



BOMBARDIER



AFTER SALES SERVICE BOMBARDIER INC. VALCOURT (QUÉBEC) CANADA JOE 2L0



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Gelcote® is a trademark of Gelcote International

Doin'it on your new Sea-Doo Watercraft

Congratulations, you are now the proud owner of a Sea-Doo personal watercraft. Whether you are an experienced boater or are new to the sport of boating, we ask you to take the time to read this *Operator Guide* and familiarize yourself with its contents. The Guide contains pertinent information which, if followed, will provide you with the necessary knowledge to help you fully enjoy the pleasures of this craft.

We strongly recommend that any watercraft 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 watercraft and the importance of courteous, responsible riding.

Each operator has a responsibility to ensure the passenger safety and the safety of other water users. Please follow all safety instruction and drive with care.

Finally, we invite you to visit your dealer regularly for regular and safety maintenance as well as any watercraft accessories you may require.

Have fun andBon Voyage.

TABLE OF CONTENTS _____

FOREWORD	4
◆ SAFETY WARNING	5
LIST OF DISTRIBUTORS	7
THE 1995 BOMBARDIER WATERCRAFT	
(NORTH AMERICAN) LIMITED WARRANTY	8
WARRANTY QUESTIONS AND ANSWERS	10
REGISTRATION NUMBER LOCATION	12
LOCATION OF THE IMPORTANT LABELS	13
WATERCRAFT IDENTIFICATION	15
Hull Identification Number	15
Watercraft Model Number	
Engine Identification Number	
COMPONENT FUNCTIONS	16
FUEL AND LUBRICATION	
Recommended Fuel	
Recommended Oil	
Oil Injection System	
BREAK-IN PERIOD	
Engine 10-Hour Inspection	
PRE-OPERATION CHECKS	
Hull	
Jet Pump Water Intake	
Bilge	
Battery	
Fuel and Oil Reservoirs	
Engine Compartment Fire Extinguisher	
Steering and Throttle Systems	
Reverse System (GTS and GTX Models)	
Variable Trim System (SPX and XP Models)	31
Safety Lanyard and Engine Start / Stop Button	31
Clothing	
OPERATING INSTRUCTIONS	
Principle of Operation	
Boarding from a Dock or in Shallow Water Starting the Engine	34
Obstacles	
Boarding in Deep Water	

Stopping / Docking	
Beaching	37
Shutting Off the Engine	
POST-OPERATION CARE	
General Care Additional Care for Foul Water or Salt Water	39
SPECIAL PROCEDURES	
Engine Overheat Jet Pump Water Intake and Impeller Cleaning	
Capsized Watercraft	
Submerged Watercraft	
Towing the Watercraft	
Low-Charge Battery Condition	
MAINTENANCE	44
Lubrication	
Periodic Inspection	
Periodic Inspection Chart	
Throttle and Choke Cable Inspection	
Carburetor Adjustment	
Fuel and Oil Filters	
Steering Alignment	
Reverse Gate Adjustment (GTS and GTX Models) VTS Adjustment (SPX and XP Models)	
Vacuum Bailer Pick-Ups	
Water Tank Trap Drains (GTS and GTX Models)	49
Fuses	
General Inspection and Care	50
TRANSPORTATION, STORAGE AND PRE-SEASON PREPARATION	51
Transportation	
Storage	
Pre-Season Preparation	54
TROUBLESHOOTING	56
SPECIFICATIONS	58
SI METRIC INFORMATION GUIDE	64
ACCESSORIES AND SERVICE PRODUCTS	
OTHER PUBLICATIONS AVAILABLE	
	69

The Operator's Guide and Safety Handbook have been prepared to acquaint the owner / operator or passenger of this personal watercraft with the various watercraft controls, maintenance and safe riding instructions. Each is indispensable for the proper use of the product, and should be kept in a waterproof bag with the watercraft at all times.

For any questions pertaining to the warranty and its application, please consult the WARRANTY QUESTIONS AND ANSWERS' section in this guide, or an authorized SEA-DOO dealer.

This guide uses the following symbols to emphasize particular information.

WARNING : 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 watercraft and / or components.

O 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 information and components / system descriptions contained in this guide are correct at the time of publication. Bombardier Inc. however, maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on products previously manufactured.

Bombardier Inc. reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation. The illustrations show the typical construction of the different assemblies and may not represent the full detail or exact shape of the parts which have the same or a similar function.

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 repair information.

WARNING : The engine and the corresponding components identified in this guide should not be utilized on product(s) other than those they were designed for. Maintenance procedures and specified tightening torques must be strictly adhered to. Never attempt repairs unless the appropriate tools are available. These watercraft 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. Mismatched or incorrect fasteners could cause damage to the watercraft or possible personal injury.

SAFETY WARNING

To fully appreciate the pleasures, enjoyment and excitement of boating there are some basic rules that MUST be observed and followed by any boater. Some rules may be new to you while others may be common sense or obvious, irrespective, we ask that you please take a few minutes of your time to read these safety instructions completely before you operate your 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.

Information in this Guide is limited. It is strongly recommended that you obtain further boating information from the local Coast Guard or Power Squadron. We further recommend you take a boating safety course. Check local and federal boating laws applicable to the waterways where you intend to use the craft. Learn the local rules of the road.

Become completely familiar with the controls and operation of the craft before taking on a passenger(s) or embarking on a trip. 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 familar with all controls before fully advancing the throttle.

The performance of this craft may significantly exceed that of other craft you may have operated. Therefore, use of this craft by a novice or inexperienced operator is not recommended.

Observe and follow all on-product warning labels and the content of this Guide.

Operator and passenger(s) should wear suitable eye and body protection from wind and water as well as deck shoes or booties.

Coast Guard approved personal floatation devices (PFD) must be worn by all aboard. Operation of this craft by a minor or disabled person is NOT recommended.

Do not operate the craft after consuming alcohol or drugs.

Always perform the pre-operation checks as specified in this Guide. This includes :

- Attaching the safety lanyard.
- Verification of throttle lever and steering movement.
- Verification of start/stop button operation.
- Oil and fuel levels.
- Adequate water depth.
- Required boating equipment. (Know how to use each).

The operator and passenger(s) must be properly seated before starting or moving the craft.

Wave or wake jumping is dangerous and in many regions illegal.

Most boating accidents results from the failure of the operator to keep a lookout for other water users or other potential hazards. Keep a safe distance from other boat or water. Do not attempt to splash others with your wake. Do not ride on the surf line.

To prevent accidental starting or unauthorized use, always detach the safety lanyard from the boat during maintenance, cleaning of the intake grill, or when swimmers are nearby.

Ensure that all passengers know how to reboard the craft from the water.

Always have an observer while towing a skier.

Know the waters in which the craft is to be operated. Current, tides, rapids, shallow water, hidden obstacles etc., can affect safe operation.

When boating, apply the principle of 1/3 fuel to destination, 1/3 back and 1/3 reserve fuel supply.

Maintain the craft and equipment in top condition at all times. Adhere to the prescribed maintenance schedules. Use a protective cover when not in use. After salt or foul water use, the craft should be thoroughly rinsed and protected from corrosion. If you suspect water ingestion into the engine, contact your dealer for proper servicing.

The bilge must be kept clean of oil, water or other foreign materials. Do not carry spare fuel and inflammable liquids in any of the storage or engine compartments.

Avoid adding on accessories, carrying equipment or passengers which may alter the craft's configuration or balance. Only perform servicing procedures which are detailed in this Guide. Further assistance or information can be obtained from your dealer. In many instances proper tools and training is required for certain servicing or repair procedures.

Gasoline fumes are flammable and explosive. Always adhere to the fueling procedure contained in this Guide and those given to you by the marina.

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. This craft has the capability of turning more sharply than other boats, however, unless in an emergency, do not negotiate sharp, high speed turns.

Like any other boat, 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 area to have an idea of how long it will take to stop the craft under varying conditions.

Prolonged exposure to the sun, wind etc., causes fatigue and may affect your reaction time.

Do not overload the craft or take on more passengers than designated for the intended type of boating. Load and altitude will also affect craft performance.

Proceed with caution and at very low speeds in shallow water. Grounding or abrupt stops may result, or debris may be picked up and be jettisoned rearward to people or property.

As the "skipper" of a boat you are responsible for damage to other boats caused by the wake of your craft. Respect no wake zones.

Respect the rights of other water users and the environment. Allow no one to throw refuse overboard.

Do not operate the craft in inclement weather.

This watercraft is not designed for nighttime operation.

Riding with a passenger(s) makes the craft handle differently and requires greater skill.

Lifting the craft requires special equipment and experience. Do not attempt to lift the craft without such experience or equipment.

Respect the safety and comfort of your passenger(s) and persons being towed on skis or other water toys.

Drive prudently and have fun.

Due to the close proximity of other racers, it is recommended that an approved personal watercraft helmet be used during racing events. Read and follow all instructions and warnings provided with the helmet.

LIST OF DISTRIBUTORS .

