

**BOMBARDIER**  
RECREATIONAL PRODUCTS



# OPERATOR'S GUIDE

## Youth Models

### 2002

#### **WARNING**

Read this guide thoroughly.  
It contains important safety information.  
Minimum recommended operator age:  
A child under 6 years old should never  
operate an ATV with an engine size 50 cc  
or greater.  
A child under 12 years old should never  
operate an ATV with an engine size 70 cc  
or greater.

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This *Operator's Guide* utilizes the following symbols to emphasize particular information:



The Safety Alert Symbol indicates a potential personal injury hazard.

## **WARNING**

Indicates a potentially hazardous situation which, if not avoided, could result in serious injury or death

**CAUTION:** Denotes an instruction which if not followed, may damage the ATV and/or components.

## **WARNING**

**YOUR ATV CAN BE HAZARDOUS TO OPERATE.** A collision or rollover can occur quickly, even during routine maneuvers such as turning and driving on hills or over obstacles, if you fail to take proper precautions.

For your safety, understand and follow all the warnings and instructions contained in the *Operator's Guide*, this *Safety Handbook* and the labels on your vehicle. **Failure to follow these warnings can result in SEVERE INJURY OR DEATH.**

Keep this *Operator's Guide* and this *Safety Handbook* with the vehicle at all times.

## **WARNING**

Children differ in skills, physical abilities and judgment. **Some children may not be able to operate an ATV safely.**

Parents should supervise their child's use of the ATV at all time.

Parents should permit continued use **ONLY** if they determine that their child has the abilities to operate the ATV safely.

Use of this ATV (category Y) by operators under age 16 shall be done only under adult supervision at all times.

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BOMBARDIER®

DS50™

DS90™

DS90™ 4-stroke

**BOMBARDIER**  
*RECREATIONAL PRODUCTS*



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# FOREWORD

Congratulations on your purchase of a new Bombardier category Y (Youth model) all-terrain vehicle (ATV). It is backed by the Bombardier warranty and a network of authorized Bombardier ATV dealers ready to provide the parts, service or accessories you may require.

Your dealer is committed to your satisfaction. He has taken training to perform the initial set-up and inspection of your vehicle as well as completed the final adjustment before you took possession. At delivery, your dealer would have explained the vehicle for the operation, maintenance and safety features. We trust you have taken full advantage of this! If you need more complete servicing information, please ask your dealer about the proper model-year *ATV Shop Manual*.

At delivery, you were also informed of the warranty coverage and completed the Warranty Registration Form which is to be sent to us for processing. In the near future you should be receiving a warranty card which will confirm our receipt of the registration as well as be used for warranty or recall purposes.

You are invited to contact our customer assistance center should you experience problems which cannot be resolved by an authorized Bombardier ATV dealer.

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

The information and components/system descriptions contained in this document 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. Due to late changes, some differences between the manufactured product and the descriptions and/or specifications in this guide may occur. Bombardier Inc. reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring any obligation upon itself.

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

The use of RIGHT and LEFT indications in the text, always refers to driving position (when sitting on vehicle).

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.

We recommend genuine Bombardier products for replacement parts and accessories. They've been especially designed for your vehicle and manufactured to meet Bombardier's demanding standards.

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

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# NOTICE

This *Operator's Guide* and *Safety Handbook* have been prepared to acquaint the owner/operator of a new vehicle and the supervising adult with the various vehicle controls, maintenance and safe operating instructions. They are indispensable for the proper use of the product.

This *Operator's Guide* uses the following symbols.

## WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in serious injury or death.

**CAUTION:** Denotes an instruction which, if not followed, could severely damage vehicle components.

**NOTE:** Indicates supplementary information needed to fully complete an instruction.

Although the mere reading of such information does not eliminate the hazard, the understanding and application of the information will promote the correct use of the all-terrain vehicle (ATV).

To fully appreciate the pleasures, enjoyment and excitement of using an ATV, there are some basic rules that **MUST** be observed and followed by any user.

This ATV is a youth model ATV. It is designed to provide the following speed.

- The DS50 provides a maximum restricted speed of 16 km/h (10 MPH).
- The DS90 provides a maximum restricted speed of 24 km/h (15 MPH).

## Notice to Parents

Review this *Operator's Guide* with any user of this ATV.

Please take time with the children to review the instructions on its safe and proper use, while paying attention to the on-product safety labeling before allowing them to ride the ATV.

Understand the controls and operation of the ATV, carefully read the *Operator's Guide*, pay attention to the on-product safety labeling and review them with the children before allowing them to ride the ATV.

A child under 6 years old should never operate the DS50 or an ATV with an engine size 50cc or greater.

A child under 12 years old should never operate the DS90 or an ATV with an engine size 70cc or greater.

Always remember that your approach to safety influences the child.

THE OPERATOR'S GUIDE SHOULD REMAIN WITH THE ATV AT ITS RESALE.

 **WARNING**

**An ATV is not a toy.**

Children differ in skills, physical abilities and judgment. Some children may not be able to operate an ATV safely.

Parents should supervise their child's use of the ATV at all times.

Parents should permit continued use **only** if they determine that the child has the ability to operate the ATV safely.

No one under 16 years old should operate an ATV without adult supervision at all times and never allow continued use of the ATV by a child if he or she does not have the abilities, the strength or the judgment to operate it safely.

Bombardier recommends that all ATV riders take a training course. For safety and training information, contact an authorized Bombardier ATV dealer or call the Specialty Vehicle Institute of America (SVIA) at 1 800 887-2887 or in Canada, the Canada Safety Council (CSC) at 1 (613) 739-1535 ext. 227.

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# SPECIAL SAFETY MESSAGES

## **AN ATV IS NOT A TOY AND CAN BE HAZARDOUS TO OPERATE.**

A collision or rollover can occur quickly, even during routine maneuvers such as turning and driving on hills or over obstacles, if you fail to take proper precautions.

**SEVERE INJURY OR DEATH** can result if you do not follow these instructions:

- ⚠ Read this *Operator's Guide*, the *Safety Handbook* and all labels carefully and follow the operating procedures described.
- ⚠ Never operate an ATV without proper instruction. Take a training course. Beginners should receive training from a certified instructor. Contact an authorized Bombardier ATV dealer to find out about the training courses nearest you or call the Specialty Vehicle Institute of America (SVIA) at 1 800 887-2887 or in Canada, the Canada Safety Council (CSC) at 1 (613) 739-1535 ext. 227.
- ⚠ Always follow this age recommendation:
  - A child under 6 years old should never operate an ATV with engine size 50 cc or greater.
  - A child under 12 years old should never operate an ATV with engine size 70 cc or greater.
- ⚠ Never allow a child under age 16 to operate a category "Y" ( youth model) ATV without adult supervision, and never allow continued use of an ATV by a child if he or she does not have the abilities to operate it safely.
- ⚠ Never carry a passenger on an ATV.
- ⚠ Never operate an ATV on any paved surfaces, including sidewalks, driveways, parking lots and streets.
- ⚠ Never operate an ATV on any public street, road or highway, even a dirt or gravel one.
- ⚠ Never operate an ATV without wearing an approved helmet that fits properly. You should also wear eye protection (goggles or face shield), gloves, boots, long sleeved shirt or jacket, and long pants.
- ⚠ Never consume alcohol or drugs before or while operating this ATV.
- ⚠ Never operate at excessive speeds. Always go at a speed that is proper for the terrain, visibility, and operating conditions, and your experience.
- ⚠ Never attempt wheelies, jumps, or other stunts.
- ⚠ Always inspect your ATV each time you use it to make sure it is in safe operating condition. Always follow the inspection and maintenance procedures and schedules described in this *Operator's Guide* and the *Safety Handbook*.
- ⚠ Always keep both hands on the handlebars and both feet on the footpegs of the ATV during operation.
- ⚠ Always go slowly and be extra careful when operating on unfamiliar terrain. Always be alert to changing terrain conditions when operating the ATV.
- ⚠ Never operate on excessively rough, slippery or loose terrain until you have learned and practiced the skills necessary to control the ATV on such terrain. Always be especially cautious on these kinds of terrain.
- ⚠ Always follow proper procedures for turning as described in this *Operator's Guide* and the *Safety Handbook*. Practice turning at low speeds before attempting to turn at faster speeds. Do not turn at excessive speed.



- ⚠ Never operate the ATV on hills too steep for the ATV or for your abilities. Practice on smaller hills before attempting larger hills.
- ⚠ Always follow proper procedures for climbing hills as described in this *Operator's Guide* and the *Safety Handbook*. Check the terrain carefully before you start up any hill. Never climb hills with excessively slippery or loose surfaces. Shift your weight forward. Never open the throttle suddenly or make sudden gear changes. Never go over the top of any hill at high speed.
- ⚠ Always follow proper procedures for going down hills and for braking on hills as described in this *Operator's Guide* and the *Safety Handbook*. Check the terrain carefully before you start down any hill. Shift your weight backward. Never go down a hill at high speed. Avoid going down a hill at an angle that would cause the vehicle to lean sharply to one side. Go straight down the hill where possible.
- ⚠ Always follow proper procedures for crossing the side of a hill as described in this *Operator's Guide* and the *Safety Handbook*. Avoid hills with excessively slippery or loose surfaces. Shift your weight to the uphill side of the ATV. Never attempt to turn the ATV around on any hill until you have mastered the turning technique described in this *Operator's Guide* and the *Safety Handbook* on level ground. Avoid crossing the side of a steep hill if possible.
- ⚠ Always use proper procedures if you stall or roll backwards when climbing a hill. To avoid stalling, use proper gear and maintain a steady speed when climbing a hill. If you stall or roll backwards, follow the special procedure for braking described in this *Operator's Guide* and the *Safety Handbook*. Dismount on the uphill side or to a side if pointed straight uphill. Turn the ATV around and remount, following the procedure described in this *Operator's Guide* and the *Safety Handbook*.
- ⚠ Always check for obstacles before operating in a new area. Never attempt to operate over large obstacles, such as large rocks or fallen trees. Always follow proper procedures when operating over obstacles as described in this *Operator's Guide* and the *Safety Handbook*.
- ⚠ Always be careful when skidding or sliding. Learn to safely control skidding or sliding by practicing at low speeds and on level, smooth terrain. On extremely slippery surfaces, such as ice, go slowly and be very cautious in order to reduce the chance of skidding out of control.
- ⚠ Never operate an ATV in fast flowing water or in water deeper than that specified in this *Operator's Guide* and the *Safety Handbook*. Remember that wet brakes may have reduced stopping ability. Test your brakes after leaving water. If necessary, apply them several times to let friction dry out the pads.

- ⚠ Always be sure there are no obstacles or people behind you when you operate in reverse. When it is safe to proceed in reverse, go slowly.
- ⚠ Always use the size and type tires specified in this *Operator's Guide*. Always maintain proper tire pressure as described in this guide.
- ⚠ Never modify an ATV through improper installation or use of accessories.
- ⚠ Never load the ATV or carry or tow cargo. This ATV is not designed to pull any object.
- ⚠ **FOR MORE INFORMATION ABOUT ATV SAFETY**, call the Specialty Vehicle Institute of America (SVIA) at 1 800 887-2887 or in Canada, the Canada Safety Council (CSC) at 1 (613) 739-1535 ext. 227 or contact an authorized Bombardier ATV dealer to find out about the training courses nearest you.

# OPERATION WARNINGS

While reading this *Operator's Guide*, remember that:

## WARNING

Indicates a potential hazard that, if not avoided, could result in serious injury or death.

The following warnings and their format have been requested by the United States Consumer Product Safety Commission and are required to be in this *Operator's Guide* and *Safety Handbook* for all ATV's.

**NOTE:** The following illustrations are general representations only. Your model may differ.

## WARNING



V00A0AQ

### **POTENTIAL HAZARD**

Operating this ATV without proper instruction.

### **WHAT CAN HAPPEN**

The risk of an accident is greatly increased if the operator does not know how to operate the ATV properly in different situations and on different types of terrain.

### **HOW TO AVOID THE HAZARD**

Beginning and inexperienced operators should complete the certified training course offered by Bombardier Inc. They should then regularly practice the skills learned in the course and the operating techniques described in this *Operator's Guide* and the *Safety Handbook*.

For more information about the training course, contact an authorized ATV dealer or call Bombardier Inc. at 1 (819) 566-3366.

**⚠ WARNING**



V00A19Q

**POTENTIAL HAZARD**

Failure to follow the age recommendations for this ATV.

**WHAT CAN HAPPEN**

Use by children of ATVs that are not recommended for their age can lead to severe injury or death of the child.

Even though a child may be within the age group for which an ATV is recommended, he or she may not have the skills, abilities, or judgment needed to operate the ATV safely and may be involved in a serious accident.

**HOW TO AVOID THE HAZARD**

A child under 6 years old should never operate an ATV.

The DS50 model is designed for children 6 years old and above. The DS90 model is designed for children 12 years old and above.

No one under 16 years old should operate a category "Y" (youth model) ATV without adult supervision.

Adults should never allow continued use of the ATV by a child if he or she does not have the abilities to operate it safely.

**⚠ WARNING**



V00A02Q

**POTENTIAL HAZARD**

Carrying a passenger on this ATV.

**WHAT CAN HAPPEN**

Greatly reduces your ability to balance and control this ATV.

Could cause an accident, resulting in harm to you and/or your passenger.

**HOW TO AVOID THE HAZARD**

Never carry a passenger. The long seat is to allow the operator to shift position as needed during operation. It is not for carrying passengers.

## **WARNING**



V00A03Q

### **POTENTIAL HAZARD**

Operating this ATV on paved surfaces.

### **WHAT CAN HAPPEN**

The ATV's tires are designed for off-road use only, not for use on pavement. Paved surfaces may seriously affect handling and control of the ATV, and may cause the vehicle to go out of control.

### **HOW TO AVOID THE HAZARD**

Never operate the ATV on any paved surfaces, including sidewalks, driveways, parking lots and streets.

**⚠ WARNING**



V00A04Q

**POTENTIAL HAZARD**

Operating this ATV on public streets, roads or highways.

**WHAT CAN HAPPEN**

You can collide with another vehicle.

**HOW TO AVOID THE HAZARD**

Never operate this ATV on any public street, road or highway, even a dirt or gravel one. In many states it is illegal to operate ATVs on public streets, roads and highways.

## **WARNING**



V00A06Q

### **POTENTIAL HAZARD**

Operating this ATV without wearing an approved motorcycle helmet, eye protection and protective clothing.

### **WHAT CAN HAPPEN**

Operating without an approved motorcycle helmet increases your chances of a severe head injury or death in the event of an accident.

Operating without eye protection can result in an accident and increases your chances of a severe injury in the event of an accident.

Operating without protective clothing increases your chances of severe injury in the event of an accident.

### **HOW TO AVOID THE HAZARD**

Always wear an approved motorcycle helmet that fits properly. You should also wear:

- eye protection (goggles or face shield)
- gloves
- boots
- long sleeved shirt or jacket
- long pants.



