

# OPERATOR'S GUIDE

Includes Safety, Use and Maintenance Information





# **A WARNING**

Read this guide thoroughly. It contains important safety information. Minimum recommended operators age: 16 years old. Keep this operator's guide with the vehicle at all times.

619901047

Original Instructions

#### **⚠** WARNING

This vehicle may exceed the performance of other vehicles you may have ridden in the past. Take time to familiarize yourself with your new vehicle.

#### CALIFORNIA PROPOSITION 65 WARNING

#### **↑** WARNING

Operating, servicing and maintaining an off-road vehicle can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle. For more information go to

www.p65warnings.ca.gov/products/passenger-vehicle.

TM® Trademarks of BRP or its affiliates.

This is a non-exhaustive list of trademarks that are the property of Bombardier Recreational Products Inc. or its affiliates. Trademarks may not be registered in every jurisdictions:

D.E.S.S.<sup>TM</sup> E-TEC® **HPGTM LYNX® RAVE® RERTM ROTAX® XPS®** 

The KYB Pro series is a registered mark of KYB America LLC.

All rights reserved. No parts of this guide may be reproduced in any form without the prior written permission of Bombardier Recreational Products Inc.

©Bombardier Recreational Products Inc. (BRP) 2024

Deutsch	Dieses Handbuch ist möglicherweise in Ihrer Landessprache verfügbar. Bitte wenden Sie sich an Ihren Händler oder besuchen Sie: www.operatorsguides.brp.com
English	This guide may be available in your language. Check with your dealer or go to: www.operatorsguides.brp.com
Español	Es posible que este manual esté disponible en su idioma. Consulte a su distribuidor o visite: www.operatorsguides.brp.com
Français	Ce guide peut être disponible dans votre langue. Vérifier avec votre concessionnaire ou aller à: www.operatorsguides.brp.com
Italiano	Questa guida potrebbe essere disponibile nella propria lingua. Contattare il concessionario o consultare: www.operatorsguides.brp.com
中文	本手册可能有您的语种的翻译版本。请向经销商问询,或者登录 www.operatorsguides.brp.com 查询。
日本語	このガイドは、言語によって翻訳版が用意されています。. ディーラーに問い合わせるか、次のアドレスでご確認ください: www.operatorsguides.brp.com
Nederlands	Deze handleiding kan beschikbaar zijn in uw taal. Vraag het aan uw dealer of ga naar: www.operatorsguides.brp.com
Norsk	Denne boken kan finnes tilgjengelig på ditt eget språk. Kontakt din forhandler eller gå til: www.operatorsguides.brp.com
Português	Este manual pode estar disponível em seu idioma. Fale com sua concessionária ou visite o site: www.operatorsguides.brp.com
Русский	Воспользуйтесь руководством на вашем языке. Узнайте о его наличии у дилера или на странице по адресу www.operatorsguides.brp.com
Suomi	Käyttöohjekirja voi olla saatavissa omalla kielelläsi. Tarkista jälleenmyyjältä tai käy osoitteessa: www.operatorsguides.brp.com
Svenska	Denna bok kan finnas tillgänglig på ditt språk. Kontakta din återförsäljare eller gå till: www.operatorsguides.brp.com

Model	Package	Engine
Rave	RS	600RS E-TEC

# **TABLE OF CONTENTS**

#### **GENERAL INFORMATION**

KNOW BEFORE YOU GO	9
SAFETY MESSAGES	10
ABOUT THIS OPERATOR'S GUIDE	11
RESPECT OF THE ENVIRONMENT	12
SAFETY INFORMATION	
BEFORE YOU GO	16
Operating Age and Ability	10
Drugs and Alcohol Avalanche Safety Training Courses	16
Avaianche Safety Fraining Courses	10
Protective Gear	
Required EquipmentGET FAMILIAR WITH THE SNOWMOBILE	17
Track Drawdsian Creaters	
Track Propulsion SystemSteering	19
Sieering	19
Tether Cord	20
BrakingParking Brake	20
Towing Another Snowmobile	20
Accessories and Modifications	21
Traction Enhancing Products	21
DIDE SAFELV	26
Rider Position (Forward Operation) Rider Position (Reverse Operation) Riding with Passenger(s)	26
Rider Position (Reverse Operation)	28
Riding with Passenger(s)	29
Riding Alone	30
Riding in a Group	30
Avoiding Collisions	30
Riding Behaviors	31
Speeding	31
Moving Parts	31
Know Terrain and Riding Variations	32
Respect of the Wildlife	36
Carbon Monoxide (CO) Poisoning	36
Gasoline Fires and Other Hazards	36
Burns from Hot Parts	37
PRACTICE EXERCISES	38
Where to Practice Exercises	38
Exercises to Practice	38
FUELING	41
Fueling Procedure	41

INJECTION OIL	42
TRANSPORTING THE VEHICLE IMPORTANT ON-PRODUCT LABELS (ALL COUNTRIES	43
IMPORTANT ON-PRODUCT LABELS (ALL COUNTRIES	EX-
CEPT CANADA/UNITED STATES)	44
Vehicle Safety Labels	44
Technical Information Labels	58
PRE-RIDE INSPECTION	61
Before Starting the Engine	01
After Engine is Started Pre-Ride Check List	b I
FIE-RIGE CHECK LIST	02
VEHICLE INFORMATION	
PRIMARY CONTROLS	66
Handlebar	66
Throttle Lever	66
Brake Lever	67
Parking Brake Lever	68
Engine Cut-off Switch	<u>7</u> 0
SECONDARY CONTROLS	
Rewind Starter Handle	72
Exhaust Tuned Pipe Preheat Button	/3
Heated Grips and Heated Throttle Lever Switch	/3
BODY AND SEAT	76
Side Panels	76
Upper Body Module	76
Seat	70
EQUIPMENT	85
Drive Belt Guard	85
COMPACT DIGITAL DISPLAY	88
Display Features	89
FUEL AND OIL	98
Fuel Requirements	
Pre-Mix Oil	99
Fueling Procedure	100
BREAK-IN PERIOD	102
Operation During Break-In	102
BASIC PROCEDURES	104
Engine Starting ProcedureVehicle Warm-Up	104
Shutting Off the Engine	104
Shutting Off the Engine	107
Altitude	107
Temperature	
Hard Packed Snow	
TUNE YOUR RIDE	109
Front Suspension Adjustments	109

#### TABLE OF CONTENTS

Rear Suspension Adjustments	. 112
Adjustment Tips According to Vehicle Behavior	. 120 . 121
MAINTENANCE	
MAINTENANCE SCHEDULE	. 124
MAINTENANCE PROCEDURES	
Engine Coolant	
Exhaust SystemSpark Plugs	
Brake Fluid	
Chaincase Oil	
Drive Chain	
Drive Belt	
Drive Pulley	
Track	
Suspension	
SkisFuses.	
VEHICLE CARE	
Post-Operation Care	. 162
Vehicle Cleaning and Protection	. 162
STORAGE	.163
PRESEASON PREPARATION	.164
MAINTENANCE RECORDS	. 165
TECHNICAL INFORMATION	
VEHICLE IDENTIFICATION	.174
Vehicle Description Decal	
COMPLIANCE LABELS	
Regulation (EU) 2016/1628 applicable for Non-Road Mobile	0
Machineries	. 176
Machineries	.177
EU DECLARATION OF CONFORMITYUK DECLARATION OF CONFORMITY	.178
UK DECLARATION OF CONFORMITY	.179
EAC DECLARATION OF CONFORMITYBRP RF DESS POST GEN2 (MOWP)	.180
USA and Canada	181
Mexico	
Brazil	
Japan	
Europe	. 182

RADIO FREQUENCY DIGITALLY ENCODED SECURITY SY TEM (RF D.E.S.S. KEY)1	
TECHNICAL SPECIFICATIONS	
ENGINE	
TROUBLESHOOTING	
TROUBLESHOOTING GUIDELINES.  Troubleshooting.  MONITORING SYSTEM  Pilot Lamps, Messages and Beeper Codes.  Fault Codes.	198 <b>201</b> 201
WARRANTY	
BRP INTERNATIONAL LIMITED WARRANTY: 2025 SKI-DOO SNOWMOBILES	AIC ES
CUSTOMER INFORMATION	
DATA PRIVACY INFORMATION CONTACT US Asia Pacific Europe, Middle East and Africa Latin America North America CHANGE OF ADDRESS/OWNERSHIP	<b>216</b> 216 216 217 217

# This page is intentionally blank

# GENERAL INFORMATION

Congratulations on your purchase of a new BRP snowmobile. Whatever model you have chosen, it is backed by the Bombardier Recreational Products Inc. (BRP) warranty and a network of authorized BRP snowmobile 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 snowmobile as well as completed the final adjustment required to suit your specific weight and riding environment before you took possession.

At delivery, you were informed of the warranty coverage and signed the Pre-delivery Check List to ensure your new vehicle was prepared to your entire satisfaction.

# KNOW BEFORE YOU GO

To learn how to reduce the risk for you, your passenger or bystanders being injured or killed, read the following sections before you operate the vehicle:

- safety information
- vehićle information.

Also read all safety labels on your snowmobile and watch attentively your safety video located at:

HTTPS://WWW.BRPLYNX.COM/SAFETY

Or, use the following QR code.



# SAFETY MESSAGES

This operator's guide utilizes the following symbols and words to emphasize particular information:

The safety alert symbol indicates a potential injury hazard.

#### ⚠ WARNING

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

### **CAUTION**

Indicates a hazard situation which, if not avoided, could result in minor or moderate injury.

# **NOTICE**

Indicates an instruction which, if not followed, could severely damage vehicle components or other property.

#### ABOUT THIS OPERATOR'S GUIDE

This operator's guide has been prepared to acquaint the owner, operator and passenger with this snowmobile and its various controls, maintenance and safe riding instructions.

The following terminology in regards to operator, passenger and vehicle configuration is used as follows throughout this guide:

- Operator: refers to the person being behind the controls and driving the snowmobile.
- Passenger: refers to a person sitting behind the operator.
- 1-UP: refers to a model designed for an operator only.
- 2-UP: refers to a model designed to accommodate one passenger.

Keep this operator's guide in the vehicle as you can refer to it for the operation, instructing others, maintenance and troubleshooting.

Note that this guide is available in several languages. In the event of any discrepancy, the English version shall prevail.

If you want to view and/or print an extra copy of your operator's guide, simply visit the following website:

#### www.operatorsguides.brp.com

The information contained in this document is correct at the time of publication. BRP, 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. BRP reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring any obligation upon itself

This operator's guide should remain with the vehicle when it's sold.

#### RESPECT OF THE ENVIRONMENT

The guidelines that we support are not designed to limit your snow-mobiling fun, but to preserve the beautiful freedom that you can experience only on a snowmobile! These guidelines will keep snowmobilers healthy, happy and able to introduce others to what they know and enjoy about their favorite winter pastime. So, the next time you hit the trails on a cool, crisp and clear winter day, we ask you to remember that you are paving the way for the future of our sport. Help us lead it down the right path! From all of us at BRP, thank you for doing your share.

There is nothing more exhilarating than snowmobiling. Venturing onto snowmobile trails that cross wild areas is an exciting and healthy winter sport. However, as the number of people using these recreational parks increases, so does the potential for damage to the environment. Abuse of land, facilities and resources inevitably leads to restrictions and closures of both private and public land.

In essence, the greatest threat to our sport, is all around us. Which leaves us with one logical choice. When we snowmobile, we must always ride responsibly.

The vast majority respect the law and the environment. Each of us must set an example for those who are new to the sport, young and old alike.

It is in every one's best interest to tread lightly into our recreational areas. Because, in the long run, to protect the sport we must preserve the environment.

**Become informed.** Obtain maps, regulations and other information from the Forest Service or from other public land agencies. Learn the rules and follow them and that goes for speed limits, too!

**Avoid** running over young trees, shrubs, and grasses and don't cut wood. On flatlands or areas where trail riding is popular, it's important to ride only where authorized. Remember, there is a link between protecting your environment and your own safety.

Respect wildlife and be particularly sensitive of animals that are rearing young or suffering from food shortage. Stress can sap scarce energy reserves. Refrain from riding in areas where only animals are intended to tread!

**Obey** gate closures and regulatory signs and remember, light treaders don't litter!

Stay out of wilderness areas. They're closed to all vehicles. Know where the boundaries are.

**Obtain permission** to travel across private land. Respect the rights of landowners and other people's privacy. Remember, snowmobile technology has lowered the noise factor considerably, but you still shouldn't rev your engines where quiet "is the order of the day".

Snowmobilers know all too well the efforts that have been made throughout the sport's history to enjoy access to areas where people can snowmobile safely and responsibly. This effort continues today, as strong as ever.

Respecting the areas where we ride... wherever they may be... is the only way to ensure their future enjoyment. That's one major reason why we know you'll agree that Light Treading is smart sledding! And there are more.

Enjoying the opportunity to see winter and all its natural majestic wonders, is an experience cherished by snowmobilers. Light Treading will preserve this opportunity and will make it possible for us to expose others to the beauty of winter and the unique thrill of our sport! Light Treading will help our sport to grow!

Finally, Light Treading is the sign of a smart snowmobiler. You don't have to leave big tracks or careen through a virgin forest to show you can ride. So whether you're driving a high performance BRP snowmobile or any other make or model, show you know what you're doing. Show you know how to send snow flying and make tracks with a light touch!

# This page is intentionally blank

# **SAFETY INFORMATION**

### **BEFORE YOU GO**

#### **A WARNING**

Disregarding any of the safety precautions and instructions contained in this section could cause injury including the possibility of death.

# **Operating Age and Ability**

Operators must be qualified. Make sure the operator is 16 or older. Your state (or province) may have additional requirements. Laws regarding the minimum age and licensing requirements vary from one jurisdiction to another. Be sure to contact the local authorities for information regarding the legal operation of a snowmobile in the intended jurisdiction of use. BRP highly recommends that you take a safety riding course. Basic training is required for the safe operation of any snowmobile.

Operation of this snowmobile with a disability that impairs vision, reaction time, judgment, or operation of the controls is not recommended. The safe use of your snowmobile depends on many conditions such as visibility, speed, weather, environment, traffic, vehicle condition and the condition of the operator. The performance of some snowmobiles may significantly exceed that of other snowmobiles you have operated. Therefore, use by novice or inexperienced operators is not recommended.

Each passenger must be able to simultaneously place both feet firmly flat against each footboard when properly seated.

# **Drugs and Alcohol**

Never ride after consuming alcohol or drugs. Riding on a snowmobile requires the operator and passenger (s) to be sober, attentive and alcohol, singly or in combination, decreases reaction time, impedes judgment, impairs vision, and inhibits your ability to safely ride on a snowmobile.

#### **Avalanche Safety Training Courses**

We recommend that all mountain riders take a local avalanche safety training course to become more familiar with snow conditions and learn how to properly use their equipment. Here are some web sites that can help you finding important information:

- US: www.avalanche.org
- Europe: www.avalanches.org
- Canada: www.avalanche.ca

#### Protective Gear

Proper snowmobile clothing should be worn by all riders. It should be comfortable and not too tight. Always check the weather forecast before going on a ride. Dress for the coldest weather expected. Thermal underwear next to the skin also provides a good insulation.

Always wear an approved helmet at all times for safety and comfort. They provide both warmth and reduce injury. A stocking type cap, balaclava and face mask should always be carried or worn. Goggles or a face shield that attach to the helmet are indispensable.

Hands should be protected by a pair of snowmobile gloves or mitts which have sufficient insulation and allow use of thumbs and fingers for operation of controls.

Rubber bottom boots with either a nylon or a leather top, with removable felt liners are best suited for snowmobiling.

You should keep yourself as dry as possible when snowmobiling. When you come indoors, take your snowmobile suit and boots off and make certain they dry properly.

Do not wear a long scarf or loose apparels that could get caught in moving parts.

Carry colored lens goggles.

# Required Equipment

As the owner of the snowmobile, you are responsible for ensuring that all required safety equipment is aboard. Check your local regulations about requirements.

First aid kit	Provided tool kit
Mobile phone	Knife
Spare spark plugs	Flashlight
Adhesive tape (duct tape)	Trail map
Spare drive belt	Snack
Probe*	Shovel*

#### BEFORE YOU GO

Avalanche beacon*	-	
*When riding in an area with avalanche risk		

#### GET FAMILIAR WITH THE SNOWMOBILE

This vehicle may exceed the performance of other vehicles you may have ridden. Take time to familiarize yourself with your new vehicle.

Inexperienced riders may overlook risks and be surprised by vehicle's specific behavior and terrain conditions. Ride slowly. Excessive speed and reckless driving can kill.

Make sure you read and understand the content of this operator's guide to become completely familiar with the controls and operation of the snowmobile before embarking on your first trip or taking on a passenger(s). If you have not had the opportunity to do so, practice driving solo in a suitable traffic-free area to become accustomed to the feel and response of each control.

It is very important to inform any operator, regardless of his experience, of the handling characteristics of this snowmobile. The snowmobile configuration, such as ski stance, ski type, suspension type, track length, width and type vary from a model to another. The snowmobile handling is greatly influenced by these characteristics.

# Track Propulsion System

Your snowmobile features a track propulsion system. The track grips on the snow-covered surface and pushes the snowmobile in the opposite direction of the force applied on the surface. Stay away from the track. Personal injury will result if contact is made with the revolving track.

#### **⚠ WARNING**

Never stand behind or near a rotating track. Debris could be projected causing severe injuries.

The grip of the track will vary depending on the surface conditions. The grip may be reduced on hard-pack snow or ice. Reduce your speed and allow more space to turn. Refer to the *TRACTION ENHANCING PRODUCTS* subsection of this guide to learn how to balance the grip of the ski vs the grip of the track. If the front and rear of the snowmobile are out of balance due to an incorrect combination of traction enhancing products, the snowmobile may tend to oversteer or understeer, which could lead to a loss of control.

#### Steering

Skis are used to steer the snowmobile through the handlebar. The performance to steer will vary depending of the grip of the skis on the surface. Steering control ability may be reduced on hard-pack snow, ice or roads. Reduce speed and allow more space to turn. Refer to the TRACTION ENHANCING PRODUCTS subsection of this guide to learn how to balance the grip of the ski versus the grip of the track. If

the front and rear of the snowmobile are out of balance due to an incorrect combination of traction enhancing products, the snowmobile may tend to oversteer or understeer, which could lead to a loss of control.

Riding with a passenger or when carrying loads, the steering control will also be reduced. Reduce speed and allow more space to turn.

#### **Tether Cord**

Always attach tether cord eyelet to clothing before starting the engine to help ensure the engine stops should the operator fall off.

After riding, always remove the tether cord from the engine cut-off switch to avoid unauthorized use by children or others and to prevent starting in a closed environment (ex: garage).

# **Braking**

Braking performances may vary suddenly under certain conditions. Always remember that the snowmobile braking distance may be affected when riding with a passenger and when loaded with cargo at the rear. Never jam the brake and lock the track. Be sure to use restraint in braking to keep from blocking the track in order to avoid surprises that could lead to a loss of control.

Using studs on the track will give you better braking capacity on packed snow or ice but will have no noticeable effect on soft snow. Refer to *Enhancing Traction Control Products* subsection for track studding application.

#### Parking Brake

Always engage parking brake before starting the engine. Parking brake should be used whenever snowmobile is parked.

Make sure parking brake is fully disengaged before operating the snowmobile. When you ride the vehicle, brake pads that are caused to drag by a continuous pressure on the lever may cause damage to the brake system and cause loss of braking capacity or fire.

#### **Towing Another Snowmobile**

If a snowmobile is disabled and must be towed, in an emergency situation only, a rope can be used

- Remove the drive belt. Refer to Maintenance Procedures for more details.
- Attach the rope to the ski legs (spindles), not to the skis. If the ski legs are not accessible, attach the rope to the bumper.

- Have someone sit on the towed snowmobile to steer and activate the brake if needed
- Tow at low speed with extra caution.

#### **NOTICE**

Always remove the drive belt of the snowmobile that is to be towed to prevent damage to its belt and drive system.

In some areas, it may be illegal to do so. Check with state or local authorities.

#### Accessories and Modifications

Any modifications or addition of accessories approved by BRP may affect the handling of your vehicle. It is important to take the time to get familiar with the vehicle once modifications are made to understand how to adapt your driving behavior accordingly.

Avoid installing equipment not specifically approved by BRP for the vehicle and avoid unauthorized modifications. These modifications and equipment have not been tested by BRP and may create hazards. For example, they could:

- Create a loss of control and increase risk of crash.
- Cause overheating or short circuits increasing the risk of fire or burn injuries
- Affect the protection features provided by the vehicle
- Affect the behavior of the trailer when the vehicle is transported
- Cause a risk of losing objects on the road when transported.

Your vehicle may also become illegal to ride.

Ask your authorized BRP dealer for suitable available accessories for your vehicle.

# **Traction Enhancing Products**

#### NOTF:

This section is applicable to all snowmobile models that are either equipped with a:

- Factory installed track approved by BRP for special studs installation.
- Factory pre-studded track.

or that can received one of these tracks

Always refer to your authorized BRP snowmobile dealer to learn more on traction enhancing products and applicability on your snowmobile.

21

#### GET FAMILIAR WITH THE SNOWMOBILE

Using traction enhancing products such as, adjustable or more aggressive ski carbide runners and / or track studs on your snowmobile will change its behavior, particularly in terms of maneuverability, acceleration, and braking.

Using traction enhancing products gives a better grip on hard packed snow and ice, but has no noticeable effect in deep snow. For this reason, driving a snowmobile equipped with traction enhancing products requires a certain adaptation period. If your snowmobile is equipped with traction enhancing products, be sure to take plenty of time to get used to the way it handles when turning, accelerating, and braking.

The use of track studs can increase the load and the stress on certain snowmobile components, as well as the vibration level. This can cause premature wear on parts such as belt, brake linings, bearings, chain, chain sprockets, and shorten track life.

Track studs can also cause serious damage to your snowmobile if it is not equipped with the appropriate tunnel protectors.

Check local regulations concerning the use of traction enhancing products on snowmobiles.

Studding an unapproved track or using unapproved studs increase the risk of the track tearing or severing

Installing track studs and tunnel protector(s) requires technical knowledge. To ensure safe and proper installation, BRP recommends to have the studs installed by your dealer.

For maintenance and replacement refer to *Track* in *Maintenance Procedures*.