NORTH AMERICA

U.S.A. : (Continental U.S.A. except Alaska, Hawaii and Puerto Rico)	BOMBARDIER CORPORATION 7575 BOMBARDIER COURT P.O. BOX 8035 WAUSAU, WI 54402-8035 Phone : (715) 842-8886
Alaska	THE BRYANT CORPORATION 19011 Woodinville Snow Road P.O. BOX 389 WOODINVILLE, WA 98072 Phone : (206) 483-0110
CANADA : Alberta British Columbia Manitoba North West Territories Ontario Quebec Saskatchewan Yukon	BOMBARDIER INC. SEA-DOO SERVICE DEPARTMENT VALCOURT, QUÉBEC CANADA JOE 2L0 Phone : (514) 532-2211
New-Brunswick Newfoundland Nova Scotia Prince Edward Island	BELL-CHARLES R. P.O. BOX 1050 RIVERSIDE DRIVE CORNER BROOKE, NFLD A2H 6J3 Phone : (709) 634-3533

If your SEA-DOO requires warranty service, you must take it to any authorized SEA-DOO 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 dealership.

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

THE 1995 BOMBARDIER WATERCRAFT (NORTH AMERICAN) LIMITED WARRANTY_

1 - WARRANTY COVERAGE PERIOD

BOMBARDIER INC. ("Bombardier"), as manufacturer warrants FROM THE DATE OF DELIVERY TO THE FIRST CONSUMER every 1995 SEA-DOO watercraft, sold as NEW AND UNUSED and PREDELIVERED by an authorized North American dealer for a period of :

- twelve (12) consecutive months for private use owners, or
- four (4) consecutive months for commercial use owners.

The warranty coverage period on all genuine Bombardier accessories installed by an authorized Bombardier dealer **at the time of delivery** of the new and unused SEA-DOO watercraft, carry the same warranty coverage period as the SEA-DOO watercraft.

2 - WHAT BOMBARDIER WILL DO

Bombardier will repair and / or replace, as its option, all genuine Bombardier components found defective in material and / or workmanship, under normal use, maintenance and service, with a genuine Bombardier component without charge for parts and labor, at any authorized SEA-DOO watercraft dealer during said warranty coverage period.

3 - CONDITION TO HAVE WARRANTY WORK VALIDATED

Present to the servicing authorized SEA-DOO watercraft dealer the SEA-DOO Warranty Registration card or a proof of purchase of the NEW AND UNUSED 1995 SEA-DOO watercraft. The SEA-DOO watercraft customer must upon completion of all warranty work sign the Bombardier warranty claim form. All parts replaced under 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.
- Damage caused by failure to provide proper maintenance and / or storage, as described in the 1995 Sea-Doo Watercraft Operator's Guide.
- Damage resulting from improper repairs, modification or use of non-approved parts.
- Damage resulting from abuse, misuse, neglect, racing.
- Damage resulting from accident, fire, theft, vandalism or any act of God.
- Damages resulting from losses incurred as consequential damages, incidental, or damages of any kind such as but not limited to towing, telephone calls or taxis.
- Water damage caused by water ingestion and improper service or maintenance.

5 - EXPRESSED OR IMPLIED WARRANTIES

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 in lieu of all other expressed or implied warranties of Bombardier, its distributors and the selling dealer, including any warranty of merchantability or fitness for any particular purpose; otherwise the implied warranty is limited to the duration of this warranty. However, some states or provinces do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply.

Neither the distributor, the selling 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.

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

Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply.

6 - CONSUMER ASSISTANCE

- A) In the event of a controversy or a servicing problem arising in connection with this Bombardier SEA-DOO Watercraft (North American) Limited Warranty, Bombardier suggests that you try to resolve the issue at the dealership level. We recommend discussing the issue with the dealer's service manager or owner.
- B) If further assistance is required, the 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. Sea-Doo / Ski-Doo Division, Customer Relations Center, Valcourt, Qc, Canada J0E 2L0

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WARRANTY QUESTIONS AND ANSWERS

- O. Why must my watercraft be registered at the factory ? After all I do have my original invoice as proof of when I purchased my watercraft.
 - A. Your warranty is valid at any authorized dealer of the product. Your registration is the key element in providing the servicing dealer with the necessary data to complete warranty claim forms.

The federal government requires each manufacturer and dealer to maintain a complete up-to-date list of all first purchasers in case of a safety-related defect and recall. This list is compiled from the warranty registrations sent to BOMBARDIER INC. by the selling dealer at the time of your purchase. If you have a change of address after the purchase of your new SEA-DOO, please advise us of your new address by sending the Change of Address Card in this book or, a postcard listing your model number, dealer number (or dealer's name) as it is shown on your warranty card, your name and new mailing address.

- Q. What costs are my responsibility during the warranty period?
 - A. The customer's responsibility includes all costs of normal maintenance services, non-warranty repairs, accident and collision damage.
- Q. What is cavitation ?
 - A. This phenomenon is caused by a part travelling at high speed in a fluid (ex. : an impeller in water). The heat / bubbles generated in some areas are enough to draw microscopic particles from the material. Cavitation will increase if there are scratches or dents in the housing / impeller or if the wear ring is worn.
- Q. Does warranty cover the jet drive system components ?
 - A. Yes, if components replacement is not due to cavitation or normal wear. Ex. : The impeller has to be considered a wear item since tiny particles and sand contained in the water will eventually cause some wear. This situation occurs most often when the watercraft is driven in shallow water where rocks and debris can be drawn into the pump.

In order to extend the service life of the impeller housing, we have developed a replaceable wear ring around the impeller. It is made of plastic, therefore it may wear with use and should be replaced. This is a convenient feature and inexpensive to replace. This replacement is considered normal maintenance and not covered by warranty.

- Q. What are some examples of neglect or abuse ?
 - A. These terms are general and overlap each other in areas. Specific examples include ; the engine running out of oil, operating the watercraft with a broken or damaged part, which causes another part to fail and so on. If you have any specific questions on operation or maintenance, please contact your SEA-DOO watercraft dealer for advice.

10 _

Q. Does the warranty cover incidental costs such as transportation due to a failure ?

A. No. The warranty is limited to the repair of the SEA-DOO watercraft itself.

- Q. May I perform any or all of the recommended maintenance shown in the *Operator's Guide* instead of having the dealer do them ?
 - A. Yes, if you are a qualified mechanic and follow the procedures specified in the Operator's Guide and Shop Manual. We do recommend however that the critical adjustments to timing and carburetion be done by a SEA-DOO dealer.
- Q. Will the warranty be voided or cancelled if I do not operate or maintain my new SEA-DOO exactly as specified in the *Operator's Guide* ?
 - A. No. The warranty on a new SEA-DOO cannot be "voided" or "cancelled". However, if a particular failure is caused by operation or maintenance other than as shown in the Operator's Guide, that failure may not be covered under warranty.

Q. What responsibility does my dealer have under this warranty ?

- 1. Completely set up every new SEA-DOO watercraft before sale ;
- 2. Explain the operation, maintenance and warranty requirements to your satisfaction at the time of sale. In addition, each SEA-DOO dealer is responsible for set-up, service and warranty repair work.

REGISTRATION NUMBER

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

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



Registration number location

F002 011 049.1

LOCATION OF THE IMPORTANT LABELS _____

Please read the following labels carefully before operating this watercraft.





14.

WATERCRAFT IDENTIFICATION

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

Hull Identification Number

The Hull Identification Number (H.I.N.) is located at right hand rear side of hull.



Watercraft Model Number

The watercraft model number can be found on U.S. Coast Guard approved label located on left hand side of stern (rear) eyelet.



Engine Identification Number

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



COMPONENT FUNCTIONS

NOTE : Some components do not apply or are optional on some models.









1) Handlebar

The handlebar controls the direction of the watercraft. Turning the handlebar to the right steers the watercraft to the right and inversely.

WARNING : Check handlebar and corresponding steering nozzle operation before starting.

2) Throttle Lever

It controls the speed of the engine and therefore, the speed of the watercraft. When squeezed, watercraft accelerates. When fully released, engine automatically returns to idle speed and watercraft is gradually stopped by water drag.

WARNING : Check throttle lever operation before starting the engine.

3) Engine Start / Stop Button

To start engine, depress and hold the button. Release immediately after engine is started.

To stop engine, fully release throttle lever then depress the button.

WARNING: When the engine is stopped, watercraft directional control is not available.



4) Choke Lever

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 recommended with a warm engine.



5) Fuel Valve

A 3-position rotating valve : OFF, ON and RESERVE :

CAUTION : A partially open fuel valve will lead to fuel starvation and possible engine damage.





ONOTE : On the SPX model, fuel valve is located on console.

OFF : Stop fuel supply to carburetor(s).

CAUTION : Turn valve to OFF position when watercraft is not operated.

- ON: Allows fuel to flow to carburetor(s). This is the normal position for operation of watercraft.
- RES : Use when the watercraft has run out of fuel in the ON position.

WARNING: Always refill the fuel tank at the first opportunity. After refueling, turn the fuel valve to the ON position for further operation.

6) Safety Lanyard Switch

Pulling the safety lanyard from the switch stops the engine operation. 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.



CAUTION : Always remove safety lanyard when leaving watercraft. Leaving the safety lanyard on watercraft equipped with the digitally encoded security system will eventually drain the battery.

WARNING : Should the engine be stopped, watercraft directional control is not available.

Digitally Encoded Security System (XP and GTX Models Only)

These models feature an anti-start protection. Dealer programmed, the safety lanyard provided with your watercraft is the only one that allows engine starting.

ONOTE : The watercraft microprocessor can be programmed to allow the use up to 8 safety lanyards. For your convenience, we recommend the purchase of additional safety lanyard(s) from your authorized dealer. It will prove to be useful in case of loss as well as for additional operators.

To find out the meaning of the monitoringbeeper coded signals, refer to TROU-BLESHOOTING section.

7) Docking Eyelets (SP and XP Series)

These eyelets can be temporarily used for docking, while refueling for example.

