

LYNX®



**BRUKERHÅNDBOK
OPERATOR'S GUIDE
Adventure™ 600 ACE • 2011**

NO/EN 619 900 257

OPERATOR'S GUIDE 2011

Adventure™ 600 ACE

SAFETY WARNING

Disregarding any of the safety precautions and instructions contained in this Operator's Guide, or on-product warnings may result in injury, including the possibility of death.

This Operator's Guide should remain with the snowmobile at time of resale.



Lynx products are manufactured by BRP.

The following are trademarks of Bombardier Recreational Products Inc. or its subsidiaries.

DESS™

3-D RAVE™

ROTAX™

LYNX®

HPG™

RER™

E-TEC®

TRA™

600 ACE™

4-TEC™

eDrive™

FOREWORD

Congratulations on your purchase of a new Lynx snowmobile. Whatever model you have chosen, it is backed by the Bombardier Recreational Products inc. (BRP) warranty and a network of authorized Lynx snowmobile dealers ready to provide the parts, service or accessories you may require.

The Operator's Guide has been prepared to acquaint the owner/operator and passenger with this new snowmobile and its various controls, maintenance and safe riding instructions. This guide is indispensable for the proper use of the product and should be kept with this snowmobile at all times.

Make sure you read and understand the content of this Operator's Guide.

After reading, please keep this Operator's Guide with the snowmobile. If the snowmobile is resold, please give the guide to the new owner for his awareness. An extra copy of the Operator's Guide is available from your Lynx snowmobile dealer at no charge.



If you have any question regarding any topic whether or not it is covered in this Operator's Guide, please send a written letter to BRP to following address:

BRP Finland OY
Service Department
P.O. Box 8039
FIN-96101 ROVANIEMI
FINLAND
Tel +358 16 3208 111

This guide uses the following safety alert symbol in conjunction with signal words to indicate a potential personal injury hazard.

WARNING

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

 **CAUTION** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. When used without the safety alert symbol , potential hazard exists for property damage only.

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

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

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, your dealer would have explained the snowmobile controls and provided you with a brief explanation of the various suspension adjustments. We trust you have taken full advantage of this!

At delivery, you were also informed of the warranty coverage and have completed the Warranty Registration process.

The information and components/system descriptions contained in this guide are correct at 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.

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

The illustrations in this document show the typical construction of the different assemblies and, in all cases,

may not reproduce the full detail or exact shape of the parts shown, however, they represent parts which have the same or a similar function.

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

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

Most components of this snowmobile are built with parts dimensioned in the metric system. Most fasteners are metric and must not be replaced by customary fasteners or vice versa.

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

For any questions pertaining to the warranty and its application, consult the WARRANTY section in this guide, and/or an authorized Lynx dealer.

TABLE OF CONTENTS

FOREWORD	1
-----------------------	----------

SAFETY INFORMATION

IMPORTANT BASIC SAFETY MEASURES	8
Training	8
Performance	8
Age	8
Speed	8
Riding	8
Operation	9
Maintenance	10
Fuel	10
Basics for Passenger	11
LAWS AND REGULATIONS	12
RIDING THE VEHICLE	13
Principle of Operation	13
How to Ride	13
Carrying a Passenger	15
Terrain/Riding Variations	16
Transporting and Towing	20

ENVIRONMENT INFORMATION

GENERAL	22
JUST WHAT IS LIGHT TREADING?	23
WHY IS LIGHT TREADING SMART	24

VEHICLE INFORMATION

VEHICLE IDENTIFICATION	26
Vehicle Description Decal	26
Identification Numbers	26
CONTROLS, INSTRUMENTS AND EQUIPMENT	27
1) Handlebar	28
2) Throttle Lever	28
3) Brake Lever	29
4) Parking Brake Lever	29
5) Engine Cut-off Switch	30
6) Emergency Engine Stop Switch	31
7) Multifunction Switch	31
8) Tool Kit	32
9) Grab Handle/Bumper	32
10) Gauge	33
11) Storage Compartment	36

