushing in to enable tubes to adjust to a longer or shorter settings.



Zipper On Canvas
(fig. 14.3)



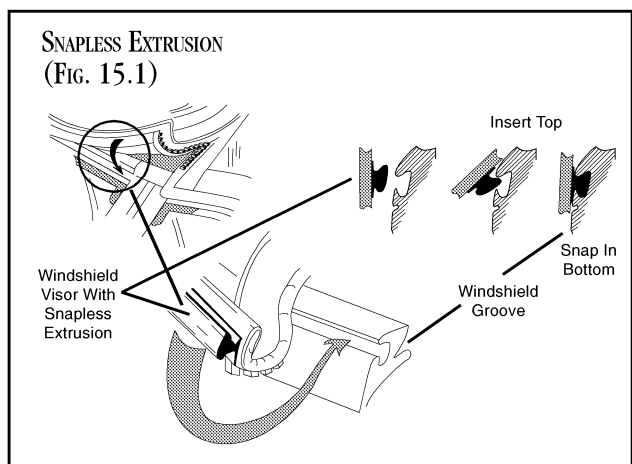
Zipper On Window
(fig. 14.4)

- **Windshield Snapless Extrusion**

The snapless extrusion designed by Sea Ray® eliminates the need for snaps and provides a superb water barrier at the windshield frame area. On the bottom edge of the Windshield Visors and Side Curtains you will notice the snapless rubber

CANVAS INFORMATION

extrusion. The extrusion fits into the top of the windshield frame. See the illustration for proper installation of the snapless extrusion into the windshield frame. To ease the installation of the extrusion, remember to partially zip the Windshield Visor and Side Curtains to relieve tension.



It is recommended for safety and ease of installation that two (2) or more people are available to install or remove the canvas set. Take time to read over the instructions for the canvas piece(s) that you are to install or remove to familiarize yourself with the location of the components of your Sport Cruiser canvas set.

! WARNING

Bimini Top should not be used when the vessel speed exceeds 45 MPH. DO NOT have Bimini Top installed when trailering. Use Cockpit cover ONLY when trailering.

! WARNING

Convertible Top should not be used when the vessel speed exceeds 45 MPH. DO NOT have Convertible Top installed when trailering. Use Cockpit cover ONLY when trailering.

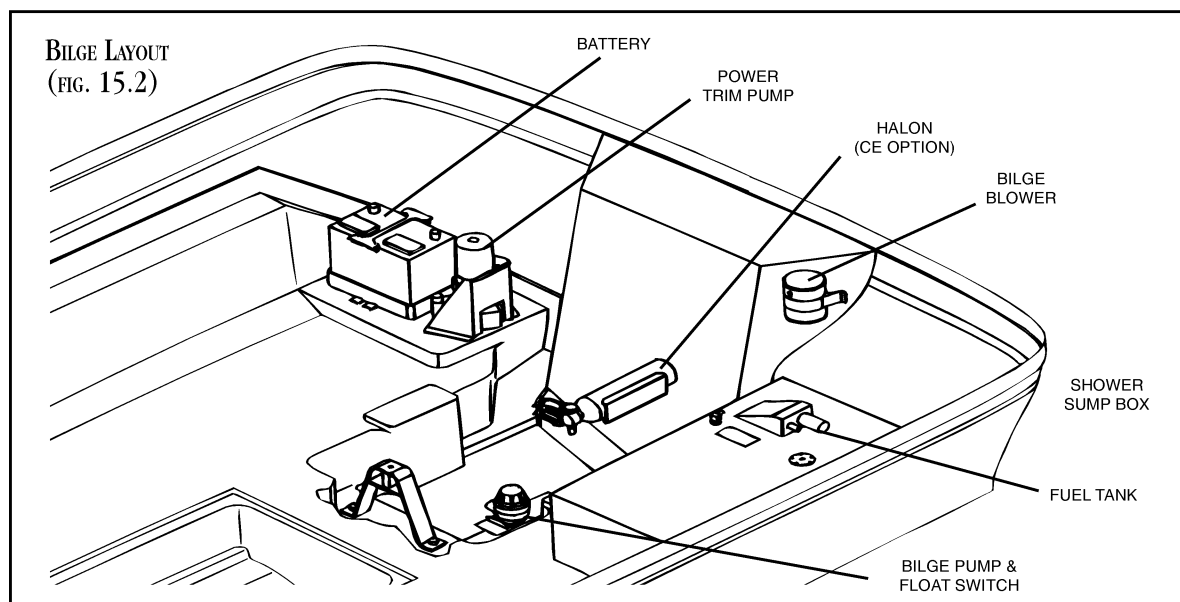
TRAILERING WITH CANVAS

You may trailer your boat with either cockpit cover or tonneau cover installed, however, the mooring cover must be installed over boat with tie down straps secure. The bimini top, side curtains and aft cover must be removed when trailering. Damage will occur to canvas and bows or boat if attached to boat while trailering.