## WARNING



V00A07Q

### **POTENTIAL HAZARD**

Operating this ATV after consuming alcohol or drugs.

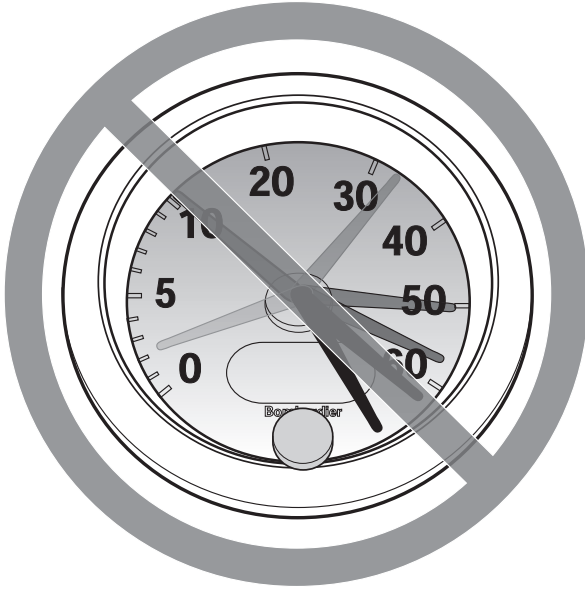
### **WHAT CAN HAPPEN**

- Could seriously affect your judgment.
- Could cause you to react more slowly.
- Could affect your balance and perception.
- Could result in an accident.

### **HOW TO AVOID THE HAZARD**

Never consume alcohol or drugs before or while driving this ATV.

## WARNING



V00A08Q

### **POTENTIAL HAZARD**

Operating this ATV at excessive speeds.

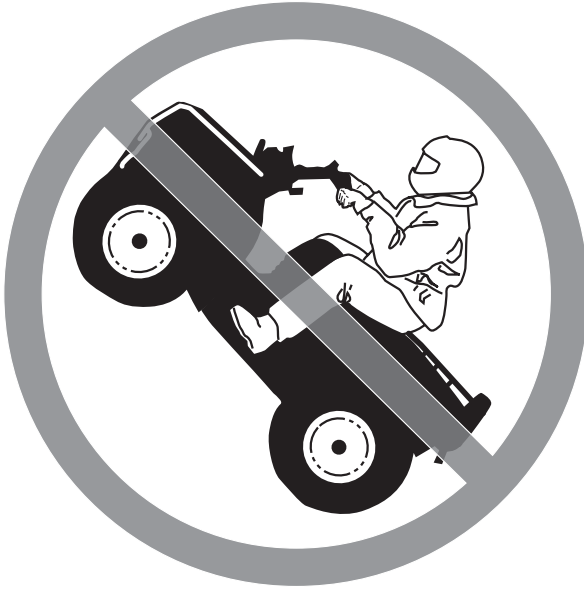
### **WHAT CAN HAPPEN**

Increases your chances of losing control of the ATV, which can result in an accident.

### **HOW TO AVOID THE HAZARD**

Always travel at a speed which is proper for the terrain, visibility and operating conditions, and your experience.

**⚠ WARNING**



V00A09Q

**POTENTIAL HAZARD**

Attempting wheelies, jumps and other stunts.

**WHAT CAN HAPPEN**

Increases the chance of an accident, including an overturn.

**HOW TO AVOID THE HAZARD**

Never attempt stunts, such as wheelies or jumps. Don't try to show off.

## **WARNING**

### **POTENTIAL HAZARD**

Failure to inspect the ATV before operating.  
Failure to properly maintain the ATV.

### **WHAT CAN HAPPEN**

Increases the possibility of an accident or equipment damage.

### **HOW TO AVOID THE HAZARD**

Always inspect your ATV each time you use it to make sure the ATV is in safe operating condition.

Always follow the inspection and maintenance procedures and schedules described in this *Operator's Guide* and the *Safety Handbook*.

**⚠ WARNING**



V00A0BQ

**POTENTIAL HAZARD**

Removing hands from handlebars or feet from footpegs during operation.

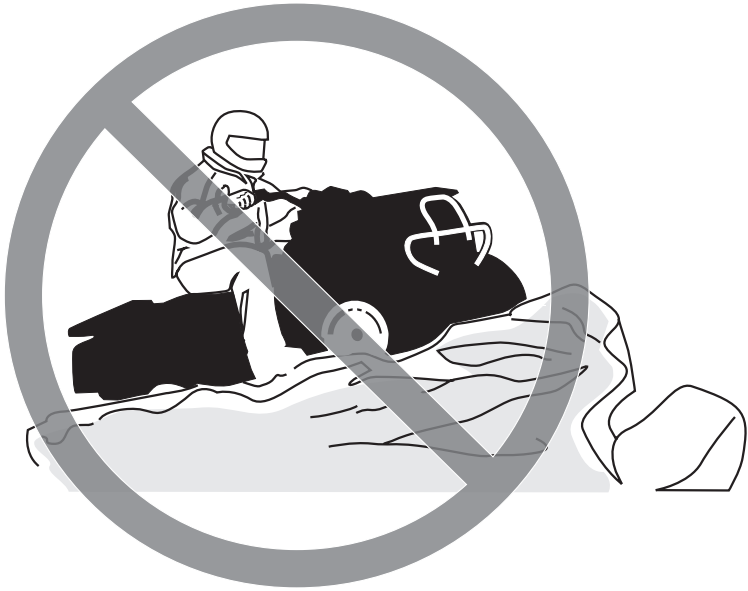
**WHAT CAN HAPPEN**

Removing even one hand or foot can reduce your ability to control the ATV or could cause you to lose your balance and fall off the ATV. If you remove a foot from the footpegs, your foot or leg may come into contact with the rear wheels, which could injure you or cause an accident.

**HOW TO AVOID THE HAZARD**

Always keep both hands on the handlebars and both feet on the footpegs of your ATV during operation.

## WARNING



V00A0CQ

### **POTENTIAL HAZARD**

Failure to use extra care when operating this ATV on unfamiliar terrain.

### **WHAT CAN HAPPEN**

You can come upon hidden rocks, bumps, or holes, without enough time to react.

Could result in the ATV overturning or going out of control.

### **HOW TO AVOID THE HAZARD**

Go slowly and be extra careful when operating on unfamiliar terrain.

Always be alert to changing terrain conditions when operating the ATV.

## WARNING



V00A0DQ

### **POTENTIAL HAZARD**

Failure to use extra care when operating on excessively rough, slippery or loose terrain.

### **WHAT CAN HAPPEN**

Could cause loss of traction or vehicle control, which could result in an accident, including an overturn.

### **HOW TO AVOID THE HAZARD**

Do not operate on excessively rough, slippery or loose terrain until you have learned and practiced the skills necessary to control the ATV on such terrain.

Always be especially cautious on these kinds of terrain.

**⚠ WARNING**



V00A0EQ

**POTENTIAL HAZARD**

Turning improperly.

**WHAT CAN HAPPEN**

ATV could go out of control, causing a collision or overturn.

**HOW TO AVOID THE HAZARD**

Always follow proper procedures for turning as described in this *Operator's Guide* and the *Safety Handbook*. Practice turning at low speeds before attempting to turn at faster speeds.

Do not turn at excessive speed.



**⚠ WARNING**



V00A00Q

**POTENTIAL HAZARD**

Operating on excessively steep hills.

**WHAT CAN HAPPEN**

The vehicle can overturn more easily on extremely steep hills than on level surfaces or small hills.

**HOW TO AVOID THE HAZARD**

Never operate the ATV on hills too steep for the ATV or for your abilities. Practice on smaller hills before attempting larger hills.

**⚠ WARNING**



V00A0FQ

**POTENTIAL HAZARD**

Climbing hills improperly.

**WHAT CAN HAPPEN**

Could cause loss of control or cause ATV to overturn.

**HOW TO AVOID THE HAZARD**

Always follow proper procedures for climbing hills as described in this *Operator's Guide* and the *Safety Handbook*.

Always check the terrain carefully before you start up any hill.

Never climb hills with excessively slippery or loose surfaces.

Shift your weight forward.

Never open the throttle suddenly or make sudden gear changes. The ATV could flip over backwards.

Never go over the top of any hill at high speed. An obstacle, a sharp drop, or another vehicle or person could be on the other side of the hill.

**⚠ WARNING**



V00A0GG

**POTENTIAL HAZARD**

Going down a hill improperly.

**WHAT CAN HAPPEN**

Could cause loss of control or cause ATV to overturn.

**HOW TO AVOID THE HAZARD**

Always follow proper procedures for going down hills as described in this *Operator's Guide* and the *Safety Handbook*.

**NOTE:** A special technique is required when braking as you go down a hill. Always check the terrain carefully before you start down any hill.

Shift your weight backward.

Never go down a hill at high speed.

Avoid going down a hill at an angle which would cause the vehicle to lean sharply to one side. Go straight down the hill where possible.

## WARNING



V00A0HQ

### **POTENTIAL HAZARD**

Improperly crossing hills or turning on hills.

### **WHAT CAN HAPPEN**

Could cause loss of control or cause ATV to overturn.

### **HOW TO AVOID THE HAZARD**

Never attempt to turn the ATV around on any hill until you have mastered the turning technique as described in this *Operator's Guide* and the *Safety Handbook* on level ground. Be very careful when turning on any hill.

Avoid crossing the side of a steep hill if possible.

#### **When crossing the side of a hill:**

Always follow proper procedures as described in this *Operator's Guide* and the *Safety Handbook*.

Avoid hills with excessively slippery or loose surfaces.

Shift your weight to the uphill side of the ATV.

## **WARNING**



V00A01Q

### **POTENTIAL HAZARD**

Stalling, rolling backwards or improperly dismounting while climbing a hill.

### **WHAT CAN HAPPEN**

Could result in ATV overturning.

### **HOW TO AVOID THE HAZARD**

Use proper gear and maintain steady speed when climbing a hill.

#### **If you lose all forward speed:**

Keep weight uphill.

Apply the brakes.

Lock parking brake after you are stopped.

#### **If you begin rolling backwards:**

Keep weight uphill.

Never apply the rear brake while rolling backwards.

Apply the front brake gradually.

When fully stopped, apply rear brake as well and lock parking brake.

Dismount on uphill side, or to a side if pointed straight uphill.

Turn the ATV around and remount, following the procedure described in this *Operator's Guide* and the *Safety Handbook*.

## WARNING



V00A0JQ

### **POTENTIAL HAZARD**

Improperly operating over obstacles.

### **WHAT CAN HAPPEN**

Could cause loss of control or a collision. Could cause the ATV to overturn.

### **HOW TO AVOID THE HAZARD**

Before operating in a new area, check for obstacles.

Never attempt to ride over large obstacles, such as large rocks or fallen trees.

When you go over obstacles, always follow proper procedures as described in this *Operator's Guide* and the *Safety Handbook*.

**⚠ WARNING**



V00A0KQ

**POTENTIAL HAZARD**

Skidding or sliding improperly.

**WHAT CAN HAPPEN**

You may lose control of this ATV.

You may also regain traction unexpectedly, which may cause the ATV to overturn.

**HOW TO AVOID THE HAZARD**

Learn to safely control skidding or sliding by practicing at low speeds and on level, smooth terrain.

On extremely slippery surfaces, such as ice, go slowly and be very cautious in order to reduce the chance of skidding or sliding out of control.

## WARNING



V00A0LQ

### **POTENTIAL HAZARD**

Operating this ATV through deep or fast flowing water.

### **WHAT CAN HAPPEN**

Tires may float, causing loss of traction and loss of control, which could lead to an accident.

### **HOW TO AVOID THE HAZARD**

Never operate this ATV in fast flowing water or in water deeper than that specified in this *Operator's Guide* and the *Safety Handbook*.

Check water depth and current before you attempt to cross any water. Water should not go above footrests.

Check water depth and current before you attempt. Remember that wet brakes may have reduced stopping ability. Test your brakes after leaving water. If necessary, apply them several times to let friction dry out the pads.



**⚠ WARNING**



V00A0MQ

**POTENTIAL HAZARD**

Improperly operating in reverse.

**WHAT CAN HAPPEN**

You could hit an obstacle or person behind you, resulting in serious injury.

**HOW TO AVOID THE HAZARD**

When you select reverse gear, make sure there are no obstacles or people behind you. When it is safe to proceed, go slowly.

**⚠ WARNING**



V00A00Q

**POTENTIAL HAZARD**

Operating this ATV with improper tires, or with improper or uneven tire pressure.

**WHAT CAN HAPPEN**

Use of improper tires on this ATV, or operation of this ATV with improper or uneven tire pressure, may cause loss of control, and increases the risk of an accident.

**HOW TO AVOID THE HAZARD**

Always use the size and type, tires specified in this *Operator's Guide* for this vehicle.

Always maintain proper tire pressure as described in this *Operator's Guide* and the *Safety Handbook*.



V00A0NQ

### **POTENTIAL HAZARD**

Operating this ATV with improper modifications.

### **WHAT CAN HAPPEN**

Improper installation of accessories or modification of this vehicle may cause changes in handling which in some situations could lead to an accident.

### **HOW TO AVOID THE HAZARD**

Never modify this ATV through improper installation or use of accessories. All parts and accessories added to this vehicle should be genuine Bombardier or equivalent components designed for use on this ATV and should be installed and used according to instructions. If you have questions, consult an authorized Bombardier ATV dealer.

**⚠ WARNING**



V00A0PQ

**POTENTIAL HAZARD**

Overloading this ATV or carrying or towing cargo improperly.

**WHAT CAN HAPPEN**

Could cause changes in vehicle handling which could lead to an accident.

**HOW TO AVOID THE HAZARD**

Never load cargo on this ATV or tow cargo.

 **WARNING**



V03M01Q

**POTENTIAL HAZARD**

Transporting inflammable or dangerous material can lead to explosions.

**WHAT CAN HAPPEN**

This can cause serious injury or death.

**HOW TO AVOID THE HAZARD**

Never transport inflammable or dangerous material.

While reading this *Operator's Guide*, remember that:

 **WARNING**

Indicates a potential hazard that, if not avoided, could result in serious injury or death.

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# **BOMBARDIER LIMITED WARRANTY NORTH AMERICA: 2002 BOMBARDIER® ATV**

## **1. SCOPE OF THE LIMITED WARRANTY**

BOMBARDIER INC. (hereinafter "BOMBARDIER"), and in the USA, Bombardier on behalf of BOMBARDIER MOTOR CORPORATION OF AMERICA (BMCA) warrants its 2002 Bombardier ATV from defects in material or workmanship for the period described below.

All genuine BOMBARDIER parts and accessories, installed by an authorized BOMBARDIER dealer (as hereinafter defined) at the time of delivery of the 2002 Bombardier ATV, carry the same warranty as that of the ATV.