CONTROLS, INSTRUMENTS AND EQUIPMENT (cont'd)	
12) Rear Rack	36
13) Passenger Seat	36
14) Passenger Handholds	36
15) Drive Belt Holder	36
16) Drive Belt Guard	37
17) Hood	38
18) Side Panels	38
19) Shift Lever	38
FUEL	40
Recommended Fuel	40
Fueling Procedure	40
BREAK-IN PERIOD	41
Break-In Period Duration	41
Operation During Break-In	41
Break-In Inspection	41
OPERATING INSTRUCTIONS	42
Pre-Operation Check	42
Engine Starting Procedure	43
Riding Conditions and your Snowmobile	44
Vehicle Warm-Up	44
Operating in Reverse	44
Shutting Off the Engine	45
Towing an Accessory	45
Towing Another Snowmobile	45
TUNE YOUR RIDE	46
Rear Suspension Adjustments	46
Front Suspension Adjustments	49
Adjustment Tips According to Vehicle Behavior	51
VEHICLE TRANSPORTATION	52
MAINTENANCE	
BREAK-IN INSPECTION	54
PERIODIC MAINTENANCE CHART	55
MAINTENANCE SCHEDULE (4-STROKE)	56
PRESEASON PREPARATION	58
STORAGE	60
MAINTENANCE SCHEDULE	61
MAINTENANCE PROCEDURES	62
Engine Oil	62
Air Filter with Single Air Intake	63
Engine Coolant	63
Exhaust System	63

MAINTENANCE PROCEDURES (cont'd)	
Spark Plugs	64
Brake Fluid	64
Chaincase Oil	65
Drive Chain	66
Drive Belt	66
Track	68
Suspension	72
Skis	72
Fuses	72
Lights	73
VEHICLE CARE	76
Post-Operation Care	76
Vehicle Cleaning and Protection	76
STORAGE AND PRESEASON PREPARATION	77
Storage	77
Preseason Preparation	77

TECHNICAL INFORMATION

EC DECLARATION OF CONFORMITY	80
EPA CERTIFIED ENGINES	81
Engine Emissions Information	81
SPECIFICATIONS	82

TROUBLESHOOTING

TROUBLESHOOTING GUIDELINES	86
MONITORING SYSTEM	87
Pilot Lamps, Messages and Beeper Codes	87

WARRANTY

BRP FINLAND OY INTERNATIONAL LIMITED WARRANTY: 2011 LYNX® SNOWMOBILES	90
--	-----------

CUSTOMER INFORMATION

PRIVACY INFORMATION	94
CHANGE OF ADDRESS/OWNERSHIP	95

SAFETY INFORMATION

IMPORTANT BASIC SAFETY MEASURES

Training

▲ Basic training is required for the safe operation of any snowmobile. Study your Operator's Guide paying particular attention to cautions and warnings. Join your local snowmobile club: its social activities and trail systems are planned for both fun and safety. Obtain basic instructions from your snowmobile dealer, friend, fellow club member or enroll in your local training program.

▲ Always show a new operator how to start and stop the vehicle. Indicate the correct riding positions and, above all else, only allow him to operate the snowmobile in a restricted flat area — at least until he is completely familiar with its operation. If there is a local snowmobile operator's training course existing, have him enroll.

Performance

▲ 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.

▲ Snowmobiles are used in many areas and in many snow conditions. Not all models perform the same in similar conditions. Always consult your snowmobile dealer when selecting the snowmobile model for your particular needs and uses.

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

Age

▲ BRP recommends the operator has at least 16 years old of age. Follow your local legislation.

Speed

▲ Speeding can be fatal. 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.

Riding

▲ Always keep right hand side of the trail.

▲ Always keep a safe distance from other snowmobiles and bystanders.

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

▲ Never ride after consuming drugs or alcohol or if you feel tired or ill. Operate your snowmobile prudently.

▲ Your snowmobile is not designed to be operated on public streets, roads or highways.

▲ Snowmobiling at night can be a delightful experience but because of reduced visibility, be extra cautious. Avoid unfamiliar terrain and be sure your lights are working. Always carry a flashlight and spare light bulbs.