#### Maneuverability

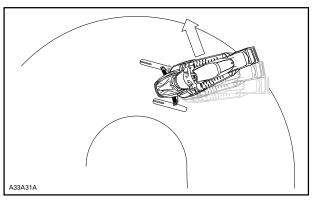
Using traction enhancing products such as, more aggressive ski carbide runners and/or studs makes the snowmobile grip the ground better at both the front and at the rear. The use of carbide runners is therefore required to give the skis a better grip, so that the front and rear of the snowmobile are in balance. While off-the-shelf carbide ski runners are adequate, they don't necessarily give you optimal control, since that depends on your personal preferences, your riding style, and how your suspension is adjusted.

#### **MARNING**

If the front and rear of the snowmobile are out of balance due to an incorrect combination of traction enhancing products, the snowmobile may tend to oversteer or understeer, which could lead to a loss of control.

# Oversteering

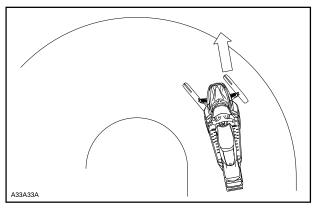
In certain conditions, using more aggressive ski carbide runners without studs on the rear track could make the snowmobile prone to oversteering, see illustration.



#### **OVERSTEERING**

# Understeering

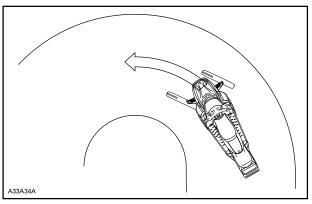
In certain conditions, the use of studs on the track could make the snowmobile prone to understeering if the skis are not equipped with more aggressive ski carbide runners, see illustration.



#### **UNDERSTEERING**

# **Controlled Driving**

A balanced combination of carbide ski runners and studs on the track ensures adequate control and better handling, see illustration.



CONTROLLED DRIVING

#### Acceleration

Using studs on the track will allow your sled to accelerate better on packed snow and ice but will have no noticeable effect on soft snow. This can cause sudden variations in traction under certain conditions.

Always go easy on the throttle and never try to spin the track to make the rear of the snowmobile skid. This could cause debris or ice to be thrown violently backwards, possibly injuring others nearby or on snowmobiles behind you.

#### Braking

As in the case of acceleration, using studs on the track will give you better braking capacity on packed snow or ice but will have no noticeable effect on soft snow. Braking may thus vary suddenly under certain conditions. Be sure to use restraint in braking to keep from blocking the track in order to avoid surprises that could lead to a loss of control.

#### RIDE SAFELY

# Rider Position (Forward Operation)

Your riding position and balance are the two basic principles of making your snowmobile go where you want it to. When turning on the side of a hill, you and your passenger must be ready to shift body weight to help it turn in the desired direction. Operator and passenger must never attempt this maneuvering by placing feet outside of the vehicle. Experience will teach you how much lean to put into turns at different speeds and how much you will have to lean into a slope to maintain proper balance.

Generally, the riding position for best balance and control is sitting. However, the posting, kneeling or standing positions are also used under certain conditions

#### **↑** WARNING

Do not attempt any maneuvers if they are beyond your abilities.

#### Sitting

Feet on the running boards, body midway back on seat is an ideal position when operating the snowmobile over familiar, smooth terrain. Knees and hips should remain flexible to absorb shocks.



#### Posting

A semi-sitting position with the body off the seat and the feet under the body in a sort of squatting posture, thus allowing the legs to absorb the shocks when traveling over uneven terrain. Avoid abrupt stops.



# Kneeling

This position is achieved by placing one foot firmly on the running board and the opposite knee on the seat. Avoid abrupt stops.



#### Standing

Place both feet on the running boards. Knees should be flexed to absorb the shock from surface bumps. This is an effective position to see better and to shift weight as conditions dictate. Avoid abrupt stop.



# Rider Position (Reverse Operation)

When operating in reverse:

- Ensure the path behind is clear of obstacles or bystanders before proceeding in reverse.
- BRP recommends sitting on your snowmobile when operating in reverse.
- Avoid standing up. Your weight could shift forward against throttle lever while operating in reverse, causing an unexpected acceleration. Unexpected acceleration when snowmobile operates in reverse can cause a loss of control.

Fast reverse while turning, could result in loss of stability and control.

# Riding with Passenger(s)

This vehicle is designed for one (1) operator and as many passengers as there are seats with straps or handholds installed on the vehicle conforming to SSCC standards. Passenger must only sit on designated passenger seat.

#### **⚠** WARNING

- Never carry a passenger on a seat not approved by BRP.
- Never allow anyone to sit between the handlebar and the operator.

Even when a passenger is allowed, this person must be physically fit for snowmobiling.

Any passenger must always be able to firmly lay his feet on the footrests and keep his hands on the handholds or seat strap when seated. Respecting those physical criteria is important to ensure that the passenger is stable and to reduce the risks of ejection. Falls can result in severe injury or death.

The operator has a responsibility to ensure the safety of his passenger and should inform the passenger about snowmobiling basics.

Before riding the vehicle, adjust suspension according to weight. Refer to *Tune Your Ride* subsection for more details.

Ask your passenger to inform you to slowdown or stop immediately if he feels uncomfortable or insecure during the ride.

When going over bumps, riders(s) may raise their body slightly off the seat to absorb the shocks with their legs.

An unforeseen bump can leave you passenger-less. Remind your passenger to lean into the turn with you, without causing the vehicle to topple. Be extremely careful, go more slowly and check the passenger frequently. Keep a watchful eye on your passenger while riding.

Braking ability and steering control are reduced when riding with a passenger. Decrease speed and allow extra space to maneuver.

#### Riding Alone

Venturing out alone with your snowmobile could also be hazardous. You could run out of fuel, have an accident, or damage your snowmobile. Remember, your snowmobile is capable of traveling further in half an hour than you may be able to walk in a day. Use the "buddy system". Always ride with a friend or member of your snowmobile club. Even then, tell someone where you are going and the approximate time you plan to return.

### Riding in a Group

Before starting out, designate a "trail boss" to lead the party and another person to follow-up at the end of the party. Ensure that all members of the party are aware of the proposed route and destination. When riding with others, limit your abilities to the experience of others. Never overtake the trail boss or, for that matter, any other snowmobile. Use down-the-line hand signals to indicate hazards or intent of direction change. It's important to keep a safe distance between each snowmobile but each one behind the leader should know the position of the machine ahead.

# **Avoiding Collisions**

Wherever riding your vehicle always be on the look-out for the unexpected. Operate defensively. Scan constantly for people, objects, conditions and upcoming vehicles. In the trail, always stay on the appropriate side - as per country regulation - to avoid collision, especially when the field of vision is reduced. E.g.: Before a hilltop and a curve. Use extra caution whenever off-trail.

Always keep a safe distance from other snowmobiles and bystanders. Tailgating another snowmobile should be avoided. If the snowmobile in front of you slows for any reason, its operator and passenger could be harmed through your neglect. Maintain a safe stopping distance between you and the snowmobile in front of you. Depending on the terrain condition, stopping may require a little more space than you think. Play it safe. Be prepared to use evasive driving.

On land or water, fog or visibility-limiting snow can form. If you must proceed into the fog or heavy snow, do so slowly with your lights on and watch intently for hazards. If you are not sure of your way, do not proceed. Keep a safe distance behind other snowmobilers to improve visibility and reaction time.

# Riding Behaviors

Injury or death may result to the snowmobile operator, passenger or bystander if the snowmobile is used in risky conditions which are beyond the operator's, passenger's or snowmobile's capabilities or intended use.

Remember, promotional material may show risky maneuvers performed by professional riders under ideal and controlled conditions. You should never attempt any such risky maneuvers if they are beyond your level of riding ability.

Jumping can be a hazardous situation. It requires practice and should be done in a known and controlled environment. Never attempt jumping in a trail. A loss of control could lead to an impact with different elements like rock or tree, or with another snowmobile. When jumping be prepared for landing to absorb the shock. Brace yourself for the impact and your knees must be flexed to act as shock absorbers.

Also, an uneven or mined surface in the trail could be enough to kick upward the snowmobile and generate an impact or a loss of control. When "gunning" the throttle, the vehicle digs into and leaves an irregular snow surface for others. So protect the other users by not spinning the track in the middle of the trail.

# Speeding

Excessive speed and reckless driving can be fatal. Always adjust your speed according to snow conditions and circumstances. In many cases, you cannot react or respond quickly enough to the unexpected. Always ride at a speed which is suitable to the trail, weather conditions and your own ability. Know your local rules. Speed limit may be in effect and meant to be observed.

#### Moving Parts

Stay away from the track. Personal injury will result if contact is made with the rotating track.

To prevent serious injury to individuals near the snowmobile:

- Never stand behind or near a moving track
- Always use a wide-base snowmobile stand with a rear deflector panel if it is necessary to rotate track
- When the track is raised off the ground, only run it at the lowest possible speed. Centrifugal force could cause debris, damaged or loose studs, pieces of torn track, or an entire severed track to be violently thrown backwards out of the tunnel with tremendous force
- Never operate the engine without the belt guard securely installed
- Never operate the vehicle without the brake disk guard securely installed

Never operate the vehicle with the side panels opened, or the hood removed

# **Know Terrain and Riding Variations**

#### Groomed Trail

On a maintained trail, sitting is the most preferred riding position. Do not race and, above all, keep to the right hand side of the trail. Be prepared for the unexpected. Observe all trail signs. Do not zigzag from one side of the trail to the other

#### Ungroomed Trail

Unless there has been a fresh snowfall you can expect "washboard" and snowdrift conditions. Taken at excessive speeds, such conditions can be physically harmful. Slow down. Hold on the handlebar and assume a posting position. Feet should be under the body assuming a crouched position to absorb any jarring effect. On longer stretches of "washboard" trails, the kneeling position of one knee on the seat can be adopted. This provides a certain amount of comfort, while at the same time keeps the body loose and capable of vehicle control. Beware of hidden rocks or tree stumps partially hidden by a recent snowfall.

#### Deep Snow

In deep "powder" snow, your vehicle could begin to "bog" down. If this occurs, turn in as wide an arc as possible and look for a firmer base. If you do get "bogged", and it happens to everyone, do not spin your track as this makes the vehicle sink deeper. Instead, turn the engine off, get off and move the back of the vehicle onto new snow. Then tramp a clear path ahead of the vehicle. A few feet will generally suffice. Restart the engine. Assume the standing position and rock the vehicle gently as you steadily and slowly apply the throttle. Depending on whether the front or rear end of the vehicle is sinking, your feet should be placed on the opposing end of the running boards. Never place foreign material beneath the track for support. Do not allow anyone to stand in front of, or to the rear of, the snowmobile with the engine running. Stay away from the track. Personal injury will result if contact is made with the revolving track.

#### Frozen Water

Traveling frozen lakes and rivers can be fatal. Avoid waterways. If you are in an unfamiliar area, ask the local authorities or residents about the ice condition, inlets, outlets, springs, fast moving currents or other hazards. Never attempt to operate your snowmobile on ice that may be too weak to support you and the vehicle. Operating a snowmobile on ice or icy surfaces can be very dangerous if you do not observe certain precautions. The very nature of ice is foreign to good control of a snowmobile or any vehicle. Traction for starting, turning or stopping is much less than that on snow. Thus, these distances can be multiplied manyfold. Steering is minimal, and uncontrolled spins are an ever present danger. When operating on ice, drive slowly with caution. Allow yourself plenty of room for stopping and turning.

#### Slush

Slush should be avoided at all times. Always check for slush before starting across any lake or river. If dark spots appear in your tracks, get off the ice immediately. Ice and water can be thrown rearward into the path of a following snowmobile. Getting a vehicle out of a slush area is strenuous and in some cases, impossible.

#### Uphill

There are two types of hills you can encounter — the open hill on which there are few trees, cliffs or other obstacles, and a hill that can only be climbed directly. On an open hill, the approach is to climb it by side hilling or slaloming. Approach at an angle. Adopt a standing position with both feet on the same running board. Keep your weight on the uphill side at all times. Maintain a steady, safe speed. Continue as far as you can in this direction, then switch to an opposite hill angle and riding position.

A direct climb could present problems. Choose the standing position, accelerate before you start the climb and then reduce throttle pressure to prevent track slippage.

In either case, vehicle speed should be as fast as the incline demands. Always slow down as you reach the crest. If you cannot proceed further, don't spin your track. Apply the parking brake, turn the engine off, free the skis by pulling them out and downhill, place the rear of the snowmobile uphill, restart the engine, release the parking brake and ease it out with slow even throttle pressure. Position yourself to avoid tipping over, then descend.

#### Downhill

Downhill driving requires that you have full control of your vehicle at all times. On steeper hills, keep your center of gravity low and both hands on the handlebar. Maintain slight throttle pressure and allow the machine to run downhill with the engine operating. If a higher than safe speed is reached, slow down by braking but apply the brake with frequent light pressure. Never iam the brake and lock the track.

#### Side Hill

When crossing a side hill or traversing up or downhill, certain procedures must be followed. All riders should lean towards the slope as required for stability. The preferred operating positions are the standing position, with both feet on the running board that is facing uphill. Be

prepared to shift your weight quickly as needed. Side hills and steep slopes are not recommended for a beginner or a novice snowmobiler.

#### Avalanche Hazard

When riding on mountainous terrain, you should be aware of the risk of avalanches. Avalanches vary in size and shapes and generally occur in steep terrain and on unstable snow.

New snow, animals, people, wind and snowmobiles can all trigger an avalanche. Avoid high marking or traversing steep terrain when avalanche conditions are possible. When in unstable snow conditions, travel should be restricted to lower angle slopes. Wind formed cornices should be avoided. Staying off unstable conditions is the key to safe mountain riding. Probably most important is to be aware of the conditions and dangers on a daily basis when in the mountains. Check local avalanche forecasts and threats each day before heading out to ride and heed forecasters advice.

You should always carry a snow shovel, probe and avalanche beacon while riding on mountains.

#### **Bright Sunshine**

Bright sunny days can considerably reduce your vision. The glare from sun and snow may blind you to the extent that you cannot easily distinguish ravines, ditches or other obstacles. Goggles with colored lenses should always be worn under these conditions.

#### Night Rides

The amount of natural and artificial light at a given time can affect your ability to see or to be seen. Be extra cautious. Drive at speeds that will allow you to stop in time when you see an unknown or dangerous object ahead. Stay on established trails and never operate in unfamiliar territory. Be sure both headlights and taillight are working and clean.

#### Unfamiliar Territory

Whenever you enter an area that is new to you, drive with extreme caution. There may be obstructions hidden beneath the snow. Go slow enough to recognize potential hazards such as fences or fence posts, brooks crossing your path, rocks, sudden dips, guy wires and countless other obstacles which could result in a termination of your snow-mobile ride.

Driving off established trails and in the woods requires reduced speed and increased vigilance. Driving too fast in an area can make even minor obstacles very hazardous. Even hitting a small rock or stump could throw your snowmobile out of control and cause injury to its riders. Even when following existing tracks, be cautious. Travel at a speed so you can see what is around the next bend or over the top of the hill.

#### Hidden Wires

Always be on the lookout for hidden wires, especially in areas that may have been farmed at one time or another. Too many accidents have been caused by running into wires in the fields, guy wires next to poles and roads, and into chains and wires used as road closures. Slow speeds are a must.

#### Riding Uneven Surfaces

Unplanned jumps of snowdrifts, snowplow ridges, culverts, indistinguishable objects or sudden drop in the trail can be dangerous. You can avoid them by wearing the proper color lenses or face shields and by operating at a lower speed.

A good way to help seeing these terrain variations is to wear the proper color lenses or face shields and by operating at a lower speed. Crouch (stand) towards the rear of the vehicle and keep the skis up and straight ahead. Apply partial throttle and brace yourself for the impact. Knees must be flexed to act as shock absorbers.

#### Road Crossing

Your snowmobile is not designed to operate or turn on pavement of public streets, roads or highways. Avoid road traveling. If you must do so, and it is permitted, reduce speed and stay on the edge of the way where you can find snow to help providing capabilities to maintain directional control.

As snowmobile trails often cross roadways it is important for riders to know the proper crossing procedures. When approaching a roadway, signal to others that you are stopping at the intersection and slowly come to a complete stop back from the road's edge. In some cases, you will be approaching the road from a ditch or snowbank. Choose a place where you know you can climb without difficulty. Stop completely at the top of the bank and wait for all traffic to clear. Then, look carefully in both directions before crossing at a 90° angle. If needed, assume a standing position to look both ways. Be wary of parked vehicles. When you are certain that the road is clear proceed straight across the intersection without hesitation. Each rider needs to come to a complete stop, look both ways and then proceed when the roadways is clear of oncoming traffic.

# Railroad Crossing

Never ride on railroad tracks. It is illegal. Railroad tracks and railroad rights-of-way are private property. A snowmobile is no match for a train. Before crossing a railroad track, stop, look and listen.

# Respect of the Wildlife

Wildlife compliments your snowmobiling day. Snowmobile tracks provide firm ground over which animals can travel from area to area. Do not violate this privilege by chasing or harassing wildlife. Fatigue and exhaustion can lead to animal's death. Avoid areas posted for the protection or feeding of wildlife. If you happen to be fortunate enough to see an animal, stop your snowmobile and observe quietly.

# Carbon Monoxide (CO) Poisoning

All engine exhaust contains carbon monoxide (CO), a deadly gas. Breathing carbon monoxide can cause headaches, dizziness, drowsiness, nausea, confusion and eventually death.

Carbon monoxide is a colorless, odorless, tasteless gas that may be present even if you do not see or smell any engine exhaust. Deadly levels of carbon monoxide can collect rapidly, and you can quickly be overcome and unable to save yourself. Also, deadly levels of carbon monoxide can linger for hours or days in enclosed or poorly ventilated areas

If you experience any symptoms of carbon monoxide poisoning, leave the area immediately, get fresh air and seek medical treatment.

To prevent serious injury or death from carbon monoxide:

- Never run the vehicle in poorly ventilated or partially enclosed areas such as garages, carports or barns. Even if you try to ventilate engine exhaust with fans or open windows and doors, carbon monoxide can rapidly reach dangerous levels.
- Never run the vehicle outdoors where engine exhaust can be drawn into a building through openings such as windows and doors.
- Never stand next to the vehicle while the engine is running. A person standing next to the vehicle when the engine is running may inhale high concentrations of exhaust fumes.

After riding, always remove the tether cord from the engine cut-off switch to avoid unauthorized use by children or others and to prevent starting in a closed environment (ex: garage).

# Gasoline Fires and Other Hazards

Gasoline is extremely flammable and highly explosive. Fuel vapors can spread and be ignited by a spark or flame many feet away from the engine. To reduce the risk of fire or explosion, follow these instructions:

- Use only an approved gasoline container to store fuel.
- Strictly adhere to instructions in Vehicle Fueling Procedure.

- Never start or operate the engine if the fuel cap is not properly installed.
- Use only a BRP approved LinQ fuel caddy to carry extra fuel on the vehicle. It should be properly installed and secured.

Gasoline is poisonous and can cause injury or death.

- Never siphon gasoline by mouth.
- If you swallow gasoline, get any in your eye or inhale gasoline vapor, visit your doctor immediately.
- If gasoline spills on you, wash with soap and water and change your clothes.

#### **Burns from Hot Parts**

Certain components may become hot during operation. Avoid contact during and shortly after operation to avoid burns.

# PRACTICE EXERCISES

Practice alone the following exercises after having done the entire Pre-ride inspection. Always start and stop the engine according to the instructions in ENGINE STARTING PROCEDURE and SHUTTING OFF THE ENGINE in BASIC PROCEDURES. Don't forget to attach the tether cord to your jacket.

#### Where to Practice Exercises

Find a suitable area to practice the exercises. Ensure the area meet the following requirements:

- No traffic
- No obstacles
- Hard packed snow
- Ample space to maneuver.

#### **Exercises to Practice**

Practice alone the following exercises after having done the entire Pre-ride inspection. Always start and stop the engine according to the instructions in ENGINE STARTING PROCEDURE and SHUTTING OFF THE ENGINE in BASIC PROCEDURES. Don't forget to attach the tether cord to your jacket.

#### Using the Emergency Engine Stop Switch

Purpose: Become familiar with the operation of throttle lever and to become familiar with using the engine stop switch.

#### Directions:

- With the parking brake engaged, start the engine and let idle until it reaches the operation temperature.
- Use the engine stop switch to shut the engine off. Press the switch with your right thumb while keeping your hand on the handgrip.
- Restart the engine and repeat the exercise. No idle time is required.

#### Tips for additional practice:

Press the emergency engine stop switch without looking at it.

# Starting, Stopping and Basic Handling

#### Purpose:

- Learn throttle control and how to get the vehicle moving.
- Become familiar with low speed deceleration and braking.

If you feel like you are losing control while doing this exercise, release the throttle to stop accelerating and apply the brake as needed to slow down. You can also use the engine stop switch to cut power entirely.

Directions: At first, you will only use the throttle for a moment at a time, then release it and coast.

- Start the engine and release the parking brake lever.
- Slowly apply throttle until the vehicle starts to creep forward. As soon as you start moving release the throttle and coast, then press the brake lever to stop.
- Continue with this part of the exercise until you are comfortable with applying and releasing the throttle.

#### Engine Stop While in Motion

Purpose: Become familiar with using the emergency engine stop switch when in motion so you know how the vehicle will react if you need to use it later.

#### Directions:

- Partway down the straightaway, while operating at 8 km/h (5MPH), toggle the engine stop switch to OFF position and coast to a stop.
- Restart the engine and repeat the exercise. Try increasing your speed (to a maximum of 20 km/h (12MPH) before using the engine stop switch.

In an emergency, the snowmobile engine can be stopped by pressing down on the emergency engine stop switch or by pulling the tether cord cap from the engine cut-off switch, while applying brake.

#### Basic Turns

Purpose: Get comfortable turning in a controlled manner on both sides.

#### Directions:

- Roll in a straight line at low speed and make a wide arcing turn.
   Make sure there is enough space to perform the entire turn.
- Repeat right and left turns and maintain a steady speed bellow 8km/h (5MPH). Hold the throttle to maintain your low speed.
- Leaning forward and into the curve may help you to turn the handlebar more easily.

#### **Quick Stops**

#### Purpose:

- Become familiar with the vehicle braking ability.
- Learn to apply brakes with maximum efficiency.

