

OPERATOR'S GUIDE

SPORTSTER LE/LT

⚠ WARNING

Read this guide thoroughly. It contains important safety information.

2 1 9 0 0 0 1 4 8



SAFETY WARNING

Disregarding any of the safety precautions and instructions contained in this *Operator's Guide*, the *Safety Handbook*, the *Safety Videocassette* and the on-product *Warning Labels* could cause injury, including the possibility of death. The operator has the responsibility to inform passenger(s) of safety precautions.

This *Operator's Guide*, the *Safety Handbook* and Videocassette should remain with the craft at the time of resale.





Gelcote[†] is a trademark of Gelcote International Knight's Spray-Nine[†] is a trademark of Korkak System Itd

The following trademarks are the property of Bombardier Inc. or its subsidiaries:

SEA-DOO®
BOMBARDIER-ROTAX®
BOMBARDIER LUBE®
Sea-Doo Synthetic Grease

Doin'it on your new Sea-Doo Sport Boat

Congratulations, you are now the proud owner of a Sea-Doo sport boat. Whether you are an experienced boater or are new to the sport of boating, we ask you to take the time to view the *Safety Videocassette* provided with the craft, to read the *Operator's Guide* and *Safety Handbook* and on-product warning/caution labels and familiarize yourself with the contents. The guidecontain pertinent information which, if followed, will provide you with the necessary knowledge to help you fully enjoy the pleasures of this boat.

We strongly recommend that any boat operator complete a safety boating course. Check with your local Coast Guard or Power and Sail Squadron in your area for course availability. More serious boaters may want to obtain "Chapman Piloting" by Elbert S. Maloney, available at most book stores.

When introducing your family or friends to the sport, be sure they fully understand the controls and operation of the sport boat and the importance of courteous, responsible riding.

Each sport boat operator has a responsibility to ensure the safety of his/her passenger(s) and of other water users. Please follow all safety instructions and operate your craft with care.

We encourage you to have an Annual Safety Inspection of your sport boat. Please contact your dealer for further details.

Finally, we invite you to visit dealer for regular safety maintenance as well as any boating accessories you may require.

Have fun and... Bon Voyage.

Please keep this guide and *Safety Handbook* on board. These manuals should remain with the sport boat at time of resale.

TABLE OF CONTENTS

⚠ SAFETY MEASURES 6 General 6 Operation 6 Maintenance 7 LIST OF DISTRIBUTORS 8 BOMBARDIER LIMITED WARRANTY 9 NORTH AMERICA: SEA-DOO® SPORT BOAT 9 BOMBARDIER INTERNATIONAL LIMITED WARRANTY: 11 SEA-DOO® SPORT BOAT 11 REGISTRATION NUMBER LOCATION 13 LOCATION OF THE IMPORTANT LABELS 14 IDENTIFICATION NUMBERS 16 Hull 16 Engines 16 CONTROLS, COMPONENTS AND INSTRUMENT LOCATION 17 Cockpit 17 Overview 18 CONTROLS, COMPONENTS AND INSTRUMENTS FUNCTIONS 20 1) Safety Lanyard (engine cut-out switch) 20 2) Steering Wheel 21 3) Throttle Lever(s) 22 4) Shift Lever 22 5) Start/Stop Button(s) 23 6) Choke Lever(s) 24 7) Navigation Light Switch 25 9) Bilge Pump Switch 25 <t< th=""><th>FOREV</th><th>VORD</th><th>5</th></t<>	FOREV	VORD	5
Operation 6 Maintenance 7 LIST OF DISTRIBUTORS 8 BOMBARDIER LIMITED WARRANTY 9 NORTH AMERICA: SEA-DOO® SPORT BOAT 9 BOMBARDIER INTERNATIONAL LIMITED WARRANTY: 11 SEA-DOO® SPORT BOAT 11 REGISTRATION NUMBER LOCATION 13 LOCATION OF THE IMPORTANT LABELS 14 IDENTIFICATION NUMBERS 16 Hull 16 Engines 16 CONTROLS, COMPONENTS AND INSTRUMENT LOCATION 17 Cockpit 17 Overview 18 CONTROLS, COMPONENTS AND INSTRUMENTS FUNCTIONS 20 1) Safety Lanyard (engine cut-out switch) 20 2) Steering Wheel 21 3) Throttle Lever(s) 22 4) Shift Lever 22 5) Start/Stop Button(s) 23 6) Choke Lever(s) 24 7) Navigation Light Switch 24 8) Bilge Pump Switch 25 9) Bilga Air Blower Switch 25 10) Fuel Gauge/Low Injection Oil Level	 ∆ SAF	FETY MEASURES	6
Operation 6 Maintenance 7 LIST OF DISTRIBUTORS 8 BOMBARDIER LIMITED WARRANTY 9 NORTH AMERICA: SEA-DOO® SPORT BOAT 9 BOMBARDIER INTERNATIONAL LIMITED WARRANTY: 11 SEA-DOO® SPORT BOAT 11 REGISTRATION NUMBER LOCATION 13 LOCATION OF THE IMPORTANT LABELS 14 IDENTIFICATION NUMBERS 16 Hull 16 Engines 16 CONTROLS, COMPONENTS AND INSTRUMENT LOCATION 17 Cockpit 17 Overview 18 CONTROLS, COMPONENTS AND INSTRUMENTS FUNCTIONS 20 1) Safety Lanyard (engine cut-out switch) 20 2) Steering Wheel 21 3) Throttle Lever(s) 22 4) Shift Lever 22 5) Start/Stop Button(s) 23 6) Choke Lever(s) 24 7) Navigation Light Switch 24 8) Bilge Pump Switch 25 9) Bilga Air Blower Switch 25 10) Fuel Gauge/Low Injection Oil Level	Ger	neral	6
Maintenance 7 LIST OF DISTRIBUTORS 8 BOMBARDIER LIMITED WARRANTY 9 NORTH AMERICA: SEA-DOO® SPORT BOAT 9 BOMBARDIER INTERNATIONAL LIMITED WARRANTY: 11 SEA-DOO® SPORT BOAT 11 REGISTRATION NUMBER LOCATION 13 LOCATION OF THE IMPORTANT LABELS 14 IDENTIFICATION NUMBERS 16 Hull 16 Engines 16 CONTROLS, COMPONENTS AND INSTRUMENT LOCATION 17 Cockpit 17 Overview 18 CONTROLS, COMPONENTS AND INSTRUMENTS FUNCTIONS 20 1) Safety Lanyard (engine cut-out switch) 20 2) Steering Wheel 21 3) Throttle Lever(s) 22 4) Shift Lever 22 5) Start/Stop Button(s) 23 6) Choke Lever(s) 24 7) Navigation Light Switch 25 9) Bilge Pump Switch 25 9) Bilge Air Blower Switch 25 10) Fuel Gauge/Low Injection Oil Level Pilot Lamp 26 <t< th=""><th></th><th></th><th>6</th></t<>			6
BOMBARDIER LIMITED WARRANTY NORTH AMERICA: SEA-DOO® SPORT BOAT 9 BOMBARDIER INTERNATIONAL LIMITED WARRANTY: SEA-DOO® SPORT BOAT 11 REGISTRATION NUMBER LOCATION 13 LOCATION OF THE IMPORTANT LABELS 14 IDENTIFICATION NUMBERS 16 Hull 16 Engines 16 CONTROLS, COMPONENTS AND INSTRUMENT LOCATION 17 Cockpit 17 Overview 18 CONTROLS, COMPONENTS AND INSTRUMENTS FUNCTIONS 20 Steering Wheel 21 3 Throttle Lever(s) 22 4 Shift Lever 22 5 Start/Stop Button(s) 23 6 Choke Lever(s) 24 8 Bilge Pump Switch 25 9 Bilge Air Blower Switch 26 11 Tachometer(s) 26 12 Speedometer 26 13 Bilge Drain Plug 27 27 27 27 27 27 27 2			7
BOMBARDIER LIMITED WARRANTY NORTH AMERICA: SEA-DOO® SPORT BOAT 9			8
SEA-DOO® SPORT BOAT SEA-DOO® SPORT SEA			
BOMBARDIER INTERNATIONAL LIMITED WARRANTY: SEA-DOO® SPORT BOAT			9
SEA-DOO® SPORT BOAT 11 REGISTRATION NUMBER LOCATION 13 LOCATION OF THE IMPORTANT LABELS 14 IDENTIFICATION NUMBERS 16 Hull 16 Engines 16 CONTROLS, COMPONENTS AND INSTRUMENT LOCATION 17 Cockpit 17 Overview 18 CONTROLS, COMPONENTS AND INSTRUMENTS FUNCTIONS 20 1) Safety Lanyard (engine cut-out switch) 20 2) Steering Wheel 21 3) Throttle Lever(s) 22 4) Shift Lever 22 5) Start/Stop Button(s) 23 6) Choke Lever(s) 24 7) Navigation Light Switch 24 8) Bilge Pump Switch 25 9) Bilge Air Blower Switch 25 10) Fuel Gauge/Low Injection Oil Level Pilot Lamp 26 11) Tachometer(s) 26 12) Speedometer 26 13) Bilge Drain Plug 27			•
REGISTRATION NUMBER LOCATION 13 LOCATION OF THE IMPORTANT LABELS 14 IDENTIFICATION NUMBERS 16 Hull 16 Engines 16 CONTROLS, COMPONENTS AND INSTRUMENT LOCATION 17 Cockpit 17 Overview 18 CONTROLS, COMPONENTS AND INSTRUMENTS FUNCTIONS 20 1) Safety Lanyard (engine cut-out switch) 20 2) Steering Wheel 21 3) Throttle Lever(s) 22 4) Shift Lever 22 5) Start/Stop Button(s) 23 6) Choke Lever(s) 24 7) Navigation Light Switch 24 8) Bilge Pump Switch 25 9) Bilge Air Blower Switch 25 10) Fuel Gauge/Low Injection Oil Level Pilot Lamp 26 11) Tachometer(s) 26 12) Speedometer 26 13) Bilge Drain Plug 27			11
LOCATION OF THE IMPORTANT LABELS 14 IDENTIFICATION NUMBERS 16 Hull 16 Engines 16 CONTROLS, COMPONENTS AND INSTRUMENT LOCATION 17 Cockpit 17 Overview 18 CONTROLS, COMPONENTS AND INSTRUMENTS FUNCTIONS 20 1) Safety Lanyard (engine cut-out switch) 20 2) Steering Wheel 21 3) Throttle Lever(s) 22 4) Shift Lever 22 5) Start/Stop Button(s) 23 6) Choke Lever(s) 24 7) Navigation Light Switch 24 8) Bilge Pump Switch 25 9) Bilge Air Blower Switch 25 10) Fuel Gauge/Low Injection Oil Level Pilot Lamp 26 11) Tachometer(s) 26 12) Speedometer 26 13) Bilge Drain Plug 27			
Tachometer(s) Tachometer Tachometer			
Hull 16 Engines 16 CONTROLS, COMPONENTS AND INSTRUMENT LOCATION 17 Cockpit 17 Overview 18 CONTROLS, COMPONENTS AND INSTRUMENTS FUNCTIONS 20 1) Safety Lanyard (engine cut-out switch) 20 2) Steering Wheel 21 3) Throttle Lever(s) 22 4) Shift Lever 22 5) Start/Stop Button(s) 23 6) Choke Lever(s) 24 7) Navigation Light Switch 24 8) Bilge Pump Switch 25 9) Bilge Air Blower Switch 25 10) Fuel Gauge/Low Injection Oil Level Pilot Lamp 26 11) Tachometer(s) 26 12) Speedometer 26 13) Bilge Drain Plug 27			14
Engines 16 CONTROLS, COMPONENTS AND INSTRUMENT LOCATION 17 Cockpit 18 CONTROLS, COMPONENTS AND INSTRUMENTS FUNCTIONS 20 1) Safety Lanyard (engine cut-out switch) 20 2) Steering Wheel 21 3) Throttle Lever(s) 22 4) Shift Lever 22 5) Start/Stop Button(s) 23 6) Choke Lever(s) 24 7) Navigation Light Switch 24 8) Bilge Pump Switch 25 9) Bilge Air Blower Switch 25 10) Fuel Gauge/Low Injection Oil Level Pilot Lamp 26 11) Tachometer(s) 26 12) Speedometer 26 13) Bilge Drain Plug 27			16
CONTROLS, COMPONENTS AND INSTRUMENT LOCATION 17 Cockpit 17 Overview 18 CONTROLS, COMPONENTS AND INSTRUMENTS FUNCTIONS 1) Safety Lanyard (engine cut-out switch) 20 2) Steering Wheel 21 3) Throttle Lever(s) 22 4) Shift Lever 22 5) Start/Stop Button(s) 23 6) Choke Lever(s) 24 7) Navigation Light Switch 24 8) Bilge Pump Switch 25 9) Bilge Air Blower Switch 25 10) Fuel Gauge/Low Injection Oil Level Pilot Lamp 26 11) Tachometer(s) 26 12) Speedometer 26 13) Bilge Drain Plug 27			16
Cockpit			
Overview 18 CONTROLS, COMPONENTS AND INSTRUMENTS FUNCTIONS 20 1) Safety Lanyard (engine cut-out switch) 20 2) Steering Wheel 21 3) Throttle Lever(s) 22 4) Shift Lever 22 5) Start/Stop Button(s) 23 6) Choke Lever(s) 24 7) Navigation Light Switch 24 8) Bilge Pump Switch 25 9) Bilge Air Blower Switch 25 10) Fuel Gauge/Low Injection Oil Level Pilot Lamp 26 11) Tachometer(s) 26 12) Speedometer 26 13) Bilge Drain Plug 27	CONTI	ROLS, COMPONENTS AND INSTRUMENT LOCATION	17
CONTROLS, COMPONENTS AND INSTRUMENTS FUNCTIONS 1) Safety Lanyard (engine cut-out switch)	Coc	ckpit	17
1) Safety Lanyard (engine cut-out switch) 20 2) Steering Wheel 21 3) Throttle Lever(s) 22 4) Shift Lever 22 5) Start/Stop Button(s) 23 6) Choke Lever(s) 24 7) Navigation Light Switch 24 8) Bilge Pump Switch 25 9) Bilge Air Blower Switch 25 10) Fuel Gauge/Low Injection Oil Level Pilot Lamp 26 11) Tachometer(s) 26 12) Speedometer 26 13) Bilge Drain Plug 27	Ove	erview	18
2) Steering Wheel 21 3) Throttle Lever(s) 22 4) Shift Lever 22 5) Start/Stop Button(s) 23 6) Choke Lever(s) 24 7) Navigation Light Switch 24 8) Bilge Pump Switch 25 9) Bilge Air Blower Switch 25 10) Fuel Gauge/Low Injection Oil Level Pilot Lamp 26 11) Tachometer(s) 26 12) Speedometer 26 13) Bilge Drain Plug 27	CONTI	ROLS, COMPONENTS AND INSTRUMENTS FUNCTIONS	20
3) Throttle Lever(s) 22 4) Shift Lever 22 5) Start/Stop Button(s) 23 6) Choke Lever(s) 24 7) Navigation Light Switch 24 8) Bilge Pump Switch 25 9) Bilge Air Blower Switch 25 10) Fuel Gauge/Low Injection Oil Level Pilot Lamp 26 11) Tachometer(s) 26 12) Speedometer 26 13) Bilge Drain Plug 27	1)	Safety Lanyard (engine cut-out switch)	20
4) Shift Lever	2)	Steering Wheel	21
5) Start/Stop Button(s) 23 6) Choke Lever(s) 24 7) Navigation Light Switch 24 8) Bilge Pump Switch 25 9) Bilge Air Blower Switch 25 10) Fuel Gauge/Low Injection Oil Level Pilot Lamp 26 11) Tachometer(s) 26 12) Speedometer 26 13) Bilge Drain Plug 27	3)	Throttle Lever(s)	22
6) Choke Lever(s) 24 7) Navigation Light Switch 24 8) Bilge Pump Switch 25 9) Bilge Air Blower Switch 25 10) Fuel Gauge/Low Injection Oil Level Pilot Lamp 26 11) Tachometer(s) 26 12) Speedometer 26 13) Bilge Drain Plug 27			
7) Navigation Light Switch 24 8) Bilge Pump Switch 25 9) Bilge Air Blower Switch 25 10) Fuel Gauge/Low Injection Oil Level Pilot Lamp 26 11) Tachometer(s) 26 12) Speedometer 26 13) Bilge Drain Plug 27			
8) Bilge Pump Switch	6)	Choke Lever(s)	
9) Bilge Air Blower Switch			
10) Fuel Gauge/Low Injection Oil Level Pilot Lamp2611) Tachometer(s)2612) Speedometer2613) Bilge Drain Plug27			_
11) Tachometer(s) 26 12) Speedometer 26 13) Bilge Drain Plug 27	9)	Bilge Air Blower Switch	
12) Speedometer2613) Bilge Drain Plug27			
13) Bilge Drain Plug			
			_
1/11 (3ran Hanniae			
15) Rear Grab Handle(s) 27			
16) Swim Platform			
17) Seats			
18) Bow Seat			
19) Spotter Seat			
20) Cup Holders		•	
21) Front Storage Compartment		·	
22) Deck Storage Compartment			

7.3) Rear Storage Compartment	29
24) Jet Pump Water Intake(s)	31
) Tow Hook	31
	Bow Light	31
27	Removable Stern Light	31
) Mooring Cleats	32
) Deck	32
) Fuel Tank Cap	32
) Deck Drain	33
) Oil Injection Tank Cap	33
) Flushing Connectors	33
34) Ventilation Ducts	33
) Bow/Stern Eyelets	34
) Jet Pump Nozzle(s)	34
37	Reverse Gate(s)	34
	Scupper Valve	34
39) Weedless System Lever	34
) Fuel Tank Vent	36
41) Ski Post (if so equipped)	36
42) Fuel Valve(s)	37
43) Cooling System Bleed Outlet(s)	37
44) Main Battery Cut-Off Switch	37
	ses	38
FUEL	AND LUDDICATION	
	AND LUBRICATION	39
	eling Procedure	39
Fu Re	eling Procedureecommended Fuel	
Fu Re	eling Procedure	39
Fu Re Re	eling Procedureecommended Fuel	39
Fu Re Re Oi	eling Procedure commended Fuel commended Oil Injection System	39 39 40
Fu Re Re Oi BREA	eling Procedure commended Fuel commended Oil Injection System K-IN PERIOD	39 39 40 40
Fu Re Re Oi BREA En	eling Procedure ecommended Fuel ecommended Oil I Injection System K-IN PERIOD gine(s)	39 39 40 40 41
Fu Re Re Oi BREA En	eling Procedure ecommended Fuel commended Oil I Injection System K-IN PERIOD gine(s) -Hour Inspection	39 40 40 41 41 41
Fu Re Re Oi BREA En 10 PRE-C	eling Procedure ecommended Fuel ecommended Oil I Injection System K-IN PERIOD gine(s) -Hour Inspection DPERATION CHECKS	39 40 40 41 41 41 43
Fu Re Oi BREA En 10 PRE-C	eling Procedure ecommended Fuel ecommended Oil I Injection System K-IN PERIOD gine(s) -Hour Inspection DPERATION CHECKS	39 40 40 41 41 41 43
Fu Re Re Oi BREA En 10 PRE-C Hu Je	eling Procedure commended Fuel commended Oil Injection System K-IN PERIOD gine(s) -Hour Inspection DPERATION CHECKS III t Pump Water Intake(s)	39 40 40 41 41 41 43 44
Fu Re Oi BREA En 10 PRE-C Hu Je Bil	eling Procedure commended Fuel commended Oil Injection System K-IN PERIOD gine(s) -Hour Inspection DPERATION CHECKS III t Pump Water Intake(s) ge	39 40 40 411 41 43 44 44 44
Fu Re Oi BREA En 10 PRE-C Hu Je Bill Ba	eling Procedure commended Fuel commended Oil Injection System K-IN PERIOD gine(s) -Hour Inspection DPERATION CHECKS III t Pump Water Intake(s) ge ttery	39 40 40 41 41 41 43 44 44 44
Fu Re Oi BREA En 10 PRE-(Hu Je Bill Ba Fu	eling Procedure commended Fuel commended Oil Injection System K-IN PERIOD gine(s) -Hour Inspection DPERATION CHECKS III t Pump Water Intake(s) ge ttery el Tank/Oil Reservoirs	39 40 40 41 41 41 44 44 44 44
Fu Re Oi BREA En 10 PRE-C Hu Je Bill Ba Fu En	eling Procedure commended Fuel commended Oil Injection System K-IN PERIOD gine(s) -Hour Inspection DPERATION CHECKS III t Pump Water Intake(s) ge ttery el Tank/Oil Reservoirs gine Compartment	39 39 40 40 41 41 41 43 44 44 44 44 44 44
Fundamental Fundam	eling Procedure commended Fuel commended Oil Injection System K-IN PERIOD gine(s) -Hour Inspection DPERATION CHECKS Ill t Pump Water Intake(s) ge ttery el Tank/Oil Reservoirs gine Compartment e Extinguisher	39 40 40 41 41 41 44 44 44 44
Fu Re Oi BREA En 10 PRE-C Hu Je Bil Ba Fu En Fir	eling Procedure commended Fuel commended Oil Injection System K-IN PERIOD gine(s) -Hour Inspection DPERATION CHECKS III t Pump Water Intake(s) ge ttery el Tank/Oil Reservoirs gine Compartment e Extinguisher eering System	39 40 40 41 41 41 43 44 44 44 44 44 44 44
Fu Re Oi BREA En 10 PRE-C Hu Je Bil Ba Fu En Fir Stu	eling Procedure commended Fuel commended Oil Injection System K-IN PERIOD gine(s) -Hour Inspection DPERATION CHECKS III t Pump Water Intake(s) ge ttery el Tank/Oil Reservoirs gine Compartment e Extinguisher eering System rottle System	39 40 40 41 41 41 43 44 44 44 44 44 44 44 44
Fundament Research Re	eling Procedure ecommended Fuel ecommended Oil Injection System K-IN PERIOD gine(s) -Hour Inspection DPERATION CHECKS Ill t Pump Water Intake(s) ge ttery el Tank/Oil Reservoirs gine Compartment e Extinguisher eering System rottle System ifter System	39 40 40 41 41 41 41 44 44 44 44 44 44 44
Fu Re Oi BREA En 10 PRE-C Hu Je Bill Ba Fu En Fir Sto Th Sh W	eling Procedure commended Fuel commended Oil Injection System K-IN PERIOD gine(s) -Hour Inspection DPERATION CHECKS III t Pump Water Intake(s) ge ttery el Tank/Oil Reservoirs gine Compartment e Extinguisher eering System rottle System eedless System eedless System	39 40 40 41 41 41 44 44 44 44 44 44 44 44 44 44
Function Records Recor	eling Procedure ecommended Fuel ecommended Oil Injection System K-IN PERIOD gine(s) -Hour Inspection DPERATION CHECKS Ill t Pump Water Intake(s) ge ttery el Tank/Oil Reservoirs gine Compartment e Extinguisher eering System rottle System ifter System	39 40 40 41 41 41 44 44 44 44 44 44 45 45