Use of the product for racing or any other competitive activity, at any point, even by a previous owner, will render this warranty null and void.

## **2. WARRANTY COVERAGE PERIOD**

This warranty will be in effect FROM THE DATE OF DELIVERY TO THE FIRST RETAIL CONSUMER or the date the product is first put into use, whichever occurs first and for a period of:

SIX (6) CONSECUTIVE MONTHS, for private use or commercial owners.

The repair or replacement of parts or the performance of service under this warranty does not extend the life of this warranty beyond its original expiration date.

## **3. CONDITIONS TO HAVE WARRANTY COVERAGE**

This warranty coverage is available only on 2002 Bombardier ATV purchased as new and unused by its first owner from a BOMBARDIER dealer authorized to distribute Bombardier ATV products in the country in which the sale occurred (hereinafter "**BOMBARDIER dealer**"), and then only after the BOMBARDIER specified pre-delivery inspection process is completed and documented. Warranty coverage only becomes available upon proper registration of the product by an authorized BOMBARDIER dealer. Such limitations are necessary in order to allow BOMBARDIER to preserve both the safety of its products, and also that of its consumers and the public.

Routine maintenance outlined in the *Operator's Guide* must be timely performed in order to maintain warranty coverage. BOMBARDIER reserves the right to make warranty coverage contingent upon proof of proper maintenance.

## **4. WHAT TO DO TO OBTAIN WARRANTY COVERAGE**

The customer must notify a servicing BOMBARDIER dealer within two (2) days of the appearance of a defect, and provide it with reasonable access to the product and reasonable opportunity to repair it. The customer must also present to the authorized BOMBARDIER dealer, proof of purchase of the product and must sign the repair/work order prior to starting the repair in order to validate the warranty repair. All parts replaced under this limited warranty become the property of BOMBARDIER.

## **5. WHAT BOMBARDIER WILL DO**

BOMBARDIER's obligations under this warranty are limited to, at its sole discretion, repairing parts found defective under normal use, maintenance and service, or replacing such parts with new genuine BOMBARDIER parts without charge for parts and labor, at any authorized BOMBARDIER dealer.

BOMBARDIER reserves the right to improve or modify products from time to time without assuming any obligation to modify products previously manufactured.

## **6. EXCLUSIONS - ARE NOT WARRANTED**

- Normal wear and tear;
- Routine maintenance items, tune ups, adjustments;
- Damage caused by failure to provide proper maintenance and/or storage, as described in the *Operator's Guide*;
- Damage resulting from removal of parts, improper repairs, service, maintenance, modifications or use of parts not manufactured or approved by BOMBARDIER or resulting from repairs done by a person that is not an authorized servicing BOMBARDIER dealer;
- Damage caused by abuse, abnormal use, neglect or operation of the product in a manner inconsistent with the recommended operation described in the *Operator's Guide*;
- Damage resulting from accident, submersion, fire, theft, vandalism or any act of God;
- Operation with fuels, oils or lubricants which are not suitable for use with the product (see the *Operator's Guide*);
- Water or snow ingestion;
- Incidental or consequential damages, or damages of any kind including without limitation towing, storage, telephone, rental, taxi, inconvenience, insurance coverage, loan payments, loss of time, loss of income.

## **7. LIMITATIONS OF LIABILITY**

**THIS WARRANTY IS EXPRESSLY GIVEN AND ACCEPTED IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT THAT THEY CANNOT BE DISCLAIMED, THE IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE LIFE OF THE EXPRESS WARRANTY. INCIDENTAL AND CONSEQUENTIAL DAMAGES ARE EXCLUDED FROM COVERAGE UNDER THIS WARRANTY. SOME STATES/PROVINCES DO NOT ALLOW FOR THE DISCLAIMERS, LIMITATIONS AND EXCLUSIONS IDENTIFIED ABOVE, AS A RESULT, THEY MAY NOT APPLY TO YOU. 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.**

Neither the distributor, any BOMBARDIER dealer nor any other person has been authorized to make any affirmation, representation or warranty regarding the product, other than those contained in this limited warranty, and if made, shall not be enforceable against BOMBARDIER.

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

## **8. TRANSFER**

If the ownership of a product is transferred during the warranty coverage period, this warranty shall also be transferred and be valid for the remaining coverage period provided that BOMBARDIER is notified of such transfer of ownership in the following way:

- a) The former owner contacts BOMBARDIER (at the phone number provided below) or an authorized BOMBARDIER dealer and gives the coordinates of the new owner; or
- b) BOMBARDIER or an authorized BOMBARDIER dealer receives a proof that the former owner agreed to the transfer of ownership, in addition to the coordinates of the new owner.

## **9. CONSUMER ASSISTANCE**

- a) In the event of a controversy or a dispute in connection with this BOMBARDIER LIMITED WARRANTY, BOMBARDIER suggests that you try to resolve the issue at the dealership level. We recommend discussing the issue with the authorized dealer's service manager or owner.
- b) If the issue has not yet been resolved, please submit your complaint in writing or call the appropriate number below:

**BOMBARDIER INC.**  
**RECREATIONAL PRODUCTS**  
BOMBARDIER ATV  
CUSTOMER ASSISTANCE CENTER  
VALCOURT, QUEBEC  
JOE 2LO  
Tel: (819) 566-3366

**BOMBARDIER MOTOR**  
**CORPORATION OF AMERICA**  
RECREATIONAL PRODUCTS  
BOMBARDIER ATV  
CUSTOMER ASSISTANCE CENTER  
7575 BOMBARDIER COURT  
WAUSAU WI 54401  
Tel: (715) 848-4957  
Fax: (715) 847-6879



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# **BOMBARDIER LIMITED WARRANTY INTERNATIONAL: 2002 BOMBARDIER® ATV**

## **1. SCOPE OF THE LIMITED WARRANTY**

BOMBARDIER INC. (hereinafter "BOMBARDIER") warrants its 2002 BOMBARDIER ATV from defects in material or workmanship for the period described below.

All genuine BOMBARDIER parts and accessories, installed by an authorized BOMBARDIER distributor/dealer (as hereinafter defined) at the time of delivery of the 2002 BOMBARDIER ATV, carry the same warranty as that of the ATV.

Use of the product for racing or any other competitive activity, at any point, even by a previous owner will render this warranty null and void.

## **2. WARRANTY COVERAGE PERIOD**

This warranty will be in effect FROM THE DATE OF DELIVERY TO THE FIRST RETAIL CONSUMER or the date the product is first put into use, whichever occurs first and for a period of:

SIX (6) CONSECUTIVE MONTHS for private use or commercial owners.

The repair or replacement of parts or the performance of service under this warranty does not extend the life of this warranty beyond its original expiration date.

## **3. CONDITIONS TO HAVE WARRANTY COVERAGE**

This warranty coverage is available only on 2002 BOMBARDIER ATV purchased as new and unused by its first owner from a BOMBARDIER distributor/dealer authorized to distribute BOMBARDIER ATV products in the country in which the sale occurred (hereinafter "BOMBARDIER distributor/dealer"), and then only after the BOMBARDIER specified pre-delivery inspection process is completed and documented. Warranty coverage only becomes available upon proper registration of the product by an authorized BOMBARDIER distributor/dealer. Such limitations are necessary in order to allow BOMBARDIER to preserve both the safety of its products, and also that of its consumers and the public.

Routine maintenance outlined in the *Operator's Guide* must be timely performed in order to maintain warranty coverage. BOMBARDIER reserves the right to make warranty coverage contingent upon proof of proper maintenance.

## **4. WHAT TO DO TO OBTAIN WARRANTY COVERAGE**

The customer must notify a servicing BOMBARDIER distributor/dealer within two (2) days of the appearance of a defect, and provide it with reasonable access to the product and reasonable opportunity to repair it. The customer must also present to the authorized BOMBARDIER distributor/dealer, proof of purchase of the product and must sign the repair/work order prior to starting the repair in order to validate the warranty repair. All parts replaced under this limited warranty become the property of BOMBARDIER.

## **5. WHAT BOMBARDIER WILL DO**

BOMBARDIER's obligations under this warranty are limited to, at its sole discretion, repairing parts found defective under normal use, maintenance and service, or replacing such parts with new genuine BOMBARDIER parts without charge for parts and labor, at any authorized BOMBARDIER distributor/dealer.

BOMBARDIER reserves the right to improve or modify products from time to time without assuming any obligation to modify products previously manufactured.

## **6. EXCLUSIONS - ARE NOT WARRANTED**

- Normal wear and tear;
- Routine maintenance items, tune ups, adjustments;
- Damage caused by failure to provide proper maintenance and/or storage, as described in the *Operator's Guide*;
- Damage resulting from removal of parts, improper repairs, service, maintenance, modifications or use of parts not manufactured or approved by BOMBARDIER or resulting from repairs done by a person that is not an authorized servicing BOMBARDIER distributor/dealer;
- Damage caused by abuse, abnormal use, neglect or operation of the product in a manner inconsistent with the recommended operation described in the *Operator's Guide*;
- Damage resulting from accident, submersion, fire, theft, vandalism or any act of God;
- Operation with fuels, oils or lubricants which are not suitable for use with the product (see the *Operator's Guide*);
- Water or snow ingestion;
- Incidental or consequential damages, or damages of any kind including without limitation towing, storage, telephone, rental, taxi, inconvenience, insurance coverage, loan payments, loss of time, loss of income.

## **7. LIMITATIONS OF LIABILITY**

**THIS WARRANTY IS EXPRESSLY GIVEN AND ACCEPTED IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT THAT THEY CANNOT BE DISCLAIMED, THE IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE LIFE OF THE EXPRESS WARRANTY. INCIDENTAL AND CONSEQUENTIAL DAMAGES ARE EXCLUDED FROM COVERAGE UNDER THIS WARRANTY. SOME STATES/ PROVINCES DO NOT ALLOW FOR THE DISCLAIMERS, LIMITATIONS AND EXCLUSIONS IDENTIFIED ABOVE, AS A RESULT, THEY MAY NOT APPLY TO YOU. 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.**

Neither the distributor, any BOMBARDIER dealer nor any other person has been authorized to make any affirmation, representation or warranty regarding the product, other than those contained in this limited warranty, and if made, shall not be enforceable against BOMBARDIER.

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

## **8. TRANSFER**

If the ownership of a product is transferred during the warranty coverage period, this warranty shall also be transferred and be valid for the remaining coverage period provided that BOMBARDIER is notified of such transfer of ownership in the following way:

- a) The former owner contacts BOMBARDIER or an authorized BOMBARDIER distributor/dealer and gives the coordinates of the new owner; or
- b) BOMBARDIER or an authorized BOMBARDIER distributor/dealer receives a proof that the former owner agreed to the transfer of ownership, in addition to the coordinates of the new owner.

## **9. CONSUMER ASSISTANCE**

- a) In the event of a controversy or a dispute in connection with this BOMBARDIER LIMITED WARRANTY, BOMBARDIER suggests that you try to resolve the issue at the distributorship/dealership level. We recommend discussing the issue with the authorized 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.

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## FREQUENTLY ASKED QUESTIONS

- Q: Why must my vehicle be registered with the factory? After all, I do have my original invoice as proof of when I purchased my vehicle.
- A: *Registration is very important and an authorized Bombardier ATV dealer must register your vehicle with Bombardier Inc. Make sure the registration card has been sent. All of this will allow you to:*
- a) Have warranty work performed at any authorized Bombardier ATV dealer in North America. Your registration card will provide the dealer with all the necessary data to complete warranty claim forms.*
  - b) Be advised by Bombardier Inc. should there be a safety recall or a particular warranty campaign.*
  - c) Be contacted much faster by the police, in the event that they find your vehicle subsequent to a theft.*
- Q: Why must my vehicle be registered with the governing body having jurisdiction over vehicle use?
- A: *Vehicle registration has two purposes: In many provinces or States, it is mandatory to register a vehicle in the same way as for a car. It allows the State or province to maintain records of existing vehicles. In some jurisdictions, governmental agencies use part of the registration fees for establishing and maintaining trails.*
- Q: Where can I find information on the lubrication and maintenance of my vehicle?
- A: *In the Operator's Guide provided with the vehicle at the time of delivery.*
- Q: Will the entire warranty be voided or cancelled, if I do not operate or maintain my new vehicle exactly as specified in the *Operator's Guide*?
- A: *The warranty of the new vehicle cannot be "Voided" or "Cancelled" if predelivered by an authorized Bombardier ATV dealer. However, if a particular failure is caused by operation or maintenance other than what is shown in the Operator's Guide, THAT failure may not be covered under warranty. This includes service work performed by the customer, oil and filter change and especially the critical adjustments such as the carburetor.*
- Q: Would you give some examples of abnormal use or strain, neglect or abuse which may affect the limited warranty coverage?
- A: *These terms are general and overlap each other in some cases. Some specific examples may include: running the engine out of oil, operating the vehicle 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 an authorized Bombardier ATV dealer for advice.*
- 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, accidents and collision damage, as well as oils, and spark plugs, and incidental or consequential damages costs as explained in the warranty.*

Q: Are "Genuine" Bombardier replacement parts used in warranty repairs also covered by the limited warranty coverage?

A: *Yes. When installed by an authorized Bombardier ATV dealer, any "Genuine" Bombardier part used in warranty repairs assumes the remaining warranty that exists on the vehicle.*

Q: If I sell my vehicle within the warranty period, will the new owner qualify for the balance of the limited warranty coverage?

A: *Yes, provided the re-sale has been registered with the manufacturer.*

Q: How can I receive the best owner assistance?

A: *The satisfaction, safety and goodwill of the owners of Bombardier products are of primary concern to your ATV dealer and Bombardier Inc. Normally, any problems that arise in connection with the sales transaction or the operation of your vehicle will be handled by your Dealer's Sales or Service Departments. It is recognized, however, that despite the best intentions of everyone concerned, misunderstandings will sometimes occur. Frequently, complaints are the result of a breakdown in communications and can quickly be resolved by a member of the dealership management. If the problem already has been reviewed with the Sales Manager or Service Manager, contact the Dealer Principal himself or the General Manager.*

**We are always pleased to receive your comments on the Bombardier ATV.**

# LOCATION OF THE IMPORTANT LABELS


The following labels are on your ATV. If missing or damaged, they can be replaced free of charge. See an authorized Bombardier ATV dealer.



## Label 1

**⚠ WARNING**

Improper ATV use can result in SEVERE INJURY or DEATH.



ALWAYS USE AN APPROVED HELMET AND PROTECTIVE GEAR.

NEVER USE ON PUBLIC ROADS.

NEVER CARRY PASSENGERS.

NEVER USE WITH DRUGS OR ALCOHOL.

**NEVER** operate:

- without proper training or instructions.
- at speeds too fast for your skills or the conditions.
- on public roads - a collision can occur with another vehicle.
- with a passenger - passengers affect balance and steering and increase risk of losing control.