This exercise is like what you did before, except you'll be applying the brake more firmly, working up to braking at the maximum without locking the track rotation. Always release the throttle completely for quick stops. If you apply throttle and brake at the same time, your stopping distance will be longer.

'n	re	∩t	10	n	c.

#### PRACTICE EXERCISES

- Start at one end of the straightaway and accelerate to 8 km/h (5MPH). Partway down the straightaway, release the throttle completely and brake quickly.
- Keep head and eyes up, keep handlebar straight, and do not release the brake until fully stopped.
- Repeat, increasing your speed and braking harder. When you feel
  that the rotation of the track will be stopped you need to release
  the pressure on the break lever. To maintain control, you need to
  keep the track in rotation.

#### Operating in Reverse

Purpose: Become familiar with the vehicle handling and turning radius in reverse.

#### Directions:

- Shift into reverse and remain seated. Refer to SHIFTING IN RE-VERSE in BASIC PROCEDURES.
- Check that the area behind you is clear. While looking backwards, slowly reverse and stop by releasing throttle and using the brake, just like when operating normally.
- Keep your speed low and do not back up for long distances.
- Repeat the reverse and stop in straight line until you get comfortable.
- Once you are comfortable with reversing in straight line, you can slowly reverse while turning the handle bar.

# **FUFLING**

Fuel is flammable and explosive under certain conditions.

- Never use an open flame to check fuel level.
- Never smoke or allow flame or spark in vicinity.
- Always proceed in a well-ventilated area.

# **Fueling Procedure**

- Stop engine and engage the parking brake.
- 2. Have operator and passenger get off the vehicle. Do not sit or lean on seat when fuel tank cap is not properly installed.
- 3. Unscrew slowly the fuel reservoir cap counterclockwise to stabilize pressure before removing it.

#### NOTE:

A short whistling sound is normal.

- Insert the spout into the filler neck.
- Pour fuel slowly so that air can escape from the tank and prevent fuel flow back. Be careful not to spill fuel.
- 6. Stop filling after the release of the gas pump nozzle handle and wait a moment before removing the spout. Do not retract the gas pump nozzle to put more fuel into the fuel tank. **Do not overfill**.

  7. Reinstall the fuel cap and fully tighten clockwise.
- 8. Always wipe off any small fuel spillage from the vehicle. If a major spillage occurs, remove side panels to remove fuel vapors from engine compartment before starting.
- 9. Before getting on the way don't forget to disengage the parking brake.
- 10. Never top up the fuel tank before placing the vehicle in a warm area. As temperature increases, fuel expands and may overflow.

# INJECTION OIL

Injection Oil is flammable when heated.

- Never use an open flame to check oil level.
- Never smoke or allow flame or spark in vicinity.
- Always proceed in a well-ventilated area.

Refer to Injection Oil in Vehicle Information to add oil.

# TRANSPORTING THE VEHICLE

Make sure that oil reservoir and fuel tank caps are properly installed.

Many type of trailer can be used to transport a vehicle. Tilt-bed, flatbed or enclosed trailers, no matter the trailer used, always proceed with precaution when driving the vehicle on and off of it.

Always anchor the vehicle securely, front and rear, even on short hauls. Use appropriate tie-down straps only. Make sure all equipment is securely fastened. Cover the vehicle to prevent road grime from causing damage.

Make sure the trailer meets state or provincial requirements. Ensure the hitch and safety chains are secured, and the brake, turn indicators and clearance lights are functional.

#### A WARNING

Make sure all seats, accessories and cargo are properly secured, or remove it to prevent from falling on the road and creating a hazard for following vehicles.

# **⚠ WARNING**

Do not tow the vehicle facing backwards. If the vehicle is towed facing backwards, the wind may cause damage to the windshield or even loss of the windshield.

# IMPORTANT ON-PRODUCT LABELS (ALL COUNTRIES EXCEPT CANADA/UNITED STATES)

This vehicle comes with a hang tag and labels containing important safety information.

Any person who rides this vehicle should read and understand this information before riding.

# Vehicle Safety Labels

These labels are affixed to the vehicle for the safety of the operator. passenger or bystanders.

The following labels are on your vehicle and they should be considered permanent parts of the vehicle. If missing or damaged, the decals can be replaced free of charge. Visit an authorized BRP snowmobile dealer

#### NOTE:

In the event of any discrepancy between this guide and the vehicle, the safety labels on the vehicle have precedence over the labels in this auide.

# Shock Absorber - Warning Label

This label is applied directly on the shock absorber.



- This shock absorber is pressurized.
- An explosion may occur if heated or punctured.
- Do not disassemble.

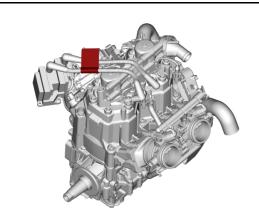
# Disconnect Fuel Injectors - Warning Label

allumer des vapeurs ne etincelle pourrai d'essence, ce qu tincelles. Autrement rifier la production

ooth fuel injectors prior to testing for ignition spark. Always electrically disconnect

nay ignite in presence of Otherwise, fuel vapors a spark creating a fire

DISCONNECT FUEL INJECTORS - WARNING LABEL



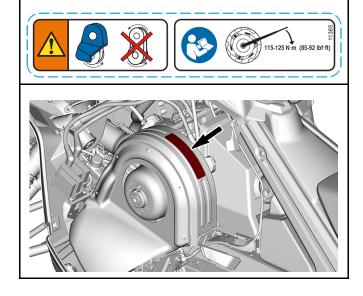
# Pulley Guard and Drive Pulley Tightening Torque - Warning and Notice Label

#### WARNING

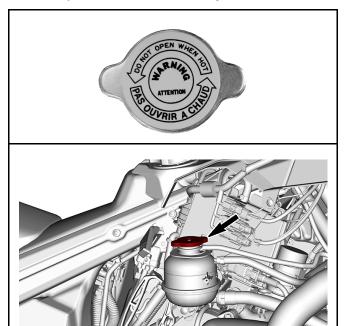
This guard must ALWAYS be in place when engine is running. Beware of rotating parts, they could cause injuries or catch your clothing.

# NOTICE

- Drive pulley bolt recommended torque is 115 to 125 Nm (85 to 92 lbf-ft).
- Not applying the recommended torque may result in a major failure of the drive pulley and the engine.
- Refer to the service manual for the complete assembly procedure.



# Do Not Open When Hot - Warning Label

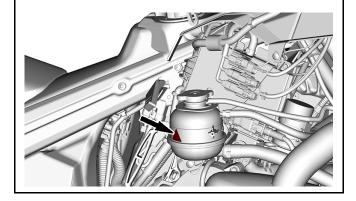


# Do Not Open When Hot - Warning Label

# **A** WARNING

Do not open when hot.





# Starting Procedure - Warning Label

# **⚠ WARNING**

- Read and understand all safety labels, locate and read operator's guide and watch the safety video (using the QR code link or visit Ski-Doo web site) before operation.
- Get familiar with your vehiclé. Inexperienced riders may overlook risks and be surprised by vehicle's specific behavior and terrain conditions. Ride slowly.
- Excessive speed and reckless driving can kill.
- ALWAYS adjust your speed according to snow conditions and circumstances.
- Steering control and braking ability may be reduced on hard-pack snow, ice or roads. Reduce speed & allow more space to stop or turn.
- Respect laws on minimum operator age. Manufacturer recommends a minimum operating age of 16 years old.
- Never open side panels or hood while engine is running or if vehicle is in motion. Ensure to remove tether cord from post before opening those.

Before Starting:

Attach tether cord to your clothing. Check proper operation of the throttle and brake levers each time before starting; they must return to their initial position when released. Apply parking brake. Turn handlebars all the way in both directions to check for interference and insure free operation.

After Starting:

Pull-out tether cord to check if engine shuts off. Re-start and push in the emergency engine stop switch to check if engine shuts off. Disengage parking brake before riding to avoid brake fading.

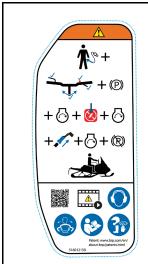
When riding with a passenger:

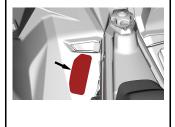
- Braking ability and steering control are reduced.
- Decrease speed and allow extra space to manoeuver.
- Adjust suspension according to weight.

Remember: you are responsible for the safety of your passenger. All drivers and passengers must read the following:

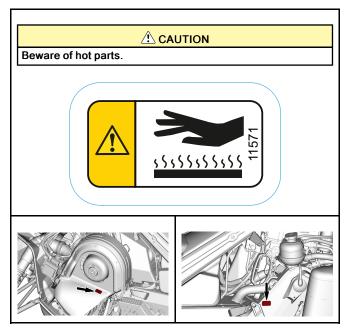
- Avoid surprises, be on the look out for the unexpected.
- Operate defensively, scan constantly for people, objects, conditions and upcoming vehicles.
- Avoid thin ice / open water.
- Use extra caution whenever off-trail.
- Always wear an approved helmet and clothing appropriate for snowmobiling.
- Never ride under the influence of alcohol or drugs, even as a passenger.

#### IMPORTANT ON-PRODUCT LABELS (ALL COUNTRIES EXCEPT CANADA/ UNITED STATES)



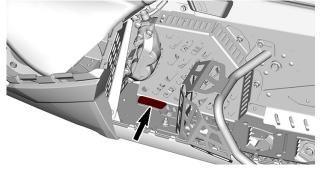


# **Beware of Hot Parts - Caution Label**



# **Disk Guard - Warning Label**





# Passenger Safety - Warning Label

#### **⚠** WARNING

Remember: you are responsible of the safety of your passenger.

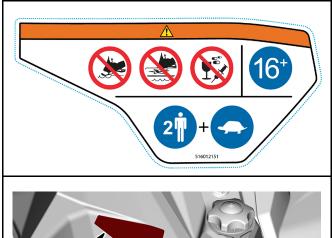
All drivers and passengers must read the following:

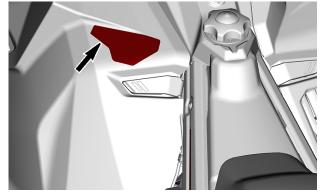
- 16 years old is the minimum age required to drive this vehicle.
- Use extra caution whenever off-trail.
- Avoid thin ice/ open water.
- Never ride under the influence of alcohol or drugs, even as passenger.

### When riding with a passenger:

- Braking ability and steering control are reduced.
- Decrease speed and allow extra space to maneuver.
- Adjust suspension according to weight.

#### IMPORTANT ON-PRODUCT LABELS (ALL COUNTRIES EXCEPT CANADA/ UNITED STATES)

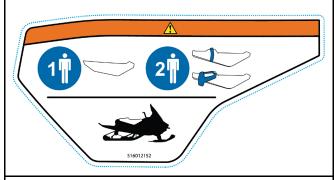


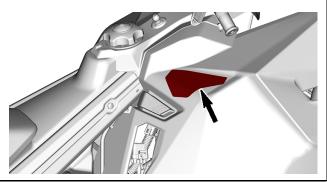


# Passenger Safety - Warning Label

# **⚠** WARNING

This vehicle is design for one (1) operator and as many passengers as there are seats with straps or handgrips installed on the vehicle conforming to SSCC standards.

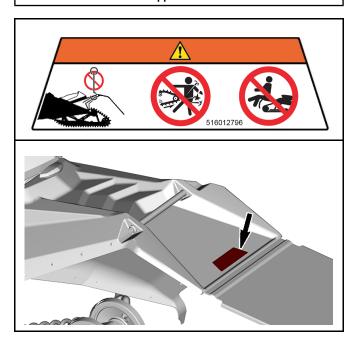




# Rotating Track — Warning Label

# **A** WARNING

- NEVER lift vehicle using the rear bumper. NEVER stand behind or near a rotating track. Debris could be projected causing severe injuries. NEVER sit in the rear support area.

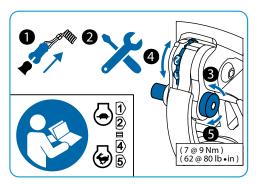


#### IMPORTANT ON-PRODUCT LABELS (ALL COUNTRIES EXCEPT CANADA/ UNITED STATES)

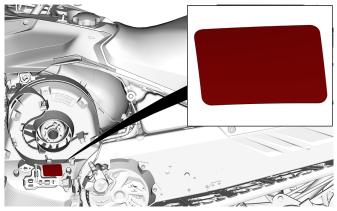
# **Technical Information Labels**

# Clicker Adjustment Label

- 1. Remove tether cord.
- 2. Remove pulley expander from pulley guard.
- Loosen bolt.
- 4. Adjust clicker.
- 5. Torque bolt.



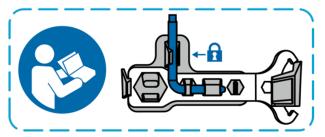
#### CLICKER ADJUSTMENT LABEL



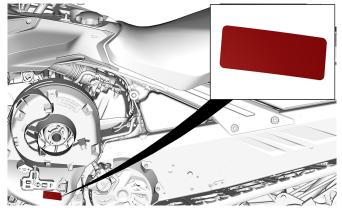
**TYPICAL** 

# Adjustment Tools Label

- Install suspension adjustment tool first. (Illustrated red on label) Install pulley expander and Headlight adjustment tool second. (Illustrated blue on label)
- Refer to Tools in Equipment.



# ADJUSTMENT TOOLS



**TYPICAL** 

IMPORTANT ON-PRODUCT LABELS (ALL COUNTRIES EXCEPT CANADA/ UNITED STATES)

#### Recommended Fuel — Notice Label

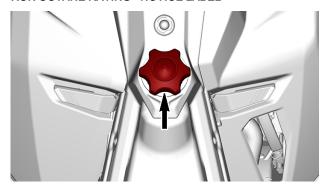
Refer to the *Technical Specifications* for appropriate fuel type for your vehicle engine.



# AKI (RON+MON)/2 OCTANE RATING - NOTICE LABEL



#### **RON OCTANE RATING - NOTICE LABEL**



# PRE-RIDE INSPECTION

Perform a pre-ride inspection before each ride to detect potential problems during operation. The pre-ride inspection can help you monitor wear and deterioration before they become a problem. Correct any problems that you discover to reduce the risk of an accident or a malfunction.

# Before Starting the Engine

- Remove snow and ice from body including lights, seat, footrests, controls and instruments.
- Remove packed snow and ice from the rear suspension using the wrench tool stored on the drive belt guard.
- 3. Verify that air silencer prefilter is free of snow.
- Verify that skis and steering operate freely. Check corresponding action of skis versus handlebar.
- Check fuel for level and leaks. Replenish if necessary and in case of any leaks; you should seek service from an authorized BRP snowmobile dealer, repair shop, or person of your own choosing for maintenance, repair, or replacement.
- All storage compartments must be properly latched and they must not contain any heavy or breakable objects. Hood and side panels must be also properly latched.
- Activate the throttle control lever several times to check that it operates easily and smoothly. It must return to idle position when released.
- Activate the brake lever and make sure the brake fully applies before the brake control lever touches the handlebar grip. It must fully return when released.
- Apply parking brake and check if it operates properly. Leave parking brake applied.
- Inspect drive belt condition and height. Refer to Drive Belt in Maintenance Procedures.

# After Engine is Started

For proper engine starting procedure, refer to the appropriate *Engine Starting Procedure*.

 Check headlights high beam and low beam, taillight, stop light and pilot lamps operation.

#### NOTE:

You may need to detach tether cord from your clothes to check lights. In such a case, attach cord as soon as you get back at the controls of the snowmobile.

- 2. Check the engine cut-off switch (by pulling tether cord cap) and emergency engine stop switch operation.
- Release parking brake.
- 4. Refer to Vehicle warm up and follow instructions.

# **Pre-Ride Check List**

ITEM	OPERATION	
BODY INCLUDING SEAT, FOOTRESTS, LIGHTS, AIR FILTER, CONTROLS AND INSTRUMENTS	Check condition and remove snow or ice.	
SKIS AND STEERING ACTION	Check for free movement and proper operation.	
SKI RUNNERS	Check for abnormal wear.	
FUEL	Check for proper level and no leaks.	
INJECTION OIL (IF APPLICABLE)	Check for proper level and no leaks.	
COOLANT	Check for proper level and no leaks.	
DRIVE BELT	Check for cracks, fraying or abnormal wear and proper height.	
THROTTLE LEVER	Check for proper operation.	
BRAKE LEVER	Check for proper operation.	
PARKING BRAKE, BRAKE	Check for proper operation.	
BRAKE FLUID	Check for proper level and no leaks.	
STORAGE COMPARTMENT	Check for proper latching and no heavy or breakable objects.	
TRACK	Check condition and remove snow or ice. For studded tracks, refer to <i>Traction Enhancing Products</i> .	
SLIDER SHOES	Check for abnormal wear.	
EMERGENCY ENGINE STOP SWITCH AND ENGINE CUT-OFF	Check for proper operation. Tether cord must be attached to operator clothing eyelet.	

SWITCH (TETHER CORD CAP)		
LIGHTS	Check for proper operation.	
HORN BUTTON (IF EQUIPPED)	Check for proper operation.	

# This page is intentionally blank

# VEHICLE INFORMATION

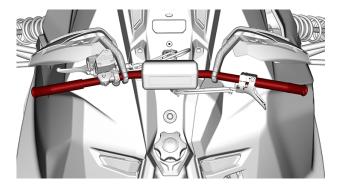
# PRIMARY CONTROLS

# Handlebar

The handlebar controls the steering of the snowmobile. As the handlebar is rotated to right or left, the skis are turned right or left to steer the snowmobile.

# **⚠ WARNING**

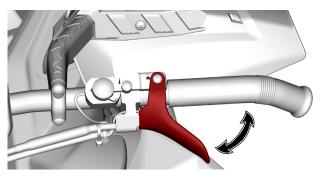
Fast reverse while turning, could result in loss of stability and control.



# Throttle Lever

Throttle lever is located on the RH side of handlebar.

When squeezed, it increases the engine speed. When released, engine speed returns automatically to idle.



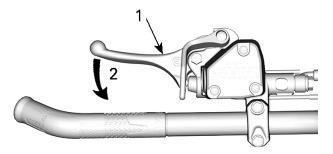
#### A WARNING

Test the throttle lever operation each time before starting the engine. The lever must return to the rest position once released. Otherwise, do not start engine.

#### Brake Lever

Brake lever is located on the LH side of handlebar.

When squeezed, brake is applied. When released, it automatically returns to the rest. Braking effect is proportional to the pressure applied on the lever and to the type of terrain and its snow coverage.



#### TYPICAL

- 1. Brake lever
- 2. To apply brake

#### Brake Lever Adjustment

# **A WARNING**

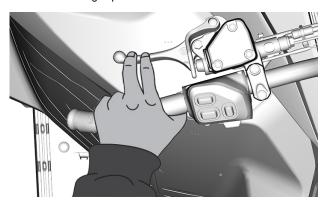
It is important to adjust the brake lever to the user size and normal riding position.

Proper brake lever position should allow:

- Good support for the index and middle finger on the lever.
- Use the outer end of the lever to optimize the force.
- Proper wrist alignment.

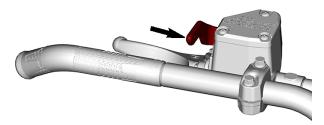
#### PRIMARY CONTROLS

Taking the time to adjust and try out the brake lever before your first snowmobile outing improves user comfort.



# Parking Brake Lever

Parking brake lever is located on the LH side of handlebar.



#### **TYPICAL**

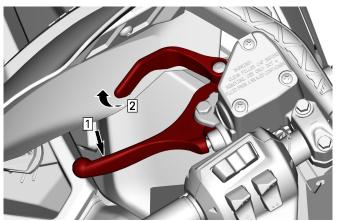
Parking brake should be used whenever snowmobile is parked.

# **A** WARNING

Make sure parking brake is fully disengaged before operating the snowmobile. When you ride the vehicle, brake pads that are caused to drag by a continuous pressure on the lever may cause damage to the brake system and cause loss of braking capacity and/or fire.

# To Engage Parking Brake

Apply and hold brake, then lock brake lever using the parking brake lever as shown.



TYPICAL — ENGAGE MECHANISM

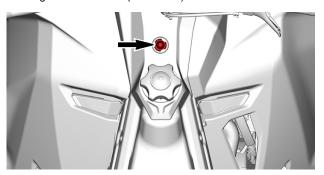
- 1. Apply and hold brake
- 2. Lock brake lever using parking brake lever

# To Release Parking Brake

Squeeze brake lever. Parking brake lever will automatically return to its original position. Always release parking brake before riding.

# **Engine Cut-off Switch**

The engine cut-off switch (tether cord) is located on the console.



The tether cord cap must be securely snapped on the engine cut-off switch to allow vehicle operation.

Pulling the tether cord cap from the switch shuts the engine off.

#### ♠ WARNING

Always attach the tether cord eyelet to clothing before starting the engine.

#### NOTE:

The D.E.S.S. (Digitally Encoded Security System) can be enabled if desired. Contact an authorized Ski-Doo dealer.

# D.E.S.S. (Digitally Encoded Security System)

The tether cord cap has an integrated D.E.S.S. key to provide you and your snowmobile with the equivalent security of a conventional lock key.

The D.E.S.S. key contains an electronic chip which features a unique permanently memorized digital code.

Your authorized BRP snowmobile dealer has programed the D.E.S.S. of your snowmobile to recognize the D.E.S.S. key in the tether cord cap to allow vehicle operation.

If another tether cord is used without programming the D.E.S.S., the engine will start but will not reach drive pulley engagement speed to move vehicle.

Make sure the tether cord cap is free of dirt or snow.

### D.E.S.S. Flexibility

The D.E.S.S. of your snowmobile can be programmed by your authorized BRP snowmobile dealer to accept up to 8 different keys.

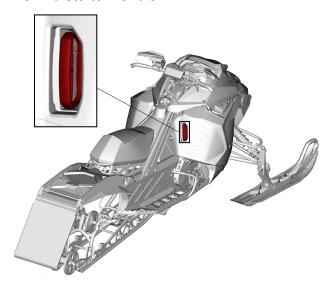
We recommend the purchase of additional tether cords from your authorized BRP snowmobile dealer. If you have more than one D.E.S.S. equipped BRP snowmobile, each can be programmed by your authorized BRP snowmobile dealer to accept the other vehicles D.E.S.S. keys.

### SECONDARY CONTROLS

Some features may not apply to your model or could be optional.