OPERATING INSTRUCTIONS	. 46
Launching/Loading	. 46
Trailering	. 47
Principle of Operation	. 47
Boarding from a Dock	. 48
Boarding from the Water	
Starting	
Rough Water or Poor Visibility Operation	
Crossing Waves	
Stopping/Docking Beaching	
POST-OPERATION CARE	
General Care	
SPECIAL PROCEDURE	
Engine Overheating	
Jet Pump Water Intake and Impeller Cleaning	
Capsized Boat	
Submerged Boat	
Low-Charge Battery Condition	
MAINTENANCE	
Lubrication	
Periodic Inspection	
Throttle and Choke Cables	
Fuel and Oil Filters	. 63
Steering/Jet Pump Nozzle Adjustment	
Reverse Gate(s)	
Deck Drain	
Fuses	
Bilge Air Blower	
Navigation Light Bulb Replacement	
General Inspection and Cleaning	. 68
STORAGE AND PRE-SEASON PREPARATION	
Storage	
Pre-Season Preparation	
TROUBLESHOOTING	
PERIODIC INSPECTION CHART	. 79
SPECIFICATIONS	. 81
SI METRIC INFORMATION GUIDE	. 85
DECLARATION CE OF CONFORMITY	
Homologation and Certification	
Operator's Guide Confirmation of Receipt	
CHANGE OF ADDRESS	
CHAILE OF ADDILESS	. 63

FOREWORD

This Operator's Guide has been prepared to acquaint the owner/operator or passenger of this sport boat with the various sport boat controls, maintenance and safe riding instructions. It is indispensable for the proper use of the product, and should be kept in a waterproof bag in the sport boat at all times. Make sure you read and understand the content of each document.

For any questions pertaining to the warranty and its application, please consult an authorized SEA-DOO sport boat dealer.

This guide uses the following symbols to emphasize particular information.

Identifies an instruction which, if not followed, might cause serious personal injuries including the possibility of death.

CAUTION: Denotes an instruction which, if not followed, might severely damage the sport boat and/or components.

NOTE: Indicates supplementary information needed to fully complete an instruction

Although the mere reading of such information does not eliminate the hazard, the understanding and application of the information will promote its correct use.

The informatioin and components/system descriptions contained in this guide are correct at the time of publication. Bombardier Motor Corporation of America (B.M.C.A.) however, maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on products previously manufactured.

Because of our ongoing commitment to product quality and innovation, Bombardier Inc. reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

The illustrations in this document show the typical construction of the different assemblies and may not reproduce the full detail or exact shape of the parts. However, they represent parts that have the same or similar function.

It is understood that this guide may be translated into another language. In the event of any discrepancy, the English version shall prevail.

Specifications are given in the SI metric system with the SAE U.S. equivalent in parenthesis. Where precise accuracy is not required, some conversions are rounded off for easier use.

A *Shop Manual* can be obtained for complete service, maintenance and more repair information.

A SAFETY MEASURES

General

- ▲ To fully appreciate the pleasures, enjoyment and excitement of boating there are some basic rules that should be observed and followed by any boater. Some rules may be new to you or covered in the PWC/Sport boat Safety Handbook or Safety Video, others may be common sense or obvious... irrespective, we ask that you please take a few minutes of your time to completely read these safety instructions before vou operate vour craft. Failure to follow this safety information and safe boating rules could result in injury, including the possibility of death to you, your passenger(s), or other water users.
- ⚠ Become completely familiar with the controls and operation of the craft before embarking on your first trip or taking on a passenger(s). If you have not had the opportunity to do so with your dealer, practice driving solo in a suitable area and feel the response of each control. Be fully familiar with all controls before applying the throttle above idle speed. As its operator, you control and are responsible for the craft's safe operation.

Operation

- ▲ Always perform the pre-operation checks as specified in this guide.
- ▲ Always keep in mind that as the throttle lever is released to idle position, less directional control is available. To turn the craft, both steering and throttle are necessary.

- ▲ Like any other boats, this craft has no brake. Stopping distance will vary depending on initial speed, load, wind, and water conditions. Practice stopping and docking in a safe, traffic free area to have an idea of how long it will take to stop the craft under varying conditions. Do not release throttle when trying to steer away from objects. You need throttle to steer. Do not use the craft's reverse, if so equipped, to stop.
- ▲ Ensure that all passengers know how to swim and how to reboard the craft from the water.
- ⚠ The operator and passenger(s) should be properly seated and wearing an approved PFD before starting or moving the craft and at all times when craft is in motion.
- ▲ Do not start or operate the craft if a person(s) is seated on the sun deck or swim platform, or are nearby in the water.
- ▲ The craft's jet thrust can cause injury. Always accelerate slowly.
- ⚠ To prevent accidental starting or unauthorized use, always detach the safety lanyard from the craft especially when swimmers are boarding or nearby, or during removal of any weeds or debris from the intake grate.
- A Riding with a passenger(s) or pulling other boats, tubes, skier or wakeboarder makes the craft handle differently and requires greater skill. Do not overload the craft or take on more passengers than designated for the particular craft. Overloading can affect maneuverability, stability and performance. Avoid adding on accessories, or equipment which may alter your control of the craft. The craft may be fitted with tow eyelets which can be used to attach a ski rope. However, do not use these eyelets or the craft's cleats to tow a parasail. Severe craft damage may occur.

- ⚠ In shallow water, proceed with caution and at very low speeds. Grounding or abrupt stops may result in injury. Debris may also be picked up and be thrown rearward by the jet pump onto people or property.
- ⚠ Respect no wake zones, the rights of other water users and the environment. As the "skipper" and owner of a boat you are responsible for damage to other boats caused by the wake of your craft. Allow no one to throw refuse overboard.
- ▲ This craft is equipped with navigation lights which should be used between sunset and sunrise. Reduce speed and do not operate the craft in reduced visibility.
- ⚠ Remember, gasoline fumes are inflammable and explosive. Always adhere to the fueling procedure contained in this guide and those given to you by the marina. Always verify fuel level before use and during the ride. Apply the principle of 1/3 fuel to destination, 1/3 back and 1/3 reserve fuel supply. Do not carry spare fuel or inflammable liquids in any of the storage or engine compartments.
- △ Combustion engine needs air to operate; consequently this craft can not be totally watertight. Any maneuvers such as figure eights etc., that cause the upper deck to be under water may cause severe engine problems due to water ingestion. Refer to SPECIAL PROCEDURES and Limited Warranty contained in this guide.
- ▲ Operation of this craft by a minor or disabled person is NOT recommended.

Maintenance

- ⚠ Only perform servicing procedures which are detailed in this guide. Further assistance or information can be obtained from your authorized Sea-Doo dealer. In many instances proper tools and training is required for certain servicing or repair procedures.
- ▲ Maintain the craft and equipment in top condition at all times. Adhere to the prescribed maintenance schedules. An annual inspection of the craft is always a good recommendation that should be followed.
- ▲ The bilge must be kept clean of oil, water or other foreign materials.
- ▲ Do not attempt to lift the craft without special equipment and training.
- ▲ The engine and the corresponding components identified in this guide should not be utilized on product(s) other than for those they were designed. Maintenance procedures and specified tightening torque must be strictly adhered to. Never attempt repairs unless the appropriate tools are available. These craft are designed with parts dimensioned in both the metric and the imperial systems. When replacing fasteners, make sure to use only those recommended by Bombardier. If required, contact your authorized Sea-Doo dealer for further servicing information.
- △ Operate your craft prudently and have fun. Don't forget that all persons must assist other boaters in an emergency.

LIST OF DISTRIBUTORS

NORTH AMERICA

USA

(Except Puerto Rico)

BOMBARDIER MOTOR CORPORATION OF AMERICA

7575, Bombardier Court P.O. Box 8035

WAUSAU, WI. 54401 (or for P.O. Box 54402)

Phone: (715) 848-4957 Fax: (715) 847-6879

http://www.bombardier.com

CANADA

Alberta
British Columbia
Manitoba
North West Territories
Ontario
Quebec
Saskatchewan
Yukon
New-Brunswick
Nova Scotia
Prince Edward Island
Nunavut

Newfoundland

BOMBARDIER INC.

RECREATIONAL PRODUCT 75, J.A. BOMBARDIER ST. SHERBROOKE, QC J1L 1W3

Phone: (819) 566-3366 Fax: (819) 566-3062

http://www.bombardier.com

If your SEA-DOO sport boat requires warranty service, you must take it to any authorized SEA-DOO sport boat dealer. Be sure to bring your warranty registration card or other valid proof of the original date of purchase. If a question or problem arises regarding warranty, first contact the service manager or owner of the SEA-DOO sport boat dealership.

To find the nearest authorized Sea-Doo sport boat dealer, dial: 1-800-882-2900.

NOTE: If outside Canada and USA, consult the local distributor.

BOMBARDIER LIMITED WARRANTY NORTH AMERICA: SEA-DOO® SPORT BOAT

1. WARRANTY COVERAGE PERIOD

In Canada, BOMBARDIER INC. ("Bombardier"), and in the USA, Bombardier on behalf of BOMBARDIER MOTOR CORPORATION OF AMERICA (BMCA), warrants FROM THE DATE OF DELIVERY TO THE FIRST CONSUMER that each SEA-DOO SPORT BOAT sold, as NEW and UNUSED and PREDELIVERED by an authorized North American SEA-DOO SPORT BOAT dealer, will be free from any defects in material and/or workmanship for a PERIOD of:

a) For private use:

TWELVE (12) CONSECUTIVE MONTHS, with the exception of the deck and hull fiberglass structure; and

SIXTY (60) CONSECUTIVE MONTHS for the deck and hull fiberglass structure.

b) For commercial use:

FOUR (4) CONSECUTIVE MONTHS, with the exception of the deck and hull fiber-glass structure; and

TWELVE (12) CONSECUTIVE MONTHS for the deck and hull fiberglass structure.

All genuine Bombardier accessories, installed by an authorized SEA-DOO SPORT BOAT dealer at the time of delivery of the new and non-current new SEA-DOO SPORT BOAT, carry the same Warranty Coverage Period as for the SEA-DOO SPORT BOAT.

2. WHAT BOMBARDIER WILL DO

BOMBARDIER will repair or replace, at its option, all genuine BOMBARDIER part found defective in material and/or workmanship, under normal use, maintenance and service, with a genuine BOMBARDIER part without charge for parts and labor, at any authorized SEA-DOO SPORT BOAT dealer during the Warranty Coverage Period.

3. CONDITION TO HAVE WARRANTY WORK VALIDATED

The customer must notify an authorized SEA-DOO SPORT BOAT dealer within two (2) days of the appearance of the defect in material and/or workmanship and present to the servicing authorized SEA-DOO SPORT BOAT dealer the SEA-DOO Warranty Registration Card or a proof of purchase of the NEW and UNUSED SEA-DOO SPORT BOAT and must sign the repair/work order prior to the start of the repair in order to validate a warranty repair. All parts replaced under this limited warranty become the property of BOMBARDIER.

4. EXCLUSIONS — ARE NOT WARRANTED

- Normal wear and tear items;
- Labor, parts and lubricant costs of all maintenance services;
- Damages caused by failure to provide proper maintenance and/or storage, as described in the "SEA-DOO SPORT BOAT Operator's Guide";
- Damages resulting from improper repairs, modifications or use of non-approved parts or, repairs not performed by an authorized SEA-DOO SPORT BOAT dealer;
- Damages resulting from abuse, misuse, neglect, racing;
- Damages resulting from accident, fire, theft, vandalism or any act of God;
- Incidental or consequential damages, or damages of any kind such as but not limited to towing charges, telephone calls or taxi;
- Water damages caused by water ingestion;

- Damages related to gel coat finish including but not limited to cosmetic gel coat finish, blisters or fiberglass delamination caused by blisters, crazing, spyder or hairline cracks; and
- Damages resulting from improper service or maintenance.

5. LIMITATIONS OF LIABILITY

This warranty gives you specific rights, and you may also have other legal rights which may vary from state to state, or province to province. WHERE APPLICABLE, THIS WARRANTY IS EXPRESSLY GIVEN AND ACCEPTED IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

Neither the distributor, any authorized SEA-DOO SPORT BOAT dealer nor any other person has been authorized to make any affirmation, representation or warranty other than those contained in this warranty, and if made, such affirmation, representation or warranty shall not be enforceable against BOMBARDIER or any other person.

In no event shall BOMBARDIER be liable for special, consequential or incidental damages, including but not limited to loss of use and transportation costs. Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above limitation or exclusion may not apply.

BOMBARDIER reserves the right to modify this warranty at any time, being understood that such modification will not alter the warranty conditions applicable to the SEA-DOO SPORT BOAT sold while this warranty is in effect.

6. TRANSFER

If the customer sells the SEA-DOO SPORT BOAT guaranteed under the present, he shall assign and transfer this warranty, which shall be valid for the rest of the relevant PERIOD as defined in section 1 hereinabove, to the new customer.

7. CONSUMER ASSISTANCE

- a) In the event of a controversy or a dispute arising in connection with this BOMBAR-DIER LIMITED WARRANTY, BOMBARDIER suggests that you try to resolve the issue at the dealership level. We recommend discussing the issue with the authorized dealer's service manager or owner.
- b) If further assistance is required, Bombardier's service department should be contacted in order to resolve the matter in Canada and the USA.
- c) If the issue has still not been resolved, please submit in writing your complaint to:

IN CANADA AND USA: BOMBARDIER INC.

RECREATIONAL PRODUCTS



CUSTOMER ASSISTANCE CENTER 75, J.-A. BOMBARDIER STREET SHERBROOKE, QC J1L 1W3 TEL.:

in CANADA: (819) 566-3366 in U.S.A.: (715) 848-4957

BOMBARDIER *RECREATIONAL PRODUCTS*

APRIL 2000

® Registered trademark of Bombardier Inc. and/or subsidiaries.

10 _____

BOMBARDIER INTERNATIONAL LIMITED WARRANTY: SEA-DOO® SPORT BOAT

1. WARRANTY COVERAGE PERIOD

BOMBARDIER INC. ("Bombardier"), as manufacturer, warrants FROM THE DATE OF DE-LIVERY TO THE FIRST CONSUMER that each SEA-DOO SPORT BOAT sold anywhere in the world except the United States and Canada, as NEW and UNUSED and PREDELIV-ERED by an authorized SEA-DOO SPORT BOAT dealer, duly appointed by an authorized SEA-DOO International Distributor, will be free from any defects in material and/or workmanship for a PERIOD of:

- a) For private use:
 - TWELVE (12) CONSECUTIVE MONTHS, with the exception of the deck and hull fiber-glass structure; and
 - SIXTY (60) CONSECUTIVE MONTHS for the deck and hull fiberglass structure.
- b) For commercial use:
 - FOUR (4) CONSECUTIVE MONTHS, with the exception of the deck and hull fiberglass structure; and
 - TWELVE (12) CONSECUTIVE MONTHS for the deck and hull fiberglass structure.

All genuine Bombardier accessories, installed by an authorized SEA-DOO SPORT BOAT dealer at the time of delivery of the new and non-current new SEA-DOO SPORT BOAT, carry the same Warranty Coverage Period as for the SEA-DOO SPORT BOAT.

2. WHAT BOMBARDIER WILL DO

BOMBARDIER through the local authorized SEA-DOO International Distributor will, during the Warranty Coverage Period, repair or replace, at its option, all genuine BOMBARDIER part found defective in material and/or workmanship, under normal use, maintenance and service, with a genuine BOMBARDIER part without charge for parts and labor, at any local authorized SEA-DOO SPORT BOAT dealer.

3. CONDITION TO HAVE WARRANTY WORK VALIDATED

The customer must notify a local authorized SEA-DOO SPORT BOAT dealer within two (2) days of the appearance of the defect in material and/or workmanship and present to the servicing authorized SEA-DOO SPORT BOAT dealer the SEA-DOO Warranty Registration Card or a proof of purchase of the NEW and UNUSED SEA-DOO SPORT BOAT and must sign the repair/work order prior to the start of the repair in order to validate a warranty repair. All parts replaced under this limited warranty become the property of the international SEA-DOO distributor of the specific territory and/or BOMBARDIER.

4. EXCLUSIONS — ARE NOT WARRANTED

- Normal wear and tear items:
- Labor, parts and lubricant costs of all maintenance services;
- Damages caused by failure to provide proper maintenance and/or storage, as described in the "SEA-DOO SPORT BOAT Operator's Guide";
- Damages resulting from improper repairs, modifications or use of non-approved parts or, repairs not performed by an authorized SEA-DOO SPORT BOAT dealer;
- Damages resulting from abuse, misuse, neglect, racing;
- Damages resulting from accident, fire, theft, vandalism or any act of God;
- Incidental or consequential damages, or damages of any kind such as but not limited to towing charges, telephone calls or taxi;
- Water damages caused by water ingestion;

- Damages related to gel coat finish including but not limited to cosmetic gel coat finish, blisters or fiberglass delamination caused by blisters, crazing, spyder or hairline cracks; and
- Damages resulting from improper service or maintenance.

5. LIMITATIONS OF LIABILITY

This warranty gives you specific rights, and you may also have other legal rights resulting from the application of mandatory national laws which may vary from country to country. WHERE APPLICABLE, THIS WARRANTY IS EXPRESSLY GIVEN AND ACCEPTED IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICUL AR PURPOSE.

In no event shall BOMBARDIER be liable for special, consequential or incidental damages, including but not limited to loss of use and transportation costs. Some countries do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above limitation or exclusion may not apply.

Neither the distributor, any authorized SEA-DOO SPORT BOAT dealer nor any other person has been authorized to make any affirmation, representation or warranty other than those contained in this warranty, and if made, such affirmation, representation or warranty shall not be enforceable against BOMBARDIER or any other person.