**ALWAYS:**

- use proper riding techniques to avoid vehicle overturns on hills and rough terrain and in turns.
- avoid paved surfaces - pavement may seriously affect handling and control.

LOCATE AND READ OPERATOR'S GUIDE.  
FOLLOW ALL INSTRUCTIONS & WARNINGS.

XXX XXX XXX

V01M01Z

## Label 2

**⚠ WARNING**




**NEVER** ride as a passenger. Passengers can cause a loss of control, resulting in SEVERE INJURY or DEATH.

704 900 005

V01M07Z

## Label 3

**⚠ WARNING**




Operating this ATV if you are under the age of 6 increases your chance of SEVERE INJURY or DEATH.

**NEVER** operate this ATV if you are under age 6.

V05M02Y 704 900

## DS50

**⚠ WARNING**



Operating this ATV if you are under the age of 12 increases your chance of SEVERE INJURY or DEATH.

**NEVER** operate this ATV if you are under age 12.

V05M03Y 704 900

## DS90 and DS90 4-Stroke

### Label 4

**⚠ WARNING**

Improper tire pressure or overloading can cause loss of control.

Loss of control can result in SEVERE INJURY or DEATH.

**TIRE PRESSURE**

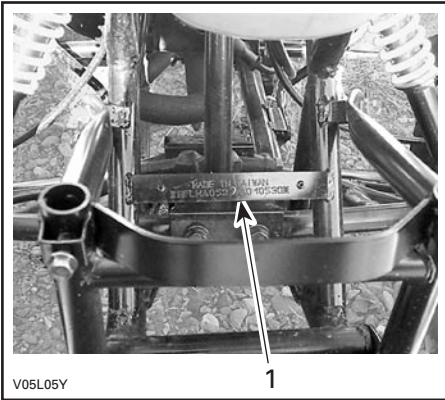
- Set with tires cold: DS 50
  - Recommended: FRONT: 55.0 kPa, 8.0 psi.  
REAR: 55.0 kPa, 8.0 psi.
  - Minimum FRONT: 41.0 kPa, 6.0 psi.  
REAR: 41.0 kPa, 6.0 psi.
- Never set tire pressure below minimum. It could cause the tire to dislodge from the rim.
- Maximum Vehicle Load: 150 lbs. ( 70 kg).  
Includes weight of operator and accessories.

V05M04Y 704 900 XXX

# HOW TO IDENTIFY YOUR ATV

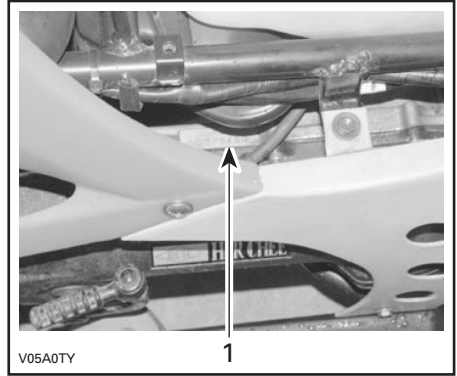
The main components of your vehicle (engine and frame) are identified by different serial numbers. It may sometimes become necessary to locate these numbers for warranty purposes or to trace your vehicle in the event of loss. These numbers are required by the authorized Bombardier ATV dealer to complete warranty claims properly. No warranty will be allowed by Bombardier Inc. if the engine identification number (EIN) or vehicle identification number (VIN) is removed or mutilated in any way. We strongly recommend that you take note of all the serial numbers on your vehicle and supply them to your insurance company.

## Vehicle Identification Number Location



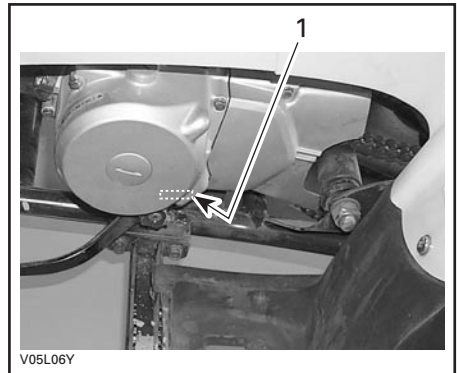
1. V.I.N.

## Engine Identification Number Location



2-STROKE MODELS

1. E.I.N.



4-STROKE MODELS

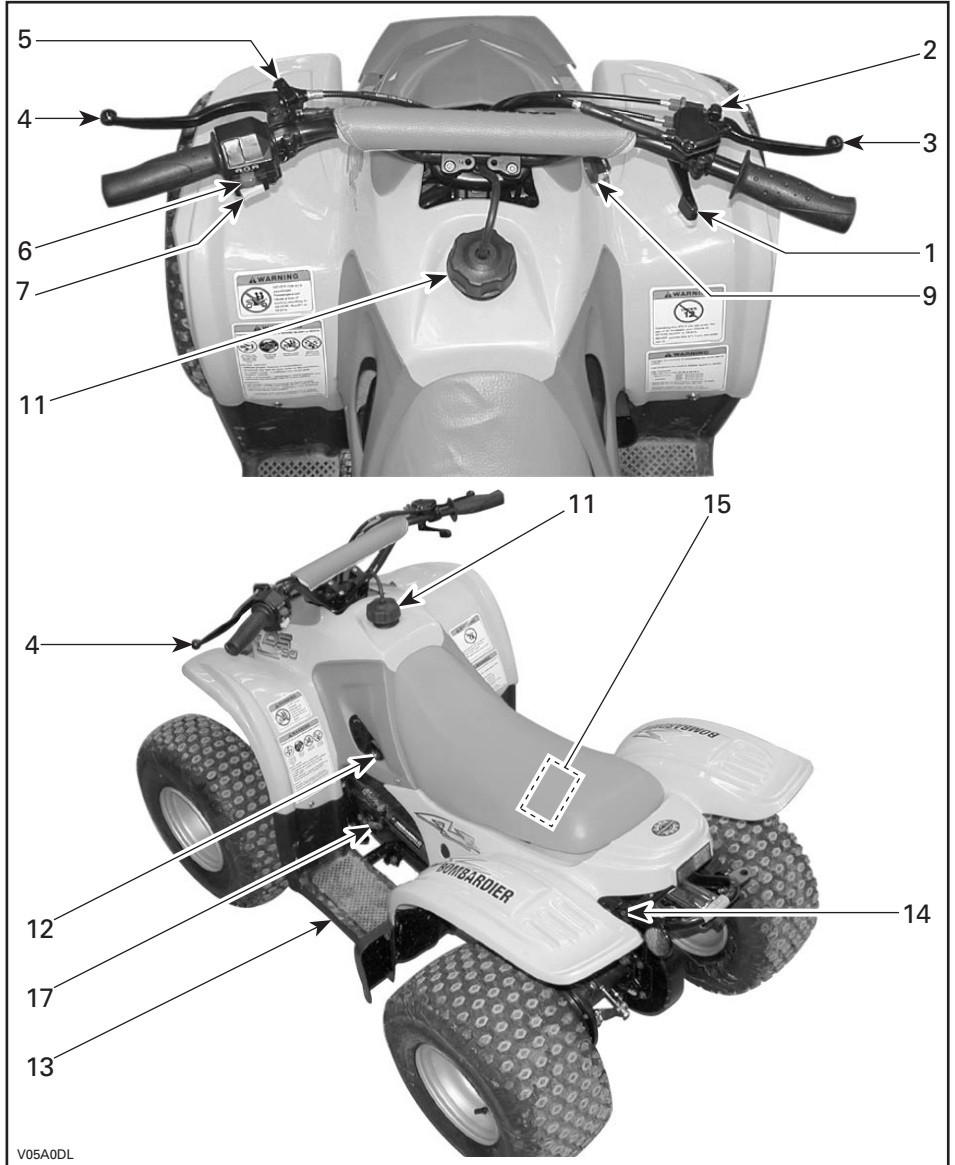
1. E.I.N.



# CONTROLS/INSTRUMENTS/EQUIPMENTS

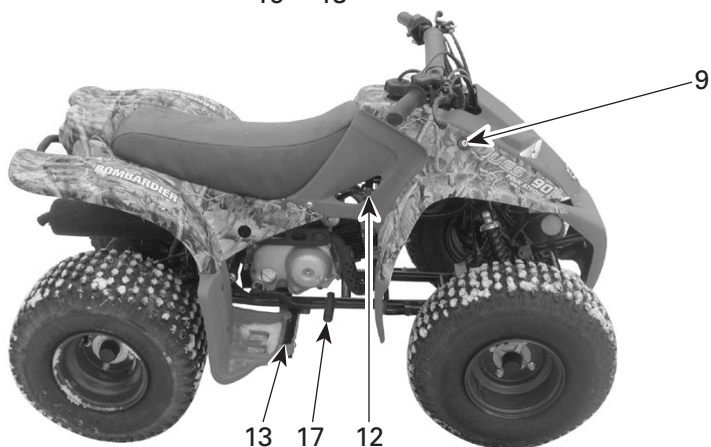
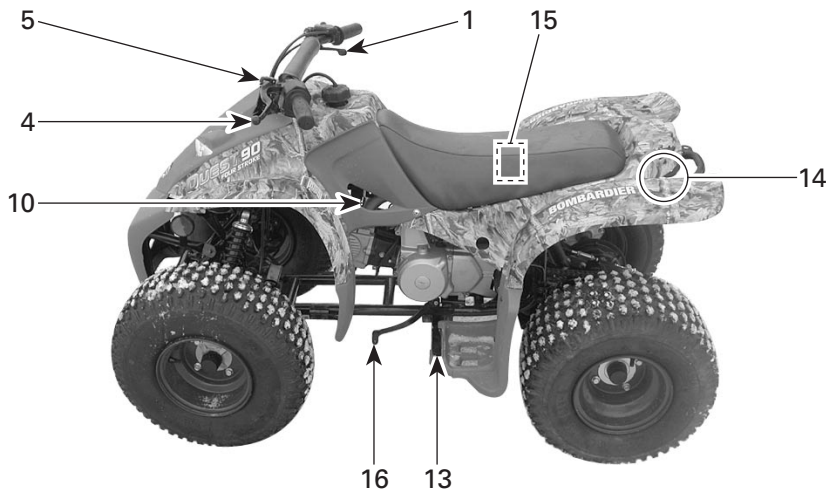
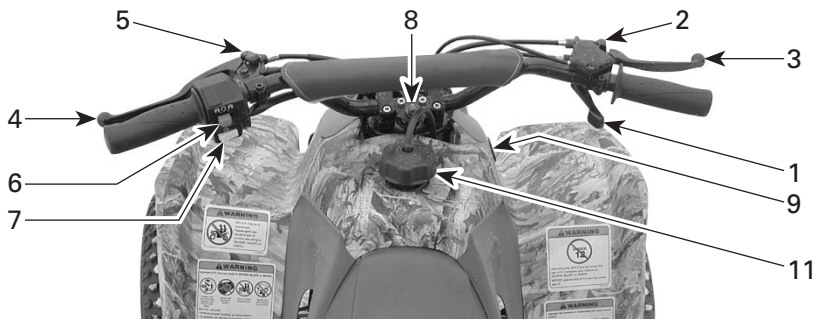
NOTE: Some controls/instruments/equipments are optional.

## DS50 and DS90 Models



V05A0DL

# DS90 4-Stroke Models



V05A0HL

While reading this *Operator's Guide*, remember that:

## **WARNING**

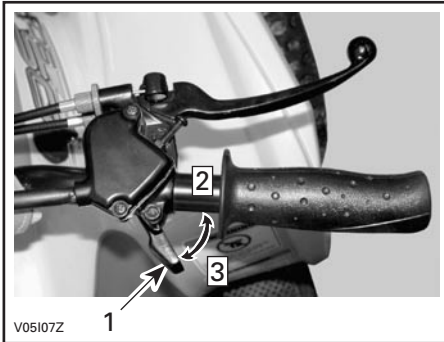
Indicates a potential hazard that, if not avoided, could result in serious injury or death.

**NOTE:** This section gives basic functions of the various controls of your ATV. For more details of how to operate one control in conjunction with some others, refer to OPERATING INSTRUCTIONS in this *Operator's Guide* and *Safety Handbook*.

### **1) Throttle Lever**

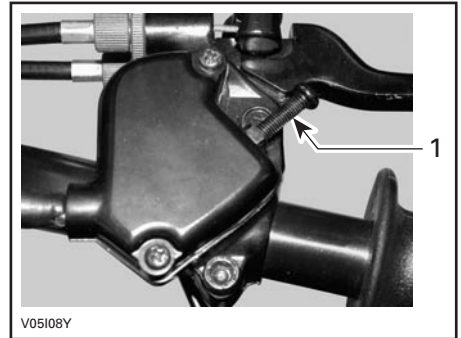
Located on the right side of handlebar. When pushed, it increases the engine speed that allows the engagement of the transmission on the selected gear.

When released, the engine speed should return automatically to idle and the vehicle will gradually slow down.



1. Throttle lever
2. To accelerate
3. To decelerate

### **2) Speed Limiter Screw**



1. Speed limiter screw

Located on the right side of handlebar. With appropriate tools, it is possible to decrease engine speed by screwing in the speed limiter screw and to increase engine speed by unscrewing it.

#### ***DS50 Model***

Units are shipped from the factory with a restricted speed setting of 16 km/h (10 MPH).

**CAUTION:** To keep tab of original setting, adults must make sure to measure the screw length before making any changes.

Using appropriate tools, adults can unscrew the speed limiter screw to obtain a maximum unrestricted speed setting of 24 km/h (15 MPH).

## **DS90 2-Stroke and DS90 4-Stroke Models**

Units are shipped from the factory with a restricted speed setting of 24 km/h (15 MPH).

Using appropriate tools, adults can unscrew the speed limiter screw to obtain a maximum unrestricted speed setting of 48 km/h (30 MPH).

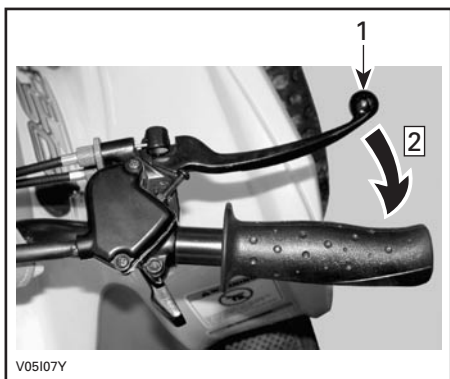
### **⚠ WARNING**

Adults should always limit the maximum restricted speed within the ability and capacity of the child to operate the vehicle safely. Never allow the child to adjust the speed limiter.

## **3) Front Brake Lever**

Located on the right side of handlebar. When compressed, the brake is applied. When released, it should automatically return to its original position. Braking effect is proportional to the force applied on the lever and to the type and condition of the terrain.

See the note at **Rear Brake Lever** below for additional information.