▲ Nature is wonderful but don't let it distract your attention from driving. If you want to truly appreciate winter's scenery, stop your snowmobile on the side of the trail so that **you** don't become a hazard to others.

▲ Fences represent a very serious threat for both you and your snowmobile. Give a wide berth to telephone poles or posts.

▲ Hidden wires unseen from a distance can cause serious accidents.

- ▲ Always wear an approved safety helmet, eye protection and a face shield. This also applies to your passenger.
- ▲ Be aware of inherent risks associated with riding off trails, such as avalanche and other natural or man made hazards or obstacles.
- ▲ Avoid road traveling. If you must do so, and it is permitted, reduce speed. The snowmobile is not designed to operate or turn on paving. When crossing a road, make a full stop, then look carefully in both directions before crossing at a 90° angle. Be wary of parked vehicles.
- ▲ Tailgating another snowmobile should be avoided. If the snowmobile in front of you slows for any reason, its driver 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.
- ▲ 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.
- ▲ Meadows sometimes have low areas where water accumulate and freezes over in winter. This ice is usually glare ice. Attempting to turn or brake on this surface could cause your vehicle to spin out of control. Never brake or attempt speeding or turning on glare ice. If you do happen to travel over such a condition, reduce speed by carefully releasing the throttle.
- ▲ Never "jump" with your snowmobile. This should be left to professional stunt men. Don't show off. Be responsible.
- ▲ While on safari, do not "gun" the throttle. Snow and ice can be thrown back into the path of a following snowmobile. In addition, when "gunning" the throttle, the vehicle digs into and leaves an irregular snow surface for others.
- ▲ Safaris are both fun and enjoyable but don't show off or overtake others in the group. A less experienced operator might try to do the same as you and fail. When riding with others, limit your abilities to the experience of others.

Operation

- ▲ Always make a pre-start inspection BEFORE you turn on the ignition.
- ▲ In an emergency, the snowmobile engine can be stopped by activating the engine cut-out switch, pulling the tether cord cap or turning off the key.
- ▲ Throttle mechanism should be checked for free movement and return to idle position before starting engine.
- ▲ Always engage parking brake when vehicle is not in use.
- ▲ Never run the engine in a non-ventilated area and/or if vehicle is left unattended.

- ▲ Never operate the engine without belt guard securely installed or, with hood or access/side panels open or removed. Never run the engine without drive belt installed. Running an unloaded engine such as without drive belt or with track raised, can be dangerous.
- ▲ **Electric start models only:** Never charge or boost a battery while installed on snowmobile.
- ▲ Ensure the path behind is clear of obstacles or bystanders before proceeding in reverse.
- ▲ Do not leave your keys in the ignition switch, it is an invitation to thieves and a danger to young children.
- ▲ Raising the rear of your snowmobile while the engine is running could cause snow, ice or debris to be thrown back at an observer. Never raise the rear of the vehicle while the engine is running. To clear or inspect the track, stop the engine, tilt the vehicle on its side and remove blockage with a piece of wood or branch. Never allow anyone near a rotating snowmobile track.

Maintenance

- ▲ Know your snowmobile and treat it with the respect and care due of any power driven machine. Common sense, proper handling and routine maintenance will result in safer and enjoyable use.
- ▲ Only perform procedures as detailed in this guide. Unless otherwise specified, engine should be turned OFF and cold for all lubrication, adjustment and maintenance procedures.
- ▲ Never have the engine running while the hood is open. Even at idle, a snowmobile engine is turning around 1,800 revolutions per minute. Always turn off the ignition before opening the hood for any reason.

- ▲ Never remove any original equipment from your snowmobile. Each vehicle has many built in safety features. Such features include various guards and consoles, plus reflective materials and warning labels.
- ▲ A poorly maintained snowmobile itself can be a potential hazard. Excessively worn components could render the vehicle completely inoperative. Keep the snowmobile in good working condition at all times. Follow your pre-operation check, weekly, monthly and annually routine maintenance and lubrication procedures as detailed in this guide. Consult a snowmobile dealer or acquire a shop manual and proper tools and equipment if other repairs or service is required.
- ▲ Do not stud the track unless it as been approved for studs. At speed, a studded track that as not been approved for studs could tear and separate from vehicle posing a risk of severe injury or death.