Every SEA-DOO SPORT BOAT is sold with the English version of this warranty. Some authorized SEA-DOO International Distributor may elect to translate this warranty into local language, it is then understood and agreed that in the event of any discrepancies or inconsistencies between the two versions, the English version shall prevail.

It is the customer's responsibility to ensure that the SEA-DOO SPORT BOAT complies with all boating regulations and standards of any country, other than the original country of sale, where the SEA-DOO SPORT BOAT is intended to be used.

BOMBARDIER reserves the right to modify this warranty at any time, being understood that such modification will not alter the warranty conditions applicable to the SEA-DOO SPORT BOAT sold while this warranty is in effect.

6. TRANSFER

If the customer sells the SEA-DOO SPORT BOAT guaranteed under the present, he shall assign and transfer this warranty, which shall be valid for the rest of the relevant PERIOD as defined in section 1 hereinabove, to the new customer.

7. CONSUMER ASSISTANCE

- a) In the event of a controversy or a dispute arising in connection with this BOMBARDIER INTERNATIONAL LIMITED WARRANTY, BOMBARDIER suggests that you try to resolve the issue at the dealership level. We recommend discussing the issue with the authorized dealer's service manager or owner.
- b) If further assistance is required, the authorized local SEA-DOO INTERNATIONAL DISTRIBUTOR's Service Department should be contacted in order to resolve the matter.
- c) If the issue has still not been resolved, please submit in writing your complaint to:

BOMBARDIER INC. RECREATIONAL PRODUCTS

CUSTOMER ASSISTANCE CENTER 75, J.-A. BOMBARDIER STREET SHERBROOKE, QUEBEC J1L 1W3

TEL.: (819) 566-3366



BOMBARDIERRECREATIONAL PRODUCTS

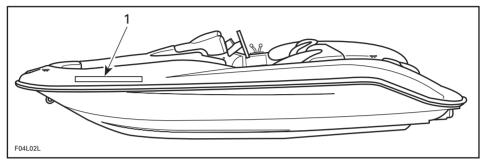
® Registered trademark of Bombardier Inc. and/or subsidiaries

12 _

REGISTRATION NUMBER LOCATION

All boats are required by federal law to be registered and legally numbered.

Due to space availability for proper display of registration number, refer to the following illustration for location. The registration number must appear on each side of the sport boat.



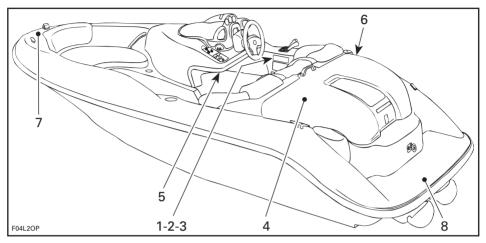
TYPICAL

1. Registration number location

LOCATION OF THE IMPORTANT LABELS

The following labels are on your craft. If missing or damaged, they can be replaced free of charge. See an authorized Sea-Doo sport boat dealer.

Please read the following labels carefully before operating your boat.



Label 1

↑ WARNING

Read and follow warning labels, operator guide and safety handbook before operation. Severe injury or death can result from ignoring warnings or through improper use of this sport boat. The performance of this

sport boat may significantly exceed that of other boats you may have operated. Therefore, use of this sport boat by novice or inexperienced operators is not recommended.

- Check throttle/shifter and steering operation and position before starting engine(s).
- Directional control is reduced with decreasing speed and lost when engine is off.
- Do not splash others or jump waves or wakes with this sport boat.
- Operator and passengers should always wear approved PFD and recommended protective clothing.
- Do not operate if passengers are not properly seated and using handgrips, or if visibility is obstructed. Do not allow passenger(s) on most forward bow seat(s) above idle speed.
- Properly attach safety lanyard to your PFD.
- Keep a safe distance from all other water users. Be aware of and observe all aplicable laws and regulations.

F04LABL

Label 2



Label 3

MAXIMUM ENGINE POWER CAPACITY RATING OF THE CRAFT:

126 KW

F04LAYY

TYPICAL — REFER TO ACTUAL LABEL ON BOAT

Label 4

<u> MARNING</u>

Do not boost battery.
Servicing of electrical components should be done by authorized dealer only.

F04LALY

Label 5

≜WARNING

Gasoline vapors can explode. Before starting engine, operate blower for 5 minutes and check engine compartment bilge for gasoline vapors.

F04LASY

Label 6

AWARNING

While fueling, stop engine(s), Fuel tank may be pressurized. Slowly turn cap when opening. Keep watercraft level. Do not overfill. Use regular unleaded gasoline, Check oil [evel, Periodically, inspect fuel system,

FOAL ATV

Label 7

AWARNING

Do not sit in bow seat above idle speed.

F04LAUY

Label 8

∴WARNING

Engine(s) must be off when using platform. Keep away from jet nozzle(s) or intake grate(s).

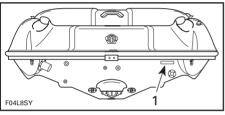
F04LAVY

IDENTIFICATION NUMBERS

The main components of the sport boat (hull and engines) are identified by different serial numbers. It may sometimes become necessary to locate these numbers for warranty purposes or to trace the sport boat in the event of theft.

Hull

The Hull Identification Number (H.I.N.) is located on the right side of the transom.



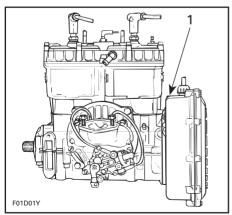
TYPICAL

1. Hull Identification Number (H.I.N.)

Engines

717 Engine

The Engine Identification Number (E.I.N.) is located on the upper side of the magneto housing.

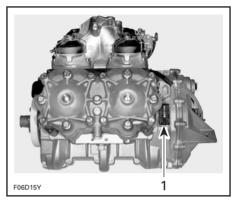


TYPICAL

1. Engine Identification Number (E.I.N.)

947 Engine

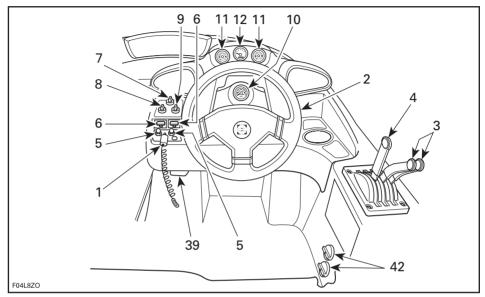
The Engine Identification Number (E.I.N.) is located on the upper crankcase on MAGNETO side.



1. Engine Identification Number (E.I.N.)

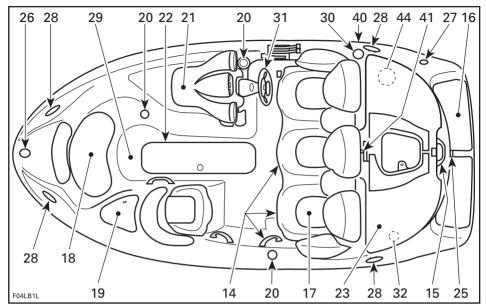
CONTROLS, COMPONENTS AND INSTRUMENTS LOCATION

Cockpit

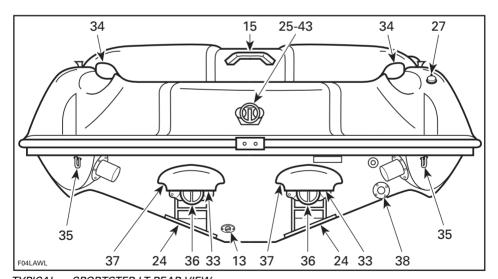


COCKPIT VIEW

Overview



TYPICAL



 $TYPICAL - SPORTSTER\ LT\ REAR\ VIEW$

- 1. Safety Lanyard Post
- 2. Steering Wheel
- 3. Throttle Lever(s)
- 4. Shift Lever
- 5. Start/Stop Button(s)
- 6. Choke Lever(s)
- 7. Navigation Light Switch
- 8. Bilge Pump Switch
- 9. Bilge Air Blower Switch
- 10. Fuel Gauge/Low Injection Oil Level Pilot Lamp
- 11. Tachometer(s)
- 12. Speedometer
- 13. Bilge Drain Plug(s)
- 14. Grab Handles
- 15. Rear Grab Handles
- 16. Swim Platform
- 17. Seats
- 18. Bow Seat
- 19. Spotter Seat
- 20. Cup Holders
- 21. Front Storage Compartment
- 22. Deck Storage Compartment

- 23. Rear Storage Compartment
- 24. Jet Pump Water Intake(s)
- 25. Tow Hook
- 26. Bow Light
- 27. Removable Stern Light
- 28. Mooring Cleats
- 29. Deck
- 30. Fuel Tank Cap
- 31. Deck Drain Hole
- 32. Oil Injection Tank Cap
- 33. Flushing Connectors
- 34. Ventilation Ducts
- 35. Bow/Stern Eyelets
- 36. Jet Pump Nozzle(s)
- 37. Reverse Gate(s)
- 38. Scupper Valve
- 39. Weedless System Lever (if so equipped)
- 40. Fuel Tank Vent
- 41. Ski Post (if so equipped)
- 42. Fuel Tank Valve(s)
- 43. Cooling System Bleed Outlet(s)
- 44. Main Battery Cut-Off Switch

CONTROLS, COMPONENTS AND INSTRUMENTS FUNCTIONS

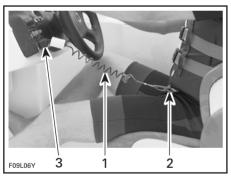
1) Safety Lanyard (engine cut-out switch)

The safety lanyard should be securely snapped onto its switch to be fully operational.

Pulling the safety lanyard cap from the switch stops the engine operation. Always attach the safety lanyard to the operator's Personal Flotation Device and snap the cap to the switch to be able to start the engine.

↑ WARNING

Should the safety lanyard cap become loose or fails to remain on its switch, replace it immediately.



TYPICAL

- 1. Safety lanyard
- 2. Secure to PFD
- 3. Snap to safety lanyard switch

Directional control is reduced when throttle is released and lost when engine is off. Always disconnect safety lanyard when craft is not in operation.

⚠ WARNING

Do not lubricate the safety lanyard post.

♠ WARNING

While the boat engine(s) can be stopped using the start/stop button(s), good driving habits recommend that the safety lanyard also be disconnected when stopping.

Monitoring System

To assist you when using the craft, a system monitors some components of the boat and sends audible signals through a beeper to inform you of a particular condition. The following chart gives the coded signals related to the safety lanyard only. For other possible codes, refer to the TROUBLE-SHOOTING section.

NUMBER OF BEEPS	POSSIBLE CAUSE	REMEDY
2 shorts (while installing safety lanyard on DESS post).	Everything is correct with the safety lanyard (good contact and the right lanyard cap).	Engine(s) can be started normally.
1 long (while installing safety lanyard on DESS post or when pressing start/stop button(s) in some cases).	Bad connection between safety lanyard cap and DESS post.	Remove and reinstall the safety lanyard on the DESS post. Two short beeps should be heard which indicate the system is ready again to allow engine(s) starting.
	Wrong safety lanyard.	Use the safety lanyard that has been programmed for the boat. If it does not work, refer to an authorized dealer.
	 Dirty safety lanyard cap. 	• Clean.
	Improper operation of MPEM or defective wiring harness.	 Refer to an authorized dealer.

Digitally Encoded Security System (DESS)

The safety lanyard cap specifically contains an electronic circuit that gives it a unique electronic serial number.

This safety lanyard can not be used on another boat and conversely, the one from another craft can not be used on your craft.

However, the DESS brings a great flexibility. You can buy additional safety lanyard and have it programmed for your craft. To have additional safety lanyard programmed, refer to an authorized Sea-Doo sport boat dealer.

♠ WARNING

Do not lubricate the safety lanyard post.

If the engine is stopped with the start/ stop button while the safety lanyard remains on the switch, it can be restarted within approximately 10 minutes by pressing the start/stop button. After this delay, it is necessary to apply slight pressure of the safety lanyard on the switch. Two short beeps should sound indicating the system is ready again to allow engine starting.

∧ WARNING

While engine can be stopped using the start/stop button, good habits recommend that the safety lanyard also be disconnected when stopping.

2) Steering Wheel

The steering wheel controls the direction of the sport boat. Turning the steering wheel clockwise steers the sport boat to the right and inversely.

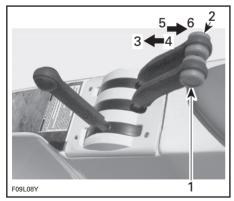
Low-Speed Steering Control System

Whenever the throttle lever(s) is (are) in idle position and the steering wheel is approaching the end of its rotation, the engine speed will be slightly accelerated to increase the jet pump thrust and thus improving the steering control for low speed operation and when approaching/leaving a dock. Refer to OPERATING INSTRUCTIONS for more details.

3) Throttle Lever(s)

When pushed forward, the craft accelerates. When fully pulled back, engine(s) return to idle speed and the sport boat is gradually stopped by water drag.

NOTE: Do not activate throttle lever(s) unnecessarily. Carburetors are equipped with fuel accelerator pumps. These pumps deliver fuel to the engines each time throttle levers are moved forward.



TYPICAL — THROTTLE LEVERS ON TWIN **FNGINF**

- 1. Port engine
- Starboard engine
 Full throttle
- Increase speed
 Decrease speed
- 6. Idle speed

Twin Engine Only

The port throttle lever controls the RPM of the port engine and the starboard lever controls the starboard engine. Although each engine RPM can be controlled individually, we recommend to move both levers simultaneously.

4) Shift Lever

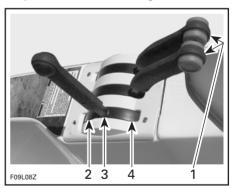
A 3-position lever:

- forward
- neutral
- reverse

In order to shift, throttle lever(s) must be fully pulled back to idle speed.

Shifter must be in neutral position to allow engine(s) starting.

NOTE: 4 short beeps will signal that shifter is not in neutral (with the safety lanvard on the DESS post while pressing one of the start/stop button). Thereafter, 1 short beep will confirm the neutral position (while shifting).

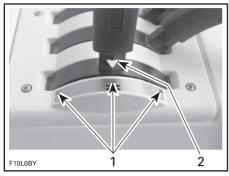


TYPICAL — SHIFT LEVER

- 1. Throttle lever(s) must be fully pulled back (idle speed) to shift
- Forward
- 3. Neutral 4. Reverse

CAUTION: Do not force lever, insure throttle lever(s) is (are) in idle position.

NOTE: To ease shifter use, line up the shifter arrow with the appropriate dot (Forward/Neutral/Reverse).



TYPICAL

- 1. Dots besides shifting position
- 2. Arrow on shifter

↑ WARNING

Shift lever should only be used when the engine is idling and craft is completely stopped.

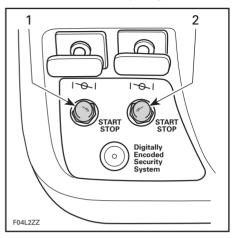
↑ WARNING

Only use reverse at slow speed and for the shortest time possible. Always ensure the path behind is clear of objects and persons including children playing in shallow water.

CAUTION: Never rev the engine at high RPM in reverse.

5) Start/Stop Button(s)

Dual function push switche(s). Used to start as well as to stop engine(s).



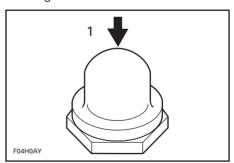
TYPICAL — START/STOP BUTTONS

- 1. For port engine
- 2. For starboard engine

Starting

Shifter must be in neutral position and the safety lanyard must be on the DESS post to allow engine(s) starting.

To start engine(s), press and hold each button. Release immediately after engine is started. Proceed the same way for the other engine (if applicable). Only one engine at a time can be started.



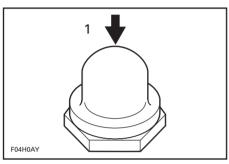
1. Start when engine is NOT running

Stopping

↑ WARNING

While engine(s) can be stopped by pressing the stop button(s), we strongly recommend the engine(s) be stopped by removing the safety lanyard. This will instill good habits.

Pressing each button when engine is running will stop the engine.



1. STOP when engine IS running

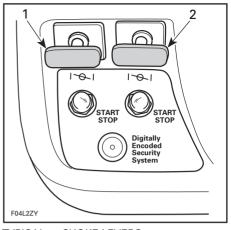
♠ WARNING

Directional control is not available when engine(s) is (are) stopped.

6) Choke Lever(s)

The choke is provided to supply a richer fuel/air mixture when starting a cold engine. When the lever is completely pulled, the choke is fully applied. The use of the choke is not required with a warm engine.

Choke lever(s) should be pulled and held to operate. Lever(s) will automatically return to their normal position when released.



TYPICAL — CHOKE LEVERS

- 1. For port engine
- 2. For starboard engine

7) Navigation Light Switch

A 3-position NAV/OFF/ANC rotary switch.

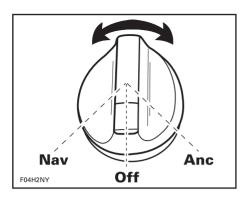
ANC: Turns on the anchorage light when the boat is anchored. Only the stern light is lit.

OFF: Turns off all lights.

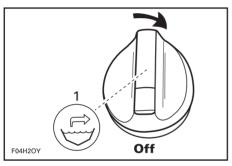
NAV: Turns on both bow and stern lights and illuminates the gauge(s).

↑ WARNING

Navigation lights should always be used between sunset and sunrise. Ensure the stern light is installed. See **Removable Stern Light** in this section for location and installation.



8) Bilge Pump Switch



1. Bilge

A 2-position OFF/bilge rotary switch.

Turn to bilge position when a manual operation is required (after cleaning, storage, etc.).

Turn it to OFF when finished.

CAUTION: Do not operate for prolonged time if the bilge is dry, battery drainage will occur.

The bilge pump may be operated without the safety lanyard on its switch.

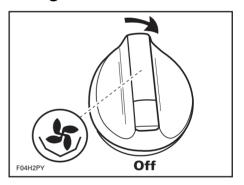
CAUTION: Ensure to always turn pump OFF when bilge is dry or before operating the engine above idle. Bilge pump will then switch to automatic mode.

Automatic Bilge Pump

An automatic bilge pump will evacuate water from the bilge. A water sensor detects the water which activates the pump. After the water is pumped out, the pump shuts-off automatically. This automatic mode is working at all times: with/without safety lanyard on DESS post and with/without engine(s) running.

CAUTION: Bear in mind that when the main battery cut-off switch is turned OFF while craft is moored, the bilge pump will not start if water comes up in the bilge.

9) Bilge Air Blower Switch



A 2-position OFF/blower rotary switch. When turned on, the blower ventilates the engine compartment.

Always use blower for a minimum of 5 minutes prior to engine starting then, turn it OFF above idle speed. Use of the bilge blower should never replace "smelling" for gasoline vapors.

Using the bilge blower for a prolonged time when the engine(s) is (are) not running will discharge the battery.

Blower should be turned off during boat operation.

10) Fuel Gauge/Low Injection Oil Level Pilot Lamp

Fuel Gauge

Located in dashboard, the analog gauge continuously indicates the amount of fuel in fuel tank when engine(s) is (are) running.

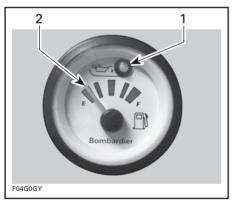
The gauge is illuminated whenever the navigation lights are used.

The fuel level can also be verified without having engine(s) running. With the safety lanyard removed from its switch, push a start/stop button; the gauge will be activated for approximately 30 seconds.

Low Injection Oil Level Pilot Lamp

The pilot lamp turns on when the injection oil level is low in oil reservoir. Fill reservoir as soon as possible, if lamp remains ON contact an authorized dealer.

CAUTION: Never run engine(s) out of oil. Serious engine damage will occur.



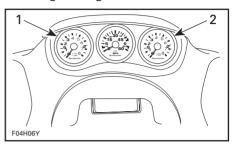
TYPICAL

- 1. Low injection oil level pilot lamp
- 2. Fuel level

11) Tachometer(s)

Analog tachometer indicates the revolutions per minute (RPM) of the engines. Multiply reading by 1000 to obtain actual RPM.

The gauges are illuminated whenever the navigation lights are used.