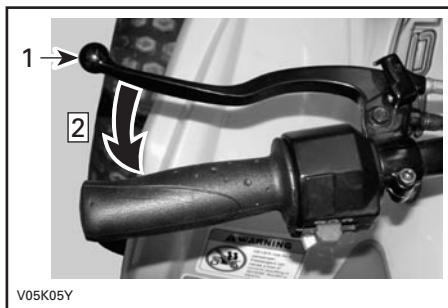


1. Brake lever
2. To apply brake

## **4) Rear Brake Lever**

Located on the left side of handlebar. When compressed, the brake is applied. When released, it should automatically return to its original position. Braking effect is proportional to the force applied on the lever and to the type and condition of the terrain.

**NOTE:** As on other wheeled vehicles, the vehicle weight is transferred to the front wheels when braking. To obtain greater stopping efficiency, the brake system distributes more braking force to the front wheels. This will affect vehicle handling and steering control when braking vigorously. Take it into account when braking.



1. Brake lever
2. To apply brake

## **5) Brake Lever Lock**

Located on left side of handlebar on the rear brake lever. When applied, it prevents the vehicle from moving. Useful when the brake needs to be locked for example such as doing a K-turn.

### **⚠ WARNING**

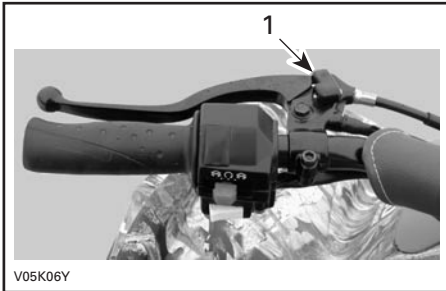
Always use the brake lever lock when the vehicle is not in operation.

## **WARNING**

Make sure brake lever lock is fully disengaged before operating the ATV.

When you ride the vehicle, the prolonged use of brakes may cause damage to the brake system and cause loss of braking capacity and/or fire.

**To engage mechanism:** Squeeze brake lever and push down the brake lever lock with a finger. Brake lever is now compressed and applying rear brakes.



1. Brake lever lock

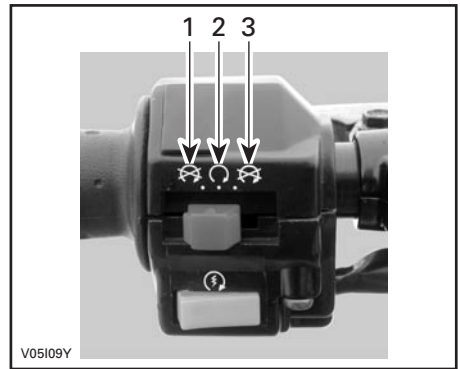
**To release mechanism:** Squeeze brake lever. Lever lock should automatically return to its original position. Brake lever should return to rest position. Always release brake lever lock before riding.

## **6) Engine Stop Switch**

Three position switch located on left side of handlebar. The engine will turn over but will not start if the engine stop switch is placed in the OFF position.

This switch can be used to stop engine and as an emergency control.

**NOTE:** While engine can be stopped by turning ignition key OFF, we recommend the engine be stopped by the engine stop switch.



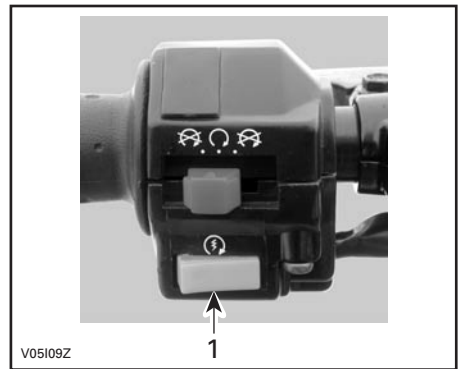
1. OFF
2. ON
3. OFF

## **7) Start Button**

Located on left side of handlebar.

To start engine, place the engine stop switch to RUN.

Press and hold the start button. Release immediately after engine is started.



1. Start button

To stop engine, fully release throttle lever then use the engine stop switch.

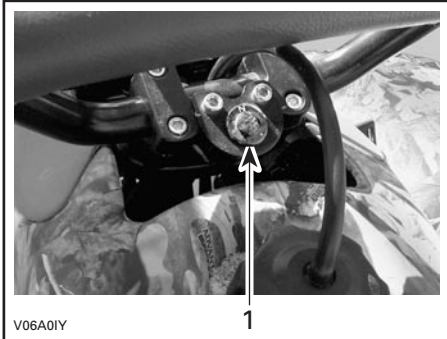
## 8) Neutral Indicator Light

### 4-Stroke Models

Located at center of cluster.

### Neutral

When lit, it indicates the transmission is in neutral position.



1. Neutral indicator light

## 9) Ignition Switch

Located on the right side of cluster.

Key-operated, 3-position switch: OFF, ON and ON with lights.

**NOTE:** The position ON with light is used only if the vehicle is equipped with headlamp.



IGNITION SWITCH

Insert key in switch and turn to the desired position. To remove key, turn key to OFF then pull it out.

**NOTE:** While engine can be stopped by turning ignition key OFF, we recommend the engine be stopped by the engine stop switch. Always turn ignition to OFF after engine has been stopped.

## 10) Choke Knob Lever

### 4-Stroke Models

Located on the left side of vehicle. This device features a variable lever to ease cold start.

Position OFF is for normal use with a warm engine (pushed in).



CHOKE KNOB LEVER IN THE OFF POSITION

The full choke position is used for lower temperature (fully extended).



*CHOKE LEVER IN THE FULL CHOKE POSITION*

The other positions between OFF and FULL position, will be use depending on the temperature.

## 11) Fuel Tank Cap

Unscrew counterclockwise and remove cap to allow fuel tank filling then fully tighten clockwise.

### **WARNING**

Never use an open flame to check fuel level.

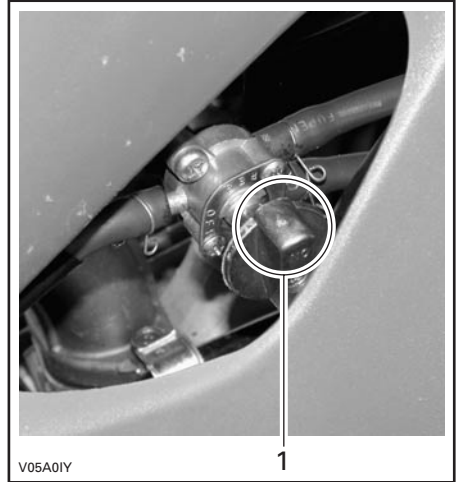
### **WARNING**

Do not allow children to put fuel in the ATV.

## 12) Fuel Valve

### **4-Stroke Models**

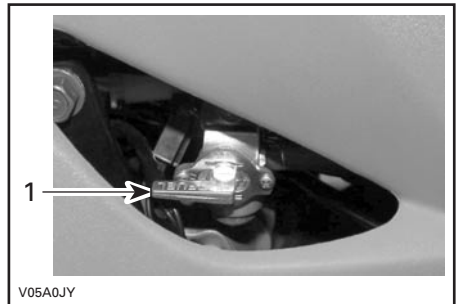
Located on right side panel under front part of seat. 3-position rotary valve: OFF, ON, RES. Rotate the tab to align its pointer with ON, OFF or RES.



1. Align this pointer toward the desired position

### **2-Stroke Models**

Located on left side panel under front part of seat. 3-position rotary valve: OFF, ON, RES. Rotate the tab to align its pointer with ON, OFF or RES.



1. Align this pointer toward the desired position

## OFF

Stops fuel supply to carburetor.

**CAUTION:** Turn valve to OFF position when ATV is not being operated or when transporting.

## ON

Allows fuel to flow to carburetor. This is the normal position for operation of the vehicle.

## RES (reserve)

When fuel is exhausted in the fuel tank when in the ON position, an emergency supply of fuel is available by turning the knob to RES. Use only this position when the ON supply is empty.

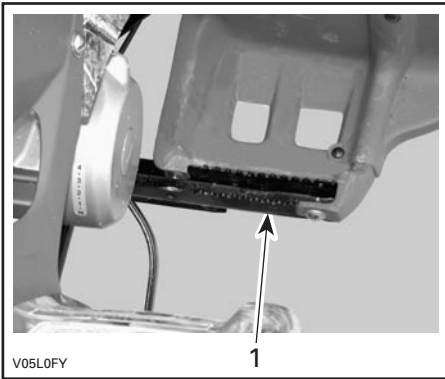
When down to the reserve, refuel as soon as possible. Ensure to turn the valve back to the ON position after re-fuelling.

**CAUTION:** Improper opening of fuel valve will restrict the flow of fuel. Make sure valve is fully opened while running.

## 13) Footpeg

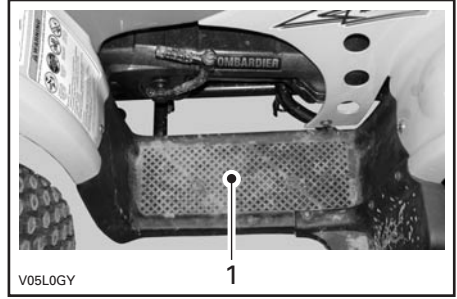
Located on footrest. Use this area to maintain your feet stable.

### 4-Stroke Models



1. Footpeg

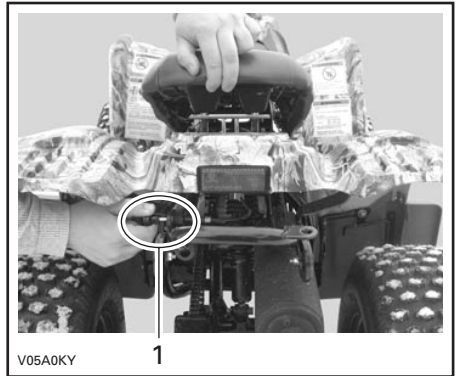
### 2-Stroke Models



1. Footpeg

## 14) Seat Latch Knob

Located underneath rear fender, near rear bumper. It allows the removal of seat to give access to engine compartment. Pull knob to release seat.



1. Seat release knob

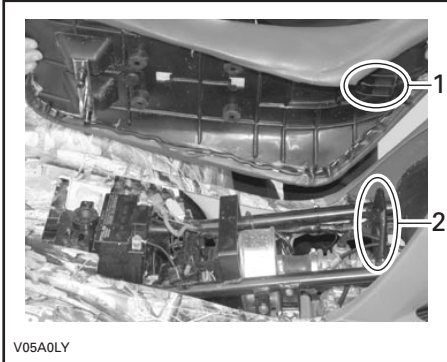
## Seat Removal

Pull latch while gently lifting rear of seat. Pull seat rearward then remove it.



## Seat Installation

Insert front tab of seat into frame hook. When seat rests in its position, firmly push seat down to latch.



1. Insert this tab in hook
2. Hook

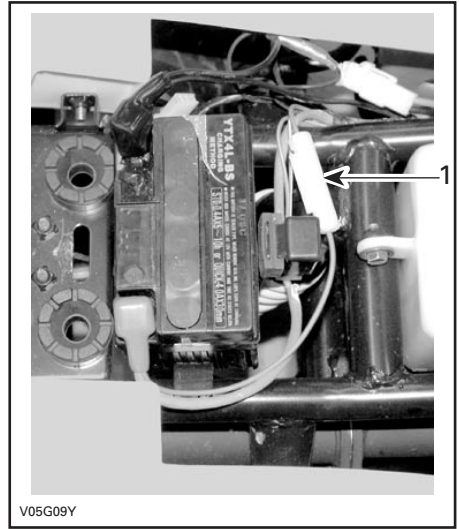
### **WARNING**

Make sure seat is securely latched before riding.

## 15) Fuse

The electrical system is protected with a fuse. Refer to MAINTENANCE for details.

The fuse holder is located on the RED (+) cable, near battery.

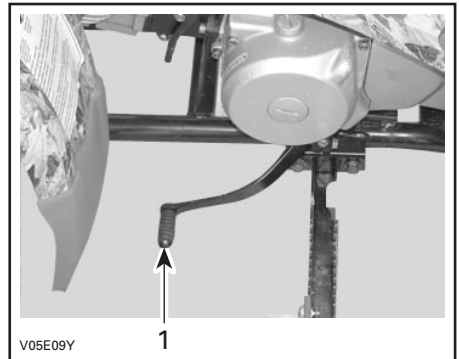


1. Fuse holder

## 16) Gearshift Pedal

### 4-Stroke Models

Located in front of left footpeg.



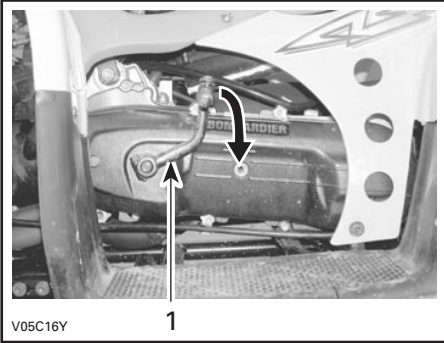
1. Gearshift pedal

## 17) Kick Start Pedal

### 2-Stroke Models

Located on left side of vehicle.

To start engine, gently press pedal down until engagement is felt, then kick down with a rapid follow through motion.

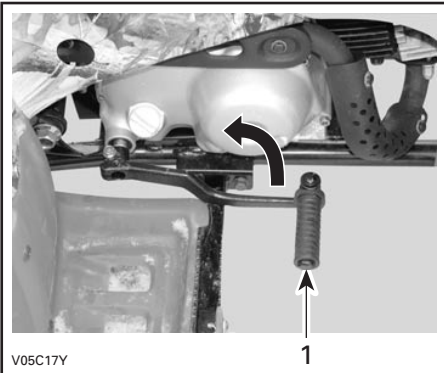


1. Kick start pedal

### 4-Stroke Models

Located on right side of vehicle.

To start engine, gently lift pedal up until engagement is felt, then pull up with a rapid follow through motion.



1. Kick start pedal

---

# LIQUIDS

While reading this *Operator's Guide*, remember that:

## WARNING

Indicates a potential hazard that, if not avoided, could result in serious injury or death.

This section specifies the recommended liquids and procedures to check their levels. Refer to MAINTENANCE for procedures to replace the liquids.

## WARNING

The following procedures should be done by an adult only.

## Fuel

### Recommended Fuel

Use super unleaded gasoline or gasohol containing less than 10% of ethanol or methanol, available from most service stations. The gasoline used must have an octane number of 91 ((R + M)/2) or higher.

**NOTE:** In most service station, pump octane number corresponds to (R + M)/2 octane number. Usually a sticker can be found on the pump.

**CAUTION:** Never experiment with other fuels. The use of unrecommended fuel can result in vehicle performance deterioration and damage to critical parts in the fuel system and engine components.

**CAUTION:** Never mix oil with fuel.

## Fuel Level

## WARNING

Never top up the fuel tank before placing the vehicle in a warm area. As temperature increases, fuel expands and may overflow. Fuel is flammable and explosive under certain conditions. Always wipe off any fuel or oil spillage from the vehicle.