Fuel

- ▲ Always stop the engine before refueling. Fuel is flammable and explosive under certain conditions. Always work in a well-ventilated area. Do not smoke or allow open flames or sparks in the vicinity. Open cap slowly. If a differential pressure condition is noticed (whistling sound heard when loosening fuel tank cap) have vehicle inspected and/or repaired before further operation. Do not overfill or top off the fuel tank before placing the vehicle in a warm area. As temperature increases, fuel expands and might overflow. Always wipe off any fuel spillage from the vehicle. Periodically verify fuel system.

Basics for Passenger

- ▲ Never ride as a passenger unless the snowmobile is equipped with a passenger seat, and sit only on the designated passenger seat.
- ▲ Always wear a DOT approved helmet and follow the same dressing guidelines as those recommended for the operator and described in this guide.
- ▲ Make sure that you are able to achieve a stable stance, both feet resting positively on the footboards of footrests with good grip, and that you are able to hold on firmly to the handholds.
- ▲ Once underway, if you feel uncomfortable or insecure for any reason, don't wait, tell the driver to slow down or stop.

LAWS AND REGULATIONS

▲ Know your local laws.

State, provincial and local government agencies have enacted laws and regulations pertaining to the safe use and operation of snowmobiles. It is your responsibility as a snowmobiler to learn and obey these laws and regulations. Respect and observance will result in safer snowmobiling for all.

Be aware of the liability property damages and insurance laws regarding your equipment.

RIDING THE VEHICLE

Before venturing on the trails, operate the snowmobile in a restricted flat area until you are completely familiar with its operation and feel comfortable that you can safely tackle a more demanding task. Have an enjoyable and safe ride.

Principle of Operation

Propulsion

Depressing throttle lever increases engine RPM causing the drive pulley to engage. Depending on models, engine RPM must be between 2500 and 4200 before drive pulley engagement will occur.

Outer sheave of drive pulley moves toward inner sheave, forcing the drive belt to move upward on the drive pulley and simultaneously forcing the sheaves apart on the driven pulley.

The driven pulley senses the load on the track and limits the belt movement. The result is an optimized speed ratio between engine RPM and the speed of the vehicle at any time.

WARNING

Never operate engine without belt guard securely installed or, with hood or access/side panels open or removed.

Power is transferred to the track through the chaincase or gearbox and drive axle.

WARNING

Always use a wide-base snowmobile mechanical stand to properly support vehicle during any track verification. Slowly accelerate engine in order to rotate track at very low speed when it is not on ground.

Turning

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

Stopping

Before riding your snowmobile, you should understand how to stop it. This is done by releasing the throttle and gradually depressing the brake lever on the left side of the handlebar. In an emergency, you may stop your vehicle by pressing the engine cut-out switch located near the throttle control and applying the brake. Remember, a snowmobile cannot "stop on a dime". Braking characteristics vary with deep snow, packed snow or ice. If the track is locked during hard braking, skidding may result.

How to Ride

How to Dress

Proper snowmobile clothing should be worn. 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.

DOT approved helmets are recommended at all times. 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 long scarfs and loose apparels that could get caught in moving parts.

What to Bring

Every snowmobiler should carry at least the following basic parts and tools that can help him and others in an emergency:

- this Operator's Guide
- spare spark plugs and wrench
- friction tape
- spare drive belt
- spare starter rope
- spare light bulbs
- tool kit (including at least pliers, screwdriver, adjustable wrench)
- knife
- flashlight.

Include other items depending on the length and time of your ride.

Riding Position

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. Driver and passenger(s) 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.

The novice driver should become familiar with the snowmobile through practice on a level area at slow speeds before venturing afield.