8) Seat Latch

Removing the seat allows access to the engine compartment and to oil reservoir cap / dipstick.

The seat latch is located at the rear end and underneath the seat.



To remove seat, pull the latch lever upward and hold. Lift and pull the seat rearward.

When reinstalling the seat, insert seat front tab into body hook.



Pull latch lever to insert it over the rear lock pin. Release latch lever then firmly push on rear of the seat to relatch.

WARNING : Periodically verify the seat lock pin and tighten if needed. Make sure seat is securely latched.

9) Rear Grab Handle

Provides a handhold for boarding when needed and a handhold for the passenger.

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

10) Boarding Pads

Provide a cushioned surface for the knees when boarding from rear of watercraft.

11) Cooling System Bleed Outlet(s)



When engine is running, water must flow from these hole(s). This allows air in tuned pipe and in engine water jacket to escape. It also indicates that water is circulating in the cooling system.

ONOTE : There is only one bleed outlet on the SPX, XP and GTX models.

CAUTION: Should water not flow from these outlets 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.

12) Jet Pump Nozzle

It is turned from side to side via rider input at the handlebar. This provides watercraft directional control when engine is running.

CAUTION : Never use nozzle as a supporting point to board the watercraft or to lift it, damage to system components may occur.

13) Air Intake Opening

This is where air enters to supply the engine and ventilate the engine compartment. If the air intake opening is kept under water for a long period water will get inside bilge.

14) Bilge Drain Plug

Should water be found in the bilge, it can be easily drained by unscrewing the drain plug.

CAUTION : Remove watercraft from water prior unscrewing the drain plug.



Tilt the watercraft slightly to the rear so that the water can completely flow out of the bilge.

WARNING : Always make sure bilge drain plug is properly tighten.

15) Bow and Stern Eyelets

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

16) Variable Trim System Button (SPX and XP Models)

Located just below engine start / stop button, this button is used to change pump nozzle position and to adjust ride to suit boat load and water conditions.



17) Floorboard

User's feet should rest on the floorboard when riding.

18) Variable Trim System Indicator (SPX and XP Models)





The trim indicator shows the riding angle of the watercraft.

19) Storage Compartment Cover

It gives access to the storage compartment. Always relatch cover after closing.

20) Cover Latch

Pull the latch lever upward in order to open the storage compartment cover. Always relatch.

ONOTE : Verify periodically the lock pin tightness of storage cover. Tighten if needed and make sure storage cover latches properly.

21) Storage Compartment

A convenient watertight, removable basket to carry personal articles. Ideal location for spare spark plugs, towrope, first aid kit, etc. Reinstall basket as shown.



WARNING : Never leave any heavy or breakable object in the storage basket. Never store or carry anything below basket.

This area is the prefered location to store an approved extinguisher. The fire extinguisher holder is installed in the rear center portion of the basket. This holder contains tool kit, *Operator's Guide* and it has a compartment to carry personal articles. Fire extinguisher should not be loose in the storage compartment.

22) Boarding Platform

Provide a large surface for easy boarding from rear of watercraft.

23) Seat Strap

The seat strap provides a handhold when needed for boarding and is used as a handhold for the passenger.

24) Monitoring Beeper

In the event the engine overheats, a beeper (continuous sound) will warn the operator. Stop engine and refer to SPECIAL PROCEDURES.

On XP and GTX models equipped with an anti-start protection, the beeper may sends different coded signals whenever a particular situation occurs. Refer to TROUBLESHOOTING section for signal description and their signification.

25) Fuel Gauge / Low Oil Warning Light (SPI, SPX and GTS Models)

Analog gauge indicates the amount of fuel in the fuel tank and a warning light when level is low in oil reservoir.



ONOTE : With the safety lanyard disconnected, fuel gauge can be activated for approximately 30 seconds by depressing the engine start / stop button.

Multifunction Gauge (XP and GTX Models)

A LCD gauge indicates the amount of fuel in the fuel tank. Warning lights will indicate a low voltage battery condition, an overheating engine, low fuel level and low oil level.



26) Tachometer (XP Model)

Analog tachometer indicates the revolutions per minute (RPM) of the engine.

27) Speedometer (GTX Model)

Analog speedometer indicates the speed of watercraft in miles per hour (MPH) and kilometers per hour (km / h).

The speed sensor mounted on the ride shoe sends the signal to the speedometer.

28) Engine Compartment

NOTE : Seat has to be removed to access engine compartment.

This is where the mechanical, electrical and fuel / oil systems are located.

WARNING: When starting or operating the engine, do not touch any electrical part. Never leave any object, rag, tool, etc., in the engine compartment or in the bilge.

29) Oil Injection Reservoir Cap / Dipstick

NOTE : Seat has to be removed to expose oil cap.

Unscrew the cap counterclockwise then pull to expose the dipstick.



The dipstick indicates the amount of oil to be added in the reservoir. Oil level should be maintained between FULL and ADD marks. Before checking oil level, place the watercraft level, then wipe the dipstick and insert it in the reservoir neck. Do not screw cap. Remove dipstick and read the level.

30) Tool Kit

Contains tools needed to perform basic watercraft maintenance.

31) Storage Compartment **Cover hinge / Locking** Mechanism (GTS and GTX Models)

Hinge is provided with a locking mechanism to hold storage compartment cover when fully open. Gently pull cover down to close it.

32) Fuel Tank Cap

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

WARNING: Never use a lit match or open flame to check fuel level.

33) Jet Pump Water Intake

The water is drawn up by the impeller through this opening. The impeller and the drive shaft are protected by a grate.

34) Rear Vent Grills (GTS and GTX Models)

Allows air to get in or out depending on engine operation.



CAUTION : If grills are kept below water level for a long period (e.g.: when boarding 2 passengers) water will enter the bilge.

35) Selector Lever (GTS and GTX Models)

When pushed in, the watercraft is in forward. To obtain neutral, unlock lever by turning it counterclockwise, then pull lever until neutral mark appears on rod. To engage reverse, repeat same procedure as for neutral, but pull lever until reverse mark appears on rod. Lever locks in forward and in neutral positions only.

WARNING : Selector lever should only be used when the engine is idling. Engaging the reverse at any other speed may damage reverse system components and possibly cause personal injuries. Ensure lever is pushed in and locked. Do not use as a grab handle.

36) Reverse Gate (GTS and GTX Models)

It moves from upward to downward position to get forward, neutral, reverse and inversely. These positions are obtained by sliding the selector lever.

CAUTION : Never use gate as a supporting point to board the watercraft, it may damage reverse system components.

37) Water Tank Trap Drains (GTS and GTX Models)

If water enters the air intake opening, a water tank trap with a baffle separates water from the air then evacuates the water through the front of storage cover.

CAUTION : Unusual maneuvers such as circles with the nose of the watercraft under water will fill the bilge.

Recommended Fuel

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

O NOTE: Look on service station pump sticker for octane specification. Do not mix oil with fuel except at engine break-in. Refer to BREAK-IN PERIOD. Always check injection oil reservoir level when refueling.

The use of good quality fuel is necessary. A well known fuel brand is highly recommended.

CAUTION : The use of a poor quality fuel can result in watercraft performance deterioration and damage to fuel system and engine components. Refer to an authorized dealer immediately.

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

Do not enter the spout too far in filler neck.

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

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

WARNING: Do not lean the watercraft to allow more fuel to fill the fuel tank. The tank design makes provision for fuel expansion of about 5%. If this area is filled, fuel will expand and may come out through fuel vent hose. Keep watercraft horizontal while fueling. Always stop the engine before refueling. 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. Never experiment with other fuels or fuel ratios. Never use fuel containing alcohol,

methanol or similar products including naphtha. The use of unrecommended fuel can result in watercraft performance deterioration and damage to critical parts in the fuel system and engine components. Never top off the fuel tank and leave watercraft in the sun. As temperature increases, fuel expands and might overflow. Always wipe off any fuel spillage from the watercraft.

Recommended Oil

Use only BOMBARDIER ROTAX IN-JECTION OIL which is available from authorized dealers. It is a blend of specially selected base oils and additives which provides outstanding lubrication, engine cleanliness and minimum spark plug fouling.

O NOTE: High quality low ash API TC injection oil for 2-cycle engines can be used if BOMBARDIER ROTAX INJECTION OIL is not available.

CAUTION : Never use 4-cycle 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 2-cycle oil. Avoid mixing different brands of API TC oil as resulting chemical reaction may cause severe engine damage.

Oil Injection System

This watercraft features an oil injection system which does not require manual fuel / oil mixing.

Oil level in reservoir should be maintained between FULL and ADD of dipstick marks. To check, remove seat to expose oil cap, unscrew cap, wipe dipstick then insert in the reservoir neck. Do not screw cap. Remove dipstick and read the level. Add oil as necessary. Use a flexible funnel to pour oil into reservoir. Wipe off any oil spillage.

O NOTE : Always carry 500 mL of BOMBARDIER ROTAX INJEC-TION 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 engine runs out of oil, severe engine damage will occur. If the oil reservoir is found almost empty, air can enter in the system and it must be bled. Immediately refer to an authorized dealer to have the oil injection system inspected.

BREAK-IN PERIOD

Engine

With Bombardier-Rotax[®] watercraft engines, a break-in period is required before operating the engine at full throttle. Engine manufacturer recommendation is about 10 operating hours.

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

To assure additional protection during the initial engine break-in, BOM-BARDIER ROTAX INJECTION OIL should be added in the fuel tank for the first full fuel tank filling only.