Vehicle safety labels are not shown on illustrations. For information on vehicle safety labels, refer to *Vehicle Safety Labels*.

### **Rewind Starter Handle**



Auto-rewind type located on right hand side of snowmobile under the side panel. Open right hand side panel to access the rewind starter handle. Refer to *Removing the Side Panels* in this subsection. To engage mechanism pull handle slowly until a resistance is felt then pull vigorously. Slowly release handle.

#### NOTE:

The maximum torque that can be transmitted to the engine by the rewind starter is 80 Nm (59 lbf-ft). The maximum force that can be exerted on the on the rope is 2 200 N (494.6 lbf).

## **Exhaust Tuned Pipe Preheat Button**



1. Start / RER button

To preheat the exhaust tuned pipe:

- 1. Apply the parking brake.
- 2. Start the engine.
- 3. Completely release the throttle
- 4. Push and hold the Start/RER button and slowly start to press on the throttle lever.

The engine sound will change. Stuttering and backfire will then start

5. Find the throttle position where there is a minimum of backfire.

The engine will cycle between stuttering and the rev limiter once the optimal temperature is reached.

6. Release the preheat button.

## Heated Grips and Heated Throttle Lever Switch

#### NOTE:

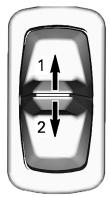
- Under 2000 RPM, heated grips will be limited at 50%.
- Battery level will limit heated grips. Under 13 V the heated grips will be turned off

The switch on the console controls simultaneously the handlebar grips and the throttle lever heat intensity.

The balance between the temperature of the throttle lever and the grips can be adjusted.

#### SECONDARY CONTROLS

Depress switch as required to select heating intensity to keep your hands at a comfortable temperature.



### SWITCH ON CONSOLE

- 1. Increase heat
- 2. Decrease heat

The heating intensity is displayed via the digital display.

## Heated Grips Display



Heated Throttle Lever Display



Heated grips and throttle lever will be OFF when there are no bars displayed on the gauge.

When the switch is released, display will return to fuel level and engine temperature.

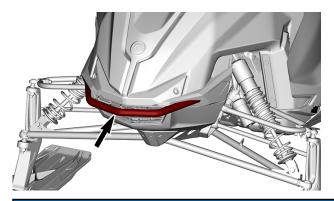
## **BODY AND SEAT**

## Front Bumper

To be used whenever snowmobile requires manual lifting.

### **A** CAUTION

Beware of injuries by using proper lifting techniques, notably using your legs force. Do not attempt to lift the rear of vehicle if it is above your limits. Use appropriate lifting device or have assistance to share lifting stress if possible.



# NOTICE

Do not use skis to pull or lift snowmobile.

## Side Panels

### **⚠** WARNING

Never operate engine with side panels opened or removed from vehicle.

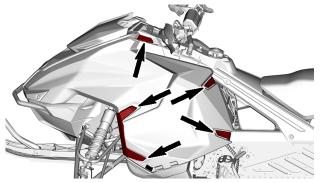
Side panels are attached to the upper body module. Refer to *Upper Body Module* for removal and installation procedure.

## **Upper Body Module**

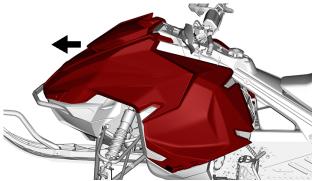
## Removing the Upper Body Module

1. Unlatch the following straps on both sides.

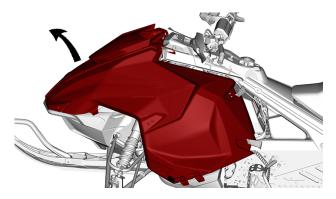
76



**LH SIDE**2. Slide the upper body module forward.

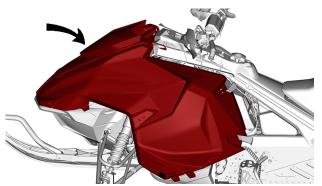


3. Remove the upper body module.

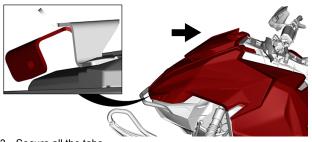


## Installing the Upper Body Module

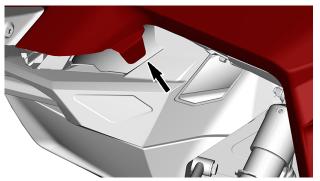
1. Lower the upper body module on the vehicle.



Slide the upper body module rearward. Make sure the front hook goes through the front support first.



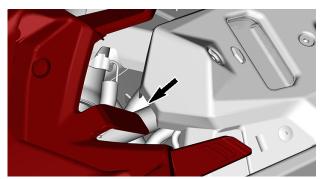
3. Secure all the tabs.



LH SIDE

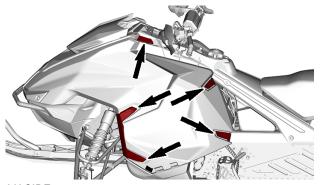


LH SIDE



TOP SIDE

4. Secure the following straps on both sides.

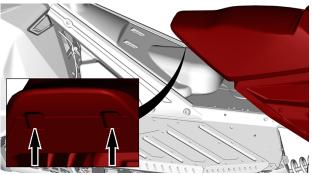


LH SIDE

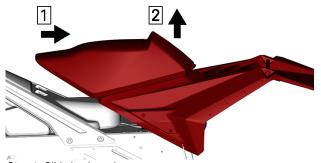
### Seat

## Removing the Seat - Front Tab Lock

1. Slide the seat backward until the front tabs are cleared.



- Disconnect the taillight connector. Slide the seat backward then pull it up to remove it.



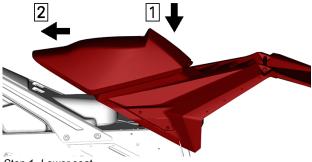
Step 1. Slide backward Step 2. Pull up

Installing the Seat - Front Tab Lock

# NOTICE

Riding the vehicle with any objects between the seat and the fuel tank could damage the fuel tank. NEVER place any objects between seat and fuel tank.

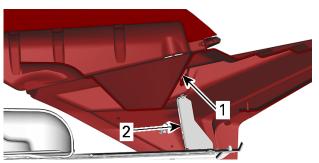
- Connect the taillight connector.
   Lower the seat on the vehicle then slide it forward.



Step 1. Lower seat Step 2. Slide forward

### NOTE:

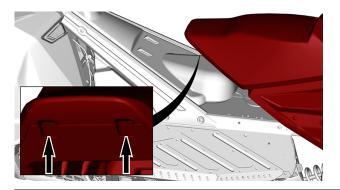
When lowering the seat, make sure the under seat bump is in front of the seat support.



TYPICAL - CROSSCUT VIEW

- Under seat bump
   Seat support
- 3. Slide the seat forward until the front tabs lock the seat in place.

## BODY AND SEAT



# **A** WARNING

Make sure seat is securely latched before riding.

### **EQUIPMENT**

Some features may not apply to your model or could be optional.

### **Drive Belt Guard**

Removing the Drive Belt Guard

#### **⚠** WARNING

### NEVER operate engine:

- Without shields and belt guard securely installed.
- With hood and/or side panels opened or removed.

NEVER attempt to make adjustments to moving parts while engine is running.

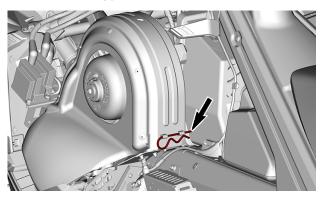
#### NOTF:

Belt guard is purposely made slightly oversize to maintain tension on its pins and retainers preventing undue noise and vibration. It is important that this tension be maintained when reinstalling.

Remove the tether cord cap from the engine cut-off switch.

Open the LH side panel. See procedure in this section.

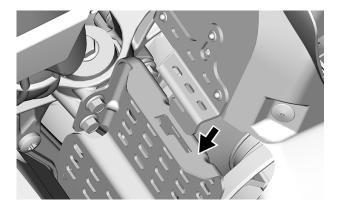
Remove the retaining pin.



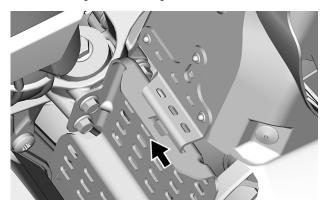
Lift rear portion of the guard then release from the front tab.

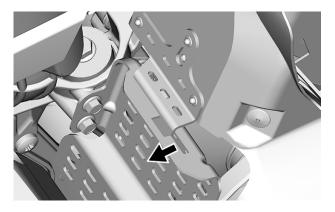
### Installing the Drive Belt Guard

Insert belt guard tab in front support slot.

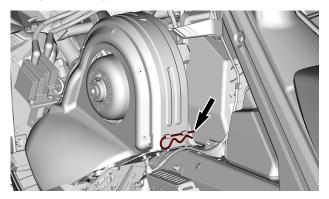


Push drive belt guard toward engine then toward front of vehicle.





Position the rear portion of the belt guard over the retainer and secure it using the retaining pin.



## COMPACT DIGITAL DISPLAY



### COMPACT DIGITAL DISPLAY

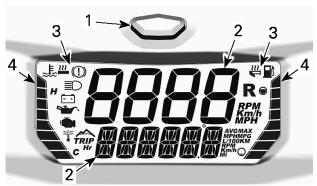
### **⚠ WARNING**

Reading the digital display can distract from the operation of the vehicle, particularly from constantly scanning the environment.

### NOTE:

The digital display is factory preset in Imperial units and in English. To change units or language, contact an authorized BRP snowmobile dealer.

## **Display Features**



### COMPACT DIGITAL DISPLAY

- 1. Mode button
- 2. Digits
- 3. Icons
- 4. Bar gauges

The digital display also has a built-in beeper.

### Digital Display

## **A WARNING**

Never adjust or set functions on the digital display while riding the vehicle.

To set the displays to your preference, refer to *Display Combination Selection*.

## Upper Display

The upper display is used to display:

- Vehicle speed.
- Engine speed (RPM).



1. Upper Display

## **Lower Display**

The lower display is used to display

- Various information (in combination with the upper display)
- Messages, refer to lcons and Messages and Monitoring System for details.
- Fault codes, refer to Monitoring System for details.



1. Lower display

## LH side Bar Gauge



### 1. LH bar gauge

LH B	ar Gauge	Information	ı
------	----------	-------------	---

Engine coolant temperature

Heated grips level

The LH side bar gauge displays the engine coolant temperature except while adjusting the heating elements.

# **NOTICE**

If engine overheats, stop vehicle in a safe place. Refer to TROUBLESHOOTING.

For details on heated grips operation, refer to Heated Grips and Throttle Lever Switch in Secondary Controls.

## RH Side Bar Gauge



### 1. RH bar gauge

RH Bar Gauge Information
Fuel level
Heated throttle lever level

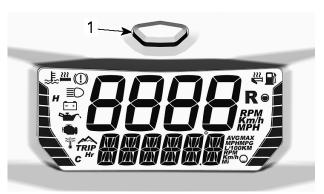
The RH side bar gauge displays the fuel level except while adjusting the heated throttle lever.

For details on heated throttle lever operation, refer to *Heated Grips* and *Throttle Lever Switch* in *Secondary Controls*.

## Display Combination Selection

The upper and lower displays can be set as combination only. They cannot be set separately.

To scroll through the information options, press and release the mode button repeatedly until the desired information is displayed.



1. Gauge mode button

## COMPACT DIGITAL DISPLAY

refer to the following table for available combinations.

Available Display Combinations						
	Upper Display	Icon/ Specific information	Lower Display	Icon/ Specific information		
1	Vehicle speed OR Engine RPM	Km/h or MPH OR RPM	Vehicle speed OR Engine speed	Km/h or MPH OR RPM		
	Engine RPM	RPM	Altitude	M or F		
2		Altitud		M or F		
			Odometer	Km or MI		
3			Trip odometer A(1)	TRIP		
	Vehicle speed		(.)	Km or MI		
4		Km/b or MDU		TRIP		
5			B (1) (2)	Km or MI		
			Trip hour (1)	TRIP Hr		
6				MAX		

			·	Km/h or MPH
7			Average speed (1)	AVG
8				Km/h or MPH
9			Top RPM (1)	MAX
		Vehicle speed Km/h or MPH		RPM
10			Average fuel	AVG
11			consump tion	L/100Km or MPG
12			Engine coolant tempera ture	E and C or F

#### NOTE:

Make sure to display the vehicle speed whenever this information is necessary.

<sup>(1)</sup> Press and hold the mode button to reset (2) Resetting the trip odometer B also resets the average fuel consumption

### Icons and Messages

See table below for usual icons and messages.

For details on malfunction pilot lamps and messages, refer to *Monitoring System*.

Icon	Beeper	Message Lower Display	Description		
_	2 short beeps	GOOD KEY	At power up, with a good key. Vehicle ready for use.		
_	— BREAK-IN		Displayed during break-in period. Refer to <i>Break-in Period</i>		
(S)	4 short beeps every 5 hinutes		Injection oil level is low. Stop vehicle in a safe place then, replenish injection oil reservoir.		
(blink ing)			Low fuel level. No bar left in fuel level display. Replenish fuel tank as soon as possible.		
(R)	Long beeps repeat ing slowly	REVERSE	Reverse is selected.		
	3 short beeps	REV. FAIL	Reverse did not engage, try again.		

Icon	Beeper	Message Lower Display	Description				
	1	1	High beam headlights are selected.				
_		WARM UP	Engine and/or injection oil need to warm-up before normal operation. The engine's RPM is limited until desired temperature is reached (up to 10 minutes when driving). Warm-up period may occur after a restart in very cold weather.				

### **FUEL AND OIL**

## Fuel Requirements

## NOTICE

Always use fresh gasoline/oil mix. Gasoline will oxidize; the result is loss of octane, volatile compounds, and the production of gum and varnish deposits which can damage the fuel system. Mix the appropriate oil with the gasoline in the recommended ratio.

Alcohol fuel blending varies by country and region. Your vehicle has been designed to operate using the recommended fuels, however, be aware of the following:

- Use of fuel containing alcohol above the percentage specified by government regulations is not recommended and can result in the following problems in the fuel system components:
  - Starting and operating difficulties.
  - Deterioration of rubber or plastic parts.
  - Corrosion of metal parts.
  - Damage to internal engine parts.
- Inspect frequently for the presence of fuel leaks or other fuel system abnormalities if you suspect the presence of alcohol in gasoline exceeds the current government regulations.
- Alcohol blended fuels attract and hold moisture which may lead to fuel phase separation and can result in engine performance problems or engine damage.

#### Recommended Fuel

The gasoline must have the following minimum octane requirements.

Use unleaded gasoline containing MAXIMUM 10% ethanol.

Fuel type	Min. octane rating		
Fuel with NO ethanol	98 RON		
	98 RON		
Fuel which may contain up to 10% MAX ethanol	(E10)		

## NOTICE

Never experiment with other fuels. Engine or fuel system damages may occur with the use of an inadequate fuel.

## **NOTICE**

Do NOT use fuel from fuel pumps labeled E85.

Use of fuel labeled E15 is prohibited by U.S. EPA Regulations.

#### Pre-Mix Oil

This vehicle has no injection oil pump.

The oil must be thoroughly mixed with gasoline in an approved fuel container first, then be poured in the vehicle fuel tank.

#### Pre-mix Fuel/Oil Ratio

Proper ratio	of	33:	1
--------------	----	-----	---

16.5L of fuel + 500ml of oil

5 U.S. gallon of fuel + 19.4 U.S. ounce of oil

5 imperial gallon of fuel + 24.2 imperial ounce of oil

#### Recommended Pre-mix Oil

#### Recommended Premix Oil

XPS 2T X2-RS racing synthetic oil

## **NOTICE**

The engine was developed and validated using the 2T X2-RS Synthetic Racing Engine Oil. BRP strongly recommends the use of this oil at all times. Never experiment other fuel/oil ratios. Damages caused by using oil not suitable for the engine or incorrect fuel/oil ratio will not be covered by the BRP limited warranty.

## **Fueling Procedure**

### **⚠** WARNING

Always stop engine before refueling.

## **⚠ WARNING**

Fuel is flammable and explosive under certain conditions.
Never use an open flame to check fuel level.
Never smoke or allow flame or spark in vicinity.
Always work in a well-ventilated area.

#### NOTE:

Do not sit or lean on seat when fuel tank cap is not properly installed.

- 1. Stop engine.
- 2. Have operator and passenger get off vehicle.

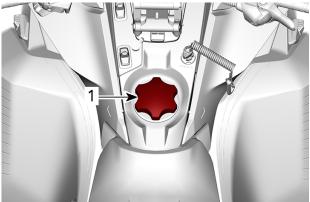
## **↑** WARNING

Do not allow anyone seated on the vehicle while fueling.

 Unscrew slowly the fuel reservoir cap counterclockwise to stabilize pressure before removing it.

#### NOTE:

A short whistling sound is normal.



#### **TYPICAL**

- 1. Fuel tank cap
- Insert the spout into the filler neck.
- Pour fuel slowly so that air can escape from the tank and prevent fuel flow back. Be careful not to spill fuel.
- Stop filling when the fuel reaches the bottom of filler neck. Do not overfill.

## **⚠** WARNING

Never top up the fuel tank before placing the vehicle in a warm area. As temperature increases, fuel expands and may overflow.

7. Fully tighten fuel reservoir cap clockwise.

## **A WARNING**

Always wipe off any small fuel spillage from the vehicle. If a major spillage occurs, remove side panels to remove fuel vapors from engine compartment before starting.

#### NOTE:

Do not sit or lean on seat when fuel tank cap is not properly installed.

### **BREAK-IN PERIOD**

## Operation During Break-In

#### Engine

During the break-in period:

- Avoid prolonged full throttle operation.
- Avoid sustained accelerations.
- Avoid prolonged cruising speeds.
- Avoid engine overheating.

However, brief accelerations and speed variations contribute to a good break-in.

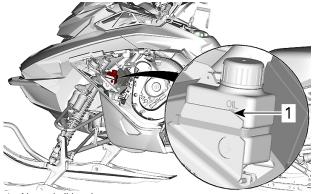
During a predetermined period, the engine management system controls some engine parameters.

The duration is based on fuel volume. It will take approximately two fuel tanks to complete the break-in.

#### During this period:

- The engine performance and behavior will not be optimal.
- The fuel and oil consumption will be higher.

Also, during the first hours of operation, monitor the level in the water pump shaft oil reservoir. It is normal that it lowers a little. However, it should stabilize after a moment, and then remain stable over time.



1 Normal oil level

#### Drive Belt

A new drive belt requires a break in period of 50 km (30 mi).

102 \_

During the break-in period:

- Avoid strong acceleration and deceleration.
- Avoid pulling a load.

  Avoid high speed cruising.

If the vehicle creeps, lower the drive belt height from the preliminary setting. Refer to *Drive Belt* in *maintenance procedure*.

## **BASIC PROCEDURES**

## **Engine Starting Procedure**

#### Procedure

- Apply parking brake.
- Recheck throttle control lever operation.
- Put your helmet on.
- Ensure that the tether cord cap is installed on the engine cut-off switch and that the cord is attached to your clothing eyelet.
- Ensure that the emergency engine stop switch is in the ON position (up).

#### A WARNING

Never depress throttle while starting engine.

6. Release parking brake.

#### NOTE:

For an initial cold start, do not release parking brake. Perform the vehicle warm-up procedure as explained below.

Grab rewind starter handle, pull handle slowly until a resistance is felt, then hold handle firmly and pull vigorously to start engine.

#### NOTF:

The maximum torque that can be transmitted to the engine by the rewind starter is 80 Nm (59 lbf-ft). The maximum force that can be exerted on the on the rope is 2 200 N (494.6 lbf).

## Vehicle Warm-Up

Before every ride, vehicle has to be warmed up as follows.

- 1. Start engine as explained in *Engine Starting Procedure* above.
- 2. Allow engine to warm up one or two minutes at idle speed.

#### NOTE:

Engine will shut down after approximately 12 minutes of idling.

- Disengage parking brake.
- Apply throttle until drive pulley engages. Drive at low speed the first two or three minutes.

## **NOTICE**

If vehicle does not move when throttle is applied, stop engine, remove tether cord cap from the engine cut-off switch, then do the following.

- Check if skis are stuck on the ground. Lift one ski at a time by the handle, then put it down.
- Check if track is stuck on the ground. Lift rear of snowmobile enough to clear track from the ground, then drop.
- Check rear suspension for hard snow or ice accumulation that could interfere with track rotation. Clean the area.

## **A** CAUTION

Beware of injuries by using proper lifting techniques, notably using your legs force. Do not attempt to lift the rear of vehicle if it is above your limits.

## **A WARNING**

Make sure tether cord cap is removed before standing in front the vehicle, getting close to the track or rear suspension components.

#### NOTF:

Warm-up is electronically controlled. During this period (up to 10 minutes depending on ambient temperature), engine RPM is limited.

## Shutting Off the Engine

Release throttle lever and wait until engine has returned to idle speed.

Shut off the engine using either the emergency engine stop switch or by pulling off the tether cord cap from the engine cut-off switch.

## **A** WARNING

Always remove the tether cord cap from engine cut-off switch when vehicle is not in operation in order to prevent accidental engine starting or to avoid unauthorized use by children or others or theft.

After engine shutdown:

## BASIC PROCEDURES

The fan	may i	remain	active	between	1	and 4	minutes	after	the	shut-
down de	pendi	ng on th	ne exha	aust temp	er	rature.				

# RIDING CONDITIONS AND YOUR SNOWMOBILE

#### Altitude

At factory, your snowmobile was calibrated to be used within an altitude range (relative to sea level).

A new snowmobile has a tag attached to the handlebar indicating its calibration. Refer to Safety Information on Vehicle.

If for any reason you don't know your snowmobile calibration, contact an authorized BRP snowmobile dealer.

If your snowmobile is to be used at an altitude outside the specified range, have it calibrated accordingly by an authorized BRP snowmobile dealer.

# NOTICE

An inappropriate altitude calibration would decrease performance and may cause serious damage to the snowmobile.

# **Temperature**

The engine management of these engines provides the optimum air/fuel ratio for all temperatures.

# **Hard Packed Snow**

All models covered in this guide which are equipped with a minimum track profile of 44 mm (1.75 in) are built for deep snow conditions and should never be used during a prolonged period of time in marginal or hard packed snow conditions.