! WARNING

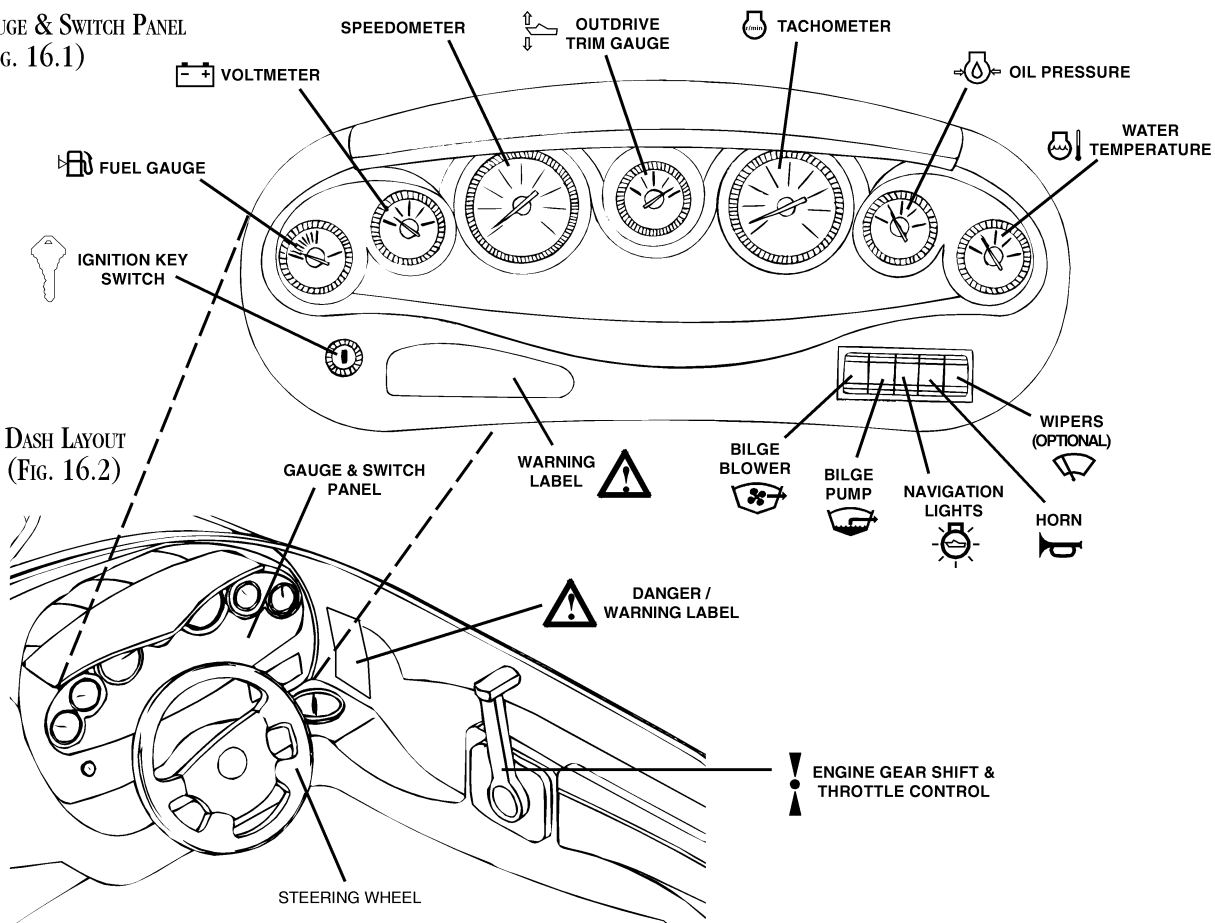
To Avoid Entrapment Of Carbon Monoxide Gas, Remove Aft Cover or Convertible Top Canvas Before Starting Engine and Operating Vessel.