MODELS	QUANTITY
SP / XP series	700 mL (24 oz)
GTS/GTX	900 mL (30 oz)

CAUTION : Remove and clean spark plugs after engine break-

10-Hour Inspection

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

The 10-hour inspection is at the expense of the watercraft 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 clamp torque	
Carburetor flange nuts (or screws) and flame arrester bracket	
Steering stem arm torque	
Steering cable adjustment if required	
Reverse cable adjustment if required (GTS / GTX)	
VTS adjustment if required (SPX / XP)	
Cooling system hose condition and fasteners	
Bailer pick-ups, check for obstructions	
Safety lanyard switch	
Monitoring beeper	
Electrical connections (starter, battery, etc.)	
Impeller shaft reservoir oil replacement	
Impeller condition, impeller / wear ring clearance	
PTO flywheel lubrication	
Seal carrier lubrication (except XP model)	
Water intake grill / hull condition	
Inspection of fasteners for tightness	
Inspect / clean engine drain tube	

We recommend that this inspection chart be signed by an authorized dealer.

Date of 10-hour inspection

Authorized dealer signature

PRE-OPERATION CHECKS_____

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.

Prior to your daily ride, verify the following :



WARNING : Safety lanyard must always be removed from switch prior to verify any of the following.

ITEM	OPERATION	1
Hull	Inspect.	
Jet pump water intake	Inspect / clean.	
Bilge	Drain. Ensure plug is secured.	
Battery	Inspect tightness of cables and retaining straps.	
Fuel and oil reservoirs	Refill.	
Engine compartment	Verify for any fuel leak / odor.	
Fire extinguisher	Inspect condition / mounting.	
Steering and throttle systems	Check operation.	
Reverse system (GTS / GTX)	Check operation.	
VTS (XP)	Check operation.	
Safety lanyard, engine start / stop button	Check operation.	

Hull

Inspect hull for cracks or damage.

Jet Pump Water Intake

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



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

Bilge

Should water be present in the bilge, tilt the watercraft to the rear and unscrew drain plug to completely empty the bilge.

WARNING : Make sure to take the watercraft out of water prior to unscrew the drain plug.

Secure bilge drain plug.

Battery

WARNING : Verify tightness of battery cables and retaining straps.

Fuel and Oil Reservoirs

With the watercraft horizontal, fill the fuel tank to specified level with fuel.

Check the oil level and refill reservoir as necessary.

Engine Compartment

WARNING : Should any leak or gasoline odor be present, do not start the engine or operate the watercraft. Immediately refer to an authorized dealer.

Fire Extinguisher

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

Steering and Throttle Systems

Assisted by another person, check steering operation for free movement. When the handlebar is horizontal, the jet pump nozzle should be in the straight ahead position. Ensure the jet pump nozzle pivots easily while, handlebar is turned.

Check throttle lever and cable several times for free and smooth operation. It must return to its initial position immediately after released.

Reverse System (GTS and GTX Models)

Check reverse gate operation for free movement. With the selector lever pushed in and locked, the gate should be in upward position. Ensure the reverse gate moves easily while selector lever is pulled out.

WARNING : Verify the reverse gate locking operation before starting the engine.

Variable Trim System (SPX and XP Models)

Push on arrows on VTS button to check nozzle movement.

ONOTE : With the safety lanyard disconnected, trim can be activated for approximately 30 seconds by depressing the engine start / stop button.

Safety Lanyard and Engine Start / Stop Button

Ensure that both switches operate properly. Start engine and stop it 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 and turning fuel valve to OFF position. Do not operate the watercraft further, see an authorized dealer.

Clothing

WARNING : Always wear a Coast Guard approved PFD. It is also recommended that gloves, wet suit, deck shoes / booties and protective glasses be worn when operating the watercraft. In some instances, for example high speed operation or racing, an approved helmet or kidney belt should be worm.

OPERATING INSTRUCTIONS

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

Principle of Operation

Propulsion

The 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 watercraft. Then the water flows through the impeller to a venturi. The venturi accelerates the water and produces thrust to move the watercraft. Depressing the throttle lever increases engine speed and therefore watercraft speed.



WARNING : Whenever the engine is to be started, the operator should always be sitting on the watercraft.

Reverse (GTS and GTX Models)

The selector lever is used for either driving the watercraft forward or backward. With the lever pushed in, the watercraft is in forward position, with the lever fully pulled out reverse position is obtained. The lever middle position is neutral. These 3 functions are produced by the mean of a gate, which is installed on jet pump venturi housing. This gate directs the water flow to get the proper function.

WARNING : Selector lever should only be used when the engine is idling. Engaging the reverse gate at any other speed may damage reverse system components and possibly cause personal injuries. Ensure lever is pushed in and locked.

Variable Trim System (SPX and XP Models)

The electric variable trim system (VTS) changes the angle of the jet pump nozzle to provide the operator with a fast, effective system to compensate for load, thrust, riding position and water conditions. Correctly adjusted, it can improve handling, reduce porpoising, and position the watercraft at its best riding angle to attain maximum performance.

When first using the craft, the operator should become familiar with the use of the variable trim system (VTS) at varying speeds and water conditions. A mid-range trim is generally used when cruising. Experience alone will dictate the best trim for the conditions. During the watercraft break-in period, when lower speeds are recommended, it is an excellent opportunity to gain familiarity of trim adjustment and its effects.

WARNING : Improper use of the variable trim can cause instability at higher speed especially in strong wind or current or while high speed maneuvering. To regain stability, an operator should slow the watercraft then re-adjust the trim to the conditions. When the nozzle is positioned in an upward angle, the water thrust directs the bow of the watercraft upward. This position is used to optimize high speed.



When the nozzle is directed downward, the bow is forced downward and enhances the craft turning capabilities. As with any watercraft, speed and operator body position and movement (body english), will determine the degree and sharpness of the craft turn. Porpoising can be reduced or eliminated if the nozzle is downward and speed adjusted proportionately.



Turning



Turning the handlebar pivots the jet pump nozzle which controls the watercraft direction. Turning the handlebar to the right will turn the watercraft to the right and inversely. The throttle must be applied to turn the watercraft. WARNING : Directional control is lost when the throttle is closed. Throttle must be applied and handlebar turned to change the direction of the watercraft. Steering efficiency will differ with carrying loads and water conditions.

The more the throttle is applied while turning the handlebar, the sharper the turn will be.

The watercraft behaves differently with a passenger and requires greater skill. The passenger should always grip the seat strap or grab handle. Reduce speed and avoid sharp turns. Avoid choppy water conditions when carrying a passenger.

Boarding from a Dock or in Shallow Water

As with any craft, getting aboard should be done carefully.

When boarding from a dock, slowly place one foot on the watercraft floorboard nearest the dock and, at the same time, transfer the body weight to the other side in order to balance the watercraft while holding the handlebar. Then, bring the other foot over the seat and put it on the other floorboard. Push the watercraft away from the dock.



CAUTION : The engine should be started with at least 90 cm (3 ft) of water below the hull.



In shallow water, board the watercraft either from the side or the rear.

WARNING : An inexperienced operator should practice how to get aboard close to the shore to simulate deep water boarding. Refer to **Boarding in Deep Water** in this section.

Starting the Engine

Before unloading the watercraft from the trailer, it can be started for about 10 seconds to verify proper operation.

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

Attach the safety lanyard to the operator's PFD and snap the cap to the switch before starting the engine.

WARNING : Only start the watercraft once all controls have been checked and operate properly.

Cold Engine

Operator and passenger should be sitting on the watercraft seat prior to starting the engine.

Turn the fuel valve to ON position.
Firmly grip handlebar with your left hand and place both feet on the floor-board.

Fully pull the choke lever with your right hand and depress the start / stop button.



Immediately after engine is started, release start / stop button and release choke lever half way.

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

A few seconds after, release the choke lever and if necessary, slightly apply throttle to keep engine running.

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

WARNING : In shallow water, shells, sand, pebbles or other objects could be drawn up by the jet pump and damage impeller, components or clog the cooling system. Also, debris could be thrown rearward into bystanders.

Warm Engine

The same procedure as a cold engine applies, except the choke does not need to be applied and throttle lever has to be slightly depressed.

Obstacles

Verify that the path ahead of the watercraft is clear of other craft or obstacles. Avoid riding close to swimmers. Check local boating laws for safe operation.



Boarding in Deep Water

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

Operator Alone

Swim to the rear of the watercraft.



Grip the grab handle (if applicable) and pull yourself upward until your knee can reach the boarding platform then grip the seat strap.

CAUTION : Never use jet pump components as a supporting point to board the watercraft, it may damage system components.



Bring your feet on the floorboard while maintaining balance using the handle-bar.



Sit astride the seat.



Attach the safety lanyard to the operator's PFD and snap the cap to the switch before starting the engine.

Start the engine.

Operator with a Passenger

The operator climbs on the watercraft the same way as explained previously.

In choppy water, the passenger while in the water, may hold the watercraft to help the operator in climbing aboard.



The passenger then climbs on the watercraft while the operator maintains balance by sitting as close as possible to the console.





Attach the safety lanyard cap to the switch before starting the engine.

WARNING : Do not start engine until the passenger is properly seated.

CAUTION : On GTS / GTX models, if vent grills are kept below water level water will enter the bilge.

Rough Water Operation

Avoid operation in these conditions. If you must do so, proceed with caution using minimum speed.

Crossing Waves

Reduce speed and cross the wave at an angle of 40°.

Always be prepared to steer and balance as necessary.