WARNING

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

Sitting

Feet on the running boards, body mid-way 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.



Carrying a Passenger

Certain snowmobiles are designed for an operator only, others can allow one passenger only, and others can allow up to two passengers. Refer to the indications on the vehicles to know if any particular snowmobile can accommodate passengers or not, and if so, how many. Always respect those indications. Overloading is dangerous because snowmobiles are not designed for it.

Even when passengers are allowed, you must make sure that the persons who would like to become passengers are physically fit for snowmobiling.

⚠ WARNING

Any passenger must be able to firmly lay his feet on the footrests and keep his hands on the grab handles or seat strap at all times when seated. Respecting those physical criteria is important to ensure that the passenger is stable and to reduce the risks of ejection.

Each operator has a responsibility to ensure the safety of his passengers and should inform them of snowmobiling basics.

⚠ WARNING

- Passengers must only sit on designated passenger seats. Never allow anyone to sit between the handlebar and the operator.
- Each passenger seat must have a strap or grab handles and meet SSCC standards.
- Passengers and operators must always wear DOT approved helmets and warm clothing appropriate for snowmobiling. Make sure that no skin is exposed.
- Once underway, if a passenger feels uncomfortable or unsecure for any reason, he must not wait, and tell the driver to slow-down or stop.

Riding with passengers on board is different than riding alone. The operator has the benefit of knowing what will be the next maneuver and is able to prepare himself accordingly. The operator also benefits from the support of his grip on the handlebar. In contrast, the passengers have to rely on the operator's careful and safe operation of

the vehicle. In addition, “body english” is limited with passengers, and the operator can sometimes see more of the trail ahead than the passengers. Therefore, smooth starting and stopping are required with passengers, and the operator must slow down. The operator must also warn passengers of side hills, bumps, branches, etc. An unforeseen bump can leave you passenger-less. Remind your passengers to lean into the turn with you, without causing the vehicle to topple. Be extremely careful, go more slowly and check the passengers frequently.

⚠ WARNING

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.

For complete information on how to adjust the suspension, please refer to the section of this Operator’s Guide entitled SUSPENSION ADJUSTMENTS under OPERATING INSTRUCTIONS and to the relevant label on the belt guard.

Use extra caution and go even more slowly with young passengers. Check frequently to make certain the child has a firm grip and is properly positioned with his feet on the running boards.

Terrain/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 condi-

tion, 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. This is especially true at night.

Hard Packed Snow

Don't underestimate hard packed snow. It can be difficult to negotiate as both skis and track do not have as much traction. Best advice is to slow down and avoid rapid acceleration, turning or braking.

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 kneeling position. 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. Turn the engine off, free the skis by pulling them out and downhill, place the rear of the snowmobile uphill restart the engine 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 jam 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 kneeling position, with the knee of the down hill leg on the seat and the foot of the uphill leg on the running board, or the posting position. Be prepared to shift your weight quickly as needed. Side hills and steep slopes are not recommended for a beginner or a novice snowmobiler.

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.

Fog or Whiteouts

On land or water, fog or visibility-limiting snow can form. If you have to 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.

Unfamiliar Territory

Whenever you enter an area that is new to you, drive with extreme caution. 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 snowmobile ride. 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.

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.

Unseen Obstruction

There may be obstructions hidden beneath the snow. 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. Stay on established trails to reduce your exposure to hazards. Be safe, slow down and enjoy the scenery.

Hidden Wires

Always be on the lookout for hidden wires, especially in areas that may have been farmed at one time or any other. 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.

Obstacles and Jumping

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

Jumping a snowmobile is an unsafe and dangerous practice. However, if the trail does suddenly drop away from you, 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.

Turning

Depending on terrain conditions, there are two preferred ways to turn or corner a snowmobile. For most snow surfaces, "body english" is the key to turning. Leaning towards the inside of the turn and positioning body weight on the inside foot will create a "banking" condition beneath the track. By adopting this position and positioning yourself as far forward as possible, weight will be transferred to the inside ski.