BILGE LAYOUT

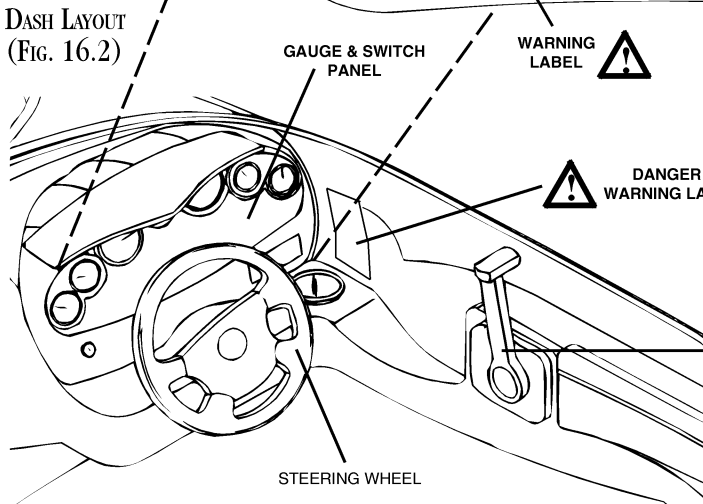


DASH LAYOUT

GAUGE & SWITCH PANEL
(FIG. 16.1)

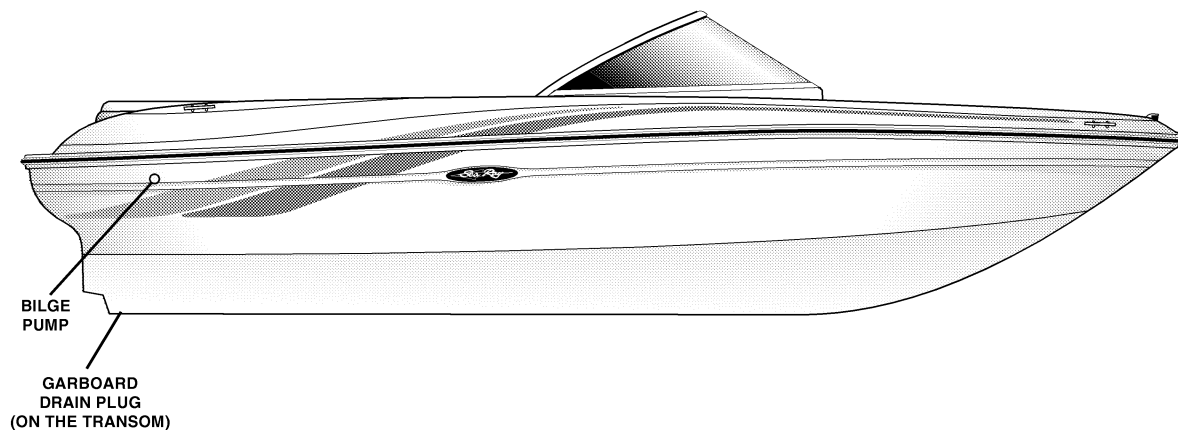


DASH LAYOUT
(FIG. 16.2)