TYPICAL — SPORTSTER LT SHOWN

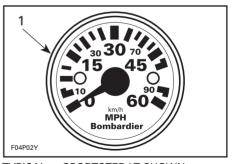
- 1. Port engine tachometer
- 2. Starboard engine tachometer

12) Speedometer

The analog speedometer indicates the speed of the sport boat in miles per hour (MPH) and kilometers per hour (km/h).

The gauge is illuminated whenever the navigation lights are used.

A speed sensor mounted on the left ride shoe sends the signal to the speed-ometer.



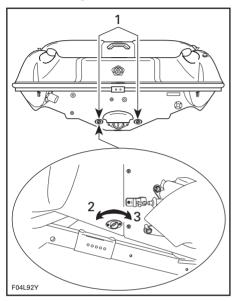
TYPICAL — SPORTSTER LT SHOWN

1. Speedometer

13) Bilge Drain Plug

Should water be left in the bilde, it can be easily drained by unscrewing the plua.

Tilt the sport boat slightly to the rear so that the water can completely flow out of the bilae.



TYPICAL

- Drain plug
 Loosen
- 3. Tiahten

14) Grab Handles

Provide a handhold for the passengers.

CAUTION: Never use the grab handles to pull anything or to lift the craft.

Refer to components location illustrations at the beginning of this section for grab handles location.

15) Rear Grab Handle(s)

Provide a handhold for boarding when needed.

CAUTION: Never use the grab handle to tow anything or to lift the craft.

16) Swim Platform

Provides an anti-skid surface for easy boarding from rear of craft.

♠ WARNING

Engine(s) must be off when using swim platform. Keep away from iet(s) or intake grate(s).

17) Seats

Each passenger should be seated while underway.

♠ WARNING

Allow no one to sit on edge of boat or to stand up while in operation. Seat/grab handles should be used in rough waters.

18) Bow Seat

Located at front of craft, it is provided as a sun seat

↑ WARNING

No passenger should use the most forward seat in the bow area if it faces backwards except at low speed in calm water or when the sport boat is stopped.

Use grab handles as necessary.

Boarding Step

Beside the sun seat, it is provided to help boarding.

19) Spotter Seat

Located beside driver seat, this seat is provided to be used by the observer when towing a skier.

WARNING

Always have an observer while towing a skier, proceed with only as much speed as required, and follow the observer instructions.

20) Cup Holders

Convenient locations for non-alcoholic beverages.

MARNING

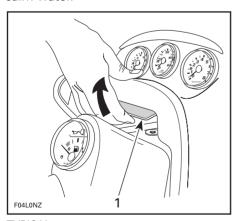
Do not drink alcoholic beverages while aboard. Do not keep bottles, cans etc. in cup holders while riding at speed and/or on rough water.

21) Front Storage Compartment

A convenient watertight, lockable storage compartment with a removable basket to carry personal articles. The basket is the ideal location for spare spark plugs, first aid kit, etc.

Never leave any heavy or loose breakable objects in the storage basket. Never operate the craft with the storage compartment cover open.

Pull the latch lever upward to unlock storage compartment cover. Lift cover until stopped by the retaining device. The cover will hold in this position on calm water.



TYPICAL

1. Pull latch lever upward

The basket is provided with a holder to store an approved fire extinguisher.

The fire extinguisher (sold separately) should not be loose in the storage compartment.

The *Operator's Guide* should be kept in a waterproof bag and remain with the sport boat at all times.

MARNING

Do not remove the basket to have access to increased storage area.

Push cover down to release mechanism then move down slowly. When bottomed on latch, firmly push cover to lock.

Periodically verify the lock pin tightness of storage cover. Tighten if needed and make sure storage cover latches properly.

MARNING

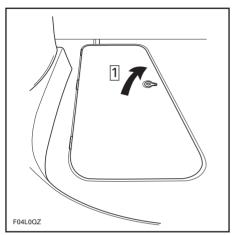
Never leave any heavy or loose breakable objects in the storage basket. Never operate the craft with the storage compartment cover open.



TYPICAL — SPOTTER SEAT STORAGE COMPARTMENT

22) Deck Storage Compartment

The deck storage compartment is a convenient location for water-skis, paddles, anchor and rope, etc.

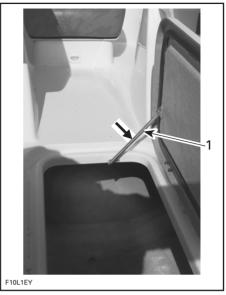


TYPICAL
Step 1: Pull latch and lift cover

Lift the latch ring and open cover gently until stopped by retaining spring.

When completely opened, the cover remains in that position on calm water.

To close, gently push on the side of the spring to release it and lower the cover.



TYPICAL

1. Gently push here to release the spring

↑ WARNING

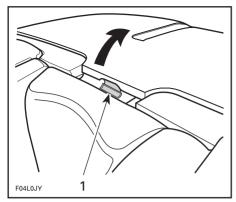
Never leave any heavy or loose breakable objects in the storage basket. Never operate the craft with the storage compartment cover open.

23) Rear Storage Compartment

Convenient rear storage location to be used to carry large personal articles. Ideal location for spare Personal Flotation Device (PFD), towels, lunch etc.

Pull the latch lever upward and open engine cover gently until stopped.

The gas assist cylinder will complete the opening and hold cover open.



TYPICAL

1. Pull latch lever upward

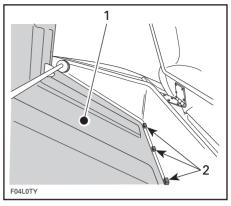
Storage Tray

CAUTION: In order to avoid damage, MAXIMUM LOAD on storage tray must not exceed 22.5 kg (50 lb).

The storage tray is removable to give access to the engine compartment. Grab the handle and lift in a rearward movement until opposite holders release.

When storage tray is lifted or removed, never touch any electrical part when starting engines or while in operation. Never leave any object, rag, tool, etc., in the engine compartment or in the bilge.

When reinstalling storage tray, ensure to properly locate it just below holders, gently lower tray then push it downward to lock.



TYPICAL

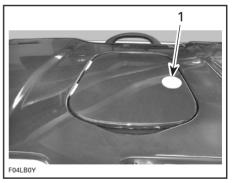
- 1. Rear storage compartment tray
- 2. Tray under holders

Firmly close storage compartment cover to relatch.

⚠ WARNING

Never leave any heavy or breakable objects in the storage compartment. Never operate the craft with the rear storage compartment cover open.

Ski Rope Storage Compartment



1. Open here

Convenient storage compartment located on engine cover. This compartment is ideal for ski rope storage.

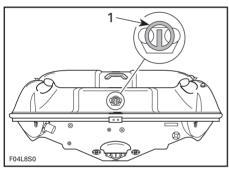
24) Jet Pump Water Intake(s)

The water is drawn up by the impeller through this opening. It minimizes entry of foreign objects into the propulsion system.

WARNING

Keep away from intake grate while engine is on. Items such as long hair, loose clothing or personal flotation device straps can become entangled in moving parts resulting in severe injury or drowning.

25) Tow Hook



TYPICAL

1. Tow hook

The hook is provided for your convenience.

26) Bow Light

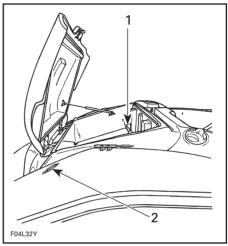
Mandatory red/green light. See Light Switch as mentioned earlier in this section.

27) Removable Stern Light

Mandatory stern white light.

It is recommended to keep it in rear storage compartment at all times except when needed

To remove from storage cover, pull it out. Snap in place to store again.

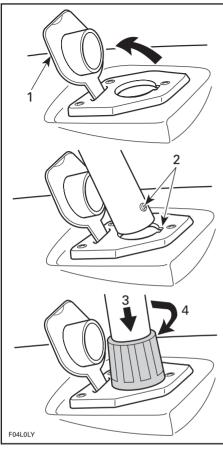


TYPICAL

- Stern light storage location
 Stern light operation position

Installation

- Lift connector cap.
- Insert post in connector hole. Ensure to align hole keyway with post screw head.
- Firmly push downward to engage terminals.
- Push lock ring downward. Turn until locked. It may be necessary to slightly turn it to allow its insertion in the hole.
- Check light operation. See Light Switch as mentioned earlier in this section.



TYPICAL

- 1. Lift
- 2. Align screw in groove
- 3. Push downward
- 4. Turn to lock

CAUTION: Ensure dielectric grease is present in connector area of light to prevent corrosion.

28) Mooring Cleats

When mooring to a dock, it is recommended to secure with both front and rear cleats. The use of dock lines with sealed air fenders is recommended to protect your boat.

CAUTION: Never use mooring cleats to pull anything or to lift the sport boat.

29) Deck

Flat surface of boat, should be kept clean and clear.

30) Fuel Tank Cap



1. Fuel tank cap

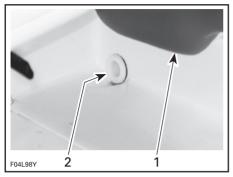
Unscrew the cap counterclockwise to allow fuel tank filling. Fully tighten when finished

↑ WARNING

Always stop the engine before refueling. Fuel is inflammable and explosive under certain conditions. Always work in a well ventilated area. Do not smoke or allow open flames or sparks in the vicinity. Fuel tank may be pressurized, slowly turn cap when opening. Keep craft level. Do not overfill or top off the fuel tank and leave craft in the sun. As temperature increases, fuel expands and might overflow. Always wipe off any fuel spillage from the craft. Never use an open flame to check fuel level.

31) Deck Drain

It provides drainage of water from rain, deck washing, water splashing, etc. Keep clean to avoid clogging.

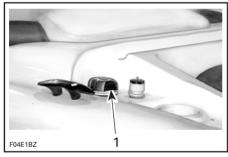


TYPICAL

- 1. Driver's seat
- 2 Deck drain

32) Oil Injection Tank Cap

The cap is located under the rear storage compartment cover on port side.



1. Oil injection tank cap

Unscrew cap by turning counterclockwise and firmly tighten by turning clockwise. Close cover. Refer to FUEL AND LUBRICATION for injection oil specification.

⚠ WARNING

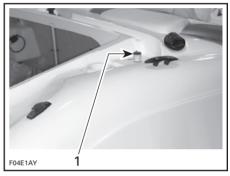
Add oil to level mark. Do not overfill. Reinstall cap and fully tighten.

33) Flushing Connectors

Refer to POST-OPERATION CARE section for proper use.

NOTE: Each engine is provided with a flushing connector onto jet pump support. Port connector is for port engine and starboard connector is for starboard engine.

For your convenience, there are additional flushing connectors under the rear storage compartment cover. Lift cover, the flushing connectors are on each side of the storage compartment.



1. Flushing connector with its cap

You may use the flushing connectors at the location that you find more practical.

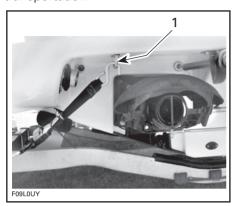
NOTE: When using upper flushing connectors, hose pincher(s) must be installed in engine compartment. this will avoid water from going out directly by the flushing connector on the jet pump. Refer to POST-OPERATION CARE section.

34) Ventilation Ducts

This is where air flows to supply engine and ventilate engine compartment. They should never be obstructed.

35) Bow/Stern Eyelets

Eyelets can be used for mooring, towing and as a tie-down point during transportation.



TYPICAL

1. Stern eyelet

36) Jet Pump Nozzle(s)

Turns side to side via input from the steering wheel. This provides directional control when engine is running.

37) Reverse Gate(s)

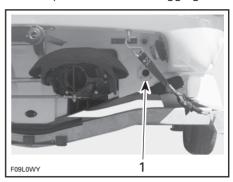
When selecting the neutral or reverse position with the shift lever, the reverse gate moves up or down to obtain the desired position.

∧ WARNING

Never use gate as a supporting point to board the craft. Shift lever should only be used when the engine is idling and craft is completely stopped.

38) Scupper Valve

This is where water from deck drains out. Keep clean to avoid clogging.



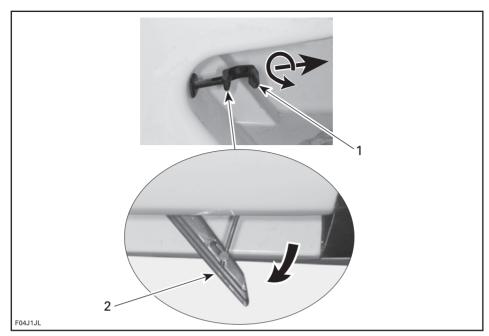
TYPICAL

1. Scupper valve

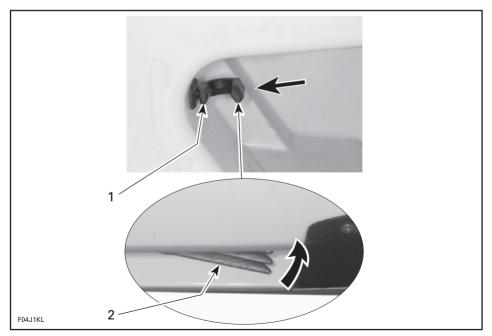
39) Weedless System Lever

Sportster LT Model

Stop engine(s) prior to using the lever.



- Turn lever counterclockwise then pull
 Water intake grate lowered to release weeds



- Push lever
 Position of water intake grate while riding on water and loading/launching on/from trailer

40) Fuel Tank Vent



1. Fuel tank vent

It allows fuel vapors and pressure to escape from fuel tank.

⚠ WARNING

Never use a lit match or open flame close to vent. Follow the **Fueling Procedure** instructions in the FUEL AND LUBRICATION section.

41) Ski Post (if so equipped)

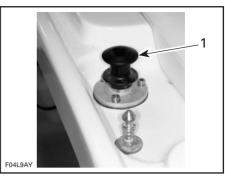
Pull up the post to allow hooking a ski rope.



TYPICAL

1. Lift ski post to use

Push down when finished.



TYPICAL

1. Ski post position when not used

Always have one person other than the operator as an observer.

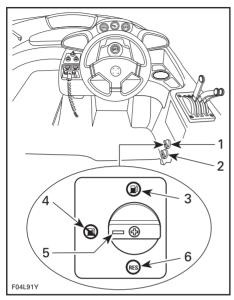
CAUTION: Never use the ski post to tow other boats.

MARNING

Riding when pulling a tub, skier or wakeboarder makes the craft handle differently and require greater skill. Unless absolutely necessary, do not make tight, sharp turns. Keep a safe distance from the docks, other swimmers, craft or objects. Be advised that serious injury can result if the tow rope become slack during a tight turn or when circling. The rope could become wrapped around the neck or limbs of a person.

42) Fuel Valve(s)

Three-position rotary valve(s): OFF, ON, RES. Rotate the knob to align its notch with ON, OFF or RES.



TYPICAL — SPORTSTER LT SHOWN

- 1. Valve for starboard engine
- 2. Valve for port engine
- 3. ON
- 4. OFF
- 5. Turn to alian notch with desired position
- 6. RESERVE

OFF: Stops fuel supply to carburetors.

CAUTION: Turn valve(s) to OFF position when sport boat is not operated and for transportation on the trailer.

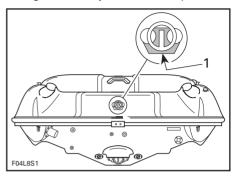
ON: Allows fuel to flow to carburetors. This is the normal position for operation of the sport boat.

RES (RESERVE): When fuel is exhausted in the fuel tank when in the ON position, an emergency supply of fuel is available by turning the knob to RES. The reserve contains approximately 10% of the fuel tank capacity.

CAUTION: Improper opening of fuel valve(s) may restrict flow of fuel. Make sure valve(s) is(are) fully opened while running.

43) Cooling System Bleed Outlet(s)

When engine is running, water must flow through this hole. This allows air in engine water jacket to escape.



TYPICAL

1. Bleed outlet

On Sportster LT model, start one engine and check water flow at bleed outlet. Stop engine then start the other one and check water flow. If everything is correct, restart the first engine.

CAUTION: Should water not flow from the outlet(s) a few seconds after engine starts, immediately stop engine and refer to POST-OPERATION CARE and look for Cooling System Flushing or refer to an authorized dealer for servicing.

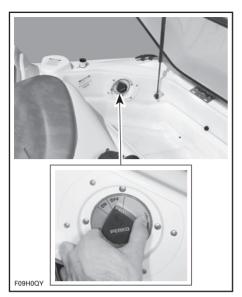
44) Main Battery Cut-Off Switch

The switch is located in the engine compartment, close to battery. It is provided to allow a complete cut-out of the electrical system.

When in OFF position, ALL electrical equipment and electronics will be OFF.

It must be in the ON position to allow the use of electrical components and to start the engine(s).

CAUTION: Stop engine(s) before switching OFF.



TYPICAL — MAIN BATTERY CUT-OFF SWITCH

It is recommended to set in the OFF position whenever performing maintenance in the engine compartment, on the electrical system, when transportation or during short term storage.

CAUTION: Bear in mind that when the switch is turned OFF while craft is moored, the bilge pump will not start if water comes up in the bilge

Fuses

The electrical system is protected with fuses. Refer to MAINTENANCE section for details.

FUEL AND LUBRICATION

CAUTION: Scrupulously follow the instructions of this section. Failure to do so may reduce the engine's life and/or performance.

Fueling Procedure

⚠ WARNING

Follow these safe boating fueling instructions explicitly.

Turn off engine(s).

Tie craft securely to the fueling pier.

Use bilge blower for a minimum of 5 minutes.

Turn off bilge air blower, bilge pump and any other devices that could produce a spark.

Ensure engine cover is closed to prevent fumes from entering the engine compartment.

Disembark all people.

Do not smoke or allow open flames in the vicinity.

Have a fire extinguisher close at hand.

Do not insert the spout too far in filler neck.

Pour fuel slowly so that air can escape from the reservoir and prevent fuel flowback.

Fill fuel tank to bottom of filler neck. Do not overfill.

Fully tighten fuel tank cap and wipe off any fuel spillage.

Before starting, ensure there are no fuel fumes in the engine compartment, ventilate using the blower as necessary.

↑ WARNING

Always stop the engine before refueling. Fuel is inflammable and explosive under certain conditions. Always work in a well ventilated area. Do not smoke or allow open flames or sparks in the vicinity. Fuel tank may be pressurized. Slowly turn cap when opening. Keep craft level. Do not overfill or top off the fuel tank and leave craft in the sun. As temperature increases, fuel expands and might overflow. Always wipe off any fuel spillage from the craft.

Recommended Fuel

Use regular unleaded gasoline with 87 octane (Ron + Mon/2) specification.

Do not mix oil with fuel except at engine break-in. Refer to BREAK-IN PERIOD section. Always check oil injection reservoir level when refueling.

CAUTION: The use of a fuel other than regular unleaded fuel can result in craft performance deterioration and damage to fuel system and engine components. Never experiment with other fuels or fuel ratios. Never use fuel containing alcohol, methanol or similar products including naphtha.

Recommended Oil

MARNING

Add oil to level mark. Do not overfill. Reinstall cap and fully tighten.

Use only two-stroke engine injection oil sold by authorized Sea-Doo sport boats dealers.

MODELS	OIL TYPE
SPORTSTER LT	BOMBARDIER FORMULA XP-S synthetic injection oil (or equivalent) or BOMBARDIER injection oil (or equivalent) ①
SPORTSTER LE ②	BOMBARDIER FORMULA XP-S synthetic injection oil (or equivalent)

- ① If BOMBARDIER injection oil is not available, API TC high-quality ashless two-stroke injection oil may be used.
- ② CAUTION: Bombardier formulation XP-S is specially formulated and tested for use in our 947 engines. Use of any other brand of twostroke oil may void the limited warranty. Use only Bombardier Formula XP-S (or equivalent).

BOMBARDIER injection oil is a special blend of basic oil additives especially selected to ensure unequalled lubrication, engine cleanliness and minimum spark plug fouling.

The BOMBARDIER FORMULA XP-S synthetic injection oil **provides superior lubrication**, reduced engine component wear and oil deposit, thus maintaining maximum-level performance and antifriction properties. This synthetic injection oil meets the latest ASTM and JASO standards by ensuring high biodegradability and low exhaust smoke.

CAUTION: Never use four-stroke petroleum or synthetic motor oil and never mix these with outboard motor oil. Do not use NMMA TC-W, TC-W2 or TC-W3 outboard motor oils or other ashless type two-stroke oil. Avoid mixing different brands of API TC oil as resulting chemical reaction may cause severe engine damage.