In the event you have to ride in these types of conditions:

- Avoid exceeding a speed of 70 km/h (45 mph) in all conditions
- Avoid hard acceleration (over 75% of throttle)
- lce scratchers should be applied
- Engine temperature should not exceed 75% on the temperature gauge.

# **NOTICE**

Running these types of tracks at high speed on a trail, on hard packed surfaces or on ice puts more stress on the lugs, which tends to heat up as a result. It also could drastically reduce the life of specific wear parts. To avoid potential degradation, delamination or damages to the track and wear parts, reduce your speed and minimize the distance that is being ridden on these types of surfaces.

#### Vehicles Equipped with Ice Scratchers

Ice scratchers are equipped on the vehicle to increase engine cooling efficiency, to lubricate and to cool track clips and sliders. They must be used whenever on ice, hard packed snow, or any conditions that do not lift enough snow particles into the rear suspension and the tunnel

# **NOTICE**

Although it is not recommended to ride a snowmobile equipped with a high lug profile track on trails or hard packed snow conditions, it is highly suggested to combine idler wheels and ice scratchers on a vehicle used in these conditions.

#### **IMPORTANT**

Ridding in these trail conditions puts the reliability of the track and its warranty at risk

If equipped with the following track profile heights, never exceed the recommended sustained vehicle speeds listed.

Track Profile Height	Maximum Sustained Speed	
57 mm (2.25 in) 60 mm (2.36 in)	110 km/h (70 MPH)	
64 mm (2.52 in) 75 mm (3 in)	95 km/h (60 MPH)	

#### TUNE YOUR RIDE

Snowmobile handling and comfort depend upon multiple adjustments.

#### **!** WARNING

Suspension adjustment could affect vehicle handling. Always take time to familiarize yourself with the vehicle's behavior after any suspension adjustment have been made. Always adjust LH and RH suspension components to the same setting.

Choice of suspension adjustments vary with carrying load, operator's weight, personal preference, riding speed and field condition.

#### NOTE:

Some adjustments may not apply to your snowmobile.

#### **⚠ WARNING**

Before proceeding with any suspension adjustment, remember:

- Park in a safe place.
- Remove the tether cord cap from the engine cut-off switch.
- Use appropriate lifting device or have assistance to share lifting stress. If a lifting device is not used, use proper lifting techniques, notably using your legs force.
- Do not attempt to lift the front or rear of vehicle if it is above your limits.
- Support front of vehicle off the ground with a suitable device before adjusting suspension.
  - Support rear of vehicle off the ground with a wide-base snowmobile stand with a rear deflector panel.
    - Make sure support device is stable and secure.

The best way to set up the suspension is to customize each adjustment one at a time. Various adjustments are interrelated. It may be necessary to readjust center spring after adjusting front springs for instance. Test run the snowmobile under the same conditions; trail, speed, snow, operator riding position, etc. Proceed methodically until you are satisfied.

Following are guidelines to fine-tune suspension. Use suspension adjustment tool provided in the tool kit.

# Front Suspension Adjustments

# Front Springs

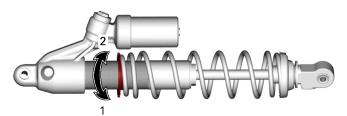
Front spring preload has an effect on front suspension firmness.

Front spring preload also has an effect on the steering behavior.

#### TUNE YOUR RIDE

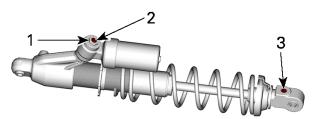
Action	Result	
Increasing preload	Firmer front suspension	
	Higher front end	
	More precise steering	
	More bump absorption capability	
Decreasing preload	Softer front suspension	
	Lower front end	
	Lighter steering	
	Less bump absorption capability	

Using the suspension adjustment tool provided in the tool kit, turn the adjustment ring to increase or decrease the spring preload.



- Increase preload
   Decrease preload

#### Shock Absorber Damping



#### ADJUSTMENT SCREWS

- 1. High speed compression Blue screw
- 2. Low speed compression Grey screw
- 3. Rebound Damping

# Low Speed Compression Damping (Grey Screw)

Low speed compression damping controls how the shock absorber reacts to a low suspension velocity (slow compression strokes, in most cases when riding at lower speeds).

Action	Result
Increasing low speed compression damping force	Firmer compression damping (slow compression)
Decreasing low speed compression damping force	Softer compression damping (slow compression)

To adjust, turn clockwise to increase damping force and counterclockwise to decrease damping force.

# **High Speed Compression Damping**

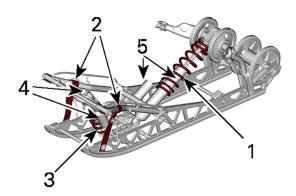
High speed compression damping controls how the shock absorber reacts to a high suspension velocity (quick compression strokes, in most cases when riding at higher speeds).

#### **TUNE YOUR RIDE**

Action	Result
Increasing high speed compression damping force	Firmer compression damping (fast compression)
Decreasing high speed compression damping force	Softer compression damping (fast compression)

To adjust, turn clockwise to increase damping force and counterclockwise to decrease damping force.

# Rear Suspension Adjustments



#### RCTRL RS - ADJUSTABLE COMPONENTS

- 1. Rear spring
- 2. Stopper straps
- Center spring
   Center shock absorber
- 5. Rear shock absorber

# NOTICE

Whenever adjusting rear suspension, check track tension and adjust if necessary.

#### Stopper Strap - rCTRL Suspension

Stopper strap length has an effect on the amount of weight the center spring has to carry especially during acceleration, therefore on the front end uplift.

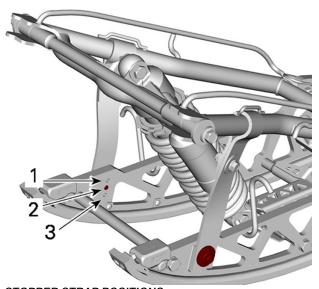
Stopper strap length also has an effect on center spring travel.

# **NOTICE**

Whenever stopper strap length is changed, track tension must be checked.

#### NOTE:

Stopper strap can be set to position 1, 2, or 3. Smaller numbers correspond to a longer strap setting.



# STOPPER STRAP POSITIONS

- 1. Position 1 (longest)
- 2. Position 2
- 3. Position 3 (shortest)

When operating the snowmobile in deep snow or hill climbing, it may be necessary to vary stopper strap length and/or riding position, to change the angle at which the track rides on the snow. Operator's familiarity with the various adjustments as well as snow conditions will dictate the most efficient combination.

Generally, a longer stopper strap setting gives better performance on a flat landscape and a shorter setting will improve handling in steep hill climbing and deep snow conditions.

Stopper Strap Setting		
Position	Use	
1	Offers long suspensions travel on front arm, lighter steering. More transfer.	
2	Standard setting. Offers a good balance between corners and big bumps.	
3	Offers the best performance on corners, little heavier steering. No transfer.	

#### Center Spring

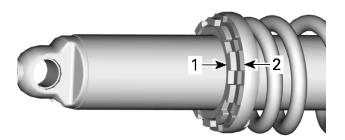
Center spring preload has an effect on steering effort, handling and bump absorption.

Also, since center spring preload adjustment puts more or less pressure on the front of the track, it has an effect on the performance in deep snow.

Action	Result	
Increasing preload	Lighter steering	
	More bump absorption capability	
	Better deep snow starts	
	Better deep snow performance and handling	
Decreasing preload	Heavier steering	
	Less bump absorption capability	
	Better trail handling	

## Ring Type Adjuster

Using the suspension adjustment tool provided in the tool kit, unscrew the lock ring and turn the adjustment ring to increase or decrease the spring preload. Tighten the lock ring when the adjustment is done.



- 1. Locking ring
- 2. Adjustment ring

#### Rear Spring - rCTRL

Rear spring preload has an effect on comfort, ride height and load compensation.

Also, adjusting rear spring preload shifts more or less weight to the snowmobile front end. As a result, more or less weight is applied to the skis. This has an effect on performance in deep snow, steering effort and handling.

Slight suspension bottoming occurring under the worst riding conditions indicates a good choice of spring preload.

Action	Result	
	Firmer rear suspension	
Increasing preload	Higher rear end	
	More bump absorption capability	
	Softer rear suspension	
Decreasing preload	Lower rear end	
	Less bump absorption capability	

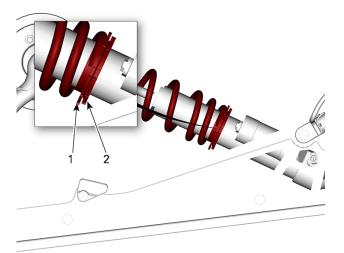
#### NOTE:

If the specification is unattainable with the original springs, visit an authorized BRP snowmobile dealer for other available springs.

For normal setting, refer to Suspension Adjustment Table.

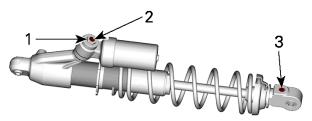
To adjust, unscrew the locking ring, then turn the adjustment ring to set the spring preload.

When the desired preload is set, tighten the locking ring against the adjustment ring.



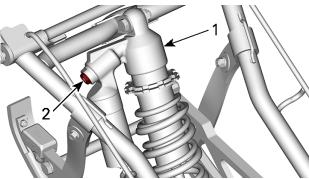
- 1. Adjustment ring
- 2. Locking ring

# Shock Absorber Damping



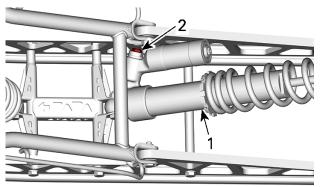
#### ADJUSTMENT SCREWS

- 1. High speed compression Blue screw
- Low speed compression Grey screw
   Rebound Damping



#### TYPICAL FRONT SHOCK ABSORBER

- 1. Front shock absorber
- 2. Adjustment screw



#### TYPICAL REAR SHOCK ABSORBER

- 1. Rear shock absorber
- 2. Adjustment screw

# Low Speed Compression Damping (Grey screw)

Low speed compression damping controls how the shock absorber reacts to a low suspension velocity (slow compression strokes, in most cases when riding at lower speeds).

Action	Result on big bumps	
Increasing low speed compression damping force	Firmer compression damping (slow compression)	
Decreasing low speed compression damping force	Softer compression damping (slow compression)	

To adjust, turn clockwise to increase damping force and counterclockwise to decrease damping force.

# High Speed Compression Damping (Blue screw)

High speed compression damping controls how the shock absorber reacts to a high suspension velocity (quick compression strokes, in most cases when riding at higher speeds).

Action	Result on small bumps	
Increasing high speed compression damping force	Firmer compression damping (fast compression)	
Decreasing high speed compression damping force	Softer compression damping (fast compression)	

To adjust, turn clockwise to increase damping force and counterclockwise to decrease damping force.

# Adjustment Tips According to Vehicle Behavior

Problem	Corrective Measures		
Front suspension darting	Check ski alignment.  Reduce front suspension spring preload.  Increase center spring preload.  Reduce rear spring preload.		
Steering feels too heavy at steady speeds	<ul><li>Reduce front suspension spring preload.</li><li>Increase center spring preload.</li></ul>		
Steering feels too heavy during acceleration	<ul><li>Reduce rear spring preload.</li><li>Lengthen limiter strap.</li></ul>		
Too much ski lift during cornering or acceleration	<ul><li>Shorten limiter strap.</li><li>Increase rear spring preload.</li></ul>		
Rear of snowmobile seems too stiff	Reduce rear spring preload.		
Rear of snowmobile seems too soft	Increase rear spring preload.		
Rear suspension is frequently bottoming	<ul> <li>Increase rear spring preload.</li> <li>Increase center spring preload.</li> <li>Lengthen limiter strap.</li> </ul>		

Problem	Corrective Measures		
Snowmobile seems to pivot around its center	<ul> <li>Reduce center spring preload.</li> <li>Increase rear spring preload.</li> <li>Increase front suspension spring preload.</li> <li>Shorten limiter strap.</li> </ul>		
Track spins too much at start	<ul> <li>Lengthen limiter strap.</li> <li>Reduce rear spring preload.</li> <li>Increase center spring preload.</li> </ul>		

# Suspension Factory Settings

**NOTE:** Clicks and turns counted from closed position.

Spring Preload / Shock Absorber Settings			
Setting	Front Shock	Center Shock	Rear Shock
Low speed compression (Clicks)	20	20	20
High speed compression (Turns)	2	2	2
Rebound (Clicks)	3	8	6
Spring preload (mm) (With stopper strap removed)	15	3	25
Stopper straps position	1		

# This page is intentionally blank

# **MAINTENANCE**

# MAINTENANCE SCHEDULE

Maintenance is very important for keeping your vehicle in safe operating condition.

This unit is produced for racing purpose only. Below are schedules for trail use but the snowcross use need maintenance and inspection after every training or race.

#### **A WARNING**

Failure to properly maintain the vehicle according to the maintenance schedule and procedures can make it unsafe to operate.

Every Year at preseason or 3 000 km (2,000 mi (Whichever Comes First)	)
--------------------------------------------------------------------------	---

Check fault codes

Adjust drive chain

Adjust and align track

Inspect brake hose, pads and disk

Check coolant density

Inspect drive belt

Visually inspect and clean drive pulley

Inspect and clean driven pulley

Lubricate rear suspension. Lubricate whenever the vehicle is used in wet conditions (rain, puddles)

Inspect exhaust system and check for leaks

Tighten exhaust manifold screws to specified torque

Inspect fuel lines, oil lines and connections

Inspect front suspension

Inspect rear suspension (including stopper straps and slider shoes)

Inspect tie-rod ends and ski alignment

#### Every Year at preseason or 3 000 km (2,000 mi) (Whichever Comes First)

Adjust headlight beam aiming

Inspect engine rubber mounts

Lubricate front suspension shocks upper spherical bearings

# Every 2 Years or 6 000 km (4,000 mi) (Whichever Comes First)

Replace brake fluid

Inspect throttle cable

Clean and lubricate rewind starter

Replace chaincase oil

Inspect engine rubber mounts

# Every 3 Years Or 10 000 km (6,000 mi) (Whichever Comes First)

Replace spark plugs

Clean and inspect 3D RAVE valves. If oil is present in valve base, replace seal

## **Every 5 Years**

Replace engine coolant

Replace in-line fuel filter

# MAINTENANCE PROCEDURES

This section includes instructions for basic maintenance procedures.

#### **A WARNING**

Turn off the engine, remove tether cord cap and follow these maintenance procedures when performing maintenance. If you do not follow proper maintenance procedures you can be injured by hot parts, moving parts, electricity, chemicals or other hazards.

#### A WARNING

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

# **Engine Coolant**

#### **⚠** WARNING

Never open coolant tank cap when engine is hot.

# **Engine Coolant Level Verification**

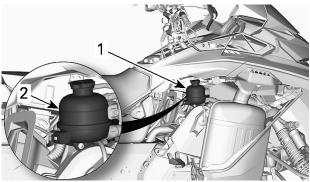
Open the RH side panel, see Body and Seat.

Check coolant level at room temperature. Liquid should be at cold level line of coolant tank.

#### NOTE:

When checking level at low temperature it may be slightly lower than the mark.

If additional coolant is necessary or if entire system has to be refilled, refer to an authorized BRP snowmobile dealer, repair shop or person of your own choosing.



#### TYPICAL

- 1. Coolant reservoir
- 2. COLD line

#### Recommended Engine Coolant

#### RECOMMENDED COOLANT

XPS Extended life pre-mixed coolant

# IF THE RECOMMENDED XPS COOLANT IS NOT

Distilled water and antifreeze solution (50% distilled water, 50% antifreeze)

# **NOTICE**

Always use ethylene-glycol antifreeze containing corrosion inhibitors specifically for internal combustion aluminum engines.

# **Exhaust System**

#### **Exhaust System Verification**

The muffler tail pipe should be centered with the exit hole in the bottom pan. Exhaust system must be free of rust or leaks. Make sure that all parts are securely in place.

#### MAINTENANCE PROCEDURES

Check retaining springs and heat shields condition and replace if necessary.

The exhaust system is designed to reduce noise and to improve the total performance of the engine. Modification may be in violation of local laws.

# **NOTICE**

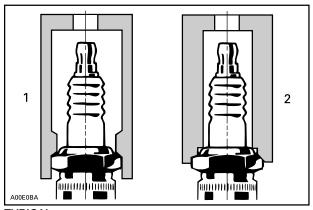
If any exhaust system component is removed, modified or damaged, severe engine damage may result.

# Spark Plugs

For spark plug type, refer to Technical Specifications subsection.

#### Replacing the Spark Plug

Use only an appropriate spark plug socket for removal and installation. Extra care should be taken to avoid side stresses which could result in a broken spark plug.



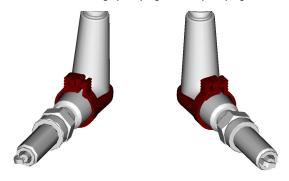
#### **TYPICAL**

- Appropriate Spark plug socket
- 2. Inappropriate socket

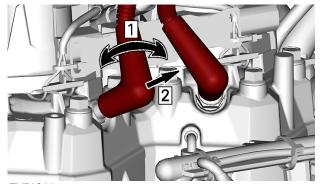
# Removing the Spark Plugs

1. Remove the upper body module. Refer to *Body* subsection.

- 2. Disconnect the stator connector. Refer to *Stator Connector Access* in the *Magneto and Starter* subsection.
- 3. Clean the spark plug and cylinder head with pressurized air.
- 4. Remove lock securing spark plug wire to spark plug.



Remove spark plug cables by gently rotating the cap and pulling it off the plug.



#### **TYPICAL**

Step 1. Gently rotate

Step 2. Pull off

Unscrew the spark plug sufficiently to break the applied torque using the appropriate tools.



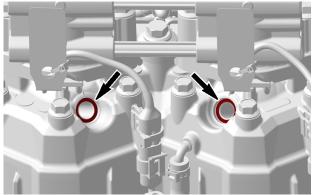


7. Remove spark plugs by hand.

# Installing the Spark Plugs (OEM)

- Prior to installation, ensure the contact surfaces of the cylinder head and spark plug are free of grime.
- 2. Lubricate contact surface of spark plug at the cylinder head.

Injection oil



3. Using a wire gauge, confirm electrode gap is as specified. Refer to *Technical Specifications*.

#### NOTE:

If spark plug gap is incorrect, use another spark plug.

- 4. Hand screw spark plug into cylinder head until it bottoms out.
- Apply specific torque using a torque wrench and approved spark plug socket.

#### NOTE:

Spark plug tightening torque is particularly important on this engine as it contributes to the proper positioning of the negative electrode.

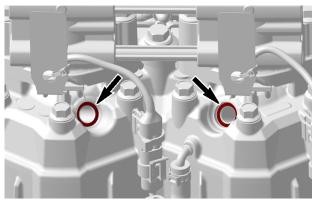
Tightening Torque	
Spark plug	23 ± 1 Nm

# Installing the Spark Plugs (Non-OEM)

When using a non-OEM spark plug, it must be correctly indexed or engine may experience rough idling and higher emissions.

- 1. Using a marker, mark the open end of the negative electrode on the plug shell (above threads).
- Prior to installation, ensure the contact surfaces of the cylinder head and spark plug are free of grime.
- 3. Lubricate contact surface of spark plug at the cylinder head.

#### Injection oil



 Using a wire gauge, confirm electrode gap is as per manufacturer specification.

#### NOTE:

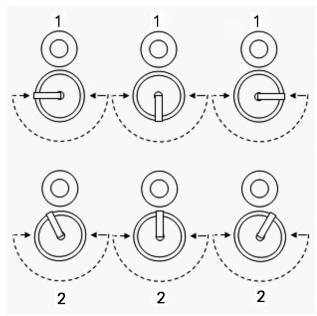
If spark plug gap is incorrect, use another spark plug.

- 5. Hand screw spark plug into cylinder head until it bottoms out.
- Apply specific torque using a torque wrench and an appropriate spark plug socket.

Tightening Torque	
Spark plug	23 ± 1 Nm

7. Visually check to ensure the open end of the negative electrode is facing the injector nozzle within 90° each side of nozzle.

The following illustration uses the point of attachment of the negative electrode to depict the angle. The injector is illustrated above the spark plug.



#### SPARK PLUG INDEXING

- Acceptable installation
   Unacceptable installation

If the plug indexing angle is not within specification, repeat procedure with another spark plug until correct indexing is achieved.

## **Brake Fluid**

#### Recommended Brake Fluid

Recommended Brake Fluid	
XPS DOT 4 Brake Fluid	
Alternative or if not available	
DOT 4 Brake Fluid	

#### MAINTENANCE PROCEDURES

Use only DOT 4 brake fluid from a sealed container. An opened container may be contaminated or may have absorbed moisture from the air.

# **⚠** WARNING

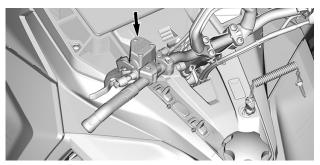
Use only DOT 4 brake fluid from a sealed container. To avoid serious damage to the braking system, do not use fluids other than the recommended one, nor mix different fluids for topping up.

Verifying the Brake Fluid Level - Model with Aluminum Reservoir

# NOTICE

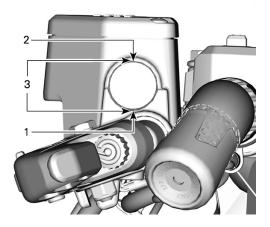
Vehicle must be on a level surface before checking any fluid levels.

- Position the handlebar in the straight-ahead position to ensure the reservoir is level.
- Check brake fluid in the reservoir for proper level.



#### TYPICAL

Brake fluid must always be above the MIN. line when brake lever is squeezed.



#### **TYPICAL**

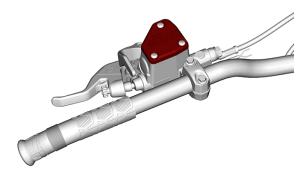
- 1. Minimum
- 2. Maximum
- 3. Operating range

# Adding Brake Fluid

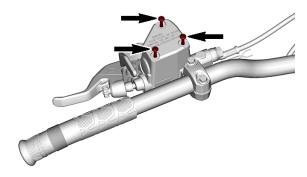
# **NOTICE**

Vehicle must be on a level surface before checking any fluid levels.

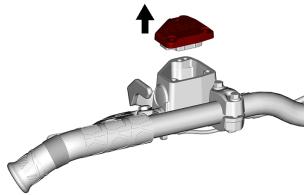
1. Clean the reservoir cap area.