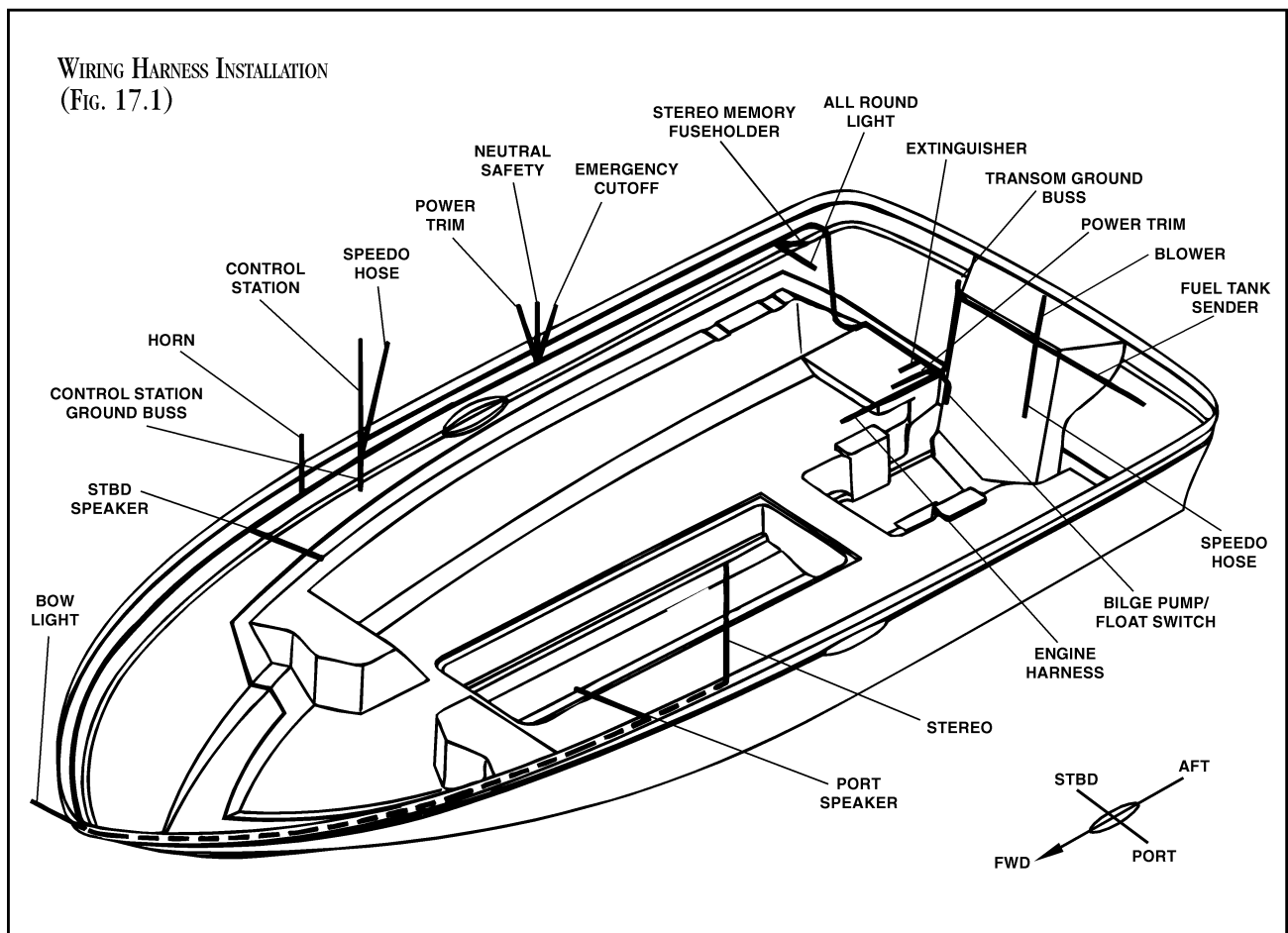
LOCATION OF THROUGH-HULL FITTINGS

STARBOARD SIDE
(FIG. 16.2)

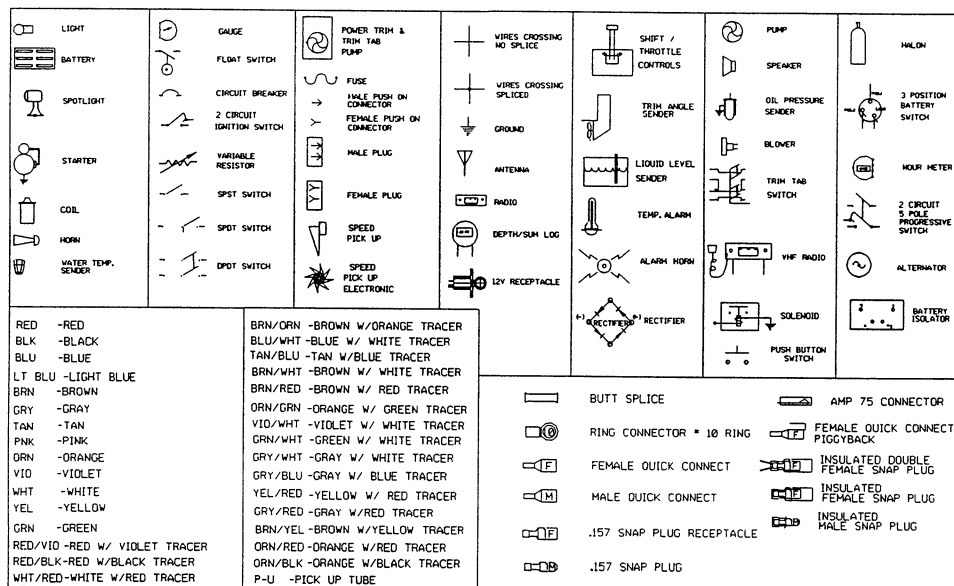


WIRING HARNESS CONSTRUCTION

WIRING HARNESS INSTALLATION
(FIG. 17.1)