Oil Injection System

A sufficient amount of injection oil should be maintained in the reservoir. To check, open rear storage cover then lift and hold the tray. Oil level is visible through the translucent reservoir.

The use of a funnel is recommended to pour the oil into the reservoir. Stop filling as soon as oil appears at approximately 13 mm (1/2 in) from top of reservoir. Do not overfill. Wipe off any oil spillage.

NOTE: Always carry a spare 1 liter of injection oil.

CAUTION: Always maintain a sufficient amount of injection oil in the oil reservoir. Check and refill every time you refuel. Do not overfill. If the engines run out of oil, severe engine damage will occur. If the oil reservoir is allowed to almost empty, air can enter into the system and it must be bled. Immediately refer to an authorized dealer to have the oil injection system inspected.

BREAK-IN PERIOD

CAUTION: Scrupulously follow the instructions of this section. Failure to do so may reduce the engine's life and/or performance.

Engine(s)

With BOMBARDIER-ROTAX® sport boat engine(s), a break-in period is required before operating the engine(s) at full throttle. We recommend about 10 operating hours.

During this period, maximum throttle should not exceed 3/4, however, brief full acceleration and speed variations contribute to a good break-in. Continued wide open throttle accelerations, prolonged cruising speeds and overloading the engine(s) is (are) detrimental during the break-in period.

To assure additional protection during the initial break-in period, it is recommended to add 2 liters (1/2 gal) of the same oil as in the injection oil reservoir in the fuel tank. The oil should be added for the first full fuel tank filling only.

To add injection oil in the fuel tank, proceed as follows:

Fill fuel tank with approximately 50 liters (12 gal) of gasoline; then, add the required quantity of injection oil in the fuel tank.

NOTE: It is important to proceed in this order to allow a proper mixing of the oil in the gasoline. If oil is added first in an empty fuel tank, fuel lines will be filled up with injection oil leading in a no start condition of the engine(s).

CAUTION: Remove and clean spark plugs after engine break-in.

10-Hour Inspection

It is highly recommended that after the first 10 hours of operation, the sport boat be checked by an authorized dealer. This inspection will also provide the opportunity to discuss any unanswered questions you may have encountered during the first hours of operation.

The 10-hour inspection is at the expense of the sport boat owner.

10-HOUR INSPECTION CHECK LIST	1
Engine ignition timing if required	
Spark plug inspection, cleaning and adjustment	
Fuel system lines and fasteners/pressurization test	
Carburetor adjustment including throttle/choke cables if required	
Oil lines and filter	
Oil injection pump adjustment if required	
Engine support and engine rubber mounts	
Muffler, battery and reservoir fastening devices	
Exhaust system hose clamps torque	
Carburetor flange screws and flame arrester support	
Steering system and low-speed steering control system	
Steering cable adjustment if required	
Shifter cable adjustment if required	
Ensure that throttle levers keep the selected position. Adjust lever tension as necessary	
Hose condition and fasteners	
Bilge pump and bilge blower	
DESS system and start/stop buttons operation	
Monitoring beeper	
Electrical connections (starter, battery, etc.)	
Lighting system inspection	
Impeller shaft reservoir oil replacement	
Torque jet pump retaining nuts	
Impeller condition, impeller/wear ring clearance	
PTO flywheel lubrication	
Water intake grates/weedless system/hull condition	
Inspection of fasteners for tightness	
Inspect/clean engine drain tube	
NOTE: Inspection applies for both engine systems where applicable. We recommend that this inspection chart be signed by an authorized of the signed by a s	doolo

We recommend that this inspecti	on chart be signed by an authorized dealer.
Date of 10-hour inspection	Authorized dealer signature
	Dealer code

PRE-OPERATION CHECKS

⚠ WARNING

The pre-operation check is very important prior to operating the vehicle. Always check the proper operation of critical controls, safety features and mechanical components before starting. If not done as specified here, severe injury or death might occur. Bring all safety equipment required by local laws.

Some of the following items may not have been previously covered in this guide, however they will be described in the MAINTENANCE or SPECIAL PROCEDURES section. Please refer to these portions to have more detailed information.

⚠ WARNING

Engine should be off and the safety lanyard must always be removed from its switch prior to verifying any of the following. Only start craft once all items have been checked and operate properly.

SUMMARY

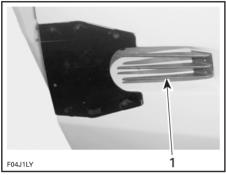
ITEM	OPERATION	1
Hull	Inspect.	
Jet pump water intakes	Inspect/clean.	
Bilge	Drain. Ensure plug is secured.	
Battery	Inspect tightness of cables and retaining straps.	
Main battery cut-off switch	Ensure it is in the ON position.	
Navigation lights	Check operation.	
Fuel/oil reservoirs	Refill.	
Engine compartment	Verify fuel/oil system components.	
Fire extinguisher	Inspect condition/mounting.	
Steering	Check operation.	
Throttle/shifter system	Check operation.	
Weedless system	Ensure it is not activated.	
Bilge blower and bilge pump	Check operation.	
Safety lanyard/engine start/stop buttons	Check operation.	
Mandatory safety boating equipment	Check operation.	
Storage compartment covers	Ensure they are closed and latched.	

Hull

Inspect hull for cracks or damage.

Jet Pump Water Intake(s)

Remove weeds, shells, debris or anything else that could restrict the flow of water and damage the cooling system or propulsion units. Clean as necessary. If any obstruction can not be removed, refer to an authorized dealer for servicing.



TYPICAL

1. Inspect this area

Inspect leading edges of the impellers, if they have nicks or bends, performance will be greatly reduced.

Bilge

Should water be present in the bilge, turn on pump switch to completely empty the bilge.

MARNING

Make sure drain plugs are properly secured prior launching the craft in water.

Battery

MARNING

Verify tightness of battery cables to their posts and condition of retaining straps/fasteners. Do not boost battery while installed.

Fuel Tank/Oil Reservoirs

With the craft horizontal, fill the fuel tank

Check the oil level and refill reservoir as necessary.

Check fuel tank/oil reservoirs retaining straps/fasteners.

Engine Compartment

↑ WARNING

Should any leak or gasoline odor be present, do not start the engine(s). Consult an authorized dealer.

Fire Extinguisher

Make sure it is full, in good condition and well secured.

Steering System

Assisted by another person, check steering operation for free movement. When the steering is centered, the jet pump nozzles should be in the straight ahead position. Ensure the jet pump nozzles pivot easily while steering is turned.

MARNING

Check steering and corresponding steering nozzle operation before starting.

Throttle System

Check throttle lever(s) once for free and smooth operation.

NOTE: Do not activate throttle lever(s) unnecessarily. Carburetors are equipped with fuel accelerator pumps. These pumps deliver fuel to the engine(s) each time throttle lever(s) is (are) moved forward

↑ WARNING

Check throttle lever operation before starting the engine.

Shifter System

Check reverse gate(s) operation for free movement. With shift lever in forward position, the gate(s) must be in upward position. With the shift lever in neutral position, gate(s) must be in middle position. With shift lever in reverse position, gate(s) must be in downward position.

Verify the reverse gate lock.

Weedless System

Ensure lever is fully pushed in.

Safety Lanyard and Engine Start/Stop Button(s)

Ensure that switch(es) operate properly. On twin-engine models, start engines and stop them using each switch individually.

↑ WARNING

If engine does not shut-off when pushing engine start/stop button or by disconnecting the safety lanyard, stop the engine by applying the choke. Do not operate the sport boat further, see an authorized dealer. Only start the sport boat once all items have been checked and operate properly.

⚠ WARNING

Only start craft once all items have been checked and operate properly.

Storage Compartment Covers

Ensure they are closed and latched.

OPERATING INSTRUCTIONS

⚠ WARNING

Always perform PRE-OPERATION CHECKS before operating the craft. Become thoroughly familiar with all controls and the function of each. Should any control or instruction be not fully understood, refer to an authorized Sea-Doo dealer.

Launching/Loading

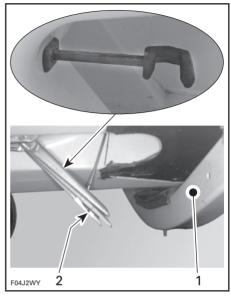
CAUTION: Before launching the craft, ensure the main battery cut-off switch is turned ON and the bilge plugs are fully screwed.

Ensure the bilge plug is fully screwed and the main battery cut-off switch is turned ON.

Before loading or launching the boat on/from the trailer, ensure that the weedless system lever, is completely pushed in.

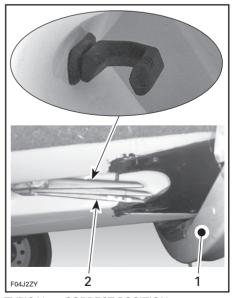
This will allow the water intake grates to be in upper position, eliminating the possibility to come in contact with the trailer.

CAUTION: Loading/launching the boat on/ from the trailer with the water intake grate in lower position will cause damage to the weedless system and possibly to the fiberglass hull.



TYPICAL — WRONG POSITION

- 1. Trailer frame
- 2. Grate in fully open position



TYPICAL — CORRECT POSITION

- 1. Trailer frame
- 2. Grate in fully close position

When finished with loading the boat on trailer, it is suggested to turn the main battery cut-off switch to OFF.

After loading the craft, ensure the main battery cut-off switch is turned OFF and the bilge plugs are remove to drain bilge.

Trailering

Refer to the trailer instructions for proper capacity, operation, maintenance, accessories and warranty.

Check the regulations in your area concerning towing a trailer, especially the following rules:

- brake system
- tow vehicle weight
- mirrors.

NOTE: An optional brake system is available for your trailer, see an authorized Sea-Doo dealer.

Take the following precautions when trailering the craft:

Tie the craft to both bow and stern (front/rear) eyelets so that it is firmly retained on the trailer. Use additional tie-downs if necessary.

- Remove stern light (if installed).
- Ensure that ski post is pushed down.
- Ensure all storage compartment covers are properly latched.
- A SEA-DOO cover can protect the craft, particularly before driving on dirt roads, to prevent dirt entry through the air intake opening(s).

Observe trailering safety precautions.

Principle of Operation Propulsion

Each engine is directly coupled to a drive shaft which, in turn, rotates an impeller. This impeller is accurately adjusted in a housing where the water is drawn up from underneath the sport boat. Then, the water flows through the impeller to a venturi. The venturi accelerates the water and produces thrust to move the sport boat. Pushing the throttle lever(s) forward increase engine speed and therefore sport boat speed.

With shift lever pushed forward, the sport boat moves forward. In pulled back position, the sport boat moves backward. The middle position is neutral and the sport boat is at the minimum thrust for most conditions. Neutral and reverse are achieved by means of a gate, which is installed on jet pump venturi housing. This gate directs the water flow to obtain the desired direction

⚠ WARNING

When the craft is in neutral position, the impeller is turning.

MARNING

Shift lever should only be used when the engine is idling and craft is completely stopped.



TYPICAL

Whenever an engine is to be started, the operator and passengers should always be sitting in the craft with the shifter lever in neutral position and throttle levers in idle position.

Steering

Turning the steering pivots the jet pump nozzle(s) which control the sport boat direction. Turning the steering clockwise will turn the sport boat to the right and inversely.



TYPICAL

Above idle speed, the throttle(s) must be applied to turn the sport boat.

⚠ WARNING

Throttle must be applied and steering turned to change the direction of the craft at speed. Steering efficiency will differ depending on the number of passengers, load and water conditions

A craft needs some throttle to turn. Practice in a safe area applying the throttle and turning away from an imaginary object. This is a good collision avoidance practice.

Turning when Using the Reverse

The sport boat behaves differently when using the reverse. The steering response is the opposite of forward operation. So, turning the steering clockwise will turn the sport boat to the left and inversely. Use throttle moderately. Too much RPM will create water turbulence and reduce reverse efficiency. At first outing, carefully practice this maneuver away from anything you might collide.

Low-Speed Steering Control System

Whenever the throttle lever is in IDLE position AND the steering wheel is approaching the end of its rotation, the engine speed will be slightly accelerated to increase the jet pump thrust. This aids steering control for low-speed navigation or when approaching/leaving a dock. For docking tips, refer to Stopping/Docking section below.

NOTE: On twin-engine models, each engine must be running so that the low-speed control properly works.

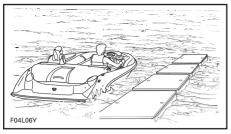
⚠ WARNING

Become fully familiar with this feature during your first ride and before carrying passengers.

Boarding from a Dock

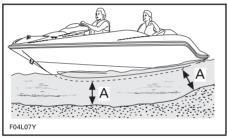
As with any boat, boarding should be done carefully and engine(s) must not be running.

When boarding from a dock, slowly place one foot on the sport boat deck nearest to the dock and then move the other foot inside the boat. Push the sport boat away from the dock.



TYPICAL

CAUTION: Although the boat requires only 30 cm (1 ft) of water to float, the engine(s) should be started with at least 90 cm (3 ft) of water below the hull to protect the propulsion system.



TYPICAL
A. 90 cm (3 ft)

Boarding from the Water

↑ WARNING

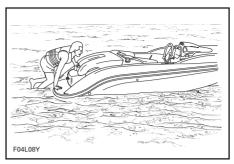
Inexperienced riders should practice how to get aboard close to shore first before venturing into deep water.

↑ WARNING

Engine should not be running while boarding. Never use propulsion components as a supporting point to board the craft.

Swim to the rear of the sport boat.

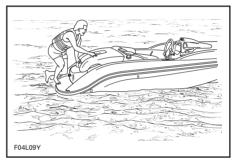
Grip the grab bar and pull yourself upward until your knee can reach the swim platform.



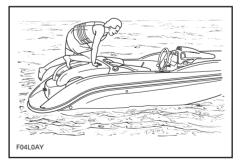
TYPICAL

↑ WARNING

Engine(s) must not be running while boarding. Never use propulsion components as a supporting point to board the sport boat.



TYPICAL



TYPICAL

↑ WARNING

Do not start engines until all passengers are properly seated.

Starting

Always activate bilge blower 5 minutes minimum before starting the engine(s). The bilge blower will ventilate the bilge.

⚠ WARNING

Bilge blower must be turned off during sport boat operation.

↑ WARNING

Do not touch electrical parts or jet pump area when engine(s) is (are) running.

Attach the safety lanyard to your PFD and snap the cap to its switch before starting the engine.

NOTE: If you hear some beeper signals other than 2 short beeps, it indicates a particular condition that must be corrected. Refer to the TROUBLE-SHOOTING section for the meaning of the coded signal.

Grip steering wheel with your right hand and place both feet on the floorboard. Turn off bilge blower.

Start one engine at a time. Check tachometer(s) to monitor engine(s).

Before starting, the operator and passengers should always be properly seated.

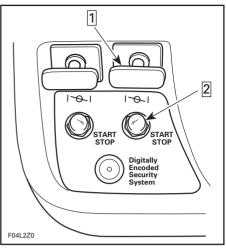
Cold Engine

Fully pull back throttle lever(s) to idle position.

First Engine

Fully pull one choke lever and depress the starting button just below it.

NOTE: Either engine can be started first.



TYPICAL

Step 1: Fully pull and hold choke lever Step 2: Press the start/stop button

Immediately after engine is started, release starting button and release choke lever.

NOTE: Do not push the throttle lever forward while starting a cold engine.

CAUTION: To avoid starter motor overheating, the cranking period should not exceed 5-10 seconds and a rest period of 30 seconds should be observed between cranking cycles to let the starter cool down and its mechanism disengage.

NOTE: In an emergency, the sport boat may be operated with one engine. Refer to SPECIAL PROCEDURE section.

Sportster LT Model

Second Engine

Start the second engine following the same procedure but use the other choke lever, start/stop button and throttle lever. Always monitor engines with tachometers.

Both Models

Leaving the Shore

With throttle lever(s) at idle, move shifter to Forward.

Slowly accelerate to reach deeper water. Do not apply full throttle until the engine(s) is (are) warm.

MARNING

In shallow water, shells, sand, pebbles or other objects could be drawn up by the jet pumps and be thrown rearward.

Warm Engine(s)

The same procedure as a cold engine applies, except the choke does not need to be applied and throttle lever has to be slightly pushed forward to approximately 1/4.

Rough Water or Poor Visibility Operation

Avoid operation in these conditions. If you must do so, proceed with caution and prudence using minimum speed. Turn on navigation lights if necessary.

Crossing Waves

Reduce speed. Always be prepared to steer and balance as necessary.

When crossing wakes, always keep a safe distance from boat ahead.

MARNING

When crossing wakes, slow down. Operator and passenger(s) can brace themselves by posting. Do not jump waves or wakes.

Stopping/Docking

The sport boat is slowed by water drag. The stopping distance will vary depending on weight, speed, water surface condition, presence and direction of wind and current.

The operator should become familiarized with the stopping distance under different conditions.

Reduce speed to idle. Shift to neutral, reverse or forward as required when approaching a dock then shut off the engine(s) just before coming along-side.

MARNING

Directional control is reduced when throttle is released and lost when engine is off.

Low-Speed Steering Control System

Reducing RPM to IDLE activates the low-speed steering control feature as described previously. For more details, refer to Low-Speed Steering Control System in Turning section above.

With practice, you can use this feature to assist docking maneuvers.

MARNING

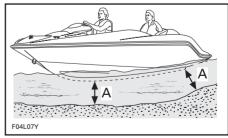
Become familiar with this feature during your first ride.

When close to the dock, shut off the engine(s).

Beaching

CAUTION: It is not recommended to run the sport boat to the beach.

Come slowly to the beach and shut off the engine(s) using the safety lanyard when water depth is 90 cm (3 ft) under the hull, then pull the boat to the beach. Ensure that all accessories are OFF.



A. 90 cm (3 ft) of water under the hull

In shallow water, shells, sand, pebbles or other objects could be drawn up by the jet pumps and be thrown rearward.

As necessary, the cooling system of each engine should be flushed before restarting. To remove sand or shell accumulation which may clog the water passages. Refer to POST-OPERATION CARE and look for **Cooling System Flushing**.

Shutting Off the Engine(s)

To shut off the engine(s), completely pull back throttle lever(s) then remove safety lanyard or press the engine start/stop button(s).

Always remove safety lanyard from sport boat.

⚠ WARNING

Should the engine(s) be shut off, sport boat directional control is not available. Never leave the safety lanyard connected on its switch when craft is not in operation to avoid unauthorized use by children.

POST-OPERATION CARE

↑ WARNING

Allow engine to cool before performing any maintenance.

General Care

Should water be present in the bilge after use of bilge pump, unscrew the drain plug and tilt the sport boat to the rear in order to allow water to drain.

Wipe up any remaining water in the engine compartment (bilge, engine(s), etc.) with clean dry rags. This is particularly important in salt water use.

Remove the sport boat from the water every day to prevent marine organisms growth.

Additional Care for Foul Water or Salt Water

When the sport boat is operated in foul water and particularly in salt water, additional care must be taken to protect the sport boat and its components. Rinse trailer and boat's hull/bilge area with fresh water.

CAUTION: Failure to perform proper care such as: craft rinsing, cooling system flushing and anticorrosion treatment, when used in salt water, will result in damage to the sport boat and its components. Never leave the craft stored in direct sunlight.

Cooling System Flushing and Engine Internal Lubrication

Flushing the cooling system with fresh water is essential to neutralize corroding effects of salt or other chemical products present in water. It will help to remove sand, salt, shells or other particles in water jackets (engine, exhaust manifold, tuned pipe) and/or hoses.

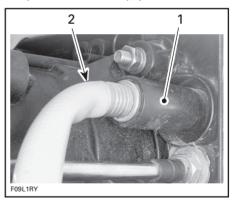
Engine lubrication and flushing should be performed when the sport boat is not expected to be used further the same day or when the sport boat is stored for any extended time.

Proceed as follows for both engines (if applicable):

↑ WARNING

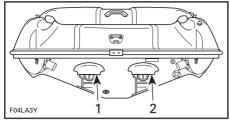
Perform this operation in a well ventilated area.

- Clean jet pump by spraying water in its inlet and outlet and then spray a soapy solution.
- Connect a garden hose directly to the pump support flushing connector(s), as shown in the next photo. Do not open the water tap yet.



TYPICAL — SPORTSTER LT MODEL

- 1. Pump support flushing connector
- 2. Garden hose plugged

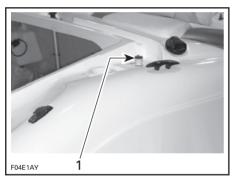


SPORTSTER LT MODEL

- 1. Flushing connector for port engine
- 2. Flushing connector for starboard engine

NOTE: Either of the flushing connectors can be used. The one(s) on the pump support(s), or the upper one(s) in the engine compartment area.