On occasion, you will find that the only way to turn the vehicle about in deep snow is to pull the snowmobile around. Do not over-exert yourself. Get assistance. Remember to always lift using your legs as opposed to your back.



Road Crossing

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. Use the standing position and proceed with only as much speed needed to crest the bank. Stop completely at the top of the bank and wait for all traffic to clear. Judge the drop to the roadway. Cross the road at a 90° angle. If you encounter another snowbank on the opposite side, position your feet near the rear of the vehicle. Remember, your snowmobile is not designed to operate on bare pavement and steering on this type of surface is more difficult.

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. When crossing a railroad track, stop, look and listen.

Night Rides

The amount of natural and artificial light at a given time can effect your ability to see or to be seen. Nighttime snowmobiling is delightful. It can be a unique experience if you acknowledge your reduced visibility. Before you start, make certain your lights are clean and work properly. 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. Avoid rivers and lakes. Guy wires, barbed wire fences, cabled road entrances and other objects such as tree limbs are difficult to see at night. Never drive alone. Always carry a flashlight. Keep away from residential areas and respect the right of others to sleep.

Safari Riding

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. Make certain that you are carrying all necessary tools and equipment and that you have sufficient fuel to complete the trip. 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. Assist others whenever necessary.

It is always IMPORTANT to keep a safe distance between each snowmobile. Always maintain a safe interval and allow sufficient stopping distance. Don't be a tailgater. Know the position of the machine ahead.

Signals

If you intend to stop, raise either hand straight above your head. A left turn is indicated by extending your left hand straight out in the proper direction. For right turns, extend the left arm and raise the hand to a vertical position so it forms a right angle at the elbow. Every snowmobiler should relay any signal to the ones behind.

Trail Stops

Whenever possible, pull off the trail when you stop. This will reduce the hazard to other snowmobilers using the trail.

Trails and Signs

Trail signs are used to control, direct or regulate the use of snowmobiles on trails. Become familiar with all signs used in the area where you are snowmobiling.

Transporting and Towing

Follow transporting and towing instructions explained further in this guide.

ENVIRONMENT INFORMATION

GENERAL

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.

The guidelines that we support are not designed to limit your snowmobiling 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 criss-cross the wild areas of forests 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.

Recognizing the importance of this issue and the need for snowmobilers to do their share in preserving areas that make it possible to enjoy our sport, BRP has developed the "Light Treading Is Smart Sledding" campaign for snowmobilers.

Light Treading refers to more than the tread of our tracks. It's a statement of concern, respect and willingness to take the lead and take action. It applies to the environment in general, its proper care and maintenance, its natural inhabitants and all enthusiasts and the public at large who enjoy the great outdoors. With this theme, we invite all snowmobilers to remember that respecting the environment is not only critical to the future of our industry but to future generations.

Light Treading in no way suggests you should curb your appetite for snowmobiling fun! It simply means tread with respect!

JUST WHAT IS LIGHT TREADING?

The fundamental objective of Light Treading is one of respect for where and how you ride a snowmobile. You're a light treader when you follow the principles below.

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".

WHY IS LIGHT TREADING SMART

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 Lynx, a sporty Lynx Xtrim Commander XU 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!

VEHICLE INFORMATION

VEHICLE IDENTIFICATION

Vehicle Description Decal

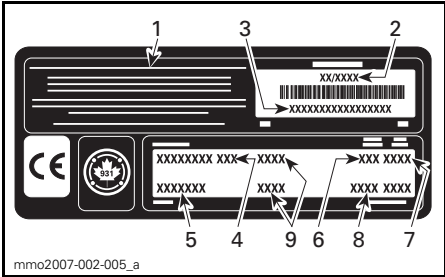
Vehicle description decal is located on the right hand side of tunnel.



mmo2008-003-008_a

TYPICAL

1. Vehicle description decal



mmo2007-002-005_a

VEHICLE DESCRIPTION DECAL

1. Manufacturer name
2. Manufacturing date
3. Vehicle identification number (V.I.N.)
4. Model name
5. Option package
6. Engine type
7. Model year
8. Color codes
9. Vehicle weight/engine power (European models)