KEY TO ELECTRICAL SYMBOLS

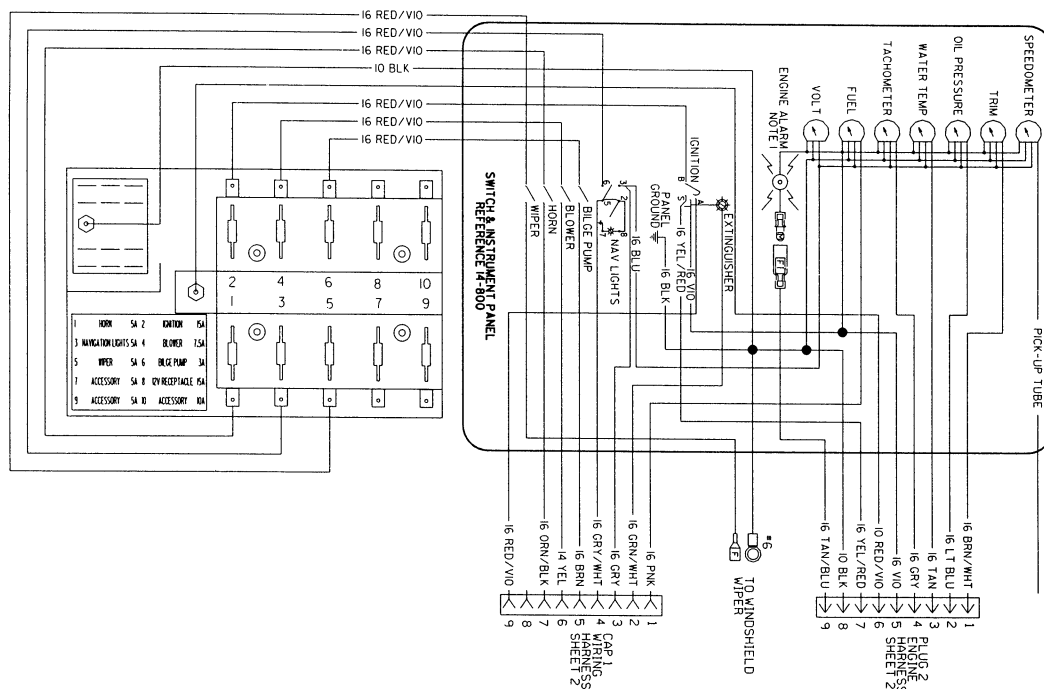


1) ALL WIRE IS AMERICAN WIRE GAUGE (AWG) STANDARDS

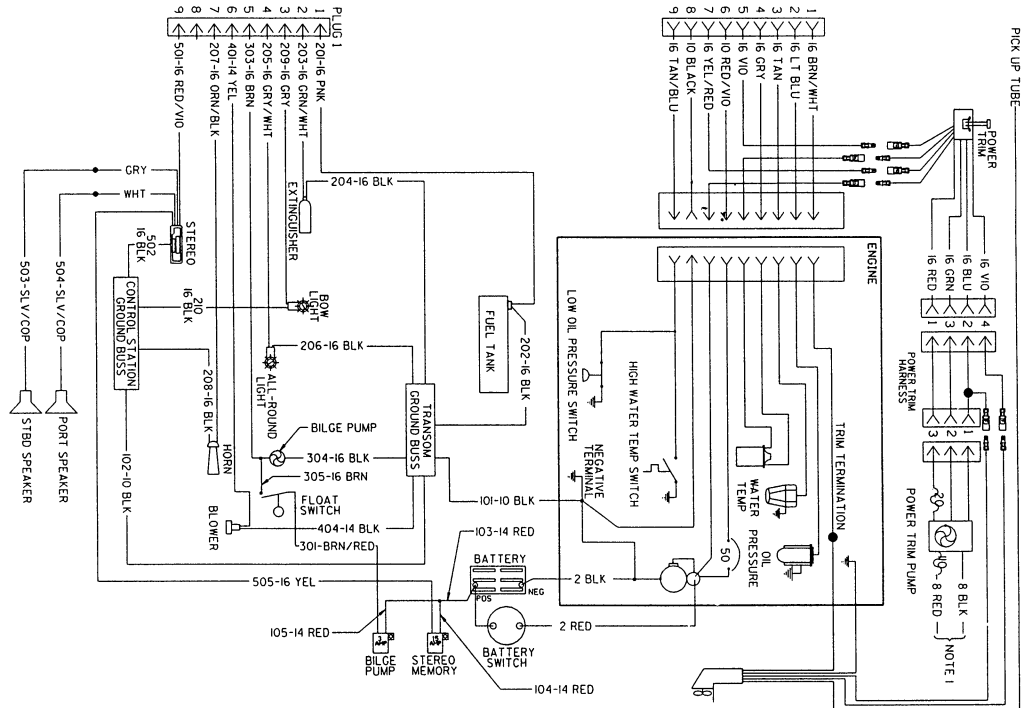
2) THE CONNECTOR SIZE IS DETERMINED BY THE GAUGE OF THE WIRE THE CONNECTOR IS USED ON.