## Engine Oil

### Recommended Oil

#### 4-Stroke Models

Use mineral-base 4-stroke engine oil that meets or exceeds the requirements for API service classification SG, SH or SJ. Always check the API service label on the oil container to be sure it includes the letters SG, SH or SJ. Only use high-quality high-detergent oil. Bombardier synthetic oil is recommended.

#### 2-Stroke Models

Use 2-stroke injection oil only.

### Oil Viscosity

#### 4-Stroke Models

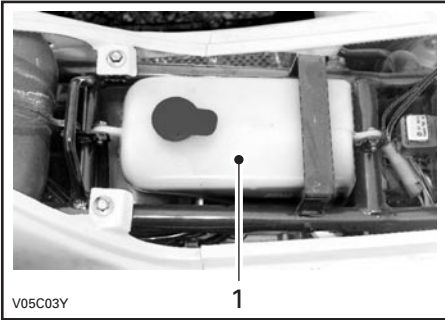
SAE 10W40 or SAE 40 is recommended.

## Oil Level

### 2-Stroke Models

Remove seat and check the level through the oil tank. Refill if necessary.

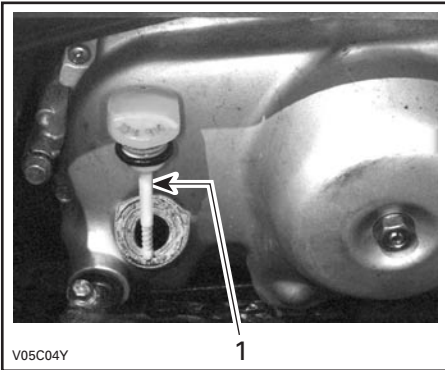
**NOTE:** The oil tank capacity is 1 l (1 quart).



1. Oil tank

### 4-Stroke Models

**CAUTION:** Check level frequently and refill if necessary. Do not overfill. Operating the engine with an improper level may severely damage engine. Wipe off any spillage.

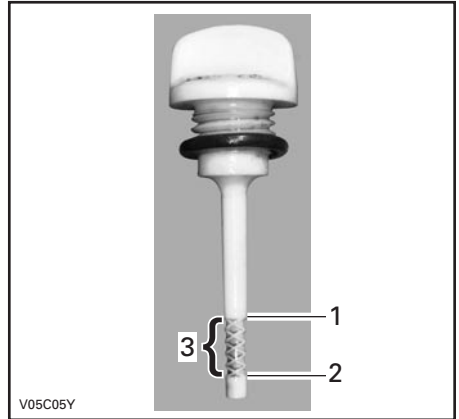


**RH SIDE OF ENGINE**

1. Dipstick

With vehicle on a level surface, start engine and let it running, around 1 minute, then stop engine check the oil level as follows:

1. Unscrew dipstick then remove it and wipe clean.
2. Reinstall dipstick, screw in it completely.
3. Remove and check oil level. It should be near or equal to the upper mark.



1. Full
2. Add
3. Operating range

4. Add oil up to upper mark if required.
5. To add oil, remove dipstick. Place a funnel into the dipstick hole and fill with the recommended oil. **Do not overfill.**
6. Properly tighten dipstick.

## Battery

NOTE: For any battery maintenance or verification, see an authorized Bombardier ATV dealer.

### Removal

Disconnect BLACK (-) cable first then RED (+) cable.

#### **WARNING**

Always respect this order for disassembly; disconnect BLACK (-) cable first. Electrolyte or fuel vapors can be present in engine compartment and a spark may ignite them and possibly cause personal injuries.

Remove battery from vehicle being careful not to tilt it so that electrolyte flows out of vent tube.

#### **WARNING**

Battery electrolyte is caustic substance that burns or destroys organic tissues by chemical action. Avoid contact with eyes, skin and clothing. Wear protective eye-glasses and a suitable pair of non-absorbent gloves when removing the battery by hand. Should any electrolyte spillage occur, immediately wash off with a solution of baking soda and water.

### Installation

Reinstall battery in vehicle.

#### **WARNING**

Connect RED (+) cable first then BLACK (-) cable. Always connect RED (+) cable first.

---

# BREAK-IN PERIOD

## Engine

### 4-Stroke Models

A break-in period of 10 operating hours is required before running the vehicle at sustained full throttle.

**CAUTION:** Never mix oil with fuel.

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

### 2-Stroke Models

To insure maximum durability and optimal performance and to avoid engine damage, please pre-mix the first four tanks of fuel with two-stroke engine oil at 30:1 ratio. Do not operate the ATV at more than half throttle for the first three hours. During the break-in period (first four tanks of fuel), operate the vehicle at various RPM and do not operate the vehicle above half throttle for extended periods.

## Belt

### 2-Stroke Models

A new belt requires a break-in period of 50 km (30 miles). Avoid strong acceleration/deceleration, pulling a load or high speed cruising.

## 10-Hour Inspection

As with any precision piece of mechanical equipment, we suggest that after the first 10 hours or 30 days after the purchase, whichever comes first, your vehicle be inspected by an authorized Bombardier ATV dealer. This inspection will give you the opportunity to discuss the unanswered questions you may have encountered during the first hours of operation.

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**The 10-hour inspection is at the expense of the vehicle owner.**

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While reading this *Operator's Guide*, remember that:

## WARNING

Indicates a potential hazard that, if not avoided, could result in serious injury or death.

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# PRE-OPERATION CHECK

## **WARNING**

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

- Apply parking brake and check if it operates properly.
- Check tire pressure and condition.
- Check wheels and bearings for wear and damage.
- Check location of controls and ensure they work properly.
- Verify steering operates freely.
- Activate throttle control lever several times to ensure it operates freely. It must return to idle position when released.
- Activate the brake levers to make sure the brakes fully apply. Levers must fully return when released.
- Check fuel and oil levels.
- Check for leaks on the engine, transmission and drive train components.
- Check drive chain for lubrication and adjustment.
- Check sprockets for wear and damages.
- Ensure fuel valve is in fully open position (ON).
- Ensure seat is properly latched.
- Look and feel for loose parts while engine is off. Check fasteners.
- Ensure the path of travel is free of persons and obstacles.
- Check operation of ignition switch, start button, engine stop switch and indicator light.
- Start engine and drive forward slowly a few feet and apply all brakes individually to test them.

**Correct any problem you may have found. See an authorized Bombardier ATV dealer as necessary.**

# OPERATING INSTRUCTIONS

## General

### 4-Stroke Models

This vehicle has four-forward gears.

Transmission must be on NEUTRAL to allow engine starting.

### All Models

Insert key in ignition switch and turn to ON. Place the engine stop switch to RUN position then press start button.

## Initial Cold Starting

### 2-Stroke Models

The 2-stroke models have an automatic enricher.

To start the vehicle, place the ignition key to ON, push the engine stop switch to RUN position.

Press start button and hold until engine starts.

**CAUTION:** Do not hold start button more than 10 seconds. A rest period should be observed between the cranking cycles to let starter cool down. Pay attention not to discharge battery.

**NOTE:** Throttle assist may be used to help engine starting faster. Press the throttle lever slightly. If too much throttle is used the choke system will not be activated.

Release start button immediately when engine has started.

### 4-Stroke Models

Insert key in ignition switch and turn to ON.

**NOTE:** Do not forget, place the engine stop switch to RUN position.

In cold weather, colder than 0°C (32°F), fully pull up the choke lever.



*FULL CHOKE POSITION*

Press start button and hold until engine starts.

**CAUTION:** Do not hold start button more than 10 seconds. A rest period should be observed between the cranking cycles to let starter cool down. Pay attention not to discharge battery.

**NOTE:** Throttle assist may be used to help engine starting faster. Press the throttle lever slightly. If too much throttle is used the engine can be flooded.

Release start button immediately when engine has started.

After a few seconds, push in the choke lever until the best engine RPM is achieved.

**NOTE:** Overusing choke may flood engine and make it hard to start. Refer to SPECIAL PROCEDURES if it occurs.

When the engine is warm, push the choke lever to OFF and release brakes.





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OFF POSITION

## Warm Engine Starting

Start the engine as explained above but without any choke. If the engine will not start after two 5-second attempts with the electric starter, pull the choke lever and place it half way position. Start the engine without activating the throttle lever. After few seconds, push the choke lever to OFF.

## Stopping the Engine

### WARNING

Avoid parking on an incline land.

Release throttle and completely stop the vehicle.

Apply the parking brake.

Set transmission lever in NEUTRAL position (**DS90 4-stroke models only**).

Push the engine stop switch in OFF position.

Turn key in ignition switch to OFF.

Remove key from ignition switch.

## Shifting the Transmission

### 4-Stroke Models

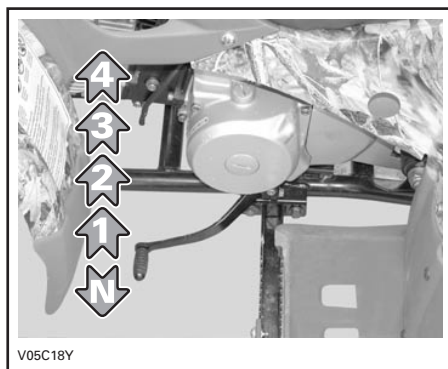
To shift the transmission, release throttle lever, then operate gearshift pedal as follow.

### WARNING

Always release the throttle when shifting gears. Shifting gears without releasing the throttle, could cause loss of control or cause the ATV to overturn.

One full stroke of the pedal shifts the transmission to the next higher or lower gear in the shifting sequence. The pedal should automatically return to its original position.

To upshift to a higher gear, put the end of your boot under gearshift lever and lift up the pedal one full stroke. To downshift, step on the gearshift pedal and depress pedal one full stroke.



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# SPECIAL PROCEDURES

## Flooded Engine

When the engine does not start after several attempts, the engine may be fuel flooded. Proceed as follows.

Turn ignition switch to ON and ensure choke is not applied.

Ensure the transmission is on NEUTRAL (4-stroke models only).

Fully press throttle lever and hold while starting the engine.

As soon as the engine starts, release throttle lever. Do not race engine.

### If it does not work:

Disconnect the spark plug cable.

Remove the spark plug.

Crank engine several times. Install new spark plug if possible or clean and dry spark plug.

Start engine as explained above. If engine continues to flood, see an authorized Bombardier ATV dealer.

## Engine Overheat

If engine overheats try the following:

Reduce vehicle speed but try to keep vehicle moving to supply air to radiator. If engine is still overheating after approximately one minute, stop vehicle and set transmission to NEUTRAL (4-stroke models). Apply parking brake and stop engine.

Let engine cool down.

See an authorized Bombardier ATV dealer as soon as possible.

## Post-Operation Care

When vehicle is used in salt-water environment (beach area, launching/loading boats etc.), rinsing the vehicle with fresh water is necessary to preserve vehicle and its components. Metallic parts lubrication is highly recommended. Use BOMBARDIER LUBE.

This must be performed at the end of each operating day.

When vehicle is operated in muddy conditions, rinsing the vehicle is recommended to preserve vehicle and its components and to keep lights clean.

## Overturning

When vehicle is overturned or stays tilted on the side, wait 3 to 5 minutes before starting engine. Check oil level and refill if necessary.

## ATV Immersion

Should the ATV become immersed, it will be necessary to take it to an authorized Bombardier ATV dealer as soon as possible. **DO NOT START THE ENGINE!** Immersion of the ATV can cause serious damage if the correct restart procedure is not followed.

## Storage and Preseason Preparation

### **WARNING**

Have an authorized Bombardier ATV dealer inspect fuel system integrity as specified in MAINTENANCE CHART.

When a vehicle is not in use for more than one month, proper storage is a necessity.

See an authorized Bombardier ATV dealer for proper procedures.

When using your ATV after storage, a preparation is required. See an authorized Bombardier ATV dealer for proper procedures.

# MAINTENANCE CHART

The maintenance is very important, if you are not familiar with safe service practices and adjustment procedures, see your authorized Bombardier ATV dealer.

## 2-Stroke Models

LUBRICATION AND MAINTENANCE CHART  I : Inspect, verify, clean, adjust, lubricate, replace if necessary C: Clean L : Lubricate R: Replace	INITIAL INSPECTION 10 HOURS OR 400 KM (250 mi) ①	EVERY			TO BE PERFORMED BY
		25 HOURS OR 1250 KM (800 mi)	50 HOURS OR 2500 KM (1600 mi)	100 HOURS OR 5000 KM (3100 mi)	
<b>ENGINE/TRANSMISSION</b>					
Gearbox oil level ②	I		I		Customer
<b>FUEL SYSTEM</b>					
Air filter			C	I	Customer
Fuel filter, fuel lines and connections	I		I		Dealer
Carburetor	I		A	C	Dealer
<b>ELECTRICAL SYSTEM</b>					
Spark plug	I			R	Dealer
Battery connections			I		Dealer
<b>DRIVE TRAIN</b>					
Drive chain lubrication/adjustment ②	I		I		Customer
Sprocket wear ③				I	Dealer
<b>STEERING/CONTROLS SYSTEM</b>					
Handlebar fasteners ②	I	A		I	Dealer
Tire pressure and wear ②	I		I		Customer
<b>SUSPENSION</b>					
Shock absorber		I			Customer
<b>BRAKE</b>					
Brake system ②	I	A		I	Dealer
<b>BODY/FRAME</b>					
Fasteners tightness ②	I	I			Customer
Frame lubrication			I		Customer

① To be performed by an authorized Bombardier ATV dealer. The initial maintenance is very important and must not be neglected.

② Pre-ride inspection item.

③ More often under severe use such dusty area, sand, snow, wet or muddy conditions. Refer to MAINTENANCE AND LUBRICATION section of *Shop Manual* for more details.

## 4-Stroke Models

LUBRICATION AND MAINTENANCE CHART  I : Inspect, verify, clean, adjust, lubricate, replace if necessary C: Clean L : Lubricate R: Replace	INITIAL INSPECTION 10 HOURS OR 400 KM (250 mi) ①	EVERY			TO BE PERFORMED BY
		25 HOURS OR 1250 KM (800 mi)	50 HOURS OR 2500 KM (1600 mi)	100 HOURS OR 5000 KM (3100 mi)	
<b>ENGINE/TRANSMISSION</b>					
Clutch system	I			I	Dealer
Engine idle speed	I			I	Dealer
Engine oil level ②	I			R	Customer
Engine oil strainer				C	Dealer
Valve clearance	I			A	Dealer
<b>FUEL SYSTEM</b>					
Air filter ③		C		I	Customer
Fuel filter, fuel lines and connections	I			I	Dealer
Carburetor	I		A	C	Dealer
<b>ELECTRICAL SYSTEM</b>					
Spark plug	I			R	Dealer
Battery connections	I		I		Customer
<b>DRIVE TRAIN</b>					
Drive chain lubrication/adjustment ②	I		I		Customer
Sprocket wear				I	Dealer
<b>STEERING/CONTROLS SYSTEM</b>					
Handlebar fasteners ②	I	A		I	Dealer
Tire wear and air pressure ②	I		I		Customer
<b>SUSPENSION</b>					
Shock absorber		I			Customer
<b>BRAKE</b>					
Brake system ②	I	A		I	Dealer
<b>BODY/FRAME</b>					
Fastener tightness ②	I	I			Customer
Frame lubrication ③			I		Customer

① To be performed by an authorized Bombardier ATV dealer. The initial maintenance is very important and must not be neglected.