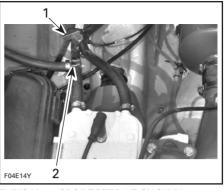
Use of the Upper Flushing Connector(s)



TYPICAL

1. Flushing connector with its cap (starboard side for Sportster LT)

When using the upper connector, it is necessary to prevent water going out directly by the connector on the pump support. Install a hose pincher (not supplied) (P/N 529 032 500) on the hose between the transom and the T-fitting as shown.



TYPICAL — SPORTSTER LT SHOWN

- 1. T-fitting
- 2. Hose pincher right after the T-fitting



TYPICAL — SPORTSTER LE SHOWN

1. Pinch outlet hose between T-fittings

Continuing the Flushing

3. Start the engine then immediately open the water tap.

⚠ WARNING

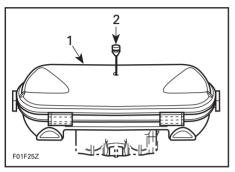
Do not touch any electrical parts or jet pump area when engine is running.

CAUTION: Never flush a hot engine. Always start the engine before opening the water tap. Otherwise, water will back flow through the tuned pipe into the engine and may cause damage to internal parts. Open water tap immediately after engine is started to prevent overheating.

4. Run the engine about 3 minutes at a fast idle around 3500 RPM.

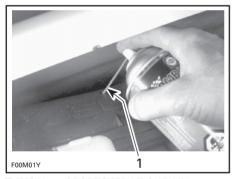
CAUTION: Never run engine longer than 5 minutes. Drive line seal has no cooling when sport boat is out of water.

5. Remove plug from air intake silencer cover.



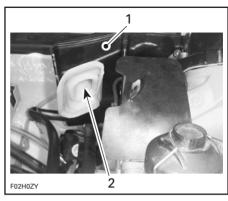
TYPICAL — SPORTSTER LT SHOWN

- 1. Air intake silencer cover
- 2. Pull plug



TYPICAL — SPORTSTER LT SHOWN

1. Spray BOMBARDIER LUBE here



947 ENGINE

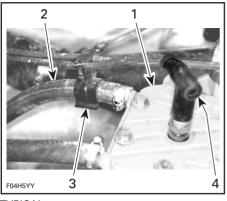
- 1. Air intake silencer
- 2. Spray BOMBARDIER LUBE here
 - Spray BOMBARDIER LUBE lubricant keeping engine at fast idle during one minute.
 - 7. Close the water tap then stop the engine.
- 8. Remove hose pincher.

CAUTION: Always close the water tap before stopping the engine.

NOTE: For storage, engine should be run out of fuel while lubricating by turning the fuel valve to OFF position.

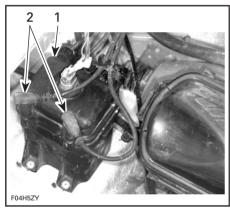
CAUTION: When engine begins to run irregularly because of fuel starvation, immediately stop water flow before engines dies.

- Disconnect the garden hose. Ensure the rubber washer remains in boat's connector (upper connectors).
- Remove spark plug cables and detach holding bracket from cooling hose.



TYPICAL

- 1. Engine head
- 2. Cooling hose3. Detach bracket holding spark plug cables
- 4. Remove spark plug cables
- 11. Connect spark plug cables to the grounding device of the electrical box.



TYPICAL

- 1. Electrical box
- 2. Connect spark plug cables to grounding devices

- 12. Remove both spark plugs and spray BOMBARDIER LUBE lubricant into each cylinder.
- 13. Crank the engine a few turns to distribute the oil on cylinder wall.
- 14. Apply anti-seize lubricant on spark plug threads then reinstall them.
- 15. Reinstall plug on air intake silencer cover.
- 16. Properly reconnect spark plug cables to spark plugs.
- 17. Wipe up any residual water from the engine.

NOTE: Repeat the same procedure for the other engine (if applicable).

Anticorrosion Treatment

To prevent corrosion, spray a corrosion inhibitor (salt water resistant) such as BOMBARDIER LUBE lubricant or equivalent over metallic components in engine compartment.

NOTE: Engine fogging should be done with BOMBARDIER LUBE lubricant whenever the sport boat is to be stored for few days or a long period.

Apply dielectric grease (salt water resistant) on battery posts and cable connectors.

CAUTION: Never leave rags or tools in the engine compartment or in the bilge.

SPECIAL PROCEDURE

Engine Overheating

CAUTION: If the monitoring beeper continuously sounds, **stop engine(s)** immediately.

Perform the Jet Pump Water Intake and Impeller Cleaning procedure in this section.

Flush cooling system, refer to POST-OPERATION CARE.

If engine(s) still overheat, refer to an authorized dealer for servicing.

Jet Pump Water Intake and Impeller Cleaning

Keep away from intake grate while engine is on. Items such as long hair, loose clothing or personal flotation device straps can become entangled in moving parts resulting in severe injury or drowning.

Weeds, shells or debris can get caught on the intake grate(s), drive shaft(s) and/or impeller(s). A clogged water intake may cause troubles such as:

- Cavitation: Engine speed is high but sport boat moves slowly due to reduced jet thrust; jet pump components may be damaged.
- Overheating: Since the jet pump operation controls the flow of water to cool the engine, a clogged intake will cause the engine to overheat and damage engine internal components

The clogged area can be cleaned as follows:

In-water cleaning: Pull safety lanyard to stop engine(s). Let the boat stop by itself then pull the weedless system lever (refer to POST OPERATION CARE). This will lower the water intake grate(s). Wait a while to allow weeds or other debris to escape from grate(s). Thereafter, fully push wheedless system lever and start engine(s). It may be necessary to repeat the procedure.

CAUTION: Operating the sport boat with the water intake grate(s) in lower position will cause damage to the weedless system.

In severe conditions if the above method does not work, the following can be performed:

- With engine(s) running, put shift lever in reverse position and vary throttle(s) quickly several times.
- Retry boat.

Most of the time, debris will escape from the propulsion system.

Out of water cleaning: If the system is still clogged, shut off the engine(s) by removing the safety lanyard.

⚠ WARNING

Always remove safety lanyard from switch to prevent accidental engine starting before cleaning the jet pump area.

Pull the weedless system lever to lower the water intake grate(s). From underneath boat, manually clean each water intake area. If the system is still clogged, refer to an authorized dealer for servicing.

CAUTION: Avoid sport boat operation in weeded areas. If unavoidable, vary sport boat speed. Weeds tend to entangle more at steady and slow speeds. Inspect water intake grate(s) for damage. Refer to an authorized dealer for repair as necessary.

Capsized Boat

The sport boat is designed so that it should not turn over easily due to its long and wide dimensions. If the sport boat ever capsizes, remember that it will continue to float. It is usually best to remain with it, you will be more easily located by others.

↑ WARNING

When boat is capsized, do not attempt to restart the engine. Operator and passengers should always wear approved personal flotation devices.

Submerged Boat

⚠ WARNING

DO NOT attempt to restart engine. See an authorized dealer as soon as possible to service the engine.

Flooded Engine

In the event the engine cannot be serviced within a few hours, remove spark plug cables and connect them on the grounding device.

⚠ WARNING

Never crank engine with spark plugs removed unless spark plug cables are connected to the grounding device.

Remove spark plugs and dry them with a clean and dry cloth.

Cover spark plug holes with a rag.

Ensure choke lever is completely pushed in.

Crank engine for approximately 10 seconds to allow water to escape from spark plug openings.

Spray BOMBARDIER LUBE lubricant into spark plug holes.

Crank engine again.

Reinstall spark plugs.

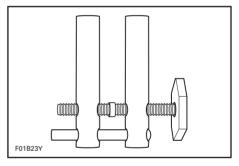
Start engine normally.

Towing the Boat in Water

In the event the sport boat becomes inoperative, tie a tow rope to the bow (front) eyelet. However, special precautions should be taken.

The maximum recommended towing speed is 24 km/h (15 MPH).

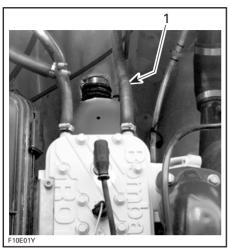
When towing your boat in water, pinch the water supply hose from the jet pump housing(s) to the engine(s) with a hose pincher (not supplied) (P/N 529 032 500) shown in the following illustration.



This will prevent the cooling system from filling which may lead to water being injected into and filling the exhaust system(s). Without the engine(s) running there isn't any exhaust pressure to carry the water out the exhaust outlet(s)

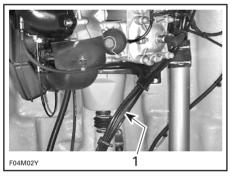
CAUTION: Failure to do this may result in damage to the engine(s). If you must tow a stranded boat in water and do not have hose pincher(s) be sure to stay well below the maximum towing speed of 24 km/h (15 MPH).

Snugly install the hose pincher on the hose as shown in the following photos.



TYPICAL — SPORTSTER LT

1. Install hose pincher on this hose



TYPICAL — SPORTSTER LE

1. Pinch water supply hose (large one) here

CAUTION: When finished towing the boat you must remove the hose pincher(s) before operating it. Failure to do so will result in damage to the engine(s).

Low-Charge Battery Condition

↑ WARNING

See your authorized Sea-Doo dealer to have it charged or replaced. Do not charge or boost the battery while installed on the craft. Electrolyte is poisonous and dangerous.

MAINTENANCE

Only perform procedures as detailed in this guide. It is recommended that the assistance of an authorized dealer be periodically obtained on other components/systems not covered in this guide. Unless otherwise specified, engine(s) must not be running and the main battery cut-off switch must be turned OFF for all maintenance procedures.

NOTE: Where applicable, maintenance procedure applies for both engine systems.

Lubrication

IMPORTANT: DO NOT lubricate safety lanyard post. This will prevent proper electrical contact.

PTO Flywheel

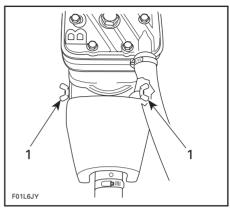
Use SEA-DOO synthetic grease and lubricate as follows:

Open rear storage compartment cover.

Remove storage tray.

Loosen the wing nuts, washers and pull out PTO flywheel guard.

Always remove safety lanyard cap from its receptacle to prevent accidental engine starting before removing the PTO flywheel guard.

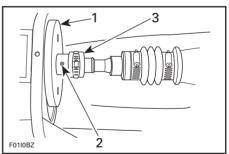


TYPICAL — SPORTSTER LT SHOWN

1. Loosen wing nuts

Using a grease gun, carefully lubricate PTO flywheel at grease fitting until drive shaft boot begins to expand.

CAUTION: Immediately stop lubricating as soon as boot begins to expand to prevent boot damage or slipping.



- 1. PTO flywheel
- 2. Grease fitting
- 3. Drive shaft boot

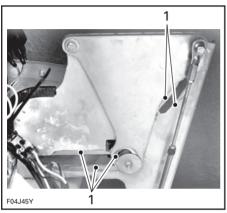
Reinstall and secure PTO flywheel guard.

Weedless System Mechanisms

Use SEA-DOO synthetic grease and lubricate as follows:

Open RH storage compartment cover and remove basket.

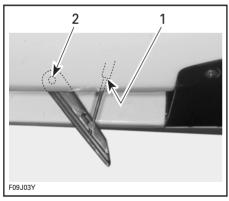
Grease sliding parts as shown.



1. Grease sliding parts and surfaces

Reinstall basket and close cover.

From underneath of hull, lubricate water intake grate(s) at pivoting points and cable rod(s) using BOMBARDIER LUBE lubricant.



TYPICAL

- 1. Lubricate cable rod
- 2. Lubricate pivoting points

Anticorrosion Protection

Throttle/Choke Cable(s)

Lubricate the throttle and choke cable(s) with BOMBARDIER LUBE lubricant every 25 hours of use (every 10 hours in salt water use).

Electrical Connections

As necessary, apply dielectric grease on battery posts and all exposed cable connectors including stern light connectors on mat and boat.

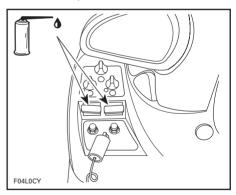
Additional Lubrication

BOMBARDIER LUBE lubricant will help to prevent corrosion and keep proper operation of moving mechanisms.

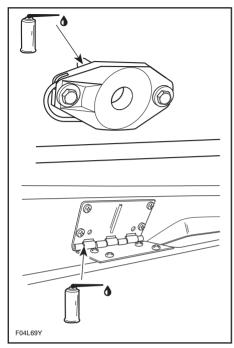
Lubrication of the following items should be performed every 50 hours in fresh water use but every 10 hours in salt water use.

Choke Lever(s)

Fully pull choke lever(s) and lubricate the metallic portion.



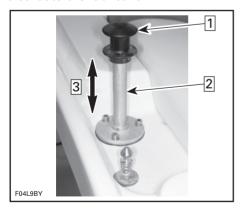
Rear Storage Compartment Cover Mechanism and Hinges



TYPICAL

Ski Post

Lubricate ski post through all its length. Pull out then push in several times to distribute the lubricant.



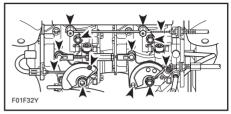
Step 1: Lift ski post to lubricate

Step 2: Lubricate here

Step 3: Move post up and down several times to distribute lubricant

Carburetors and Oil Injection Pump

Lubricate springs, shafts and exposed portion of cables. Grease carburetor linkage with synthetic grease.



TYPICAL

Reverse Gate(s)

Lubricate pivoting points and mechanism of each side.

Rear Storage Compartment Cover Cylinders

Lubricate rod of cylinders.

Periodic Inspection

Routine maintenance is necessary for all mechanized products. A periodic inspection contributes to the products life span.

The Periodic Inspection chart at the end of this document gives guidelines for regular sport boat servicing schedule to be performed by you and/or by an authorized dealer. The schedule should be adjusted according to operating conditions and use.

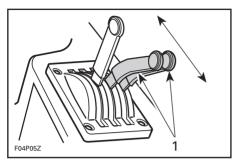
Throttle and Choke Cables Throttle Cable(s)

Move the throttle lever(s) forward and rearward once. They must operate smoothly. Refer to an authorized dealer if adjustment is necessary.

NOTE: Do not activate throttle lever(s) unnecessarily, when engine is (are) not running. Carburetors are equipped with fuel accelerator pumps. These pumps deliver fuel to the engine(s) each time throttle lever(s) is (are) moved forward.

⚠ WARNING

Do not alter or tamper with throttle cable(s) adjustment or routing.



TYPICAL — THROTTLE LEVERS

1. Must move freely

Choke Cable(s)

Ensure choke cable(s) operate(s) smoothly and without any hesitation from fully open to fully closed. When the choke lever is fully pulled, choke must be fully applied. Refer to an authorized dealer if necessary.

Carburetors

Carburetor adjustment is very important to allow good engine operation and therefore sport boat performance. Carburetor adjustment requires technical knowledge and experience to have the correct mixture supplied to the engine. These critical adjustments must be performed by an authorized dealer once a year or more often if necessary.

CAUTION: Serious engine damage can occur with improper carburetor adjustment.

Fuel and Oil Filters

These filters must be replaced by an authorized dealer annually. Fuel system pressurization should be conducted at the same time.

CAUTION: An obstructed oil filter will cause oil starvation resulting in serious engine damage.

Steering/Jet Pump Nozzle Adjustment

When the steering is aimed in straight ahead position, the jet pump nozzle(s) should be in the same direction to allow the sport boat to run in a straight line.

Refer to an authorized dealer if an adjustment is necessary.

↑ WARNING

Ensure the steering/jet pump nozzle(s) operate(s) freely from side to side and is (are) not stressing the steering cable(s).

Reverse Gate(s)

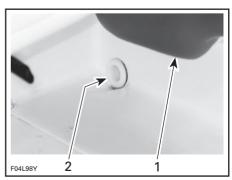
When shift lever is in forward position, reverse gate(s) should be in an upward position and locked. With the shift lever in neutral position, reverse gate(s) should be in intermediate position. When shift lever is in reverse position, reverse gate(s) should be in downward position. Refer to an authorized dealer if an adjustment is necessary.

↑ WARNING

Ensure the shifter/reverse gate(s) operate(s) freely and are not stressing the reverse cable.

Deck Drain

Remove any obstruction from deck drain outlet.



- 1. Driver's seat
- 2. Deck drain hole

Fuses

Accessories, Engine Electrical System and Gauges

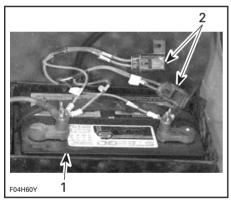
If a fuse is defective, replace by one of the same rating.

MARNING MARNING

Do not use a higher rated fuse as this can cause severe damage. If a fuse has burnt out. Source of malfunction should be determined and connected before restarting. See an authorized Sea-Doo sport boat dealer for servicing.

If nothing at all is working, check main fuses located close to battery in engine compartment.

NOTE: There are spare fuses in rubber holders attached to the top of MPEM.

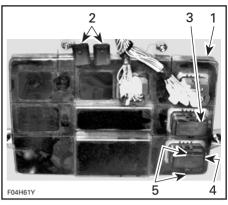


TYPICAL

- 1. Battery
- Main fuses

If an accessory, engine or gauge is not working, check its fuse condition.

Fuses for the accessories, the electrical system of the engine(s) and the gauges are mounted on the Multi-Purpose Electronic Module (MPEM), which is located in the engine compartment.



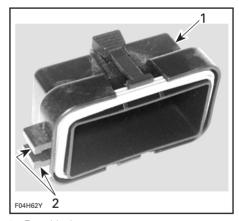
TYPICAL

- 1. MPEM
- 2. Spare fuse holders
- 3. Top fuse block
- 4. Bottom fuse block
- 5. Locking tabs

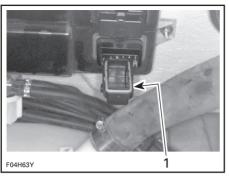
A decal on the MPEM shows the rating, position and identification of the fuses.

Squeeze cover locking tabs and pull cover out to access fuses.

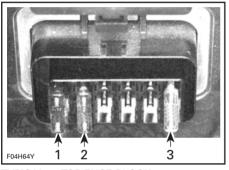
Use the cover tabs to remove the fuse.



- 1. Fuse block cover
- 2. Use these tabs as a fuse puller

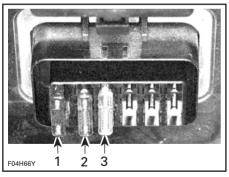


 Slide cover tabs each side of fuse then pull fuse out



TYPICAL — TOP FUSE BLOCK

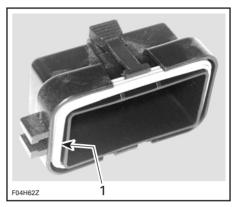
- 1. MPEM supply
- 2. Gauges supply
- 3. Bilge pump



TYPICAL — BOTTOM FUSE BLOCK

- 1. Bilge air blower
- 2. Additional accessories
- 3. Navigation lights

When finished, ensure to properly place seal in cover.



1. Properly place seal in cover

Carefully position cover on fuse block then firmly push until you hear a snapping sound for each locking tab.

Charging System

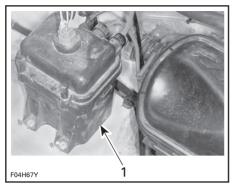
If the battery is regularly discharged, check this fuse condition.

Fuses for the charging systems are located in the small electrical box(es) in the engine compartment. On Sportster LT model, the port side box is for the port engine and the starboard side box is for the starboard engine.

Pull tabs outside one at a time while pulling out cover.

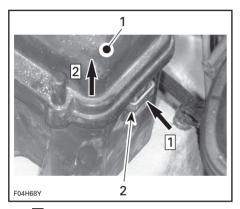
⚠ WARNING

If any water is found in the electrical box, immediately refer to an authorized dealer before operating the boat.



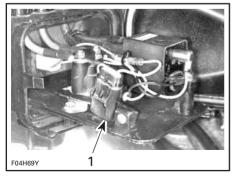
TYPICAL

1. Electrical box



Step 1: Push locking tab Step 2: Lift cover 1. Electrical box cover 2. Locking tab

Lift cover and turn it upside down to reach fuse.