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



Stopping / Docking

The watercraft is slowed by water drag. The stopping distance will vary depending on the watercraft size, carrying weight, water condition, wind and current.



The operator should familiarize himself with the stopping distance under different conditions.

Release the throttle at a sufficient distance before the expected landing area, water resistance slows down the watercraft.

Reduce speed when approaching a dock then shut off the engine just before coming alongside.

WARNING : No directional control is available when the throttle is closed or engine is shut off. On GTS / GTX, never use the reverse system for stopping the watercraft.

Beaching

CAUTION : It is not recommended to run the watercraft to the beach.

Proceed the same way as for docking except for the following :

Come slowly to the beach and shut off the engine when reaching about 90 cm (3 ft) of water under the hull.

WARNING : In shallow water, shells, sand, pebbles or other objects could be drawn up by the jet pump and damage impeller, components or clog cooling system. Also, debris could be thrown rearward into bystanders. Get off watercraft and pull it on the beach.

Shutting Off the Engine

To keep watercraft directional control, the engine should be running until the watercraft is at idle.

To shut off the engine, completely release throttle lever and press the engine start / stop button. Remove safety lanyard from watercraft.

WARNING : Should the engine be shut off, watercraft directional control is not available. Never leave the safety lanyard on an unattended watercraft.

General Care

Should any water be present in the hull, unscrew the drain plug and tilt the watercraft to the rear in order to allow water to flow out.

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

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

Leave the seat partially opened. This will avoid engine compartment condensation and possible corrosion.

ONOTE : When the watercraft is stored with seat partially opened and without a tarpaulin, unscrew the drain plug in order to avoid water build up in the bilge during rainfall.

Additional Care for Foul Water or Salt Water

When the watercraft is operated in foul water and particularly in salt water, additional care must be taken to protect the watercraft and its components. Rinse bilge area with fresh water.

CAUTION : Failure to perform proper care such as : watercraft rinsing, cooling system flushing and anticorrosion treatment, when watercraft is used in salt water, will result in damage to the watercraft and its components. Never leave the watercraft stored in direct sunlight. UV radiation will eventually dull finishes.

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 clean up 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 watercraft is not expected to be used further the same day or when the watercraft is stored for any extended time.

An optional coupler hose can be installed on the watercraft to ease flushing.

Proceed as follows :



WARNING : Perform this operation in a well ventilated area.

- Clean jet pump by spraying water in its inlet and outlet and then SEA-DOO LUBE lubricant.
- 2. Remove seat to allow access of cooling system.
- Remove dust cap from fitting spigot and attach coupler hose. Make sure coupler hose is properly locked to fitting spigot.
- 4. Install a hose pincher on water outlet hose.

NOTE : This prevents water from exiting through exhaust socket.







- 5. Attach other end of coupler hose to a garden hose. Do not open water tap yet.
- 6. Start the engine then immediately open the water tap.

WARNING : Do not touch any electrical part 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.

7. 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 watercraft is out of water.

- 8. Pull plug from air intake silencer cover.
- 9. Spray SEA-DOO LUBE lubricant through air intake silencer cover keeping engine at fast idle.



ONOTE: Lubrication of engine should be done at least for 1 minute. After approximately half a minute, close fuel valve to run engine out of fuel while lubricating.

CAUTION : When engine begins to run irregularly because of fuel starvation, immediately stop water flow before engine dies. Severe engine damage could result if not done in this order.

10. Close the water tap then stop the engine.

CAUTION : Always close the water tap before stopping the engine, otherwise severe engine damage could occur.

- 11. Unlock and remove coupler hose. Reinstall dust cap over fitting spigot.
- 12. Remove hose pincher from water outlet hose.
- 13. Wipe up any residual water from the engine.
- 14. Remove spark plug cables and connect them on the grounding device.



15. Remove both spark plugs and spray SEA-DOO LUBE lubricant into each cylinder.

16. Crank the engine a few turns to distribute the oil onto cylinder wall.

- 17. Apply anti-seize lubricant on spark plug threads then reinstall them.
- 18. Reinstall plug on air intake silencer cover.

Anticorrosion Treatment

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

O NOTE: Engine fogging should be done with SEA-DOO LUBE lubricant whenever the watercraft is to be stored for few days or a long period.

Apply a 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.

Engine Overheat

If the monitoring beeper sounds continuously, stop engine immediately.

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

Flush cooling system, refer to POST-OPERATION CARE.

If engine still overheats, refer to an authorized dealer for servicing.

Jet Pump Water Intake and Impeller Cleaning

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

- 1- Cavitation: Engine speed is high but watercraft moves slowly due to reduced jet thrust, jet pump components may be damaged.
- 2- 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.

A weed clogged area can be cleaned as follows :

In-water cleaning: Rock the watercraft several times while repeatedly pressing start / stop button for short period without starting engine. Most of the time, this will result in letting the weeds falling from the intake area. Start engine and make sure water flows out from bleed outlet(s) and watercraft operates properly.

On-beach cleaning : Place a cardboard or a carpet beside the watercraft to prevent scratching when turning the watercraft for cleaning.

WARNING : Always remove safety lanyard cap from switch to prevent accidental engine starting before cleaning the jet pump area. Engine must not be running for this operation.

Rotate the watercraft counterclockwise (seen from rear) to its left side for cleaning. Rotating watercraft counterclockwise eliminates the possibility of residual water in the tuned pipe entering the engine and causing engine damage.



Clean the water intake area. If the system is still clogged, refer to an authorized dealer for servicing.

CAUTION : Inspect water intake grill for damage. Refer to an authorized dealer for repair as necessary.

CAUTION : Avoid watercraft operation in weed areas. If unavoidable, vary watercraft speed. Weeds tend to entangle more at steady speed and at slow speed.

Capsized Watercraft

SP and XP Series

The watercraft is designed so that if it is turned over, it should not remain capsized due to its self-righting capability.

42

After roll over, always tip watercraft counterclockwise (maximum 90°) before restarting engine.

GTS and GTX Models

The watercraft is designed so that it should not turn over easily, due to its longer and larger dimensions and its full vee hull. Also 2 sponsons mounted on the side of the hull assist watercraft stability. If it turns over, it will remain capsized due to its non self-righting capability. To return the watercraft upright rotate it **clockwise** (seen from rear) by pushing on the right side then handhold the side of water intake **HOLE** and use your weight to complete the rotation of watercraft.



Submerged Watercraft

If the watercraft is submerged and engine is water-flooded, it is strongly recommended that the watercraft be serviced by an authorized dealer immediately.

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.

Crank engine to allow water to escape from spark plug.

Spray SEA-DOO LUBE lubricant into spark plug holes.

Crank engine again.

Reinstall spark plugs.

Towing the Watercraft

In the event the watercraft becomes inoperative, tie a tow rope to the bow (front) eyelet and have the watercraft towed to the shore at moderate speed.

Low-Charge Battery Condition

See your dealer to have it charged or replaced.

WARNING: Do not charge or boost the battery in the watercraft. Connecting cables could produce a spark and possibly cause an explosion if fuel or electrolyte vapors are present.

MAINTENANCE

WARNING: 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 must not be running and the safety lanyard must be removed for all maintenance procedures.

Lubrication

Use SEA-DOO synthetic grease and lubricate every 10 hours. Proceed as follows :

Remove seat to expose engine compartment.

On SP and XP series, remove vent tube support.

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

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



Using a grease gun, carefully lubricate drive shaft splines at PTO flywheel grease fitting until drive shaft boot is just beginning to expand.

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

Lubricate seal carrier at grease fitting (except XP model).

CAUTION : As soon as grease comes out the seal immediately stop lubricating. Never leave any clothing, tool or other objects near PTO flywheel and seal carrier.



Secure PTO flywheel guard.

On SP and XP series, reinstall vent tube support.

Anticorrosion Protection

Throttle / Choke Cables

Lubricate the throttle and choke cables with SEA-DOO LUBE lubricant every 25 hours and every 10 hours in salt water use.

O NOTE : A cable luber can be used on cable end to inject SEA-DOO LUBE lubricant.

Electrical Connections

As necessary, apply anticorrosion product such as a dielectric grease on battery posts and all exposed cable connectors.

Additional Lubrication

SEA-DOO 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

Fully pull choke lever and lubricate the metallic portion.



Seat Opening Mechanism, Tab, Hook and Lock Pin





Carburetor and Oil Injection Pump

Lubricate springs, shafts and exposed portion of cables.

ONOTE: Grease carburetor linkage at both ends with synthetic grease if applicable.



Reverse System (GTS and GTX Models)

Lubricate support plate sliding area of sliding block and triangular lever with synthetic grease.

Also lubricate sliding washer and selector lever stem.



Periodic Inspection

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

The following maintenance chart gives guidelines for regular watercraft servicing schedule to be performed by you and / or by an authorized dealer. The schedule can be adjusted according to operating conditions and use.

IMPORTANT: Schedule for watercraft rental operations or higher number of hour use, will require greater frequency of inspection and maintenance.