② Pre-ride inspection item.

③ More often under severe use such dusty area, sand, snow, wet or muddy conditions. Refer to MAINTENANCE AND LUBRICATION section of *Shop Manual* for more details.

# MAINTENANCE

While reading this *Operator's Guide*, remember that:

## WARNING

Indicates a potential hazard that, if not avoided, could result in serious injury or death.

## WARNING

Unless otherwise specified, engine should not be running for all maintenance procedures.

## WARNING

Should removal of a locking device (e.g. lock tabs, self-locking fasteners, etc.) be required when undergoing disassembly/assembly, always replace with a new one.

## WARNING

All maintenance should be done by an adult or an authorized Bombardier ATV dealer. Do not allow children to attempt repairs or maintenance.

The following covers the maintenance items that can be performed by the customer if desired. Other items found in maintenance chart must be performed by an authorized Bombardier ATV dealer.

**NOTE:** Among other things, this section gives the procedures to replace the liquids. Refer to LIQUIDS for procedures to check levels and refill.

## Engine/Transmission

### Oil Change and Oil Filter Replacement

Oil and filter are to be replaced at the same time. Oil change should be done with a warm engine.

## WARNING

The engine oil can be very hot. Wait until engine oil is warm.

- Ensure vehicle is on a level surface.
- Clean the drain plug area.
- Remove dipstick.
- Place a drain pan under the engine drain plug area.
- Unscrew drain plug.
- Allow enough time for oil to flow out of oil filter.
- Remove the right crankcase cover to replace oil filter.
- Remove the oil filter and replace with a new filter.
- Wipe out any oil spillage on engine.
- Change gasket on drain plug. Clean gasket area on engine and drain plug then reinstall plug. Refill engine at the proper level with the recommended oil. Refer to SPECIFICATIONS for capacity.
- Start engine and let idle for a few minutes. Ensure oil filter area and drain plug areas are not leaking.
- Stop engine. Wait a while to allow oil to flow down to crankcase then check oil level. Refill as necessary.
- Dispose of oil as per your local environmental regulations.

## Valve Adjustment

See an authorized Bombardier ATV dealer for valves adjustment.

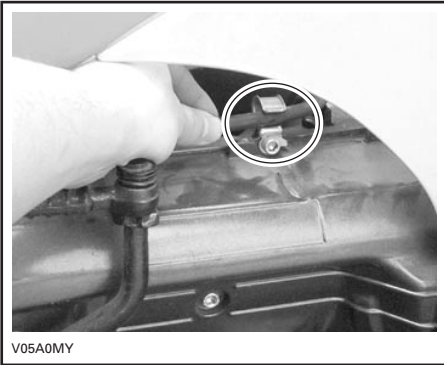
Insufficient clearance will cause loss of power and possibly damage the valves. Excessive clearance will cause noise.

## Air Filter

### Air Filter Replacement

Remove the seat.

Unclamp the oil tube from the clamp of left crankcase cover.



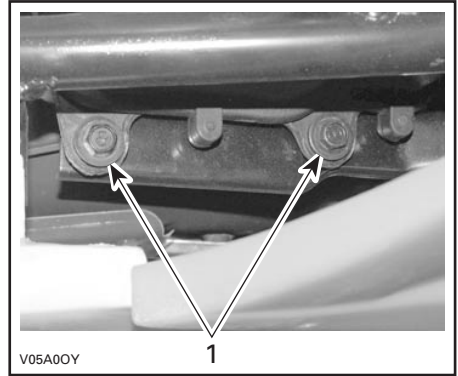
Remove front and rear bolts retaining the oil tank to the frame.

Pull the oil tank out of frame and place the tank on frame.



**CAUTION:** Do not take apart oil filter or oil hose from the oil tank.

Behind the right body cover trim, remove the bolts retaining air box to the frame.



1. Remove these bolts

Push back the air box to get it release from the air duct.

Rotate the air box and take it out.

Remove bolts under air box and split it.

Remove the air filter and clean the inside of air box.

Install a new air filter and assemble the air box.

**NOTE:** On 2-stroke models, lubricate the air filter with air filter oil.

Install air box and oil tank by reversing the disassembly procedures.

## Electrical

### Battery

#### **WARNING**

Never charge a battery while installed in vehicle.

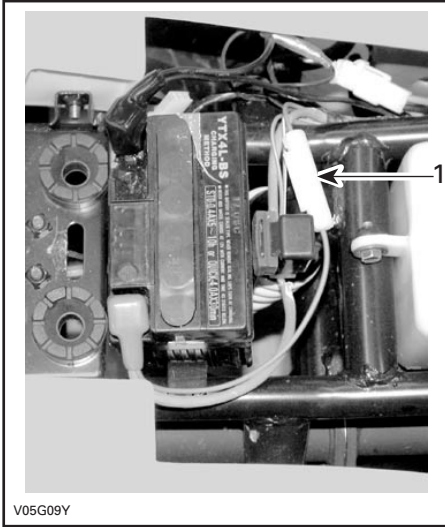
Clean battery post with a wire brush. Apply dielectric grease on post to protect against oxidation.

## Fuse

If the fuse is damaged, replace it by one of the same rating.

**CAUTION:** Do not use a higher rated fuse as this can cause severe damage.

Fuse holder is located on the RED (+) battery cable.



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1. Fuse holder

## Drive Train

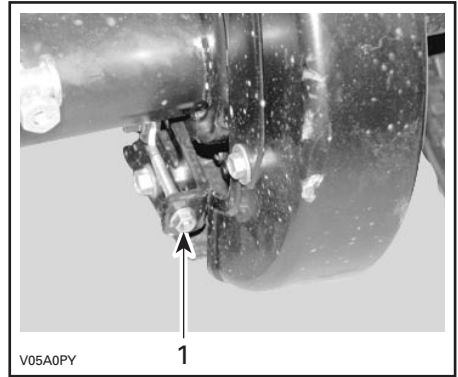
### Drive Chain

Check drive chain condition.

The drive chain should be checked, lubricated and adjusted at every ride.

The free-play of the drive chain should be between 20 to 30 mm (25/32 to 1-3/16 in) up and down.

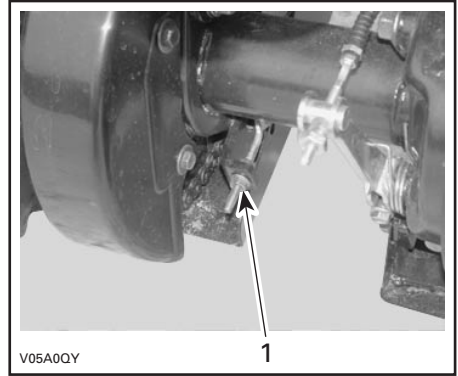
Adjust the drive chain by adjusting the drive chain adjusting nut.



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### 2-STROKE MODELS

1. Drive chain adjusting nut



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### 4-STROKE MODELS

1. Drive chain adjusting nut

## Wheel

Occasionally, wheel nuts should be removed to apply anti-seize lubricant on studs to ease future removal. This is particularly important when vehicle is used in salt-water environment or in mud. Remove one nut at a time, lubricate then retorquer.

## Tires/Wheels

### Tire Pressure

#### **⚠ WARNING**

Tire pressure greatly affects vehicle handling and stability. Under-pressure may cause tire to deflate and rotate on wheel. Overpressure may burst the tire. Always follow recommended pressure. Since tires are low-pressure types, a manual pump should be used.

Check pressure when tires are "cold" before using the vehicle. Tire pressure changes with temperature and altitude. Recheck pressure if one of these conditions has changed.

For your convenience, a pressure gauge is supplied in tool box.

TIRE PRESSURE	
REAR	
RECOMMENDED	55 kPa (8 PSI)
MINIMUM	41 kPa (6 PSI)
FRONT	
RECOMMENDED	15 kPa (2.2 PSI)
MINIMUM	12 kPa (1.8 PSI)

Although the tires are specifically designed for off-road use, a flat may still occur. Therefore, it is recommended to carry a tire pump and a repair kit.

### Tire/Wheel Condition

Check tire for damage and wear. Replace if necessary.

## Wheel Removal

Loosen bolts then lift vehicle. Place a support under vehicle. Remove bolts then remove wheel.

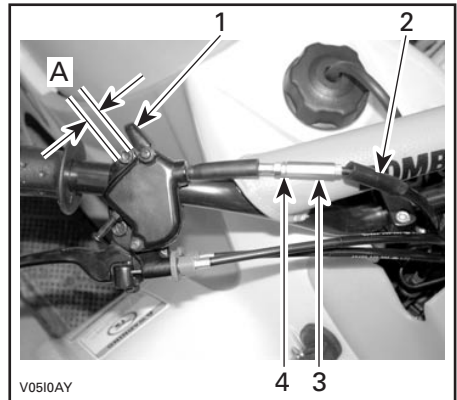
At installation, it is recommended to apply anti-seize lubricant on threads. Gently tighten bolts in a criss-cross sequence then apply a final torque.

WHEEL NUTS TORQUE	44 N•m (32 lbf•ft)
----------------------	-----------------------

## Steering/Control Systems

### Throttle Cable Adjustment

The normal throttle free-play is 2 to 6 mm (3/32 to 7/32 in).



1. Throttle lever
2. Rubber protector
3. Cable adjuster
4. Lock nut
- A. 2 to 6 mm (3/32 to 7/32 in)

To adjust cable, slide rubber protector back to expose throttle cable adjuster.

Loosen lock nut and turn the adjuster to get proper adjustment.



# Suspension

## Adjustment

### Front Shocks

#### 4-Stroke Models

### WARNING

Left and right adjusting cams must always be set at the same position. Never adjust one adjusting cam only. Uneven adjustment can cause poor handling and loss of stability, which could lead to an accident.

### Preload Adjustment

#### All Models (front or rear)

Adjust spring preload by turning adjusting cam.

Turn the adjusting cams clockwise for a firmer ride and rough road condition.

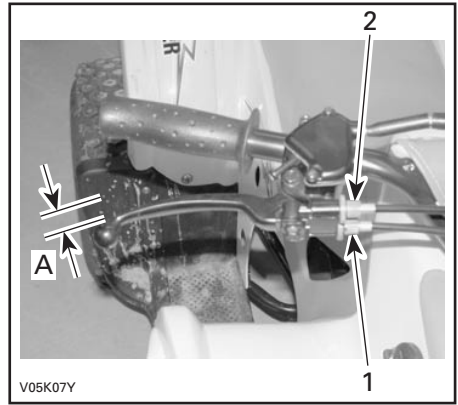
Turn the adjusting cams counterclockwise for a light load and a smooth road condition.

## Brake

### Brake Lever Adjustment

The normal free-play of brake lever is between 10 and 20 mm (13/32 and 25/32 in).

To adjust front brakes, use the adjusters on right brake lever.

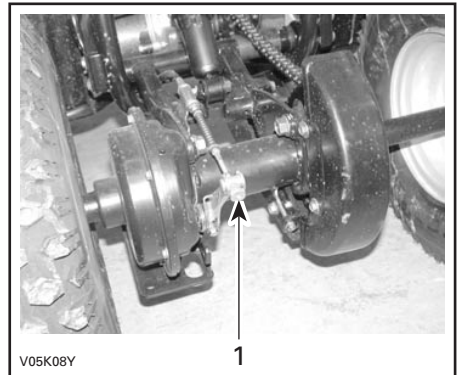


1. Left front brake adjuster
2. Right front brake adjuster
- A. 10 to 20 mm (13/32 to 25/32 in)

To adjust rear brake, turn the adjusting nut at the end of brake cable.

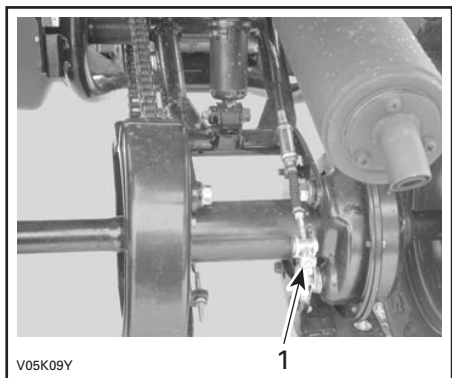
### WARNING

Adjusting nut must be aligned with pin, any slight deviation may result in braking play when brake is applied.



#### 2-STROKE MODELS

1. Adjusting nut



#### 4-STROKE MODELS

1. Adjusting nut

## Body/Frame

### Engine Compartment

Check engine compartment for any damage and leaks. Ensure all hose clamps are properly secured and no hose is cracked, kinked or otherwise damaged.

Inspect muffler, battery and reservoir fastening devices.

Check electrical connections for corrosion and tightness.

Replace or have damaged parts repaired.

## Fasteners

Check fastener condition and tightness on the vehicle. Retighten as required.

## Seat Latch

Remove seat and check latch mechanism for wear. See an authorized Bombardier ATV dealer for parts replacement if damaged.

## Vehicle Cleaning and Protection

Painted parts which are damaged should be properly repainted to prevent rust.

When required, wash the body with hot water and soap (only use mild detergent). Apply non-abrasive wax.

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

# TRANSPORTATION

While reading this *Operator's Guide*, remember that:

## WARNING

Indicates a potential hazard that, if not avoided, could result in serious injury or death.

## Transportation

When transporting a vehicle, secure vehicle to trailer with suitable tie-downs. Using ordinary ropes is not recommended.

## WARNING



V00A174

Never tip this vehicle on end for transporting. We recommend that you carry the vehicle in its normal operating position (on all four wheels).

Place the fuel valve to OFF position.

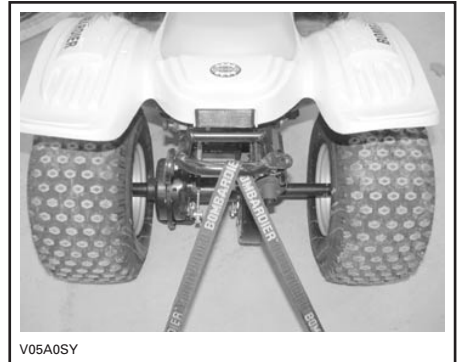
Set the parking brake.

Secure the vehicle to front by the front bumper and rear by the rear bumper.



V05A0RY

FRONT LOCATION



V05A0SY

REAR LOCATION

**CAUTION:** Attaching vehicle at other locations may damage the vehicle.

## WARNING

Do not tow this vehicle behind a car or other vehicle.