2. Remove the screws retaining the reservoir cap.



3. Remove the reservoir cap.



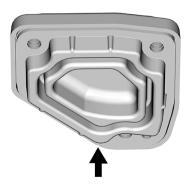
 Add fluid as required. Do not overfill. Use only the recommended brake fluid

# **CAUTION**

Avoid getting brake fluid on skin or eyes - it may cause severe burns. In case of contact with the skin, wash thoroughly. In case of contact with the eyes, immediately rinse with plenty of water for at least 10 minutes and then consult a doctor immediately.

# **NOTICE**

- Brake fluid can damage paint, rubber and plastic parts
- Protect these nearby parts with a rag when servicing the brake system
- Rinse thoroughly in case of spillage.
- 5. Ensure the diaphragm is pushed in the reservoir cap before installing the cap one the reservoir.



6. Reinstall reservoir cap and screws. Tighten to specification.

Tightening Torque	
Reservoir cap screws	0.7 ± 0.1 Nm (6 ± 1 lbf-in)

#### Chaincase Oil

#### Recommended Chaincase Oil

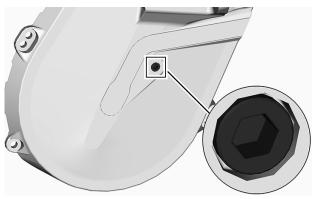
Recommended Chaincase Oil	
XPS™ Synchromesh Transmission Synthetic Oil	
Alternative or if not available	
75W140 gear oil that meets the API GL-5 specification	

# **NOTICE**

The chaincase of this snowmobile has been developed and validated using the XPS Synchromesh Transmission Synthetic Oil. BRP strongly recommends the use of its XPS Synchromesh Transmission Synthetic Oil at all times. Damages caused by oil which is not suitable for the chaincase will not be covered by the BRP limited warranty.

#### Verifying the Chaincase Oil Level

With the vehicle on a level surface, check the oil level by removing the check plug.



#### CHECK PLUG

Oil level must reach the threaded hole

If level is correct, reinstall check plug and tighten to the specified torque.

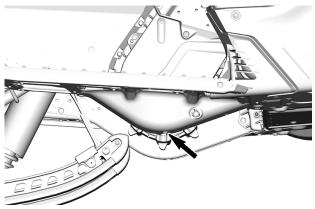
Tightening Torque	
Check plug	6 ± 1 Nm (53 ± 9 lbf-in)

If level is insufficient, refer to Chaincase Filling Procedure.

## Replacing the Chaincase Oil

## Draining the Chaincase Oil

- 1. Place the vehicle on a level surface.
- 2. Place a drain pan under the chaincase drain plug area.
- Remove filler cap.
- 4. Remove the drain plug located at the bottom of the chaincase.



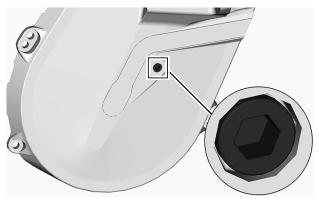
#### **TYPICAL**

- 5. Wait a while to allow all oil to drain out of the chaincase.
- 6. Install drain plug and tighten to specification.

Tightening Torque	
Chaincase drain plug	6 ± 1 Nm (53 ± 9 lbf-in)

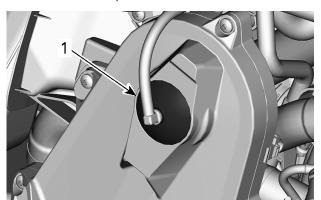
# Filling the Chaincase

- Open the RH side panel. Refer to *Equipment*.
   Remove the check plug.



#### **CHECK PLUG**

3. Remove the filler cap.



TYPICAL - TOP OF CHAINCASE

- 1. Filler cap
- 4. Pour recommended oil in the filler hole until oil comes out by the check plug hole.

  5. Reinstall check plug and tighten to specification.

Tightening Torque	
Check plug	6 ± 1 Nm (53 ± 9 lbf-in)

Reinstall the filler cap.

#### **Drive Chain**

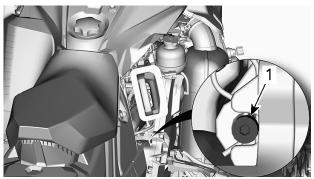
#### Access to Chaincase

Open RH side panel, refer to Equipment.

#### Drive Chain Adjustment

Using the Torx end of the driven pulley expander, GENTLY turn tensioner clockwise to eliminate the play.

**NOTE**: Make sure the play is completely eliminated by trying to turn back and forth the driven pulley.



#### TYPICAL

Do not force the tensioner in.

#### NOTE:

Do not remove the hair cotter pin.

# **NOTICE**

Overtightening the drive chain could result in severe damage to the chaincase components.

### **Drive Belt**

### Drive Belt Inspection

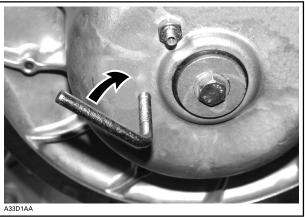
Remove the drive belt guard. Refer to the procedure in Equipment.

Inspect belt for cracks, fraying or abnormal wear (uneven wear, wear on one side, missing cogs, cracked fabric). If abnormal wear is noted, probable cause could be pulley misalignment, excessive RPM with frozen track, fast starts without warm-up period, burred or rusty sheave, oil on belt or distorted spare belt. Contact an authorized BRP snowmobile dealer.

### Replacing the Drive Belt

### **Drive Belt Removal**

- 1. Remove tether cord cap from engine cut-off switch.
- 2. Remove drive belt guard. Refer to Equipment.
- Insert the driven pulley expander provided in the threaded hole on the adjuster hub as shown.



- 4. Open the driven pulley by screwing the tool in.
- Remove the drive belt by slipping it over the top of the driven pulley, then over the drive pulley.

# Installing the Drive Belt

The driven pulley must be expanded. Refer to Removing the Drive Belt.

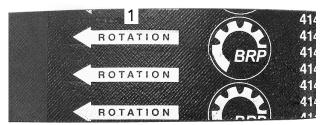
1. Slip the belt over the drive pulley, then over the driven pulley.

# **NOTICE**

Do not force or use tools to pry the belt into place, as this could cut or break the cords in the belt.

### NOTE:

The maximum drive belt life span is obtained when belt is installed with arrows in the direction of rotation.



- 1. To be pointed in the direction of rotation
- 2. Unscrew and remove the driven pulley expander from the pulley.
- Rotate the driven pulley several times to properly set the belt between the sheaves.
- 4. If a new belt was installed, an adjustment will be required for the proper belt height. Refer to Adjusting the Drive Belt Height.
- İnstall belt guard.
- Close side panel.

# Drive Belt Adjustment

Drive belt adjustment must be performed every time a new belt is installed and as part of the pre-ride inspection.

To adjust the drive belt, proceed as follows:

- Remove the tether cord cap.
- 2. Open the LH side panel. Refer to Body and Seat.
- 3. Remove the belt guard. Refer to Equipment.
- Keep the set screw from turning using a 1/8 inch Allen wrench and loosen the lock nut using a 7/16 in open wrench.
- Turn the set screw 1/4 turn at a time then rotate the driven pulley to properly set the belt between the pulley sheaves. Measure belt deflection using a straight edge and a tensiometer as explained below.

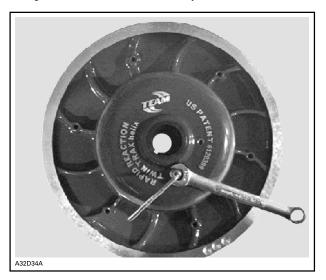
Required tool	
Tensiometer 414 348 200	

6. Repeat until the right belt deflection is reached.

### NOTE:

Turn the set screw clockwise to increase the distance between the sheaves and counterclockwise to decrease the distance.

7. Tighten the lock nut after the belt adjustment has been made.



# **Belt Deflection Measurement**

 Set deflection between 27 mm (1.06 in) and 37 mm (1.46 in) using bottom O-ring.



### DEFLECTION SETTING

- 1. Bottom O-ring set to specification
- Place upper O-ring to 0 kgf (0 lbf).
- 3. Position a straight edge ruler on the drive belt.
- 4. Position the tensiometer on drive belt, halfway between pulleys.
- Push the tensiometer downwards until bottom O-ring (deflection) be aligned with the inner edge of the straight ruler.
- 6. Read load recorded by the upper O-ring on the tensiometer.



### LOAD READING

- 1. Upper O-ring
- 7. Load reading must be as per the following table.

Drive belt Adjustment specification		
Belt deflection setting	27 to 37 mm (1.06 to 1.46 in)	
Belt load reading	11.3 kg (25 lb)	

8. Adjust as required.

# **Drive Pulley**

Drive Pulley Adjustment (if equipped)

# **⚠ WARNING**

Remove tether cord cap from engine cut-off switch before performing any adjustment. Vehicle must be parked in a safe place, away from the trail.

### **⚠** WARNING

NEVER disassemble or modify the drive pulley.

Improper assembly or modifications could cause the pulley to explode violently under the stress generated by the high rotational speed.

Visit your BRP snowmobile dealer to maintain or service the drive pulley. Improper servicing or maintenance may affect performance and reduce belt life. Always respect maintenance schedules.

The drive pulley is factory calibrated to transmit maximum engine power at a predefined RPM. Factors such as ambient temperature, altitude or surface condition may vary this critical engine RPM thus affecting snowmobile efficiency.

This adjustable drive pulley allows setting maximum engine RPM to maintain maximum power.

Ramp cams should be adjusted so that actual maximum engine RPM matches the maximum horsepower RPM. Refer to *Technical Specifications* (Engine).

### NOTE:

Use a precision digital tachometer for engine RPM adjustment.

There are 5 positions in which the ramp cam can be set.

Each position modifies the maximum engine RPM by about 200 RPM.

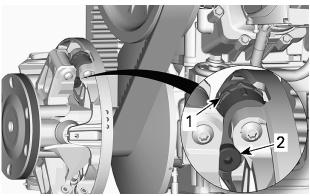
Lower position numbers decrease engine RPM in steps of 200 RPM and higher position numbers increase it in steps of 200 RPM.

# **Procedure**

- 1. Refer to Body and Seat in Vehicle Information and remove:
  - LH side panel
  - Drive pulley guard

### MAINTENANCE PROCEDURES

2. Locate the cam and the pivot screw on the drive pulley.

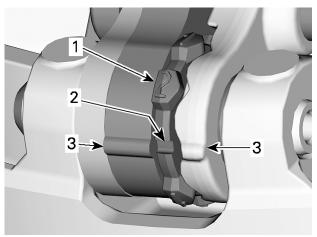


# **TYPICAL**

- 1. Cam
- 2. Pivot screw

The cam position is identified as follows:

- Positions 1, 2, 4 and 5 are numbered.
- Position 3 (middle) is identified by a notch.
- There are notches on each side of the cam used as pointers.

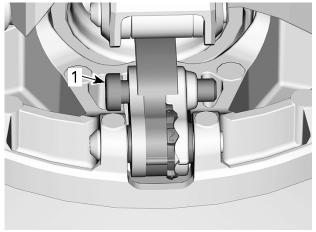


- Numbered position
   Position 3 Notch
- 3. Pointers

To adjust, proceed as follows for all 3 cams:

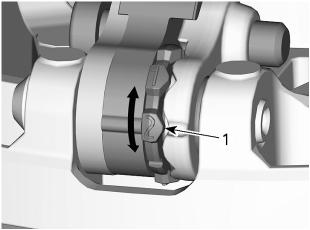
3. Using the Allen end of the driven pulley expander, loosen the pivot screw.

### MAINTENANCE PROCEDURES



# 1. Pivot screw

- 4. Move the right lever aside to be able to turn the cam.5. Turn cam to the desired position.



- 1. Desired cam position (here #2)
- 6. Tighten the pivot screw.

TIGHTENING TORQUE		
Pivot	8 ± 1 Nm (71 ± 9 lbf-in)	

# **NOTICE**

Always adjust all 3 cams to the same setting.

### Track

### Track Condition

# **⚠** WARNING

Remove tether cord cap from engine cut-off switch before performing any maintenance or adjustment, unless otherwise specified. Vehicle must be parked in a safe place, away from the trail.

Remove tether cord cap from engine cut-off switch.

### MAINTENANCE PROCEDURES

Lift the rear of the snowmobile and support it with a wide-base snowmobile mechanical stand with a rear deflector panel. With the engine off, rotate the track by hand, and inspect condition. If worn or cut, or if track fibers are exposed, or if missing or defective inserts or guides are noted: contact an authorized BRP snowmobile dealer.

### Snowmobiles Equipped with Traction Enhancing Products

If your snowmobile is equipped with a BRP approved studded track, PROCEED WITH A VISUAL INSPECTION OF YOUR TRACK BEFORE EACH USE.

Look for any defects, such as:

- Perforations in the track
- Tears in the track (particularly around traction holes on studded tracks)
- Lugs that are broken or torn off, exposing portions of rods
- Delamination of the rubber
- Broken rods
- Broken studs (studded tracks)
- Bent studs (studded tracks)
- Missing studs
- Studs that are torn off the track
- Missing track guide(s)
- Also, ensure that studs nut are tighten to the recommended torque.

On approved studded tracks, replace broken or damaged studs immediately. If your track shows signs of deterioration, it must be replaced immediately. When in doubt, ask your dealer.

# **A** WARNING

Riding with a damaged track or studs could lead to a loss of control.

For complete information on traction enhancing products, refer to *TRACTION ENHANCING PRODUCTS* in *SAFETY INFORMATION* at the beginning of this Operator's Guide.

# Track Tension and Alignment

### NOTF:

Track tension and alignment are interrelated. Do not adjust one without the other.

# **⚠** WARNING

To prevent serious injury to individuals near the snowmobile:

- NEVER stand behind or near a moving track.
- Always use a wide-base snowmobile stand with a rear deflector panel if it is necessary to rotate track.
- When the track is raised off the ground, only run it at the lowest possible speed.

Centrifugal force could cause debris, damaged or loose studs, pieces of torn track, or an entire severed track to be violently thrown backwards out of the tunnel with tremendous force, possibly resulting in the loss of a leg or other serious injury.

# Verifying the Track Tension

### NOTE:

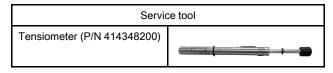
Ride the snowmobile in snow about 15 to 20 minutes prior to adjusting track tension.

- Remove tether cord cap from engine cut-off switch.
- 2. Lift rear of vehicle and support it off the ground.

# **A** CAUTION

Use proper lifting techniques, notably using your legs force. Do not attempt to lift the rear of vehicle if it is above your limits.

- 3. Allow rear suspension to fully extend.
- 4. Prepare the tensiometer.



 Set the bottom O-ring as per the Track Deflection from the applicable vehicle in the Technical Specifications table.

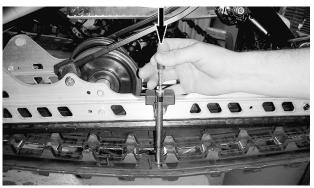
### MAINTENANCE PROCEDURES



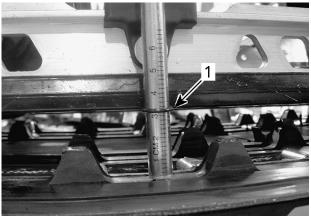
- 1. Bottom O-ring
  - 2. Place the upper O-ring to 0 kgf (0 lbf).



- 1. Upper O-ring
- Position the tensiometer on track, halfway between front and rear idler wheels.
- Push the tensiometer downwards until bottom O-ring (deflection set earlier) be aligned with the bottom of slider shoe.



**TYPICAL** 



**TYPICAL** 

- 1. Deflection O-ring aligned with slider shoe
- 7. Read load recorded by the upper O-ring on the tensiometer.



TYPICAL - LOAD READING

- 1. Upper O-ring
- 8. Load reading must be as per the track deflection in the *Technical Specifications*.
- 9. If load reading is not in accordance with the specification, adjust track tension. Refer to *Track Tension Adjustment*.

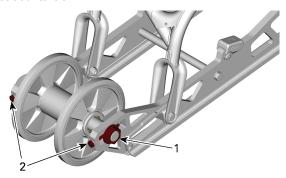
# **Track Tension Adjustment**

- 1. Remove tether cord cap from engine cut-off switch.
- 2. Lift rear of vehicle and support it off the ground.

# **A** CAUTION

Use proper lifting techniques, notably using your legs force. Do not attempt to lift the rear of vehicle if it is above your limits.

- 3. Loosen the rear axle screws.
- Tighten or loosen both adjustment screws (equally) to increase or decrease track tension.



- 1. Loosen the axle screws
- 2. Tighten or loosen the adjustment screws
- If correct tension is unattainable, contact an authorized Lynx dealer.
- 6. Retighten the rear axle nut to specification.

Tightening Torque		
Rear idler wheel screw	48 ± 6 N⋅m (35 ± 4 lbf⋅ft)	

7. Check track alignment as described below.

# Aligning the Track

### A WARNING

Before checking track alignment, ensure that the track is free of all particles which could be thrown out while track is rotating. Keep hands, tools, feet and clothing clear of track. Always lift the snowmobile on a wide-base stand with a rear deflector panel. Ensure no one is standing in close proximity to the snowmobile, especially at the rear of the track. Never rotate track at high speed.

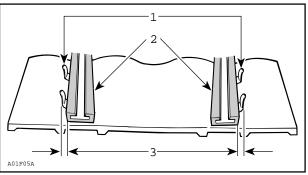
Centrifugal force could cause debris, damaged or loose studs, pieces of torn track, or an entire severed track to be violently thrown backwards out of the tunnel with tremendous force.

Lift rear of vehicle and support it off the ground.

# **CAUTION**

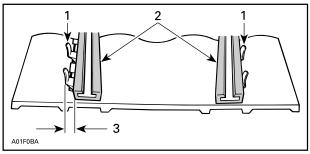
Use proper lifting techniques, notably by using the force of your legs. Do not attempt to lift the rear of vehicle if it is above your limits.

- Start engine and accelerate slightly so that track slowly turns. This must be done in a short period of time (15 to 20 seconds).
- Check that the track is well centered; equal distance on both sides between edges of track guides and slider shoes.



- Guides
- Slider shoes
- 3. Equal distance

### To correct track alignment:



- 1. Guides
- Slider shoes 2.
- Tighten on this side

  - Stop engine.
     Remove tether cord cap from engine cut-off switch.

### ⚠ WARNING

Remove tether cord cap from engine cut-off switch before performing any maintenance or adjustment, unless otherwise specified. Vehicle must be parked in a safe place, away from the trail.

- 3. Loosen the rear axle nut.
- Tighten adjustment screw on side where the slider shoe is the farthest from the track insert guides.
- 5. Tighten the rear axle nut.

# **WARNING**

Properly tighten wheel retaining bolt, otherwise wheel may come off and cause track to "lock".

- 6. Restart engine and rotate track slowly to recheck alignment.
- 7. Tighten the rear axle nut to specified torque.

Tightening Torque	
Rear axle screw	48 ± 6 Nm (35 ± 4 lbf-ft)

8. Reposition snowmobile on the ground.

# Suspension

### Steering and Front Suspension Condition

Visually inspect steering and front suspension for tightness of components (steering arms, control arms and links, tie rods, ball joints, ski bolts, ski legs, etc.). If necessary, contact an authorized BRP snowmobile dealer.

### Suspension Stopper Strap Condition

Inspect stopper straps for wear and cracks, bolt and nut for tightness. If loose inspect holes for deformation. Replace as required. Tighten nut to specification.

Tightening Torque		
Stopper strap nut	7 ± 1 Nm (62 ± 9 lbf-in)	

### Rear Suspension Condition

Visually inspect all suspension components including slider shoes, springs, wheels, etc.

### NOTF:

During normal driving, snow will act as a lubricant and coolant for the slider shoes. Extensive riding on ice or sanded snow, will create excessive heat build-up and cause premature slider shoe wear.

### Skis

### Wear and Condition of Skis and Runners

Check the condition of the skis and ski runner carbides. If worn, contact an authorized BRP snowmobile dealer.

# **⚠** WARNING

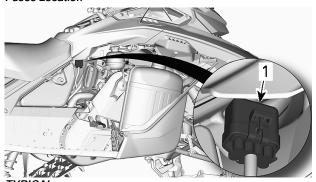
Excessively worn skis and/or ski runners will adversely affect snowmobile control.

### **Fuses**

### Access to Fuse Block

Remove the upper body module, refer to Upper Body Module.

### Fuses Location



TYPICAL 1 Fuse block

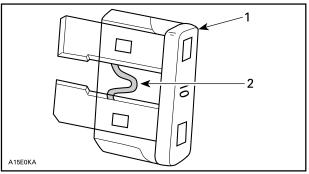
Unlock fuse block from its cover.

Refer to Technical Specifications for fuse rate and configuration.

# Fuse Inspection

Check fuse condition and replace it if necessary.

To remove fuse from holder, pull fuse out. Check if filament is melted.



- 1. Fuse
- 2. Check if melted

# **A** WARNING

Do not use a higher rated fuse.

# **⚠** WARNING

If fuse has burnt out, source of malfunction should be determined and corrected before restarting. See an authorized BRP snowmobile dealer for servicing.

# VEHICLE CARE

# **Post-Operation Care**

Remove snow and ice from rear suspension, track, front suspension, steering mechanism and skis.

### . WARNING

Make sure D.E.S.S. key is removed from D.E.S.S. post before standing in front the vehicle, getting close to the track or rear suspension components.

Always cover your snowmobile when leaving it outside overnight or during extended periods of inactivity. This will protect it from frost and snow as well as help retain its appearance.

# Vehicle Cleaning and Protection

Wash snowmobile using water mixed with a mild detergent.

Use only microfiber cloths or an equivalent.

# NOTICE

Never use a high pressure washer to clean the vehicle. Use low pressure only, like a garden hose.

# Non Compatible Cleaning Products

Material Type	Non-Compatible Cleaning Products
All plastics, vinyls, painted steel and aluminium	BRAKE AND PARTS CLEANER OR ANY PETROLEUM BASE CLEANING PRODUCTS

# Compatible Cleaning Products

Material Type	Cleaning Product
All plastics, vinyls,	Automotive type soap with water
painted steel and	XPS Spray Cleaner and Polish
aluminium.	XPS All Purpose Cleaner

For more information and products, Visit the XPS Products website at www.xpslubricants.com

# **STORAGE**

During summer, or when a snowmobile is not in use for more than three months, proper storage is necessary.