3) QUICK CONNECT TERMINALS TO BE .250 UNLESS OTHERWISE INDICATED, TAB THICKNESS IS .032"

DC WIRING SCHEMATIC

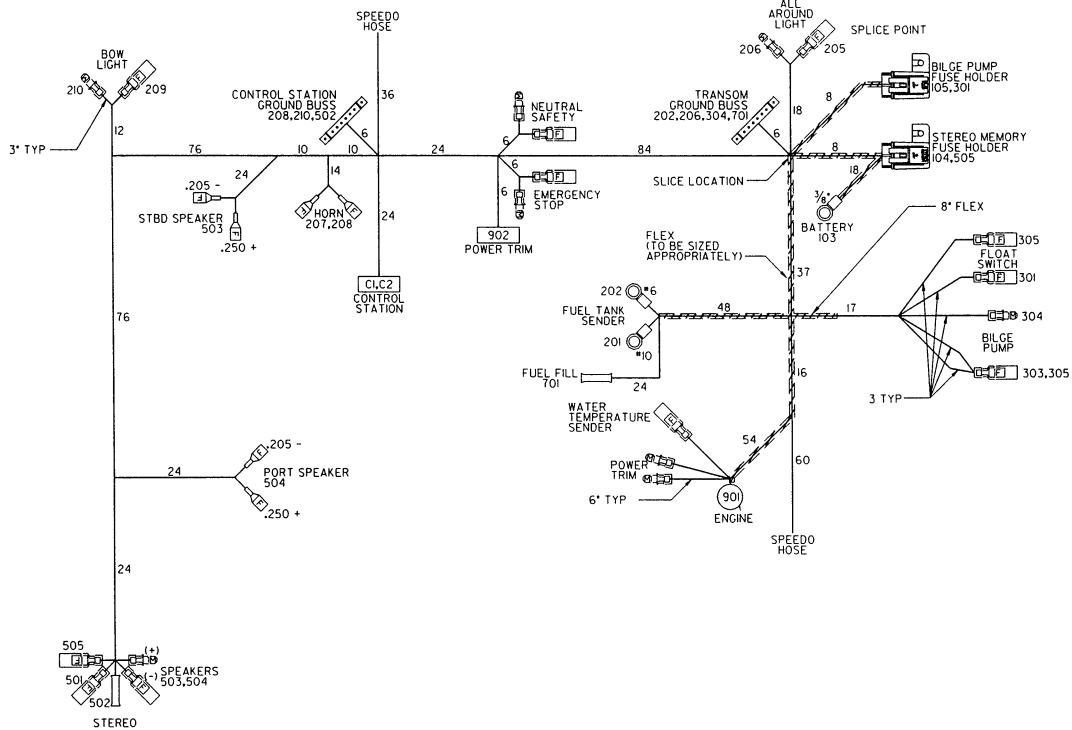


DC WIRING SCHEMATIC



Print No. 09-601, 2 of 2, Revision 01

WIRING HARNESS SCHEMATIC



Print No. 09-870, 3 of 4, Revision 05

INTERNATIONAL HOMOLOGATIONS

This vessel and its systems have been constructed in accordance with standards and specifications in effect at the time of manufacture as published by the various regulatory authorities listed below.

1. Ministere De La Mer - France
2. Registro Italiano Navale - Italy
3. Det Norske Veritas - Norway
4. Securite des Nauires - Canada
5. J.C.I. (Japan Craft Inspection) - Japan
6. N.K.K. (Nippon Kaiji Kyokai) - Japan
7. B.S.I. (British Standards Institute) - England
8. Ministerio Obras Publicas Y Transporters - Spain
9. EC Directive - European Community

Further information may be obtained from Sea Ray® Customer Service. 1-800-SRBOATS.