Periodic Inspection Chart

	FREQUENCY				
DESCRIPTION	every 10 hours	every 25 hours	every 50 hours	every 100 hours or seasonally	To be performed by
Lubrication / corrosion protection	1		~		OPERATOR
Engine ignition timing				~	DEALER
Spark plug replacement			~		DEALER
Throttle / choke cables, inspection / lubrication	1	~			OPERATOR
Flame arrester inspection			~		DEALER
Carburetor adjustment including choke / throttle cable adjustments and linkage				~	DEALER
Oil injection pump adjustment			1	~	DEALER
Fuel filter and oil filter inspection	·	~			DEALER
Oil filter and fuel filter replacement				~	DEALER
Engine head screws, retorque		1			DEALER
Steering system			~		DEALER
Reverse system / reverse cable adjustment (GTS / GTX)				~	DEALER
Variable Trim System (SPX / XP)			~		DEALER
Fastener tightening (flame arrester mount screws, carburetor mount nuts, engine mount screws, exhaust system, etc.)			~		DEALER
Muffler, battery and reservoir fastening devices			 ✓ 		OPERATOR
Fuel / oil line, check-valve and hose inspection, fuel system pressurization			~		DEALER
Fuel vent line pressure relief valve inspection		~			DEALER
Inspect / clean engine drain tube	1	 ✓ 			DEALER
Bilge system / water tank trap drains inspection			~		OPERATOR
Battery condition			~		DEALER
Battery and starter cables		~			DEALER
Monitoring beeper / electrical connections			~	1 1	DEALER
Impeller shaft reservoir oil level / oil condition		~		Replace	DEALER
Impeller condition and impeller / wear ring clearance		2	~		DEALER
Drive shaft boot and spline condition (both ends)		2	~		DEALER
PTO flywheel lubrication	~		Ι		OPERATOR
Seal carrier lubrication (except XP model)	~		1		OPERATOR
Water intake grill condition		2	~	1 1	OPERATOR
Hull condition			1	~	OPERATOR
Cooling system flushing ③		~	1		OPERATOR

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

① Every 10 hours in salt water use.

- These items have to be initially checked after 25 hours. Thereafter, servicing to be made as specified in this chart.
- ③ Daily flushing in salt water or foul water use.

Throttle and Choke Cable Inspection

Throttle Cable

Depress and release the throttle lever several times. It must operate smoothly and return to its initial position without any hesitation. Refer to an authorized dealer if necessary.

WARNING : If throttle lever does not automatically return, do not operate watercraft and see your dealer.



Choke Cable Inspection

Ensure it operates smoothly and without any hesitation from fully open to fully close. When the choke lever is fully pulled, choke must be fully applied. Refer to an authorized dealer if necessary.

Carburetor Adjustment

Carburetor adjustment is very important to allow good engine operation and therefore watercraft performance. Carburetor adjustment requires technical knowledge and experience to have the correct mixture supplied to the engine. This critical adjustment 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 should 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 Alignment

When the handlebar is aimed in straight ahead position, the jet pump nozzle should be in the same direction allowing the watercraft to run in a straight line.

Refer to an authorized dealer if an adjustment is necessary.

WARNING : Ensure the handlebar / jet pump nozzle operate freely from side to side and are not stressing the steering cable and / or bracket.

Steering system wear should be inspected every 50 hours by an authorized dealer.

Reverse Gate Adjustment (GTS and GTX Models)

When selector lever is pushed in and locked, reverse gate should be in upward position. With the lever half way out and locked, reverse gate should be in middle position. When lever is fully pulled out, reverse gate should be in downward position. Refer to an authorized dealer if adjustment is necessary.

WARNING : Ensure the selector lever / reverse gate operate freely and are not stressing the reverse cable. Always make sure selector lever locks in forward.

VTS Adjustment (SPX and XP Models)

Push on arrow pointing upwards on VTS button until the VTS stops. The nozzle should be up (10°) without interfering with venturi housing.



Push on arrow pointing downwards on VTS button until VTS stops. The nozzle must be down (10°) and it must not interfere with venturi housing.



If VTS needs to be readjusted, refer to an authorized dealer.

CAUTION : Trim ring and / or nozzle must not interfere at any position. Damage will occur if adjustments are not done adequately.

Vacuum Bailer Pick-Ups

They are located each side of the drive shaft tunnel.



This watercraft features a vacuum activated syphon. Two pick-ups use a low pressure area in the jet pump to syphon the water out of the bilge.

Inspect each pick-up screen for obstructions, clean as necessary.

Water Tank Trap Drains (GTS and GTX Models)

Open storage cover and check for possible obstructions at drain outlets.



Fuses

Electrical system is protected with 2 fuses. One fuse protects the charging circuit, the second fuse protects the accessories and controls. If starter does not operate or battery is regularly discharged, check fuse condition. The fuse caps are in the electrical box located on port side (left) and hold spare fuses.

On the SPX and XP models, VTS system is also protected with a fuse.

To access fuse caps unclip and move away electrical box from its seat.



Replace the fuse by one of the same rating. Make sure to properly close the fuse cap.

CAUTION : Do not use a higher rated fuse as this can cause severe damage. Refer to SPECIFI-CATIONS section for recommended fuse rating.

Wires in electrical box cover must hang freely. Do not pack wires in cover.

WARNING : If any water is found in the electrical box, immediately refer to an authorized dealer before operating the water-craft.

Properly close electrical box cover making sure its seal is well positioned.

General Inspection and Care

Inspection

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

WARNING : If any gasoline leak or odor is found, do not start the engine. Have the watercraft serviced by an authorized dealer. Failure to correct a leak could lead to an explosion.

Inspect muffler, battery and fuel/oil reservoir fastening devices. Check electrical connections for corrosion and tightness.

Inspect hull and jet pump water intake grill for damage. Replace or have damaged parts repaired. It is recommended that an authorized dealer annually inspect the hull condition.

Care

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 and / or hull. Apply nonabrasive wax such as silicone wax.

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

TRANSPORTATION, STORAGE AND PRE-SEASON PREPARATION

Transportation

WARNING : Always turn the fuel valve to OFF position when transporting the watercraft.

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

CAUTION : Do not route ropes or tie-downs over the seat as they could produce permanent damage. Wrap ropes or tie-downs with rags or similar protectors where they can touch the watercraft body.

Ensure seat and storage cover are properly latched.

A SEA-DOO cover should protect the watercraft, particularly before driving on dirt roads, to prevent dirt entry through the air intake opening(s).

Observe trailering safety precautions.

Storage

It is recommended that the watercraft be serviced by an authorized dealer for storage but the following operations can be performed by you with a minimum of tools.



CAUTION : Do not run the engine during the storage period.

Engine Draining

Check engine drain tube running from exhaust manifold fitting to exhaust outlet socket. Make sure there is no sand or other particles in it and that it is not obstructed so that water can leave the engine. Clean tube and fitting (on exhaust outlet) as necessary.

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



Watercraft Rinsing

Thoroughly rinse the watercraft hull, bilge, engine compartment, with **fresh** water.

Propulsion System

Lubricant in impeller shaft reservoir should be drained and reservoir cleaned. Refilled with 65 mL (2.2 U.S. oz of SEA-DOO synthetic polyolester oil 75W90 GL5 type C gear lube. Refer to an authorized dealer for this operation.

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

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.

Lubricate seal carrier at grease fitting (except XP model).

CAUTION : As soon as grease comes out the seal immediately stop lubricating.



Fuel System

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

CAUTION : Fuel stabilizer should be added prior 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 watercraft. Always turn the fuel valve to OFF position when storing the watercraft.

Cooling System Flushing and Engine Internal Lubrication

Refer to procedure discussed in POST-OPERATION CARE.

Battery

Contact your authorized dealer or refer to the appropriate *Shop Manual* for proper storage procedure.

Anticorrosion Treatment

Wipe off any residual water in the engine compartment. Spray SEA-DOO LUBE lubricant over metallic components in engine compartment.

Additional Recommended Protection

Cooling system may be filled with an equal part of water and antifreeze solution.

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

NOTE : The engine does not have to run during this operation.

Three hoses have to be disconnected to allow air to escape and antifreeze solution to completely fill cooling system water jackets.

Install a hose pincher on water injection hose.

Disconnect water inlet hose, drain hose and water outlet hose.



Raise all hoses above the highest point of tuned pipe and temporarily tie them together.

Insert a funnel into inlet hose going from the water inlet socket to tuned pipe. Pour about 2 liters (1/2 gal) of antifreeze solution through the funnel.

Tie up all hoses higher than tuned pipe.

O NOTE : If hoses are not attached higher than tuned pipe, coolant will drain out.



The following steps should be performed to provide the watercraft enhanced protection.

Remove muffler and drain out as much water as possible. Reinstall muffler.

OR : Disconnect one hose from muffler and pour some antifreeze liquid inside muffler. Reconnect hose.

Lubricate the throttle cable with SEA-DOO LUBE lubricant.

ONOTE : A cable luber can be used on throttle cable end to inject SEA-DOO LUBE. Clean the bilge with hot water and detergent or with bilge cleaner. Rinse thoroughly. Lift front end of watercraft to completely drain bilge. If any repairs are needed to body or to the hull contact your dealer. For paint touch up to mechanical parts use Bombardier spray paint. For small gelcoat repairs, a Bombardier repair kit is available. See AC-CESSORIES AND SERVICE PROD-UCTS section. Replace damaged labels / decals.

ONOTE : Bilge cleaning should be done prior to anticorrosion treatment.

Wash the body with soap and water solution (only use mild detergent). Rinse thoroughly with fresh water. Remove marine organisms from the hull. Apply a nonabrasive wax such as silicone wax.

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

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

CAUTION : The watercraft must never be left in water for storage. Never leave the watercraft stored in direct sunlight. UV radiation will dull finishes.

The seat should be partially left opened during storage. This will avoid engine compartment condensation and possible corrosion.