### Storage

Clean the vehicle

Add fuel stabilizer to fuel following the product manufacturer recommendations.

Run the engine after adding the product to the fuel.

Run the engine until there is no fuel left.

Lubricate the engine.

Lubricate brake lever pivot

Block muffler outlet with rags

Lift rear of vehicle until track is clear of the ground. Do not release track tension

# **A** CAUTION

Use appropriate lifting device or have assistance to share lifting stress. If a lifting device is not used, use proper lifting techniques, notably using your legs force. Do not attempt to lift the rear of vehicle if it is above your limits.

# **NOTICE**

The snowmobile has to be stored in a cool and dry place and covered with an opaque but ventilated tarpaulin. This will prevent sun rays and grime from affecting plastic components and vehicle finish.

# NOTICE

Fuel stabilizer should be added prior to engine lubrication to prevent the loss of the chemical properties of fuel and protect the fuel system against varnish deposits.

# PRESEASON PREPARATION

Proper vehicle preparation is necessary when a vehicle has not been used for more than three months.

Using the *maintenance schedule*, perform the items titled *EVERY YEAR AT PRESEASON*.

Visit your authorized BRP snowmobile dealer for more information.

# **MAINTENANCE RECORDS**

Send photocopy of maintenance record to BRP if needed.

Pre-delivery		
Serial number:		Signature/Print:
Mileage / km:		
Hours:		
Date:		
Dealer no:		
Notes:		
Refer to vehicle Pre-Delivery Bulletin for detailed installation procedures		

# MAINTENANCE RECORDS

First inspection			
Mileage / km:		Signature/Print:	
Hours:			
Date:			
Dealer no:			
Notes:			
For maintenance schedule refer to Maintenance Information section of this operator's guide			
	Service		
Mileage / km:	Service	Signature/Print:	
	Service	Signature/Print:	
km:	Service	Signature/Print:	
km: Hours:	Service	Signature/Print:	
km: Hours: Date: Dealer	Service	Signature/Print:	
km: Hours: Date: Dealer no:	Service	Signature/Print:	
km: Hours: Date: Dealer no:	Service	Signature/Print:	

Mileage / km:		Signature/Print:		
Hours:				
Date:				
Dealer no:				
Notes:				
1				
For main	For maintenance schedule refer to Maintenance Information section of this operator's guide			
	Service			
Mileage / km:		Signature/Print:		
Hours:				
Date:				
Date: Dealer no:				
Dealer				
Dealer no:				
Dealer no:				

Service

# MAINTENANCE RECORDS

Service			
Mileage / km:		Signature/Print:	
Hours:			
Date:			
Dealer no:			
Notes:			
For maintenance schedule refer to Maintenance Information section of this operator's guide			
	Service		
Mileage / km:		Signature/Print:	
Hours:			
Date:			
Dealer no:			
Notes:			
For maintenance schedule refer to Maintenance Information section of this operator's guide			

Mileage / km:		Signature/Print:
Hours:		
Date:		
Dealer no:		
Notes:		
For maintenance schedule refer to Maintenance Information section of this operator's guide		
	Service	
Mileage / km:		Ciara atrus /Driet
14111.		Signature/Print:
Hours:		Signature/Print:
		Signature/Print:
Hours:		Signature/Print:
Hours: Date: Dealer		Signature/Print:
Hours: Date: Dealer no:		Signature/Print:
Hours: Date: Dealer no:		Signature/Print:

Service

# MAINTENANCE RECORDS

	Service	
Mileage / km:		Signature/Print:
Hours:		
Date:		
Dealer no:		
Notes:		
For maintenance schedule refer to Maintenance Information section of this operator's guide		
		·
	Service	
Mileage / km:	Service	Signature/Print:
	Service	Signature/Print:
km:	Service	Signature/Print:
km: Hours:	Service	Signature/Print:
km: Hours: Date: Dealer	Service	Signature/Print:
km: Hours: Date: Dealer no:	Service	Signature/Print:
km: Hours: Date: Dealer no:	Service	Signature/Print:

Mileage / km:		Signature/Print:
Hours:		
Date:		
Dealer no:		
Notes:		
For mail	ntenance schedule refer to Maintenar section of this operator's guide	
	Service	
Mileage / km:		Signature/Print:
Hours:		
Date:		
Dealer no:		
Notes:		
For mail	ntenance schedule refer to Maintenar section of this operator's guide	

Service

# MAINTENANCE RECORDS

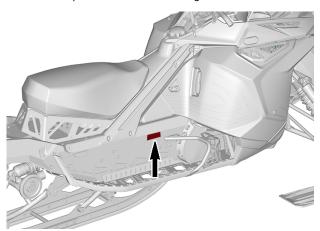
	Service	
Mileage / km:		Signature/Print:
Hours:		
Date:		
Dealer no:		
Notes:		
For maintenance schedule refer to Maintenance Information section of this operator's guide		
	Service	
Mileage / km:		Signature/Print:
Hours:		
Date:		
Dealer no:		
Notes:		
For mai	ntenance schedule refer to Maintenar section of this operator's guide	

# TECHNICAL INFORMATION

# VEHICLE IDENTIFICATION

# **Vehicle Description Decal**

Vehicle description decal is located on right hand side of tunnel.





### FOR FUROPEAN MARKET

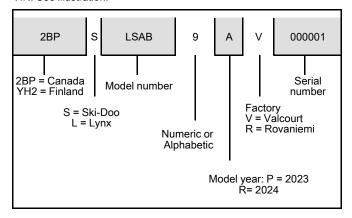
# Identification Numbers

The main components of your snowmobile (engine and frame) are identified by different identification numbers. It may sometimes become necessary to locate these numbers for warranty purposes or to trace your snowmobile in the event of loss. These numbers are required by the authorized BRP snowmobile dealer to complete warranty claims properly. We strongly recommend that you take note of all the identification numbers on your snowmobile and supply them to your insurance company.

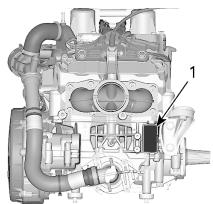
# Vehicle Identification Number (VIN)

VIN is scribed on vehicle description decal. See above. It is also engraved on tunnel near vehicle description decal.

Model number and model year are part of the information found in the VIN. See illustration.



### **Engine Identification Number Location**

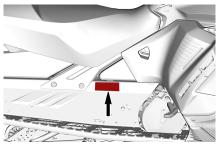


1. Engine identification number

# **COMPLIANCE LABELS**

# Regulation (EU) 2016/1628 applicable for Non-Road Mobile Machineries

Depending on your particular vehicle configuration, an additional NRMM identification label may be installed on the tunnel, near the chaincase.



TYPICAL - ON RH SIDE OF TUNNEL



NRMM IDENTIFICATION ON VEHICLE

# NOISE EMISSION AND VIBRATION VALUES

MODEL		600R E-TEC
NOISE EMISSION AN		ID VIBRATION VALUES <sup>1</sup>
Noise	Sound power level (L <sub>WA</sub> )	98.3 dB (Uncertainty (K <sub>wa</sub> ) 3 dB)
Noise	Sound pres sure (L <sub>pA</sub> )	86.2 dB (Uncertainty (K <sub>pA</sub> ) 3 dB)
Vibration	Han d-arm system	3.11 m/s <sup>2</sup>
Vibration	Whole body at seat	<0.5 m/s <sup>2</sup>

<sup>1:</sup> Noise emission and Vibration values are measured in accordance with Annexes A and B of ISMA 1 regulation on a snow covered or grass surface in neutral or without belt.

# **EU DECLARATION OF CONFORMITY**



BRP Finland Oy PL 8040 (Isosavantie 7) FI-96101 Rovaniemi, Finlan

T 358 40 800 7700 F 358 16 318 114

www.brp.com

# EU Declaration of Conformity

Authorized Representative: BRP Europe N.V., Skaldenstraat 125, Gent, Belgium, 9042

This declaration of conformity is issued under the sole responsibility of the manufacturer.

The undersigned, representing the manufacturer, hereby declares that model year 20: Snowmobiles marked with the  $C\xi$  mark and a 17-character vehicle identification numb (VIN) structured as YH2LxxxxxxSRxxxxxx under commercial name Lynx comply with all threlevant provisions of the following Directives and Regulations:

Machinery Directive 2006/42/EC as amended up to and including Reg. 2019/1243/EU	ISO 12100:2010
Non-Road Mobile Machinery (NRMM) Regulation (EU) 2016/1628 on gaseous pollutants	Category SMB, Stage V emissions limits
Electromagnetic Compatibility (EMC) Directive 2014/30/EU as amended up to and including Reg. (EU) 2018/1139	CISPR 12:2007/A1:2009 & IEC 61000-6-1:2005 or UN R10.04 or later version
Battery Directive 2006/66/EC as amended up to and including Dir. (EU) 2018/849	EN 50342-7:2015
Radio Equipment (RED) Directive 2014/53/EU as amended up to and including Reg. 2018/1139 (If fitted with radio frequency (RF) D.E.S.S. key)	IEC 62368-1:2014 CISPR 25:2016 ISO 11452-2:2004 ETSI EN 300 330 V2.1.1:2017

Risto Perttula Director, Research and Development, Lynx BRP Finland Oy Rovaniemi, Finland

December 4th, 2023

SKI-daa LYNX SED-ADD. EVIDRUDE ROTAX CAN-AM

# UK DECLARATION OF CONFORMITY



BRP Finland Oy PL 8040 (Isosavantie 7) FI-96101 Rovaniemi, Finland T 358 40 800 7700

www.brn.com

# **UK Declaration of Conformity**

Authorized Representative: BRP Recreational Products UK Ltd., Castle Chambers, 43 Castle Street, Liverpool, L2 9SH

This declaration of conformity is issued under the sole responsibility of the manufacturer.

The undersigned, representing the manufacturer, hereby declares that model year 2025 Snowmobile marked with the ER mark and a 17-character vehicle identification number (VIIN) structured as YH2LxxxxxSRxxxxxxx under commercial name Lynx comply with all the relevant provisions of the following UK Statutory instrument and Regulations:

The Supply of Machinery (Safety) Regulations 2008, UK Statutory Instrument 2008/1597 as amended up to and including SI 2020/1112	ISO 12100:2010
Non-Road Mobile Machinery (Type-Approval and Emission of Gaseous and Particulate Pollutants) Regulation 2018, UK SI 2018/764 as amended up to and including SI 2020/1393	Category SMB, Stage V emissions limits
Electromagnetic Compatibility Regulations 2016, UK SI 2016/1091 as amended up to and including SI 2020/1112	CISPR 12:2007/A1:2009 & IEC 61000-6-1:2005 or UN R10.04 or later version
Batteries and Accumulators (Placing on the Market) Regulations 2008, UK SI 2008/2164 as amended up to and including UK SI 2020/904	EN 50342-7:2015
Radio Equipment Regulations 2017, UK SI 2017/1206 as amended up to and including SI 2020/1112	IEC 62368-1:2014 CISPR 25:2016 ISO 11452-2:2004 ETSI EN 300 330 V2.1.1:2017

Risto Pertfula Director, Research and Development, Lynx

BRP Finland Oy

Rovaniemi, Finland

December 4th, 2023

Ski-doo Lywx Sec-200. EVIDRUDE ROTAX. Can-am

# **EAC DECLARATION OF CONFORMITY**

# Left blank for Eurasian Conformity mark where applicable

# BRP RF DESS POST GEN2 (MOWP)

# **USA** and Canada

This device complies with FCC Part 15 and Industry Canada license exempt RSS standard(s). Operation is subject to the following two conditions:

- this device may not cause interference, and
- this device must accept any interference, including interference that may cause undesired operation of the device.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However. there is no guarantee that interference will not occur in a particular installation. equipment does cause harmful interference to radio or television reception, which can be deby termined ' turnina equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected

Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

Le dispositif a été évalué à satisfaire l'exigence générale de l'exposition aux rf. L'appareil peut être utilisé dans des conditions d'exposition portatif sans restriction.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.

- l'appareil ne doit pas produire de brouillage, et
- I'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

IC: 12006A-1001301698 For variant 1001298626

FCC ID: 2ACER1001301698 For variant 1001298626

# Mexico

**IFETEL** 



Marca: BRP Megatech

Número: BRME1023-28175

BRP Megatech Certificate num-

ber: 1451074

Modelo: 1001298626

NOM-208-SCFI-2016 (Disposición Técnica IFT-008-2015)

La operación de este equipo está sujeta a las siguientes dos condiciones:

- Es posible que este equipo o dispositivo no cause interferencia perjudicial y
- Este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

# Brazil



Número: 05248-23-15603

BRP Megatech Certificate num-

ber: 1451077

Modelo: 1001298626

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados. Para maiores infor- mações, consulte o site da ANATEL.

# Japan

This device is granted pursuant to the Japanese Radio Law (

電波法

Telecommunications Business

Law (電気通信事業法). This device should not be modified (otherwise the granted designation number will become invalid).

# Europe

# **Declaration of Conformity**

Simplified EU Declaration of Conformity according Radio Equipment Directive 2014/ 53/



#### DF

Hiermit erklärt BRP Megatech, dass der Funkanlagentyp 1001316154 der Richtlinie 2014/ 53/EU entspricht. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: https://www.brp.com/en/ corporate-social-responsibility/ product-safety.html

## FR

Le soussigné, BRP Megatech, déclare que l'équipement radioélectrique du type 1001316154 est conforme à la directive 2014/53/UE. Le texte complet de la déclaration UE de conformité est disponible à l'adresse internet suivante: https://www.brp.com/en/corporate-social-responsibility/product-safety.html

## BG

С настоящото BRP Megatech декларира, че този тип радиосъоръжение 1001316154 е в съответствие с Директива 2014/53/EC.

Цялостният текст на ЕС декларацията за съответствие може да се намери на следния интернет адрес: https://www.brp. com/en/corporate-social-responsibility/product-safety.

### EL

Με την παρούσα ο/η BRP Megatech, δηλώνει ότι ο ραδιοεξοπλισμός 1001316154 πληροί την οδηγία 2014/53/ΕΕ. Το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ διατίθεται στην ακόλουθη ιστοσελίδα στο διαδίκτυο: https://www.brp.com/en/corporate-social-responsibility/product-safety.html

### CS

Tímto BRP Megatech prohlašuje, že typ rádiového zařízení 1001316154 je v souladu se směrnicí 2014/53/EU. Úplné znění EU prohlášení o shodě je k dispozici na této internetové adrese:https://www.brp.com/en/ corporate-social-responsibility/ product-safety.html

## DA

Hermed erklærer BRP Megatech, at radioudstyrstypen 1001316154 er i overensstemmelse med direktiv 2014/53/EU.

EU-overensstemmelseserklæringens fulde tekst kan findes på følgende internetadresse:https:// www. brp. com/en/corporate-social-responsibility/product-safety.html

## ET

Käesolevaga deklareerib BRP Megatech, et käesolev raadioseadme tüüp 1001316154 vastab direktiivi 2014/53/EL nõuetele.

ELi vastavusdeklaratsiooni täielik tekst on kättesaadav järgmisel internetiaadressil: https:// www. brp. com/en/corporate-social-responsibility/product-safety.html

# ES

Por la presente, BRP Megatech declara que el tipo de equipo radioeléctrico 1001316154 es conforme con la Directiva 2014/ 53/UE.

El texto completo de la declaración UE de conformidad está disponible en la dirección Internet siguiente: https://www.brp. com/en/corporate-social-responsibility/product-safety.html

## FΙ

BRP Megatech vakuuttaa, että radiolaitetyyppi 1001316154 on direktiivin 2014/53/EU

mukainen. EU-vaatimustenmukaisuusvakuutuksen täysimittainen teksti on saatavilla seuraavassa internetosoitteessa: https://www.brp.com/en/corporate-social-responsibility/product-safety.html

### ΕN

Hereby, BRP Megatech declares that the radio equipment type 1001316154 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: https://www.brp.com/en/corporate-social-responsibility/product-safety.html

### HR

BRP Megatech ovime izjavljuje da je radijska oprema tipa 1001316154 u skladu s Direktivom 2014/53/EU. Cjeloviti tekst EU izjave o sukladnosti dostupan je na sljedećoj internetskoj adresi: https://www.brp.com/en/corporate-social-responsibility/product-safety.html

#### HU

BRP Megatech igazolja, hogy a 1001316154 típusú rádióberendezés megfelel a 2014/53/EU irányelvnek. Az EU-megfelelőségi nyilatkozat teljes szövege elérhető a következő internetes címen: https://www.brp.com/en/corporate-social-responsibility/product-safety.html

#### IT

Il fabbricante, BRP Megatech, dichiara che il tipo di apparecchiatura radio 1001316154 è conforme alla direttiva 2014/53/

Il testo completo della dichiarazione di conformità UE è disponibile al seguente indirizzo Internet: https://www. brp. com/en/corporate-social-responsibility/product-safety.html

### LT

Aš, BRP Megatech, patvirtinu, kad radijo įrenginių tipas 1001316154 atitinka Direktyvą 2014/53/ES. Visas ES atitikties deklaracijos tekstas prieinamas šiuo interneto adresu: https://www.brp.com/en/corporate-social-responsibility/product-safety.html

### ١V

Ar šo BRP Megatech deklarē, ka radioiekārta 1001316154 atbilst Direktīvai 2014/53/ES. Pilns ES atbilstības deklarācijas teksts ir pieejams šādā interneta vietnē: https://www.brp.com/en/corporate-social-responsibility/product-safety.html

#### MT

B'dan, BRP Megatech, niddikjara li dan it-tip ta' tagħmir tar-radju 1001316154 huwa konformi mad-Direttiva 2014/53/ UE. It-test kollu tad-dikjarazzjoni ta' konformità tal-UE huwa disponibbli f'dan l-indirizz tal-Internet li ġej: https://www.brp.com/ en/corporate-social-responsibility/product-safety.html

### NL

Hierbij verklaar ik, BRP Megatech, dat het type radioapparatuur 1001316154 conform is met Richtlijn 2014/53/EU.

De volledige tekst van de EU-conformiteitsverklaring kan worden geraadpleegd op het volgende internetadres: https://www.brp.com/en/corporate-social-responsibility/product-safety.html

### PL

BRP Megatech niniejszym oświadcza, że typ urządzenia radiowego 1001316154 jest zgodny z dyrektywą 2014/53/ UE. Pełny tekst deklaracji zgodności UE jest dostępny pod następującym adresem internetowym: https://www.brp. com/en/corporate-social-responsibility/product-safety.html

## PT

O (a) abaixo assinado (a) BRP Megatech declara que o presente tipo de equipamento de rádio 1001316154 está em conformidade com a Diretiva 2014/53/UE.

O texto integral da declaração de conformidade está disponível no seguinte endereço de Internet: https://www.brp.com/en/corporate-social-responsibility/product-safety.html

### RO

Prin prezenta, BRP Megatech declară că tipul de echipamente radio 1001316154 este în conformitate cu Directiva 2014/53/ UE. Textul integral al declaratiei UE de conformitate este disponibil la următoarea adresă internet: https://www.brp. com/en/corporate-social-responsibility/product-safety.html

### SV

Härmed försäkrar BRP Megatech att denna typ av radioutrustning 1001316154 överensstämmer med direktiv 2014/53/EU. Den fullständiga texten till EU-försäkran om överensstämmelse finns på följande webbadress: https://www. brp.com/en/corporate-social-responsibility/product-safety.html

### SL

BRP Megatech potrjuje, da je tip radijske opreme 1001316154 skladen z Direktivo 2014/53/EU. Celotno besedilo izjave EU o skladnosti je na voljo na naslednjem spletnem naslovu: https://www. brp. com/en/corporate-social-responsibility/product-safety.html

### SK

BRP Megatech týmto vyhlasuje, že rádiové zariadenie typu 1001316154 je v súlade so smernicou 2014/53/EÚ. Úplné EÚ vyhlásenie o zhode je k dispozícii na tejto internetovej adrese: https://www. brp. com/en/ corporate-social-responsibility/ product-safety.html

## IS

BRP Megatech lýsir því hér með yfir að þráðlausi fjarskiptabúnaðurinn 1001316154 er í samræmi við tilskipun 2014/53/ESB. Óstyttan texta ESB-samræmisyfirlýsingarinnar er að finna á veffanginu:https://www.brp.com/en/ corporate-social-responsibility/ product-safety.html

### Liechtenstein

Hiermit erklärt BRP Megatech, dass der Funkanlagentyp

1001316154 der Richtlinie 2014/ 53/EU entspricht. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: https://www.brp.com/en/ corporate-social-responsibility/ product-safety.html

### NO

Hermed erklærer BRP Megatech at radioutstyrstypen 1001316154 er i samsvar med direktiv 2014/53/EU. Hele teksten i EU-samsvarserklæringen finnes på følgende internettadresse: https://www.brp.com/en/corporate-social-responsibility/product-safety.html

### RU

Компания BRP Megatech настоящим заявляет, что радиотехническое оборудование категории 1001316154 отвечает требованиям Директивы 2014/53/EU.

Полный текст декларации соответствия ЕС доступен на сайте https://www. brp. com/en/corporate-social-responsibility/product-safety.html

# RADIO FREQUENCY DIGITALLY ENCODED SECURITY SYSTEM (RF D.E.S.S. KEY)

This device complies with FCC Part 15 and Industry Canada license exempt RSS standard(s).