# TROUBLESHOOTING

<b>SYMPTOM: <i>Engine does not turn</i></b>	
<b>POSSIBLE CAUSES</b>	<b>WHAT TO DO</b>
1. Ignition switch is in the OFF position.	Place switch to ON position.
2. Transmission is not set on the NEUTRAL.	Set transmission in NEUTRAL.
3. Burnt fuse.	Check main supply fuse.
4. Weak battery or loose connections.	Check charging system fuse. Check connections and terminals condition. Have the battery checked. Contact an authorized Bombardier ATV dealer.
5. Engine stop switch is in OFF position.	Place switch to ON position.

<b>SYMPTOM: <i>Engine turns over but fails to start</i></b>	
<b>POSSIBLE CAUSES</b>	<b>WHAT TO DO</b>
1. Mixture not rich enough to start cold engine.	Check fuel tank level and check starting procedure, particularly use of the choke.
2. Flooded engine (spark plug wet when removed).	Refer to <b>SPECIAL PROCEDURES</b> .
3. No fuel to the engine (spark plug dry when removed).	Check fuel tank level; turn fuel valve to ON (also try on RES). A failure of the fuel pump or carburetor may have occurred. Contact an authorized Bombardier ATV dealer.
4. Spark plug/ignition (no spark).	Remove spark plug then reconnect to spark plug cable. Check that ignition switch and/or engine stop switch(es) is/are at the ON position. Start engine with spark plug grounded to engine away from spark plug hole. If no spark appears, replace spark plug. If trouble persists, contact an authorized Bombardier ATV dealer.
5. Engine compression.	As the engine is pulled over with the kick starter, "cycles" of resistance should be felt as piston goes past top dead center. If no pulsating resistance is felt, it suggests a major loss of compression. Contact an authorized Bombardier ATV dealer.

<b>SYMPTOM: <i>Engine lacks acceleration or power</i></b>	
<b>POSSIBLE CAUSES</b>	<b>WHAT TO DO</b>
1. Fouled/damaged/worn spark plug.	Clean/verify spark plug and heat range. Replace as required.
2. Lack of fuel to engine.	Check item <b>Engine turns over but fails to start.</b>
3. Carburetor adjustments.	Contact an authorized Bombardier ATV dealer.
4. Engine is overheating.	Check <b>Engine Overheat in SPECIAL PROCEDURES.</b> If overheating persists, contact an authorized Bombardier ATV dealer.
5. Air box plugged or dirty.	Check air filter and clean if necessary. Check the position of the air intake tube.
6. CVT dirty or worn.	Contact an authorized Bombardier ATV dealer.

<b>SYMPTOM: <i>Engine backfire</i></b>	
<b>POSSIBLE CAUSES</b>	<b>WHAT TO DO</b>
1. Exhaust system leakage.	Contact an authorized Bombardier ATV dealer.
2. Engine is running too hot.	See <b>Engine lacks acceleration or power.</b>
3. Ignition timing is incorrect or there is an ignition system failure.	Contact an authorized Bombardier ATV dealer.
4. Improper carburetor setting.	Contact an authorized Bombardier ATV dealer.

<b>SYMPTOM: <i>Engine misfire</i></b>	
<b>POSSIBLE CAUSES</b>	<b>WHAT TO DO</b>
1. Fouled/damaged/worn spark plugs.	Clean/verify spark plug and heat range. Replace as required.
2. Water in fuel.	Drain fuel system and refill with fresh fuel.

<b>SYMPTOM: <i>Vehicle cannot reach full speed</i></b>	
<b>POSSIBLE CAUSES</b>	<b>WHAT TO DO</b>
1. Engine.	See <b>Engine lacks acceleration or power.</b>
2. Parking brake.	Ensure brake lever lock is completely removed.
3. Air box plugged or dirty.	Check air filter and clean if necessary. Check the position of the air intake tube.
4. CVT dirty or worn.	Contact an authorized Bombardier ATV dealer.

<b>SYMPTOM: <i>Gearshift lever is hard to move</i></b>	
<b>POSSIBLE CAUSES</b>	<b>WHAT TO DO</b>
1. Transmission gears are in a position that prevents the transmission lever to work.	Rock the vehicle back and forth to move the gears in the transmission and allow the transmission lever to be set.
2. Engine idle speed is set too high.	Adjust the idle speed. Refer to the specification.
3. CVT dirty or worn.	Contact an authorized Bombardier ATV dealer.

<b>SYMPTOM: <i>The RPM increases but the vehicle doesn't move</i></b>	
<b>POSSIBLE CAUSES</b>	<b>WHAT TO DO</b>
1. The transmission is N position.	Set a gear.
2. CVT is defective.	Contact an authorized Bombardier ATV dealer.
3. Water in the CVT housing.	Contact an authorized Bombardier ATV dealer.

# SPECIFICATIONS

VEHICLE MODEL		DS90 4-STROKE
<b>ENGINE</b>		
Type		4 stroke, air cooled
Number of cylinder		Single horizontal cylinder
Number of valve		2 valves
Displacement		85.9 cc (5.2 cu. in)
Bore	Standard	40 mm (1.85 in)
Stroke		49.5 mm (1-15/16 in)
Starting		Electric/kick start
Compression ratio		8.1:1
Lubrication		Wet sump with replaceable oil filter
Decompressor		N.A.
<b>TRANSMISSION</b>		
Transmission		Semi-automatic, 4 speed, wet multi-disk
<b>CARBURETION</b>		
Idle speed	± 100	1700 RPM
<b>ELECTRICAL</b>		
Ignition type		CDI (Capacitor Discharge Ignition)
Spark plug make and type		NGK CR7HSA
Number of spark plug		1
Spark plug gap		0.7 mm (.027 in)
Battery		12 V, 4 Ah. Maintenance free
Starting system		Electric start
Taillight		N.A.
<b>FUSE</b>		
Main fuse		7 A
<b>SUSPENSION</b>		
Front	Type	Oil damped Independent suspension — A-arm
Rear	Type	Oil damped, single shock, rigid axle
<b>TIRES</b>		
Pressure	Front	15 kPa (2.2 PSI) recommended, 12 kPa (1.8 PSI) minimum
	Rear	55 kPa (8 PSI) recommended, 41 kPa (6 PSI) minimum
Size	Front	20 x 7-8
	Rear	18 x 9.5-8

<b>VEHICLE MODEL</b>		<b>DS90 4-STROKE</b>
<b>WHEELS</b>		
Wheel nut torque	Front/rear	44 N•m (32 lbf•ft)
<b>BRAKES</b>		
Front		2, drums
Rear		1, drum
Parking		LH brake lever with lock
<b>DIMENSIONS</b>		
Dry mass		120 kg (265 lb)
Overall length		1525 mm (60 in)
Overall width		890 mm (35 in)
Overall height		900 mm (35.4 in)
Wheel base		955 mm (38 in)
<b>LIQUIDS</b>		
Oil type (engine and transmission)		SAE 10W40, 4-stroke mineral-based engine oil. API classification SG, SH or SJ synthetic oil is recommended
Fuel	Type	Super unleaded gasoline
	Octane	91 (R + M)/2 or higher
<b>CAPACITIES</b>		
Engine oil		Oil change with filter: 1 l (1.06 quarts)

Because of our ongoing commitment to product quality and innovation, Bombardier reserves the right, at any time, 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.



VEHICLE MODEL		DS50 2-STROKE	DS90 2-STROKE
<b>ENGINE</b>			
Engine displacement		49.3 cc (3 cu. in)	82.5 cc (5.0 cu. in)
Type		2 stroke, air cooled	
Number of cylinder		Single horizontal cylinder	
Idle speed $\pm 100$		1800 RPM	
Starting		Kick and electric	
Compression ratio		7:1	6.9:1
Bore	Standard	40 mm (1-37/64 in)	50 mm (1-31/32 in)
Stroke		39.2 mm (1-35/64 in)	42 mm (1-21/32 in)
<b>TRANSMISSION</b>			
Transmission		Continuously Variable Transmission (CVT)	
<b>ELECTRICAL</b>			
Ignition type		CDI (Capacitor Discharge Ignition)	
Spark plug make and type		NGK BPR7HS	
Number of spark plug		1	
Spark plug gap		0.7 mm (.027 in)	
Battery		12 V, 4 Ah. Maintenance free	
Taillight		N.A	
<b>FUSE</b>			
Main fuse		7A	
<b>SUSPENSION</b>			
Front	Type	Oil damped independent suspension — A-arm	
Rear	Type	Oil damped, single shock, rigid axle	
<b>TIRES</b>			
Pressure	Front	15 kPa (2.2 PSI) recommended, 12 kPa (1.8 PSI) minimum	
	Rear	55 kPa (8 PSI) recommended, 41 kPa (6 PSI) minimum	
Size	Front	16 x 8-7	
	Rear	16 x 8-7	
<b>WHEELS</b>			
Wheel nut torque	Front/rear	44 N•m (32 lbf•ft)	
<b>BRAKES</b>			
Front		2, drums	
Rear		1, drum	
Parking		LH brake lever with lock	

VEHICLE MODEL		DS50 2-STROKE	DS90 2-STROKE
<b>DIMENSIONS</b>			
Dry mass		103 kg (227 lb)	108 kg (238 lb)
Overall length		1465 mm (58 in)	1525 mm (60 in)
Overall width		875 mm (34 in)	890 mm (35 in)
Overall height		890 mm (35 in)	930 mm (37 in)
Seat height		660 mm (26 in)	700 mm (28 in)
Wheel base		955 mm (38 in)	
<b>LIQUIDS</b>			
Oil type		2-stroke engine oil only, synthetic oil is recommended	
Fuel	Type	Super unleaded gasoline	
	Octane	91 (R + M)/2 or higher	
<b>CAPACITIES</b>			
Engine oil		Oil change with filter: 0.9 l (0.95 quarts)	

Because of our ongoing commitment to product quality and innovation, Bombardier reserves the right, at any time, 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	UNIT	SYMBOL	
length .....	meter .....	m	
mass .....	kilogram .....	kg	
force .....	newton .....	N	
liquid .....	liter .....	L	
temperature .....	Celsius .....	°C	
pressure .....	kilo pascal .....	kPa	
torque .....	newton-meter .....	N•m	
land velocity .....	kilometer per hour .....	km/h	
PREFIXES			
PREFIX	SYMBOL	MEANING	VALUE
kilo .....	k .....	one thousand .....	1000
centi .....	c .....	one hundredth of .....	0.01
milli .....	m .....	one thousandth of .....	0.001
micro .....	μ .....	one millionth of .....	0.000001
CONVERSION FACTORS			
TO CONVERT	TO ①	MULTIPLY BY	
in .....	mm .....	25.4	
in .....	cm .....	2.54	
in <sup>2</sup> .....	cm <sup>2</sup> .....	6.45	
in <sup>3</sup> .....	cm <sup>3</sup> .....	16.39	
ft .....	m .....	0.3	
oz .....	g .....	28.35	
lb .....	kg .....	0.45	
lbf .....	N .....	4.4	
lbf•in .....	N•m .....	0.11	
lbf•ft .....	N•m .....	1.36	
lbf•ft .....	lbf•in .....	12	
PSI .....	kPa .....	6.89	
imp. oz .....	U.S. oz .....	0.96	
imp. oz .....	mL .....	28.41	
imp. gal .....	U.S. gal .....	1.2	
imp. gal .....	L .....	4.55	
U.S. oz .....	mL .....	29.57	
U.S. gal .....	L .....	3.79	
MPH .....	km/h .....	1.61	
Fahrenheit .....	Celsius .....	(°F - 32) ÷ 1.8	
Celsius .....	Fahrenheit .....	(°C x 1.8) + 32	
hp .....	kW .....	.75	

\* The international system of units abbreviates SI in all languages.

① To obtain the reverse sequence, divide by the given factor. To convert **milli-meters to inches**, divide by 25.4.

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

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## **PRIVACY OBLIGATIONS/DISCLAIMER**

We wish to inform you that your coordinates will be used for safety and warranty purposes. Sometimes, we also use the coordinates of our clients to inform them about our products and to present them offers. Should you prefer not to receive information on our products, services and offers, please let us know by writing to the address below.

Also note that, from time to time, carefully selected and trustworthy organizations may be permitted to use the coordinates of our clients to promote quality products and services. If you prefer not to have your name and address released, please let us know by writing to the address below:

Bombardier Inc.  
Recreational Products  
Warranty Department  
75 J.A. Bombardier Street  
Sherbrooke, Québec J1L 1W3  
Canada

Fax Number: (819) 566-3590





AFFIX  
PROPER  
POSTAGE

**BOMBARDIER**  
RECREATIONAL PRODUCTS

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

**ATV MODEL No.** \_\_\_\_\_

**VEHICLE IDENTIFICATION NUMBER (V.I.N.)** \_\_\_\_\_

**ENGINE IDENTIFICATION NUMBER (E.I.N.)** \_\_\_\_\_

**Owner:** \_\_\_\_\_  
NAME

\_\_\_\_\_  
No. STREET APT

\_\_\_\_\_  
CITY STATE/PROVINCE ZIP/POSTAL CODE

**Purchase Date** \_\_\_\_\_  
YEAR MONTH DAY

**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 ATV has been registered with Bombardier.**

 **WARNING**

Indicates a potential hazard that, if not avoided, could result in serious injury or death.



**BOMBARDIER**  
RECREATIONAL PRODUCTS

 **WARNING**

**THIS VEHICLE CAN BE HAZARDOUS TO OPERATE.**

A collision or rollover can occur quickly, even during routine manoeuvres such as turning and driving on hills or over obstacles, if you fail to take proper precautions.

**SEVERE INJURY OR DEATH** can result if you do not follow these instructions:

- **BEFORE YOU OPERATE THIS ATV, READ THE OPERATOR'S GUIDE, THE SAFETY HANDBOOK AND ALL LABELS.**
- **NEVER OPERATE THIS ATV, WITHOUT PROPER INSTRUCTION.** Beginners should complete a certified training course.
- **NEVER CARRY A PASSENGER.** You increase your risk of losing control if you carry a passenger.
- **NEVER OPERATE THIS ATV ON A PAVED SURFACE.** You increase your risk of losing control if you operate this ATV on pavement.
- **NEVER OPERATE THIS ATV ON PUBLIC ROADS.** You can collide with another vehicle if you operate this ATV on a public road.
- **ALWAYS WEAR AN APPROVED HELMET,** eye protection, and protective clothing.
- **NEVER CONSUME ALCOHOL OR DRUGS** before or while operating this vehicle.
- **NEVER OPERATE THIS ATV AT EXCESSIVE SPEEDS.** You increase your risk of losing control if you operate this ATV at speeds too fast for the terrain, visibility conditions, or your experience.
- **NEVER ATTEMPT WHEELIES, JUMPS, OR OTHER STUNTS.**