ONOTE : If the watercraft is stored outside with seat partially opened and without a tarpaulin, unscrew the rear drain plug in order to avoid water build up in the bilge during rainfall. Tilt the watercraft to the rear so that water can flow out of floorboard.

Pre-Season Preparation

Use the following chart.

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

WARNING : Observe all WARN-INGS 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.

Pre-Season Preparation Chart

O NOTE : It is highly recommended that the dealer perform at the same time the annual safety inspection and factory campaigns in addition to the preseason preparation.

OPERATIONS	To be performed by
Lubrication / corrosion protection	OPERATOR
Battery condition / charging and reinstallation	DEALER
Battery, starter connections and routing @	DEALER
Spark plug replacement ①	OPERATOR
Impeller shaft reservoir oil inspection	DEALER
Propulsion system inspection	DEALER
Oil filter replacement	DEALER
Oil injection reservoir filling	OPERATOR
Flame arrester cleaning / inspection @	DEALER
Fuel filter replacement	DEALER
Fuel line condition @	DEALER
Filler neck, fuel tank and fuel cap condition @	DEALER
Check valves, fasteners, fuel system pressurization @	DEALER
Throttle 2 and choke cable inspection / adjustment	DEALER
Oil injection pump adjustment and bleeding	DEALER
Engine ignition timing	DEALER
Carburetor adjustment	DEALER
Steering system adjustment / inspection @	DEALER
Reverse cable adjustment (GTS / GTX)	DEALER
Inspection of water tank trap drains (GTS / GTX) / bilge lines / bailer pick-ups	DEALER
Inspection of cooling system inlet / outlet hoses @	DEALER
Monitoring beeper	DEALER
Digitally encoded security system (if equipped)	DEALER
Fire extinguisher condition / mounting @	OPERATOR

 Before installing new spark plugs, it is suggested to burn the excess SEA-DOO LUBE lubricant by starting the engine using the old spark plugs.

^② Safety item covered in the annual safety inspection.

WARNING: Only perform this operation in a well ventilated area. Coupler hose must be installed or watercraft must be in water to cool engine. Running the engine without cooling water will damage exhaust hose interior and may damage engine.

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.

Monitoring Beeper Coded Signals

GTX and XP Models

CODED SIGNALS	POSSIBLE CAUSE	REMEDY
2 short beeps	 Confirms safety lanyard signal operation. 	
1 short beep	Bad connection.	Reinstall safety lanyard cap correctly over switch.
	 Uncoded safety lanyard. Safety lanyard code. 	Use only coded safety lanyard. Use another coded safety lanyard or refer to an authorized dealer.
8 short beeps	Micro-processor.	Refer to an authorized dealer.

All Models

Continuously beeps.	Engine overheats.	See ENGINE OVERHEATS.

Engine will not Start

OTHER OBSERVATION	POSSIBLE CAUSE	REMEDY
Engine does not turn over.	 Safety lanyard removed. Burnt fuse. Discharged battery. Battery connections, corroded or loose. Water flooded engine. 	Install cap over switch. Check wiring then replace fuse. Refer to an authorized dealer. Refer to an authorized dealer. Refer to Submerged Watercraft in SPECIAL PROCEDURES.
Engine slowly turns.	Discharged or weak battery.	Refer to an authorized dealer.
Engine turns over.	 Fuel tank empty or water- contaminated. Fuel filter clogged or water- contaminated. 	Refill. Syphon and fill with fresh fuel. Clean, check fuel tank for water.
	 Fuel flooded engine : Fouled / defective spark plugs. Misuse of choke. 	Replace. Use only with cold engine. Replace spark plugs.

Engine Misfires, Runs Irregularly

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

Engine Overheats

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

Engine Continually Backfires

OTHER OBSERVATION	POSSIBLE CAUSE	REMEDY
	Faulty rev limiter.	Refer to an authorized dealer.
Weak spark.	 Fouled / defective / worn spark plugs. 	Replace.
Overheated engine.	See ENGINE OVERHEATS.	

Engine Pinging or Knocking

OTHER OBSERVATION	POSSIBLE CAUSE	REMEDY
	 Poor quality gasoline / low octane. Spark plug heat range too high. 	Use well known quality and recommended gasoline. Use recommended spark plugs.
	 Ignition timing. 	Refer to an authorized dealer.

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, RUNS IRREGULARLY. Syphon and replace.
Overheated engine.	See ENGINE OVERHEATS.	

Watercraft can not Reach Top Speed

OTHER OBSERVATION	POSSIBLE CAUSE	REMEDY
Cavitation	 Jet pump water intake clogged. 	Clean.
	 Damaged impeller. 	Replace. Refer to an authorized dealer.

Abnormal Noise from Propulsion System

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

SPECIFICATIONS _____

ENGINE		SP	SPI
Engine type		Rotax 587, 2-stroke	Rotax 587, 2-stroke
Induction typ	e	Rotary valve	Rotary valve
Exhaust syste	em	Water cooled / water injected	Water cooled / water injected
Lubrication	Туре	Oil injection	Oil injection
	Oil type	BOMBARDIER ROTAX INJECTION OIL	BOMBARDIER ROTAX
Number of cy	linders	2	2
Displacement	1	580 cm ³ (35.43 in ³)	580 cm ³ (35.43 in ³)
Rev limiter se	atting	6550 RPM ± 100	6550 RPM ± 100
COOLING			
Туре		Water cooled, total loss type.	Water cooled, total loss type.
		Direct flow from propulsion unit.	Direct flow from propulsion unit.
ELECTRICAL			
Magneto gen	erator output	160 W @ 6000 RPM	160 W @ 6000 RPM
Ignition syste	m type	Capacitor discharge ignition (breakerless).	Capacitor discharge ignition (breakerless).
Spark plug	Make and type	NGK, BR7ES	NGK, BR7ES
	Gap	0.5 - 0.6 mm (.020024 in)	0.5 - 0.6 mm (.020024 in)
Starting syste	m	Electric starter	Electric starter
Battery		12 V, 19 A	12 V, 19 A
Fuse	Starting system	5 A	5 A
	Charging system	15 A	15 A
CARBURETI	ON		
Fuel type		Regular unleaded gasoline	Regular unleaded gasoline
Carburetor		Diaphragm type Quantity : 1	Diaphragm type Quantity : 1

PROPULSION		SP		SPI		
Propulsion system		Bombardier Formula pump		Bombardi pump	Bombardier Formula pump	
Jet pump typ	е	Axial flow, single stage		Axial flow	, single stage	
Transmission		Direct driv	'e	Direct driv	/e	
Impeller shaft type	t reservoir oil	SEA-DOO polyoleste GL5	synthetic er oil 75W90	SEA-DOO polyoleste GL5	SEA-DOO synthetic polyolester oil 75W90 GL5	
Pivoting angle (nozzle)	e of direction	~ 26°		~ 26°		
Pivoting angle trim system	e of variable	N.A.		N.A.		
Minimum req level for jet p	uired water ump	90 cm	(3 ft)	90 cm	(3 ft)	
PERFORMAN	NCE					
Cruising time at full throttle	Fuel tank without reserve	~1.20 hou	irs	~1.12 hou	urs	
	Fuel tank reserve	~15 minut	tes	~14 minu	tes	
DIMENSION	S					
Number of pa	issengers ①	1 operator passenge		1 operator passenge		
Overall length	1	256 cm	(100 in)	256 cm	(100 in)	
Overall width		105 cm	(41.5 in)	105 cm	(41.5 in)	
Overall height	t	92 cm	(36.2 in)	92 cm	(36.2 in)	
Weight		176 kg	(387 lb)	178 kg	(392 lb)	
Load limit (passengers -	+ luggage)	160 kg	(352 lb)	160 kg	(352 lb)	
Hull material		Composit	e (fiberglass)	Composit	e (fiberglass)	
CAPACITIES						
Fuel tank		34 L	(9 U.S. gal)	34 L	(9 U.S. gal)	
Impeller shaft reservoir	Capacity	65 mL	(2.2 U.S. oz)	65 mL	(2.2 U.S. oz)	
	Oil level	Up to plug	3	Up to plug	9	
Oil injection r	eservoir	4.5 L	(1.2 U.S. gal)	4.5 L	(1.2 U.S. gal)	

① Refer to load limit.

N.A.: Not Applicable.

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ENGINE		SPX	XP
Engine type		Rotax 657, 2-stroke	Rotax 717, 2-stroke
Induction typ	e	Rotary valve	Rotary valve
Exhaust syste	em	Water cooled / water injected	Water cooled / water injected
Lubrication	Туре	Oil injection	Oil injection
	Oil type	BOMBARDIER ROTAX INJECTION OIL	BOMBARDIER ROTAX
Number of cy	/linders	2	2
Displacement	t	650 cm ³ (39.66 in ³)	718 cm ³ (43.81 in ³)
Rev limiter se	tting	7000 RPM (+100, -50)	7000 RPM (+100, -50)
COOLING			
Туре		Water cooled, total loss type. Direct flow from propulsion unit.	Water cooled, total loss type. Direct flow from propulsion unit.
ELECTRICAL	· · · · ·	propulsion unit.	propulsion unit.
Magneto gen	erator output	160 W @ 6000 RPM	160 W @ 6000 RPM
Ignition syste	em type	Capacitor discharge ignition (breakerless).	Capacitor discharge ignition (breakerless).
Spark plug	Make and type	NGK, BR8ES	NGK, BR8ES
	Gap	0.5 - 0.6 mm (.020024 in)	0.5 - 0.6 mm (.020024 in)
Starting syste	em	Electric starter	Electric starter
Battery		12 V, 19 A	12 V, 19 A
Fuse	Starting system	5 A	5 A
	Charging system	15 A	15 A
VTS system		15 A	15 A
CARBURETION			
Fuel type		Regular unleaded gasoline	Regular unleaded gasoline
Carburetor		Diaphragm type Quantity : 2	Diaphragm type Quantity : 2

N.A. : Not Applicable.