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

IC Registration Number: 12006A-1001317030

FCC ID: 2ACER-1001317030

We, the party responsible for compliance, declare under our sole responsibility that the device is in conformity with the provisions of the following Council Directive: 2014/53/EU. To which this declaration relates is in conformity with the essential requirements and other relevant requirements. The product is in conformity with the following directives, harmonized standards and regulations:

Radio Equipment Directive (RED) 2014/53/EU and Harmonized Standards:

IEC 62368-1:2014, CISPR 25:2016, ISO 11452-2:2004, ETSI EN 300 330 V2.1.1:2017

Radio Equipment Statutory Instrument 2017/1206 and Designated Standards:

IEC 62368-1:2014, CISPR 25:2016, ISO 11452-2:2004, ETSI EN 300 330 V2.1.1:2017

RADIO FREQUENCY DIGITALLY ENCODED SECURITY SYSTEM (RF D.E.S. S. KEY)

# This page is intentionally blank

# TECHNICAL SPECIFICATIONS

# **ENGINE**

ENGINE	
Engine type	Rotax 600 E-TEC® RS Liquid cooled with reed valves and electronic RAVE
Number of cylinder	2
Bore	72.3 mm (2.846 in)
Stroke	73.0 mm (2.874 in)
Displacement	599.4 cm³ (36.58 in³)
Maximum power engine speed	8500 ± 100 RPM

FUEL/ LUBRICATION SYSTEM		
Fuel delivery		E-TEC direct injection with integrated auxiliary injection system
Idle speed (not adjustable)		1600 ± 200 RPM
Gasoline/oil ratio		33:1
Pre-mix oil	Decemmended	XPS 2T X2-RS
Water pump shaft oil	Recommended	racing synthetic oil
Water pump shaft oil reservoir capacity		50 ml (1.7 fl oz(US))

ELECTRICAL SYSTEM			
Lighting system output		30 A @ 14.5 V 1340 W @ 6000 RPM	
Spark plug	Туре	NGK ILKR9Q7 (engine and spark plug threads are indexed)	
190			

ELECTRICAL SYSTEM		
	Gap	Not adjustable 0.6 to 0.7 mm (.024 to .028 in)

# RAVE RS

COOLING SYSTEM		
	Recommended	XPS Extended life pre-mixed coolant
Coolant type	Alternative, or if not available	Distilled water and antifreeze solution (50% distilled water, 50% antifreeze)

FUEL SYSTEM		
Fuel pump		In-tank electrical fuel pump
Fuel	Туре	Premium unleaded gasoline (fuel which may contain up to 10% MAX ethanol
	Octane rating	98 (RON)
Fuel tank capacity		18 I (4.8 gal (US))

ELECTRICAL SYSTEM			
Taillight and stoplight		2.6 W / 139 mW LED	
F1 Start / RER / Clock		5 A	
Fuses	F2	Loads	25 A
	F4	Accessory	15 A

DRIVE SYSTEM - CHAINCASE			
Chaincase Type	Recommended	XPS Synchromesh Transmission Synthetic Oil	
oil	Турс	Alternative, or if not available	75W140 gear oil that meets the API GL-5 specification

DRIVE SYSTEM - CHAINCASE			
			with limited slip gear oil additive
	Capacity		350 ml (12 fl oz(US))
Chaincase ra	tio		23/51

DRIVE SYSTEM - PULLEYS		
Drive pulley	Туре	pDrive Racing with clicker
Drive pulley	Engagement RPM	5700 ± 100 RPM
Driven pulley	Туре	Team Rapid Reaction
Daine healthadineters at	Deflection	27 to 37 mm (1.06 to 1.46 in)
Drive belt adjustment	Force	11.3 kg (25 lb)

DRIVE SYSTEM - TRACK		
Drive sprocket number of teeth		8
	Width	38 cm (15 in)
Track	Length	348 cm (137 in)
	Profile height	44.5 mm (1.75 in)
Track adjustment	Deflection	3.2 cm (1.26 in)

DRIVE SYSTEM - TRACK		
	Force	6.0 to 8.5 kgf (13 to 19 lbf)

BRAKE SYSTEM		
Brake Type		Single 220 mm stainless floating disc with 4 pistons caliper
	Туре	DOT 4
Brake fluid	Quantity	50 ml (1.69 fl oz(US))
Caliper		Fixed 4 pistons (4 x 30 mm)
Brake pad material		Metallic
Minimum brake pad thickn	0.5 mm (.02 in)	
Minimum brake disc thickness		5.4 mm (.213 in)
Maximum brake disc warpage		0.2 mm (.01 in)

FRONT SUSPENSION		
Suspension type	RAS 3 RS / LFS+ RS	
Suspension maximum travel	272 mm (10.7 in)	
Shock absorber type	KYB PRO 46 HLCR Kashima	

REAR SUSPENSION		
Suspension type		rCTRL
Suspension maximum travel Measured at rear arm		305 mm (12 in)
Shock absorber type	Center	KYB PRO 46 HLCR Kashima
Officer absorber type	Rear	KYB PRO 46 HLCR Kashima

WEIGHT AND DIMENSIONS		
Mass (dry)	210 kg (463 lb)	
Overall length	3040 mm (119.7 in)	
Overall width	1 280 mm (50.4 in)	
Overall height	1140 mm (44.9 in)	
Ski stance	1080 mm (42.4 in)	

# This page is intentionally blank

# TROUBLESHOOT-ING

# TROUBLESHOOTING GUIDELINES

# **Troubleshooting**

# 1. ENGINE IS CRANKED BUT FAILS TO START

No fuel to the engine.

Check fuel tank level, add fuel if necessary.

System voltage too low.

Contact an authorized Ski-Doo dealer.

# 2. ENGINE LACKS ACCELERATION OR POWER

Engine warm-up in progress.

Drive vehicle at low speeds for a few minutes.

Engine break-in period not completed.

Complete break-in period.

Drive and driven pulleys require servicing.

Contact an authorized SKI-DOO dealer.

# Engine overheats.

- Check coolant level, see MAINTENANCE PROCEDURES (PAGE 126) MAINTENANCE PROCEDURES.
- Check heat exchangers cleanliness. Clean if necessary.

Drive belt worn too thin

- If the drive belt has lost more than 3 mm (1/8 in) of its original width, it will affect vehicle performance.
- Replace drive belt.

Incorrect track adjustment.

 See MAINTENANCE PROCEDURES (PAGE 126) MAINTE-NANCE PROCEDURES and/or an authorized SKI-DOO dealer for proper alignment and tension adjustments.

R.A.V.E. valves problem.

 Seek service from an authorized Ski-Doo dealer, repair shop, or person of your own choosing for maintenance, repair, or replacement.

Euol	pressure	too	lov.
ruei	pressure	ιοο	IOW.

 Seek service from an authorized Ski-Doo dealer, repair shop, or person of your own choosing for maintenance, repair, or replacement.

# 3. ENGINE BACKFIRES

Engine is running too hot.

See item 4 of ENGINE LACKS POWER.

Ignition timing is incorrect or there is an ignition system failure.

 Seek service from an authorized Ski-Doo dealer, repair shop, or person of your own choosing for maintenance, repair, or replacement.

Exhaust system leak.

 Seek service from an authorized Ski-Doo dealer, repair shop, or person of your own choosing for maintenance, repair, or replacement.

Fuel pressure too low.

 Seek service from an authorized Ski-Doo dealer, repair shop, or person of your own choosing for maintenance, repair, or replacement.

# 4. ENGINE MISFIRES

Water in fuel

Drain fuel system and refill with fresh fuel.

RAVE valves malfunction

Have RAVE valves system inspected. Seek service from an authorized Ski-Doo dealer, repair shop, or person of your own choosing for maintenance, repair, or replacement.

# HEATED GRIPS/THUMB WARMERS ARE NOT WORKING

Engine RPM is too low.

Make sure engine RPM is above 2000.

# 6. ENGINE HAS SHUT DOWN

The engine shuts down after long periods of idling.

## TROUBLESHOOTING GUIDELINES

 Do not let engine idle too long. Refer to VEHICLE WARM-UP in operating instruction.

# 7. WATER PUMP SHAFT OIL LEVEL LOWERS

External leak.

Replace leaking part.

Engine internal leak.

Have the engine bottom end repaired.

# MONITORING SYSTEM

# Pilot Lamps, Messages and Beeper Codes

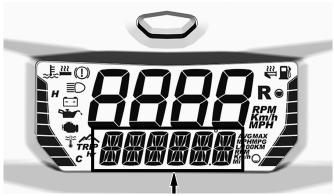
Gauge pilot lamps will inform you if an anomaly occurs or to inform you of a particular condition.



## PILOT LAMPS

Pilot lamp can flash alone or in combination with another lamp.

The lower display is used to give you a brief description if an anomaly occurs or to inform you of a particular condition.



COMPACT DIGITAL LOWER DISPLAY

## MONITORING SYSTEM

Messages will be displayed with a beep code and pilot lamp(s).

Beeper codes will be heard, and messages will be displayed to catch your attention.

Refer to following table for details.

NOTE:

Some of the listed pilot lamps and messages do not apply to all models

Pilot Lamp ON	Beeper	Message Display	Description
<del>™</del> }}	4 short beeps every 30 seconds	HIGH ENGINE TEMPERA TURE	Engine is overheating, reduce snowmobile speed and run in loose snow or stop engine immediately and let engine cool down. Check coolant level, refer to Maintenance. If coolant level is correct and overheating persists, contact an authorized BRP snowmobile dealer. Do not run the engine if condition persists.
		MUFFLER OVERHEAT	Reduce speed or stop engine. Let engine cool down and restart. If overheating persists, contact an authorized BRP snowmobile dealer. Do not run the engine if condition persists.
## <del>*</del>	Short beeps repeating rapidly	HIGH ENGINE TEMPERA TURE	Critical overheat. Stop engine immediately and let engine cool down. Check coolant level, refer to <i>Maintenance</i> . If

Pilot Lamp ON	Beeper	Message Display	Description
			coolant level is correct and overheating persists, contact an authorized BRP snowmobile dealer. Do not run the engine if condition persists.
		MUFFLER OVERHEAT	Critical overheat. Stop engine immediately and
		ECM OVERHEAT	let engine cool down. If overheating persists, contact an authorized BRP snowmobile dealer. Do not run the engine if condition persists.
-+	4 short beeps every 5 minutes	BATT VOLT	Indicate a low or high battery voltage condition. Visit an authorized BRP snowmobile dealer as soon as possible.
£	4 short beeps	CHECK ENGINE	Engine fault, see an authorized BRP snowmobile dealer, repair shop or person of your own choosing as soon as possible.
	-	_	Displayed when brake is applied for more than 15 seconds while throttle lever is squeezed and vehicle is moving at more than 5 km/h (3 mph).

Pilot Lamp ON	Beeper	Message Display	Description
_	4 short beeps every 5 minutes	KNOCK	Engine detonation (RPM is limited when this condition occurs).  - Ensure recommended fuel is used.  - Check fuel quality, replace if necessary.  - If fault still occurs, contact an authorized BRP snowmobile dealer, repair shop, or person of your own choosing.
_	4 short beeps every 5 minutes	REV LIMIT	Engine RPM limited for protection when certain faults occur.
_		OVER REV	Indicates that maximum engine RPM is reached. Check clutch calibration.
_	Short beeps repeating rapidly	SHUTDOWN	Shutdown procedure in force due to engine overheating or fuel pump problem.
_	2 short beeps every 10 seconds	BELT OVERHEAT	The belt temperature reaches 75 C 167 F. Message and beeps disappears when the temperature drops below 75 C 167 F.
_	2 short beeps	BELT OVERLOAD	If a critical condition is detected over 1 minute.

Pilot Lamp ON	Beeper	Message Display	Description
	every 15 seconds		Message and beeps disappears if the driver reduces critical style of riding.
_	2 short beeps every 10 seconds	BELT OVERLOAD	If it stills in critical condition over 10 minutes. Message will not disappear until the engine shutdown.
	2 short beeps	_	Good key, vehicle ready to operate.
DESS	Short beeps, repeating slowly	WRONG KEY	Unable to read key (bad connection). Make sure the key is clean and correctly snapped on post.
	Short beeps repeating rapidly	BAD KEY	Invalid key or key not programmed. Use the proper key for the vehicle or have the programmed.
(blinking)	_	_	Fuel level sensor problem.

# **Fault Codes**

If the check engine icon is ON, it is possible to read fault  $\mathsf{code}(\mathsf{s})$  on the gauge.

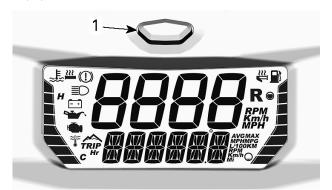
To read active fault code(s), select the vehicle speed and engine RPM display combination, see *Compact Digital Display*.

## MONITORING SYSTEM

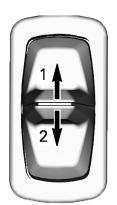
## NOTE:

Make sure to select actual vehicle speed and actual engine RPM (not "top" or "average" values).

Press and hold the gauge mode button and simultaneously switch from HIGH to LOW beam repeatedly several times until a code is displayed.



1. Gauge mode button



- 1. High beam
- 2. Low beam

If two or more codes are registered, use the gauge mode button to scroll.

To exit the fault codes mode, press and hold the gauge mode button.

Contact an authorized Ski-Doo dealer for code signification.

# This page is intentionally blank

# **WARRANTY**

# BRP INTERNATIONAL LIMITED WARRANTY: 2025 SKI-DOO® SNOWMOBILES

THE PRODUCT IS DESIGNED FOR SPECIFIC RACING FUNCTIONALITIES AND IS NOT DESIGNED OR CERTIFIED TO BE OPERATED ON SNOWMOBILE TRAILS. TO THE EXTENT PERMITTED BY LAW, NO WARRANTY, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS HEREBY GIVEN BY BRP. TO THE EXTENT THAT THEY CANNOT BE DISCLAIMED, THE IMPLIED WARRANTIES ARE LIMITED TO THE MINIMUM TERM PROVIDED AT LAW. SOME JURISDICTIONS 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 JURISDICTION TO JURISDICTION.

# BRP LIMITED WARRANTY FOR THE EUROPEAN ECONOMIC AND THE COMMONWEALTH OF THE INDEPENDENT STATES (CIS) AREAS AND TURKEY: 2025 SKI-DOO® SNOWMOBILES

THE PRODUCT IS DESIGNED FOR SPECIFIC RACING FUNCTIONALITIES AND IS NOT DESIGNED OR CERTIFIED TO BE OPERATED ON SNOWMOBILE TRAILS. TO THE EXTENT PERMITTED BY LAW, NO WARRANTY, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS HEREBY GIVEN BY BRP. TO THE EXTENT THAT THEY CANNOT BE DISCLAIMED, THE IMPLIED WARRANTIES ARE LIMITED TO THE MINIMUM TERM PROVIDED AT LAW. SOME JURISDICTIONS 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 JURISDICTION.

# This page is intentionally blank

# CUSTOMER INFORMATION

# DATA PRIVACY INFORMATION

Bombardier Recreational Products Inc., its affiliates and subsidiaries ("BRP") is committed to protecting your privacy and support a general policy of openness about how we collect, use and disclose your personal information in the course of managing our relationship with you. More details can be found by visiting BRP's Privacy Policy at: https://brp.com/en/privacy-policy. html or by scanning the QR Code below.

Please be assured that we have appropriate security measures in place to ensure that your personal information is protected against loss and unauthorized access.

Your personal information that may be collected by BRP, directly from you or from authorized dealers or authorized third parties, includes:

- Contact, Demographic & Registration Information (e.g., name, full address, phone number, email, gender, ownership history, language of communication)
- Vehicle Information (e.g., serial number, purchase and delivery date, unit usage, vehicle location and movements)
- Third Party Information (e.g., information received from BRP partners, joint marketing activities information, social media)
- partners, joint marketing activities information, social media)
   Technological Information (e.g., IP address, type of device, operating system, browser type, webpages you view, cookies and similar technologies when you use BRP or dealers' websites or mobile application)
- Interaction with BRP Information (e.g., information collected when you call BRP's in-house sales representatives, buy items on a BRP website, sign up for BRP emails, participate in BRP-sponsored contests and sweepstakes or attend BRP-sponsored events)
- Transactional Information (e.g., information necessary to handle returns, payment information when you purchase our products or services through our websites or mobile applications and other issues related to your purchase of BRP products)

This information may be used and processed for the following purposes:

- Safety & Security
- Customer Support for Sales and After Sales (e.g., complete or follow up with you about your purchase or maintenance)
  - Registration & Warranty
- Communication (e.g., sending you a BRP satisfaction survey)
- Online Behavioural Advertising, Profiling and Location-Based Services
  - (e.g., offer customized experience)
- Compliance & Dispute Resolution
- Marketing & Advertising
- Assistance (e.g., help with any delivery issues, handle returns, and other issues related to your purchase of BRP products).

We also may use personal information to generate aggregated or statistical data that no longer identifies you personally.

Your personal information may be disclosed to the following: BRP, BRP's authorized dealerships, distributors, service providers, advertising and market research partners and other authorized third parties.

We may receive information about you from diverse sources, including third parties, such as BRP's authorized dealerships and partners, with whom we offer services or engage in joint-marketing activities. We may also receive information about you from social media platforms when you interact with us on those platforms.

Depending on the circumstances, your personal information may be communicated outside the region where you reside. Your personal information is retained only for as long as necessary for the purpose for which we obtained it and according to our retention policies.

To exercise your data privacy rights (e.g. right of access, right of rectification), to withdraw your consent in order to be removed from the address list for marketing purposes or for the satisfaction survey or for general data privacy questions, please contact BRP's Data Protection Officer at or by mail at **privacyofficer@brp.com** or by mail at: BRP Legal Service, 726 St-Joseph, Valcourt, Quebec, Canada, J0E 2L0.

When BRP processes your personal information, they do so in compliance with its Privacy Policy available at: https://www.brp.com/en/privacy-policy.html or by using the following QR Code.



# **CONTACT US**

### www.brp.com

### Asia Pacific

### **BRP Asia**

107D and 107E, 17/F, Tower 1, Grand Century Place, Mongkok, Kowloon, Hong Kong

### Australia

Level 26 477 Pitt Street Svdnev. NSW 2020

## China

上海市徐汇区衡山路10号6号楼301 Rm 301, Building 6, No.10 Heng Shan Rd, Shanghai, China

### Japan

21F Shinagawa East One Tower 2–16–1 Konan, Minato-ku-ku, Tokyo 108–0075

## New Zealand

Suite 1.6, 2–8 Osborne Street, Newmarket. Auckland 2013

## Europe, Middle East and Africa

### **Belgium**

Oktrooiplein 1

# Czech Republic

Stefanikova 43a Prague 5 150 00

### Germany

Alte Papierfabrik 16 D-40699 Erkrath

### Finland

Isoaavantie 7 PL 8040 96101 Rovaniemi

### France

Arteparc Bâtiment B Route de la côte d'Azur, 13 590 Meyreuil

### Norway

Ingvald Ystgaardsvei 15 N-7484 Trondheim Salg, marketing, ettermarked

### Sweden

Spinnvägen 15 903 61 Umeå Sweden 90821

### Switzerland

Avenue d'Ouchy 4-6 1006 Lausanne

### Latin America

### Brazil

Rua Odila Maia Rocha Brito, 25 Edificio Beaumont, andar 1 ao 5 CEP 13092-110 Campinas -SP

### Mexico

Av. Ferrocarril 202 Parque Industrial Querétaro Santo Rosa Jauregui, Querétaro C.P. 76220

# North America

### Canada

3200A, rue King Ouest, Suite 300 Sherbrooke (Québec) J1L 1C9

### United States of America

10101 Science Drive Sturtevant, Wisconsin 53177

If your address has changed or if you are the new owner of the snow-mobile, be sure to notify BRP by either:

- Notifying an authorized BRP snowmobile dealer or distributor.
- North America Only: calling at 1 888 272-9222.
- Mailing one of the change of address cards on the following pages at one of the BRP addresses indicated in the Contact Us section of this guide.

In case of change of ownership, please join a proof that the former owner agreed to the transfer.

Notifying BRP, even after the expiration of the limited warranty, is very important as it enables BRP to reach the snowmobile owner if necessary, like when safety recalls are initiated. It is the owner's responsibility to notify BRP.

STOLEN UNITS: If your personal snowmobile is stolen, you should notify BRP or an authorized BRP snowmobile dealer. We will ask you to provide your name, address, phone number, the vehicle identification number and the date it was stolen.

CHAN	GE OF ADDRES	S/OWNER	RSHIP						
		APT	ZIP/POSTAL CODE	TELEPHONE		APT	ZIP/POSTAL CODE	TELEPHONE	
CHANGE OF OWNERSHIP	Vehicle Identification Number (V.I.N.)	NAME STREET	STATE/PROVINCE		NAME	STREET	STATE/PROVINCE		8
CHANGE OF ADDRESS	ION NUMBER	OR PREVIOUS OWNER: NO.	CITY	COUNTRY	NEW ADDRESSOR NEW OWNER:	NO.	CITY	COUNTRY	E-MAIL ADDRESS

CHAN	GE OF ADDRESS	/OWNEF	RSHIP						
 		APT	ZIP/POSTAL CODE	TELEPHONE		APT	ZIP/POSTAL CODE	TELEPHONE	
CHANGE OF OWNERSHIP	Vehicle Identification Number (V.I.N.)	STREET	STATE/PROVINCE		NAME	STREET	STATE/PROVINCE		S
CHANGE OF ADDRESS	VEHICLE IDENTIFICATION NUMBER	NO.	CITY	COUNTRY	NEW ADDRESS OR NEW OWNER:	NO.	CITY	COUNTRY	E-MAIL ADDRESS

CHANGE OF ADDRESS/OWNERSHIP									
		APT	ZIP/POSTAL CODE	TELEPHONE		APT	ZIP/POSTAL CODE	TELEPHONE	
CHANGE OF OWNERSHIP	Vehicle Identification Number (V.I.N.)	STREET	STATE/PROVINCE		NAME	STREET	STATE/PROVINCE		S
CHANGE OF ADDRESS 🔲	VEHICLE IDENTIFICATION NUMBER	OR PREVIOUS OVVINER:	CITY	COUNTRY	NEW ADDRESS OR NEW OWNER:	NO.	CITY	COUNTRY	E-MAIL ADDRESS

NOTES			

229

NOTES			

NOTES		

NOTES		

Model N	No					
VEHICL IDENTIF	E FICATION NUMBER	(V.I.N.)				
ENGINE IDENTIF	E FICATION NUMBER	(E.I.N.)				
Owner:						
		NAME			_	
	APT					
	CITY		ZIP/POSTAL CODE			
Purchas	se Date	YEAR	MONTH	DAY		
Warrant	ty Expiry Date	YEAR	MONTH	DAY		
To be completed by the dealer at the time of the sale.						
	D	EALER IMP	RINT ARI	ĒΑ		



# **A WARNING**

Disregarding any of the safety precautions and instructions contained in the operator's guide, safety video and on product safety labels could cause injury including the possibility of death.



®TM and the BRP logo are trademarks of BOMBARDIER RECREA-TIONAL PRODUCTS INC. or its affiliates. ©2024 BOMBARDIER RECREATIONAL PRODUCTS INC. ALL RIGHTS RESERVED.

### www.brp.com

ALUMACRAFT®	CAN-AM®	LYNX®
MANITOU®	QUINTREX®	ROTAX®
SEA-DOO®	SKI-DOO®	