INSIDE VIEW OF ELECTRICAL BOX COVER

1. Charging system fuse

When finished, ensure to carefully close electrical box cover so that seal is well positioned.

Bilge Air Blower

Verify bilge air blower for proper operation. It is located in starboard ventilation duct beneath rear storage compartment cover.



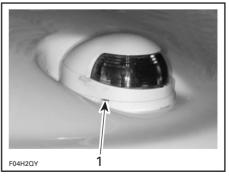
TYPICAL

1. Blower

⚠ WARNING

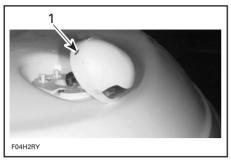
If bilge blower does not operate properly, refer to an authorized dealer before starting the sport boat.

Navigation Light Bulb Replacement Bow Light



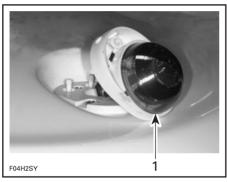
TYPICAL

1. Gently pry here with a screwdriver



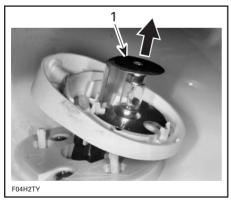
TYPICAL

1. Remove this screw



TYPICAL

1. Pull lens out



TYPICAL

1. Lift and remove bulb

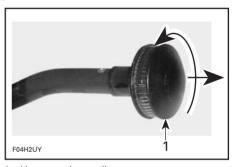
The assembly is essentially the reverse of removal procedures. However, pay particular attention to the following:

Apply dielectric grease on bulb contact surface.

When installing the bulb under the upper terminal plate, it is possible that the bulb remains loose. The cover will compress the terminal plate against the bulb at reinstallation.

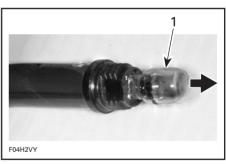
Stern Light

Unscrew lens counterclockwise and pull it out.



1. Unscrew then pull

Pull bulb to remove it.



1. Pull bulb out

Apply dielectric grease on new bulb contact surface.

The assembly is the reverse of removal procedure.

General Inspection and Cleaning

Inspection

Check engine compartment for any damage and fuel/oil injection systems for leaks. Also check battery for electrolyte leaks. Ensure all hose clamps are properly secured and no hose is cracked, kinked or presenting any other damage.

⚠ WARNING

If at any time, gasoline leaks/odor are found, do not start the engine(s). Have the boat serviced by an authorized dealer.

Inspect mufflers, battery and reservoir fastening devices. Check electrical connections for corrosion and tightness.

Inspect hull and jet pump water intake grate(s) for damage. Replace or have damaged parts repaired.

Cleaning

Twice a year, the bilge should be cleaned with hot water and detergent or bilge cleaner to remove any possible fuel/oil/electrolyte deposits and mildew.

Occasionally, wash the body with hot water and soap (only use mild detergent). Remove any marine organisms from engine(s) and/or hull. Apply nonabrasive wax.

CAUTION: Never clean fiberglass and plastic parts with strong detergent, degreasing agent, paint thinner, acetone, etc.

Wash windscreen with Bombardier cleaner (P/N 293 110 001 — 400 g) and water. For fine scratches and scuff marks removal, use a windshield polisher for acrylic, lucite, polycarbonate and similar materials

Stains may be removed from seats and fiberglass with Knight's Spray-Nine* from Korkay System Ltd or the equivalent.

Respect the environment by ensuring fuel, oil or cleaning solutions do not drain into the waterways.

STORAGE AND PRE-SEASON PREPARATION

⚠ WARNING

Because fuel and oil are flammable, have an authorized Sea-Doo sport boat dealer inspect the fuel and oil systems integrity as specified in the PERIODIC INSPECTION CHART.

Storage

It is recommended that the sport boat be taken to an authorized dealer for proper storage but the following operations can be performed by you with a minimum of tools.

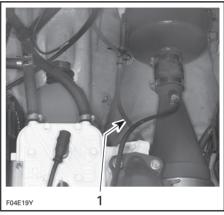
CAUTION: Do not run the engine(s) during the storage period.

NOTE: Storage procedure applies for both engine systems on Sportster LT model.

Engine Draining

Check engine(s) drain tube. Make sure there is no sand or other particles in and that it is not obstructed so that water can exit the engine(s). Clean hose and fitting as necessary. Refer to POST-OPERATION CARE.

CAUTION: Water in engine drain tube(s) must be free to flow out, otherwise water could be trapped in engine(s). Should water freeze in engine(s), severe damage will occur. Check engine drain tube(s) for obstructions.



TYPICAL

1. Drain tube must be clean

Fuel System

SEA-DOO fuel stabilizer or equivalent, should be added to fuel tank to prevent fuel deterioration and carburetor gumming. Follow manufacturer's instructions for proper use.

CAUTION: Fuel stabilizer should be added prior to engine lubrication to ensure carburetor protection against varnish deposit.

↑ WARNING

Fuel is flammable and explosive under certain conditions. Always work in a well ventilated area. Do not smoke or allow open flames or sparks in the vicinity. Always wipe off any fuel spillage from the sport boat.

Cooling System Flushing and Engine Internal Lubrication

Refer to procedure discussed in POST-OPERATION CARE.

Propulsion System

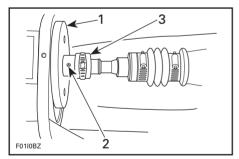
Lubricant in impeller shaft reservoir should be drained and reservoir cleaned. Refilled with BOMBARDIER synthetic polyolester oil 75W90 GL5 type C gear lube, as per following table. Refer to an authorized dealer for this operation.

CAUTION: Use only BOMBARDIER jet pump oil or equivalent synthetic gear oil, otherwise component service life could be reduced. Do not mix oil brands or types.

IMPELLER SHAFT RESERVOIR		
MODEL	CAPACITY (mL)	
Sportster LE	115	
Sportster LT	80	

Lubricate PTO flywheel at grease fitting with synthetic grease.

CAUTION: Do not lubricate excessively. Immediately stop when a slight movement is noticed on rubber boot. Never leave any clothing, tool or other objects in the engine compartment.



- 1. PTO flywheel
- Grease fitting
- 3. Drive shaft boot

Boat Cleaning/Repair

Wash the body and the trailer with soap and water solution (only use mild detergent). Rinse thoroughly with fresh water. Remove any marine organisms from the hull.

CAUTION: Never clean apparent fiberglass and plastic parts with strong detergent, degreasing agent, paint thinner, acetone, etc.

Stains may be removed from seats and fiberglass with Knight's Spray-Nine* from Korkay System Ltd or the equivalent.

If repairs are needed to the body or to the hull contact your dealer. For paint touch up to mechanical parts use Bombardier spray paint. For minor gelcoat repairs, a Bombardier repair kit is available. Replace damaged labels/decals.

Clean the bilge with hot water and detergent or with bilge cleaner. Rinse thoroughly. Unscrew drain plug(s) and lift front end of sport boat to completely drain bilge.

Antifreezing Protection

In cool regions where freezing point temperature may be encountered, cooling system must be filled with water and antifreeze solution. (50% water, 50% antifreeze).

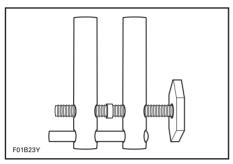
CAUTION: Antifreeze mix must be fed in cooling system. Otherwise water will freeze in engine(s)/exhaust system(s) causing severe damage.

NOTE: When available, it is recommended to use biodegradable antifreeze compatible with internal combustion aluminum engines.

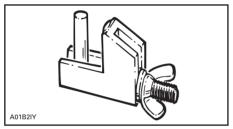
CAUTION: Always use ethylene glycol antifreeze containing corrosion inhibitors specifically recommended for aluminum engines.

NOTE: The engine(s) will not have to run during this operation but should have been run before to exhaust water from cooling system components.

Some hoses have to be plugged to prevent draining before filling cooling system jackets with the antifreeze. Use hose pinchers (not supplied) (P/N 529 032 500) or (P/N 295 000 076).



TYPICAL — HOSE PINCHER (P/N 529 032 500)



TYPICAL — HOSE PINCHER (P/N 295 000 076)

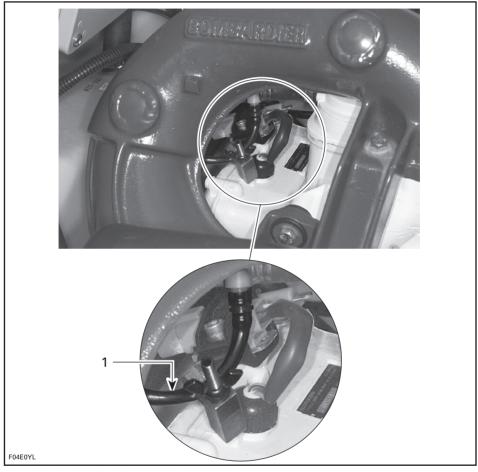
Air will escape from bleed hose on tuned pipe.

Sportster LT Model

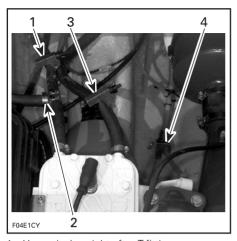
Hose Pinchers Installation

Install a hose pincher and firmly tighten on:

- water injection hose at tuned pipe



- 1. Hose pincher on injection hose going to tuned pipe
- engine drain tube coming from exhaust manifold before T-fitting
- hose right after T-fitting
- hose on cylinder head.



- 1. Hose pincher right after T-fitting
- 2. T-fitting
- 3. Hose pincher on this hose
- 4. Hose pincher on drain tube

Antifreeze Filling

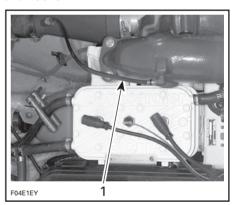
NOTE: Hose pinchers must be firmly tightened so that no antifreeze can flow through the blocked hoses. If you hear the liquid flowing in the muffler immediately after starting pouring antifreeze, it indicates that antifreeze is bypassing the engine/tuned pipe water jackets. To correct this, firmly retighten hose pinchers.

Unscrew cap from flushing fitting on the edge of engine compartment and insert a funnel into flushing fitting. Pour about 2 liters (1/2 gal) of antifreeze solution through the funnel. Let the antifreeze enough time to flow. Moving the hose with the T-fitting should accelerate the flow.



TYPICAL

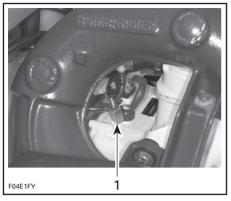
Pour antifreeze until you see it flowing out of tuned pipe bleed hose. At this time only, the entire circuit is filled with antifreeze.



TYPICAL

Pour antifreeze until it flows out here

Remove hose pincher from injection hose at tuned pipe and continue to pour approximately 200 mL (7 oz). This will allow antifreeze to flow inside muffler to protect it.



TYPICAL

1. Remove this hose pincher

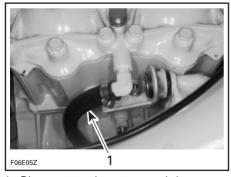
When finished, remove all remaining hose pinchers.

Most of the antifreeze will drain out from flushing fitting and jet pump nozzle when removing hose pinchers. Use a suitable container to recover it. Dispose antifreeze as per your local laws and regulations.

Sportster LE Model

Install a hose pincher to engine drain hose.

Disconnect engine water supply hose from cylinder head, as shown in the next photo.



1. Disconnect engine water supply hose

Temporarily install one short piece of hose to engine water inlet fitting.

Insert a funnel into hose. Pour antifreeze mixed with water in the engine until the solution is visible in the water return hose.

Remove temporary hose and reconnect engine water supply hose to engine.

Remove hose pincher.

Most of the antifreeze will drain out when removing hose pincher. Use a container to recover it. Dispose antifreeze as per your local laws and regulations.

NOTE: Although antifreeze will mainly drain out, the antifreeze has flowed to mix with water that was possibly trapped in cooling system cavities and thus preventing freezing problems.

Care should be taken with a Rotax 947 engine since water partially remains inside engine and cannot be totally drained.

NOTE: For pre-season preparation, drain antifreeze from cooling system prior to launching boat in water as explained above.

Battery

Contact your authorized dealer.

Anticorrosion Treatment

Wipe off any residual water in the engine compartment.

Spray BOMBARDIER LUBE lubricant over metallic components in engine compartment.

Lubricate the throttle cable(s) with BOMBARDIER LUBE lubricant.

Finalizing Storage Preparation

Apply a non abrasive wax to body.

The engine storage cover should be left partially opened during storage (detach the gas shocks from the cover to prevent full opening). Remove storage tray. Place it on deck. This will avoid engine compartment condensation and possible corrosion.

If the sport boat is to be stored outside, cover it with a vented opaque tarpaulin to prevent sun rays and grime from affecting the plastic components, sport boat finish as well as preventing dust accumulation.

CAUTION: Never leave the sport boat stored in direct sunlight. UV radiation will dull finishes. The sport boat must never be left in water for storage. Make sure to turn off main battery cut-off switch.

For the storage period, it is necessary to lift the bow up and safely block in this position so drainage can take place. Ensure the drain plug is unscrewed.

Pre-Season Preparation

Use the PERIODIC INSPECTION CHART at the end of this document and refer to the pre-season column.

Since technical skills and special tools are required, some operations should be performed by an authorized Sea-Doo dealer.

⚠ WARNING

Observe all WARNINGS and CAUTIONS mentioned throughout this guide which are pertinent to the item being checked. When component conditions seem less than satisfactory, replace with genuine BOMBARDIER parts or approved equivalents.

NOTE: It is highly recommended that an authorized Sea-Doo dealer perform the annual safety inspection and factory campaigns in addition to the preseason preparation all at the same time.

TROUBLESHOOTING

The following chart is provided to help in diagnosing the probable source of simple troubles. You may be able to solve many of these problems rather quickly, but others may require the skills of a mechanical technician. In such a case, consult an authorized dealer for servicing.

Nothing is Working in the Electrical System

OTHER OBSERVATION	POSSIBLE CAUSE	REMEDY
No beeps are heard when installing safety lanyard on DESS post.	 Main battery cut-off switch is turned OFF. 	• Verify and turn ON.

Monitoring Beeper Coded Signals

NUMBER OF BEEPS	POSSIBLE CAUSE	REMEDY
2 short (while installing safety lanyard on DESS post).	 Everything is correct with the safety lanyard (good contact and right lanyard cap). 	 Engine can be started normally.
1 long (while installing safety lanyard on DESS post or when pressing start/stop buttons in some cases).	Bad connection between safety lanyard cap and DESS post.	Remove and reinstall the safety lanyard on the DESS post. Two short beeps should be heard which indicates the system is ready again to allow engine starting.
	Wrong safety lanyard.	 Use the safety lanyard that has been programmed for the boat. If it does not work, refer to an authorized dealer.
	 Dirty safety lanyard cap. 	• Clean.
	 Improper operation of MPEM or defective wiring harness. 	Refer to an authorized dealer.
4 short (while pressing start/stop button with safety lanyard already installed).	• Shifter is NOT in neutral.	 Place shifter in neutral. While moving the shifter, 1 short beep indicates you reached the neutral position.
1 short (while moving shifter to neutral).	 Confirmation that shifter is now in neutral. 	• Engine is now ready to be started.
8 short.	 Defective MPEM (memory). 	Refer to an authorized dealer.
Continuous.	Engine overheating.	• Refer to Engine Overheats below.

76

Engine will not Start

OTHER OBSERVATION	POSSIBLE CAUSE REMEDY			
Engine does not turn over and the monitoring beeper sounds.	Refer to monitoring beepe	r coded signals above.		
Engine does not turn over.	 Safety lanyard removed. 	 Install cap over switch. 		
	Burnt fuse.	 Check wiring then replace fuse. 		
	Discharged battery.	 Refer to an authorized dealer. 		
	 Battery connections, corroded or loose. 	 Refer to an authorized dealer. 		
	Water flooded engine.	 Refer to an authorized dealer. 		
Engine slowly turns.	 Discharged or weak battery. 	 Refer to an authorized dealer. 		
Engine turns over.	 Fuel tank empty or water contaminated. 	 Refill or siphon and fill with fresh fuel. 		
	 Fuel filter clogged or water contaminated. 	 Clean, check fuel tank for water. 		
	Fuel flooded engine:			
	 Fouled/defective spark plugs. 	• Replace.		
	 Misuse of choke. 	 Use only with cold engine. Replace spark plugs. 		

Engine Misfires, Runs Irregularly

OTHER OBSERVATION	POSSIBLE CAUSE	REMEDY
Weak spark.	• Fouled worn spark plugs.	Replace.
	• Faulty RPM limiter.	 Refer to an authorized dealer.
	Too much oil supplied to engine.	 Improper oil pump adjustment, refer to an authorized dealer.
Lean fuel mixture.	 Fuel: Level too low, stale or water contaminated. 	Siphon and/or refill.
	 Fuel filter, clogged or water contaminated. 	 Refer to an authorized dealer.
Rich fuel mixture (high fuel consumption).	Flame arrester dirty/clogged.	Clean or replace.
	Partially closed choke.	 Refer to an authorized dealer.

Engine Overheats

OTHER OBSERVATION	POSSIBLE CAUSE	REMEDY
Monitoring beeper continuously sounds.	 Clogged jet pump water intake. 	• Clean.
	 Incorrect type of fuel or oil. 	• Siphon and refill.
	Clogged coolant system.	 Flush cooling system with garden hose.

Engine Continually Backfires

OTHER OBSERVATION	POSSIBLE CAUSE	REMEDY		
	Faulty RPM limiter.	 Refer to an authorized dealer. 		
Weak spark.	• Fouled, worn spark plugs.	Replace.		
Overheated engine.	• See Engine Overheats.			

Engine Pinging or Knocking

OTHER OBSERVATION	POSSIBLE CAUSE	REMEDY
	Poor quality gasoline/low octane.	 Use well known quality and recommended gasoline.
	 Spark plug heat range too high. 	 Use recommended spark plugs.

Engine Lacks Acceleration or Power

OTHER OBSERVATION	POSSIBLE CAUSE	REMEDY		
	 Weak spark/incorrect fuel mixture. Water in fuel or injection oil. 	Refer to ENGINE MISFIRES.Siphon and replace.		
Overheated engine.	See Engine Overheats.			

Sport Boat can not Reach Top Speed

OTHER OBSERVATION	POSSIBLE CAUSE	REMEDY
	 Jet pump water intakes clogged. 	• Clean.
	Damaged impeller(s).	 Replace. Refer to an authorized dealer.

Abnormal Noise from Propulsion System

OTHER OBSERVATION	POSSIBLE CAUSE	REMEDY		
	 Weeds or debris jammed around impeller(s). 	 Clean and check for damage. 		
	 Damaged impeller shaft(s) or drive shaft(s). 	 Refer to an authorized dealer. 		