PROPULSION		SPX		XP		
Propulsion system		Bombardier Formula pump		Bombardi pump	Bombardier Formula pump	
Jet pump typ	e	Axial flow, single stage		Axial flow	, single stage	
Transmission		Direct driv	'e	Direct driv	/e	
Impeller shaft type	reservoir oil	SEA-DOO polyoleste GL5	synthetic er oil 75W90	SEA-DOO polyoleste GL5	SEA-DOO synthetic polyolester oil 75W90 GL5	
Pivoting angle (nozzle)	e of direction	~ 26°		~ 26°		
Pivoting angle trim system	e of variable	~ 10°		~ 10°		
Minimum req level for jet p	uired water ump	90 cm	(3 ft)	90 cm	(3 ft)	
PERFORMAN	ICE					
Cruising time at full throttle	Fuel tank without reserve	~50 minu	tes	~48 minu	tes	
	Fuel tank reserve	~10 minu	tes	~10 minu	tes	
DIMENSION	S					
Number of pa	issengers ①	1 operato passenge		1 operato passenge		
Overall length	l	256 cm	(100 in)	256 cm	(100 in)	
Overall width		105 cm	(41.5 in)	105 cm	(41.5 in)	
Overall height	:	92 cm	(36.2 in)	92 cm	(36.2 in)	
Weight		180 kg	(397 lb)	187 kg	(412 ib)	
Load limit (passengers -	⊦ luggage)	160 kg	(352 lb)	160 kg	(352 lb)	
Hull material		Composit	e (fiberglass)	Composit	e (fiberglass)	
CAPACITIES						
Fuel tank		34 L	(9 U.S. gal)	34 L	(9 U.S. gal)	
Impeller shaft reservoir	Capacity	65 mL	(2.2 U.S. oz)	65 mL	(2.2 U.S. oz)	
	Oil level	Up to plug	3	Up to plug	3	
Oil injection r	eservoir	4.5 L	(1.2 U.S. gal)	4.5 L	(1.2 U.S. gal)	

① Refer to load limit.

N.A. : Not Applicable.

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ENGINE		GTS	GTX
Engine type		Rotax 587, 2-stroke	Rotax 657, 2-stroke
Induction type	Э	Rotary valve	Rotary valve
Exhaust syste	em	Water cooled / water injected	Water cooled / water injected
Lubrication	Туре	Oil injection	Oil injection
	Oil type	BOMBARDIER ROTAX INJECTION OIL	BOMBARDIER ROTAX
Number of cy	linders	2	2
Displacement	t	580 cm ³ (35.43 in ³)	650 cm ³ (39.66 in ³)
Rev limiter se	etting	6550 RPM ± 100	7000 RPM (+100, -50)
COOLING			
Туре		Water cooled, total loss type.	Water cooled, total loss type.
		Direct flow from propulsion unit.	Direct flow from propulsion unit.
ELECTRICAL			
Magneto gen	erator output	160 W @ 6000 RPM	160 W @ 6000 RPM
Ignition syste	m type	Capacitor discharge ignition (breakerless).	Capacitor discharge ignition (breakerless).
Spark plug	Make and type	NGK, BR7ES	NGK, BR8ES
	Gap	0.5 - 0.6 mm (.020024 in)	0.5 - 0.6 mm (.020024 in)
Starting syste	m	Electric starter	Electric starter
Battery		12 V, 19 A	12 V, 19 A
Fuse	Starting system	5 A	5 A
	Charging system	15 A	15 A
CARBURETI	ON		
Fuel type		Regular unleaded gasoline	Regular unleaded gasoline
Carburetor		Diaphragm type Quantity : 1	Diaphragm type Quantity : 2

PROPULSION		GTS		GTX	GTX	
Propulsion system		Bombardier Formula pump		Bombardier Formula pump		
Jet pump typ	e	Axial flow	, single stage	Axial flow	, single stage	
Transmission		Direct driv	'e	Direct driv	/e	
Impeller shaft type	: reservoir oil	SEA-DOO polyoleste GL5	synthetic er oil 75W90	SEA-DOC polyoleste GL5	SEA-DOO synthetic polyolester oil 75W90 GL5	
Pivoting angle (nozzle)	e of direction	~ 26°		~ 26°		
Pivoting angle trim system	e of variable	N.A.		N.A.		
Minimum req level for jet p		90 cm	(3 ft)	90 cm	(3 ft)	
PERFORMAN	NCE					
Cruising time at full throttle	Fuel tank without reserve	~1.42 hours ~14minutes		~1.08 hours		
	Fuel tank reserve			~10 minutes		
DIMENSION	S					
Number of pa	issengers ①	1 operato passenge		1 operato passenge		
Overall length)	302 cm	(119 in)	302 cm	(119 in)	
Overall width		119 cm	(46.9 in)	119 cm	(46.9 in)	
Overall height	t	95 cm	(37.4 in)	95 cm	(37.4 in)	
Weight		210 kg	(465 lb)	220 kg	(484 lb)	
Load limit (passengers -	+ luggage)	225 kg	(496 lb)	225 kg	(496 lb)	
Hull material		Composit	e (fiberglass)	Composit	e (fiberglass)	
CAPACITIES						
Fuel tank		45 L	(12 U.S. gal)	45 L	(12 U.S. gal)	
Impeller shaft reservoir	Capacity	65 mL	(2.2 U.S. oz)	65 mL	(2.2 U.S. oz)	
	Oil level		9	Up to plug	9	
Oil injection r	eservoir	4.5 L	(1.2 U.S. gal)	4.5 L	(1.2 U.S. gal)	

① Refer to load limit.

N.A.: Not Applicable.

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.

SI* METRIC INFORMATION GUIDE

BASE UNITS				
DESCRIPTION length mass force liquid temperature pressure torque land velocity navigation veloc	ity	UNIT meter kilogram newton liter Celsius kilopascal newton-meter kilometer per hour knot PREFIXES	SYMBOL m kg N L °C kPa N•m km / h km / h	
PREFIX	SYMBOL	MEANING	VALUE	
kilo centi milli micro	k c m µ	one thousand one hundredth of one thousandth of one millionth of	1000 0.01 0.001 0.000001	
	CON	VERSION FACTORS		
TO CONVERT in in ² in ³ ft oz lb lbf lbf●ft lbf●ft lbf●ft lbf●ft lbf●ft PSI imp. oz imp. gal imp. gal U.S. oz U.S. gal knot MPH Fahrenheit Celsius hp		TO [©] mm cm ² cm ³ m g kg N N∙m lbf•in kPa U.S. oz mL U.S. gal 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.

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

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

ACCESSORIES AND SERVICE PRODUCTS_

These accessories and other fine Sea-Doo products are available at your dealer.





ACCESSORIES	PRODUCTS
Seat Bag P / N 298 303 040 All models Saddle Bag	Synthetic Grease P / N 293 550 010
P / N 298 302 040 All models Storage Tray P / N 295 500 150 GTS / GTX	F001 001 041
Touring Seat P / N 295 500 212 GTS P / N 295 500 149 GTX	P/N 293 600 011
Vent Water Block P / N 295 500 204 SP / XP series	3 E 1、2006 . 日報経行行でも
Digitally Encoded Security System P / N 295 500 211 All models	F001 001 025
Sand Bag Anchor P / N 295 500 213 All models	Spray Paint for Metallic Parts Only P / N 293 500 020 Purple P / N 293 500 029 White
	F001 001 026



PRODUCTS		PRODUCTS	
Gelcoat Spray Paint P / N 293 500 063 P / N 293 500 076 P / N 293 500 078	Teal Super White Bright Yellow	Sea-Doo Cleaner P / N 293 110 001 400 g P / N 293 110 002 4 L	
SMC Spray Paint P / N 293 500 079 P / N 293 500 080	Teal Green		
		F001 001 040 F001 001 074	

OTHER PUBLICATIONS AVAILABLE

PUBLICATION	P/N
Shop Manual	219 100 013
Sea-Doo Racing Handbook	219 000 019

WATERCRAFT MODEL NO	_
HULL IDENTIFICATION NUMBER (H.I.N.)	_
ENGINE IDENTIFICATION NUMBER (E.I.N.)	_
Purchase Date	_
Warranty Expiry Date year month day	_
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 watercraft has been registered with Bombardier.

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 watercraft becomes necessary.

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

CHANGE OF ADDRESS

CHANGE OF ADDRESS 🖵			
VEHICLE IDENTIFICATION NUMBER	Model Number	Hull Identification N	lumber (H.I.N.)
OLD ADDRESS :		NAME	
	NO.	STREET	 APT
NEW ADDRESS :	CITY	STATE / PROVINCE	ZIP / POSTAL CODE
		NAME	
	NO.	STREET	APT
	СІТҮ	STATE / PROVINCE	ZIP / POSTAL CODE

STOLEN UNITS

In the event that your watercraft 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 watercraft dealers on a monthly basis to aid in recovery of such units to their owners.

STAMP

BOMBARDIER INC.

X

SEA-DOO WARRANTY VALCOURT, QUEBEC CANADA JOE 2L0





Litho'd in Canada