78

PERIODIC INSPECTION CHART

				FREC	UENCY	
	DESCRIPTION	FIRST 10 HOURS	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HOURS OR PRE-SEASON	TO BE PERFORMED BY
GENERAL	Fire extinguisher condition/mounting @	'			/ 2	0
GENERAL	Lubrication/corrosion protection	1		>	V	0
	Head bolts, retorque	>			>	D
	Support and rubber mount condition/tightness	>		>		D
	Exhaust system fasteners/hoses @	V		'	V	D
	RAVE valve cleaning			>	V	D
ENGINE	Counterbalance shaft oil level (if so equipped)			٧	>	D
	Spark plug inspection, cleaning and adjustment	>				D
	Spark plug replacement			>		D
	Ignition timing	>			>	D
	Flushing		√ 3			0
COOLING	Hose condition and fasteners	>		>	>	D
SYSTEM	Inspect/clean engine drain tube	/ 1	~			D
	Water flow regulator valve inspection				>	D
	Carburetor adjustment including choke/throttle cable adjustments				~	D
	Throttle/choke cables, inspection/ lubrication ④	1	~		~	D
	Fuel filter and lines inspection @	~	~		V	D
	Fuel filter replacement				V	D
FUEL SYSTEM	Fuel vent line pressure relief valve inspection		~		~	D
	Fuel lines, check-valve and fuel system pressurization (4)	>	~		~	D
	Fastener tightening (carburetors/throttle body, fuel lines) ④	>		>	>	D
	Fuel tank straps @	V			V	0
	Fuel tank filling				/ 2	0
LUBRICATION SYSTEM	Oil injection pump adjustment	V			V	D
	Oil lines inspection @	V	V		V	D
	Oil filter replacement				/	D
	Oil reservoir straps @	V			V	0
	Oil reservoir filling				√ ②	0

				FREC	UENCY	
	DESCRIPTION	FIRST 10 HOURS	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HOURS OR PRE-SEASON	TO BE PERFORMED BY
	Main battery cut-off switch ④	V	V		V	D
	Lights condition/operation	~	~		/ 2	D
	Bilge blower and bilge pump inspection ④	~	V		√ 2	D
ELECTRICAL SYSTEM	Electrical connections (ignition system, electrical box(es), starting system, etc.) ④	~	~		٧	D
	Digitally Encoded Security System @	>			/ 2	D
	Monitoring beeper	>		'	/	D
	Battery tightness 4	>		'	/ 2	D
	Battery charging				V	D
	Sacrificial aluminum anode			'		0
STEERING SYSTEM	Inspection and cable adjustment ④	~		~	~	D
LOW-SPEED STEERING SYSTEM	Inspection and throttle cable adjustment ④	~		7	٧	D
	Drive shaft boot and spline condition			~		D
	Drive shaft floating seal C-clip position			~		D
	PTO flywheel lubrication	~	~			0
PROPULSION	Shifter system/cable adjustment @	~			/	D
SYSTEM	Jet pump reservoir oil level/oil condition	REPLACE	>		REPLACE	D
	Jet pump cover pusher inspection				✓	D
	Impeller condition and impeller/wear ring clearance			~		D
	Water intake grate condition			/ 2		0
	Weedless system lubrication/condition			~		0
HULL AND BODY	Hull condition @	>			/ 2	0
	Ride shoe condition	>			✓	0
	Storage compartment cover locks lubrication	1		~		0
	Deck drains/scupper valve cleaning ④	V	~		/ 2	0

NOTE: Some items are included in the PRE-OPERATION CHECKS and not necessarily repeated in this chart.

D: Dealer

O: Operator

- ① Every 10 hours in salt water use.
- 2 Daily checked.
- ③ Daily flushing in salt water or foul water use.
- Safety item covered in the annual safety inspection (owner's expenses).

SPECIFICATIONS

ENGINE		SPORTSTER LT					
Number of eng	gines	2					
Engine type		BOMBARDIER-ROTAX 717, 2-stroke					
Induction type		Rotary valve					
Exhaust syster	n	Water cooled/water injected					
	Type	Oil injection					
Number of engines 2							
		BOMBARDIER injection oil (or equivalent) ①					
Number of cyli	nders	2					
Displacement		718 cm³ (43.81 in³)					
Rev limiter set	ting	7000 RPM (± 50)					
COOLING							
Туре		Water cooled, total loss type. Direct flow from propulsion unit					
Monitoring bee	eper, switch on @	96 - 99°C (205 - 210°F)					
ELECTRICAL							
Magneto generator output		160 W @ 6000 RPM					
Ignition system type		CDI (Capacitor Discharge Ignition (breakerless					
Spark plug	Make and type						
Spark plug	Gap	0.5 - 0.6 mm (.020024 in)					
Starting systen	n	·					
Battery		Not supplied @					
	Main	20 A (3)					
	MPEM supply	5 A					
		15 A (2)					
Fuege	Bilge air blower	11211					
1 4363	Bilge pump	3 A					
	Navigation lights	3 A					
	Gauges supply	5 A					
	, ,	10 A					
CARBURETIO	N						
Fuel type		· ·					
Carburetor		One carburetor, single diaphragm type with accelerator pump					

- ① If BOMBARDIER-ROTAX injection oil is not available, API TC high quality ashless twostroke injection oil may be used.
- 2 Recommended: Exide R-24-130, 12 V, 25 A•h (130 minutes reserve) or R-24-160 (160 minutes) or equivalent.

Battery posts: On top. Round taper type.

Battery maximum allowed size:

285 mm (11-1/4 in) long x 190 mm (7-1/2 in) wide x 238 mm (9-3/8 in) high.

PROPULSION		SPORTSTER LT						
Propulsion system		Bombardier Formula Jet Pump						
Number of jet pumps		2						
Jet pump type		Axial flow, single stage						
Transmission		Direct drive						
Impeller shaft reservoir, o	oil type	Sea-Doo Synthetic polyolester 75W90 GL5 gear oil						
Pivoting angle of directio	n (nozzle)	~ 26°						
Minimum required water for jet pump(s)	level	90 cm (3 ft)						
DIMENSIONS	•							
Overall length		4.42 m (14 ft 6 in)						
Overall length on trailer		5 m (16 ft 5 in)						
Beam		2.16 cm (7 ft 1 in)						
Draft		30 cm (12 in)						
Dead rise		20°						
Overall height		1.07 m (3 ft 6 in)						
Overall height on trailer		1.50 m (4 ft 11 in)						
Weight (dry)		560 kg (1235 lb)						
Load limit (passengers +	luggage)	4 passengers OR 325 kg (715 lb) (based on calm water operation)						
Maximum engine power of the craft	capacity rating	125 kW (166 HP)						
Hull material		Composite (fiberglass)						
CAPACITIES	•							
Fuel tank (reserve include	ed)	85 L (22 U.S. gal)						
Impeller shoft reasonsin	Capacity	80 mL (2.7 U.S. oz)						
Impeller shaft reservoir	Oil level	Up to plug						
Oil injection reservoir		9 L (2.3 U.S. gal)						

BOMBARDIER INC. reserves the right to make changes in design and specifications and/or to make additions to, or improvements in its products without imposing any obligation upon itself to install them on its products previously manufactured.

82 _____

ENGINE		SPORTSTER LE						
Number of engir	ies	1						
Engine type		BOMBARDIER-ROTAX 947, 2-stroke						
Induction type		Reed valve						
Exhaust system		Water cooled/water injected with regulator						
Exhaust valve		Rotax Adjustable Variable Exhaust (RAVE)						
Lubrication	Туре	Oil injection						
Lubrication	Oil type	BOMBARDIER Formula XP-S synthetic injection oil (or equivalent)						
Number of cylind	ders	2						
Displacement		951.2 cm³ (58 in³)						
Rev limiter settir	ng	7200 RPM (± 50)						
Engine nominal p	oower at 6750 RPM	95 kW (127 HP)						
COOLING								
Туре		Water cooled, total loss type. Direct flow from propulsion unit						
Monitoring beep	er, switch on @	96 - 99°C (205 - 210°F)						
ELECTRICAL								
Magneto genera	tor output	180 W @ 6000 RPM						
Ignition system t	ype	Digital DC-CDI						
Spark plug	Make and type	NGK, BR8ES						
Spark plug	Gap	synthetic injection oil (or equivalent) 2 951.2 cm³ (58 in³) 7200 RPM (± 50) PM 95 kW (127 HP) Water cooled, total loss type. Direct flow from propulsion unit 96 - 99°C (205 - 210°F) 180 W @ 6000 RPM Digital DC-CDI NGK, BR8ES 0.5 - 0.6 mm (.020024 in) Electric starter with reduction gear Not supplied ① 20 A (2) 5 A em 15 A (1)						
Starting system		Electric starter with reduction gear						
Battery		Not supplied ①						
	Main	20 A (2)						
	MPEM supply	5 A						
	Charging system	15 A (1)						
Fuses	Bilge air blower	7.5 A						
i uscs	Bilge pump	3 A						
	Navigation lights	3 A						
	Gauges supply	5 A						
	Auxiliary system	10 A						

① Recommended: Exide R-24-130, 12 V, 25 A•h (130 minutes reserve) or R-24-160 (160 minutes) or equivalent.

Battery posts: On top. Round taper type.

Battery maximum allowed size: 285 mm (11-1/4 in) long x 190 mm (7-1/2 in) wide x 238 mm (9-3/8 in) high.

CARBURETION		SPORTSTER LE							
Fuel type		Regular unleaded gasoline							
Carburetor		Mikuni BN 46-42. Fuel accelerator pump. Quantity: 2							
PROPULSION	-								
Propulsion system		Bombardier Formula Jet Pump							
Number of jet pumps		1							
Jet pump type		Axial flow, single stage							
Transmission		Direct drive							
Impeller shaft reservoir,	oil type	Sea-Doo Synthetic polyolester SAE 75W90 GL5 gear oil							
Pivoting angle of direction	n (nozzle)	~ 26°							
Minimum required water for jet pump(s)	level	90 cm (3 ft)							
DIMENSIONS	-								
Overall length		4.42 m (14 ft 6 in)							
Overall length on trailer		5 m (16 ft 5 in)							
Beam		2.16 m (7 ft 1 in)							
Draft		30 cm (12 in)							
Dead rise		20°							
Overall height		1.07 m (3 ft 6 in)							
Overall height on trailer		1.50 m (4 ft 11 in)							
Weight (dry)		560 kg (1235 lb)							
Load limit (passengers +	luggage)	4 passengers OR 325 kg (715 lb) (based on calm water operation)							
Hull material		Composite (fiberglass)							
CAPACITIES									
Fuel tank (reserve included)		85 L (22 U.S. gal)							
Fuel reserve		15.4 L (4.05 U.S. gal)							
Impeller shaft reservoir	Capacity	120 mL (4.0 U.S. oz)							
IIIIpellel Shart leselvoll	Oil level	Up to plug							
Oil injection reservoir		9 L (2.3 U.S. gal)							

BOMBARDIER INC. reserves the right to make changes in design and specifications and/or to make additions to, or improvements in its products without imposing any obligation upon itself to install them on its products previously manufactured.

84 _____

SI* METRIC INFORMATION GUIDE

BA	SE UNITS	
DESCRIPTION length mass force liquid temperature pressure torque land velocity navigation velocity.	UNIT meter kilogram newton liter Celsius kilopascal newton-meter kilometer per hour knot	SYMBOL m kg N L °C kPa N•m km/h kn
Р	REFIXES	
PREFIX SYMBOL kilo k centi c milli m micro μ	MEANING one thousand one hundredth of one thousandth of one millionth of	VALUE 1000 0.01 0.001 0.000001
CONVER	SION FACTORS	
TO CONVERT in	TO ① mm. cm. cm². cm³. m. g. kg. N. N•m. N•m. lbf•in. kPa. U.S. oz. mL. U.S. gal. L. mL. L. MPH. km/h. Celsius. Fahrenheit. kW.	MULTIPLY BY 25.4 2.54 6.45 16.39 0.3 28.35 0.45 4.4 0.11 1.36 12 6.89 0.96 28.41 1.2 4.55 29.57 3.79 1.15 1.61 (°F - 32) ÷ 1.8 (°C x 1.8) + 32 .75

^{*} The international system of units abbreviates SI in all languages.

NOTE: Conversion factors are rounded off to 2 decimals for easier use.

① To obtain the reverse sequence, divide by the given factor. Example: to convert millimeters to inches, divide by 25.4.

BOMBARDIERRECREATIONAL PRODUCTS



DECLARATION CE

OF CONFORMITY

Application of Council Directives: 94/25/CE — Recreational craft 89/336/CEE — Electromagnetic

compatibility

Standards to which conformity is declared: ISO 7840, ISO 8469, ISO 8665, ISO 8846,

ISO 8848, ISO 8849, ISO 9094, ISO 9097, ISO 10087, ISO 10088, ISO 10133, ISO 10240, ISO 11105, ISO 11591, ISO 11592, ISO 12215, ISO 12216, ISO 13592, COLREGS, ABYC H-5,

ABYC H-8

Manufacturer's name: Bombardier Motor Corporation of America.

Manufacturer's address: 451 E. Illinois Ave

Benton, Illinois 62812-0394

Importer's name: Société ANF — Industrie S.A.

Importer's address: 2, rue du Nouveau Bercy

94220 Charenton Paris, France

Notified body for Directive 94/25/CE: International Marine Certification Institute

Trèves centre, rue de Trèves 45

1040 Brussels, Belgium

Competent body for Directive 89/336/CEE: UTAC

Autodrome de Linas-Montlhéry, B.P. 212

91311 Montlhéry cedex. France

Type of equipment: Sport boats, inshore category C

Model names and numbers:

Model name

Model number(s)

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directives and Standards.

Name of signatory: Fernando Garcia

Title of signatory on behalf of

Bombardier Motor Corporation of America: Director - Public and Regulatory Affairs —

Sea-Doo sport boats

86 _____

Homologation and Certification

These boats comply with the following standards:

STANDARD	TYPE OF CERTIFICATION
United States Coast Guard	Self certification
Canadian Coast Guard	Self certification
Russian Maritime Register of Shipping	Certify by Russian Maritime Register of Shipping 8, Dvortsovaya Nab., 191186 St. Petersburg, Russia
Directive 89/336/CEE of the council relating to electromagnetic compatibility	Internal production control plus control carried out on the responsability of a competent body.
	Competent body: UTAC Autodrome de Linas-Montlhéry, B.P. 212 91311 Montlhéry cedex, France
Directive 94/25/EC of the European Parliament and of the council relating to recreational craft	Internal production control plus control carried out on the responsability of a notified body.
	Notified body: International Marine Certification Institute Trèves centre, rue de Trèves 45 1040 Brussels, Belgium

Operator's Guide Confirmation of Receipt

Your dealer	
Name:	
Address:	
Upon deliv forward it t	you and help you to resolve any problems you may have. ery of your sport boat, complete and sign the form hereunder and your dealer in order to be covered by our warranty. onditions are as detailed in the Warranty Section of this guide.
 Receipt	Cut he
	Name:Address:
Owner of	Sport Boat model No
HIN (to be co	mpleted by customer or selling dealer)
This warrar	nty begins (date).
safety feato with. I am a boat. I have	named on this document has instructed me on the operation, maintenance ures and warranty policy, all of which I understand and agree to be bour also satisfied with the predelivery set-up and inspection of my Sea-Doo spoe also received a copy of the <i>Operator's Guide, Safety Handbook and Safe of the Image of the Safety Handbook and Safe of the Image of th</i>
	Signature:
	Data:

88 _____

CHANGE OF ADDRESS

If your address has changed, be sure to fill out and mail the card provided on this page.

Such notification is likewise necessary for your own safety even after expiration of the original warranty, since Bombardier will be in a position to contact you if correction to your craft becomes necessary.

NOTE: This card is strictly for change of address only.

\sim L	Т	NIC	\boldsymbol{F}		' '		RESS	٠
Сп	м	DVI		'F #	٩U	UΠ	1633	ð

CHANGE OF ADDRESS		
CRAFT IDENTIFICATION NUMB	ERS	Hull Identification Number (H.I.N.)
I OLD ADDRESS:		NAME
! 	NO.	STREET APT
 	CITY	STATE/PROVINCE ZIP/POSTAL CODE
NEW ADDRESS:		NAME
 -	NO.	STREET APT
1 	CITY	STATE/PROVINCE ZIP/POSTAL CODE

I STOLEN UNITS

In the event that your craft is stolen, you should notify your area's distributor warranty department of such.

Please provide your name, address, phone number, Hull Identification Number and date it was stolen.

Bombardier will provide a list of stolen units to all authorized Sea-Doo dealers on a monthly basis to aid in recovery of such units to their owners.

}

AFFIX PROPER POSTAGE

BOMBARDIER

RECREATIONAL PRODUCTS

WARRANTY DEPARTMENT 75, J.A. BOMBARDIER ST. SHERBROOKE (QUEBEC) CANADA J1L 1W3

CHANGE OF ADDRESS

If your address has changed, be sure to fill out and mail the card provided on this page.

Such notification is likewise necessary for your own safety even after expiration of the original warranty, since Bombardier will be in a position to contact you if correction to your craft becomes necessary.

NOTE: This card is strictly for change of address only.

(CHANGE OF ADDRESS								_~
! 	CHANGE OF ADDRESS 🛄								
 	CRAFT IDENTIFICATION NUMBER	ERS	Hull Identifi	ation N	 umber (l	 			
! !	OLD ADDRESS:			NA	ME				
I		NO.		STR	EET				APT
1	NEW ADDRESS:	CITY		STATE/P	ROVINCE		ZIP/PO	STAL (CODE
1				NA	ME				
I		NO.		STR	EET				APT

STOLEN UNITS

In the event that your craft is stolen, you should notify your area's distributor warranty department of such.

STATE/PROVINCE

ZIP/POSTAL CODE

CITY

Please provide your name, address, phone number, Hull Identification Number and date it was stolen.

Bombardier will provide a list of stolen units to all authorized Sea-Doo dealers on a monthly basis to aid in recovery of such units to their owners.

}

AFFIX PROPER POSTAGE

BOMBARDIER

RECREATIONAL PRODUCTS

WARRANTY DEPARTMENT 75, J.A. BOMBARDIER ST. SHERBROOKE (QUEBEC) CANADA J1L 1W3

CHANGE OF ADDRESS

CHANGE OF ADDRESS

If your address has changed, be sure to fill out and mail the card provided on this page.

Such notification is likewise necessary for your own safety even after expiration of the original warranty, since Bombardier will be in a position to contact you if correction to your craft becomes necessary.

NOTE: This card is strictly for change of address only.

			- —	_	_	_								7
CHANGE OF ADDRESS 🔲														
CRAFT IDENTIFICATION NUMB	ERS				L	<u> </u>				<u>L</u>				
Model Number		Hull	lden	tific	atior	n Nu	mbe	r (H.	.l.N.)	•				
OLD ADDRESS:						NAM	IE							_
	NO.				;	STRE	ET						AF	Τ'
	CITY				STAT	E/PR(NIVC	CE	7	ZIP/F	POST	ΓAL	COD	ÞΕ
NEW ADDRESS:														

STOLEN UNITS

In the event that your craft is stolen, you should notify your area's distributor warranty department of such.

NO.

CITY

NAME

STREET

STATE/PROVINCE

Please provide your name, address, phone number, Hull Identification Number and date it was stolen.

Bombardier will provide a list of stolen units to all authorized Sea-Doo dealers on a monthly basis to aid in recovery of such units to their owners.

APT

ZIP/POSTAL CODE

}

AFFIX PROPER POSTAGE

BOMBARDIER

RECREATIONAL PRODUCTS

WARRANTY DEPARTMENT 75, J.A. BOMBARDIER ST. SHERBROOKE (QUEBEC) CANADA J1L 1W3

CHANGE OF ADDRESS

NEW ADDRESS:

NO.

CITY

CHANGE OF ADDRESS

If your address has changed, be sure to fill out and mail the card provided on this page.

Such notification is likewise necessary for your own safety even after expiration of the original warranty, since Bombardier will be in a position to contact you if correction to your craft becomes necessary.

NOTE: This card is strictly for change of address only.

								_	_	_		_	_=
CHANGE OF ADDRESS 🔲													
CRAFT IDENTIFICATION NUMBI	ERS												
Model Number		Hul	Hde	ntifi	icati	on N	luml	oer (H.I.N	1.)			
OLD ADDRESS:													
						NA	ME						
	NO.	NO. STREET									APT		
	CITY				STA	ATE/P	ROV	NCE		ZIP	/POS	TAL	CODE

STOLEN UNITS

In the event that your craft is stolen, you should notify your area's distributor warranty department of such.

NAME

STREET

STATE/PROVINCE

Please provide your name, address, phone number, Hull Identification Number and date it was stolen.

Bombardier will provide a list of stolen units to all authorized Sea-Doo dealers on a monthly basis to aid in recovery of such units to their owners.

APT

ZIP/POSTAL CODE

}

AFFIX PROPER POSTAGE

BOMBARDIER

RECREATIONAL PRODUCTS

WARRANTY DEPARTMENT 75, J.A. BOMBARDIER ST. SHERBROOKE (QUEBEC) CANADA J1L 1W3

SPORT BOAT MODEL No.					
HULL IDENTIFICATION NUMBER (H.I.N.)					
MERCURY OR ROTAX ENGINE IDENTIFICATION NUMBER (E.I.N.)					
Owner:					
IVAVIL					
	No. STREET				APT
	CITY STATE/PROVINCE				ZIP/POSTAL CODE
Purchase	Date				
		YEAR	MONTH	DAY	
Warranty	/ Expiry Date	YEAR	MONTH	DAY	
		TEAN	WONTH	DAT	
To be completed by the dealer at the time of the sale.					
To be completed by the dealer at the time of the sale.					
DEALER IMPRINT AREA					

Please verify with your selling dealer to ensure your SEA-DOO craft has been registered with Bombardier.