Identification Numbers

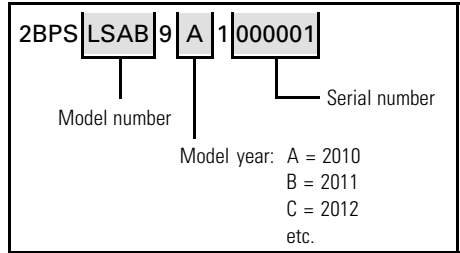
The main components of your snowmobile (engine and frame) are identified by different identification numbers. It may sometimes become necessary to locate these numbers for warranty purposes or to trace your snowmobile in the event of loss. These numbers are required by the authorized Lynx dealer to complete warranty claims properly. No warranty will be allowed by BRP if the engine

identification number or vehicle identification number (V.I.N.) is removed or mutilated in any way. 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 (V.I.N.)

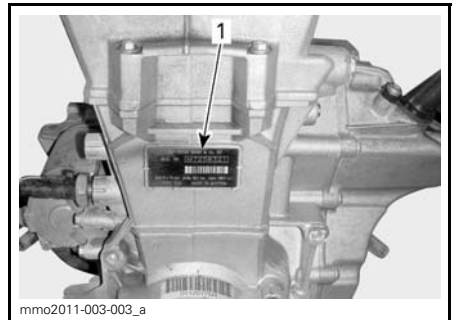
V.I.N. is scribed on the vehicle description decal. See above. It is also engraved on the tunnel, near the vehicle description decal.

Model number and model year are part of the information found in the V.I.N. See illustration.



Engine Identification Number

Refer to the following illustration to locate the engine identification number on the applicable engine.



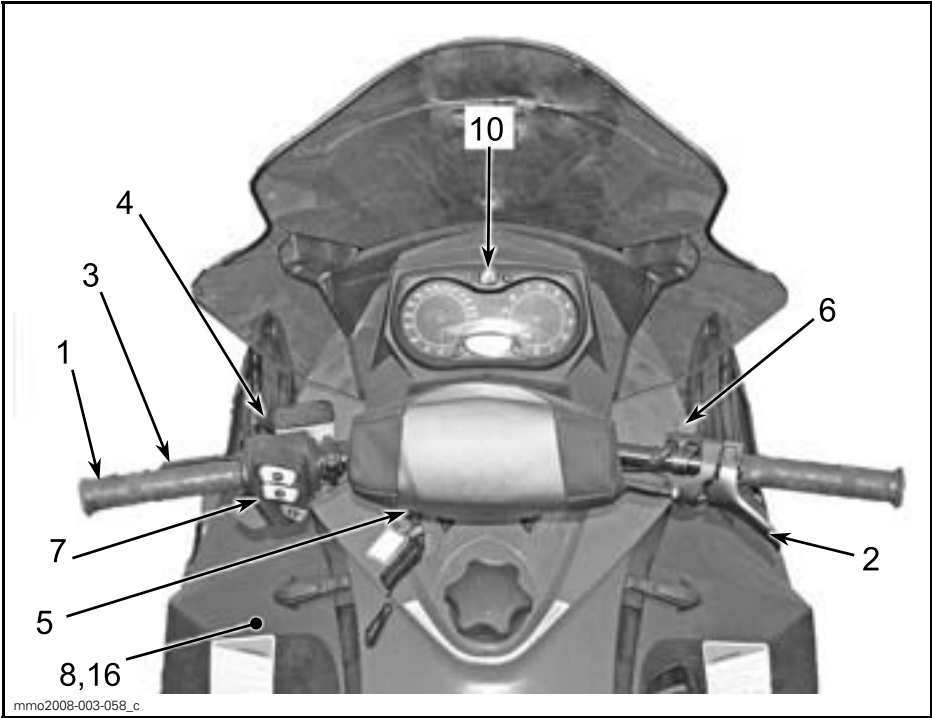
mmo2011-003-003_a

600 ACE ENGINE

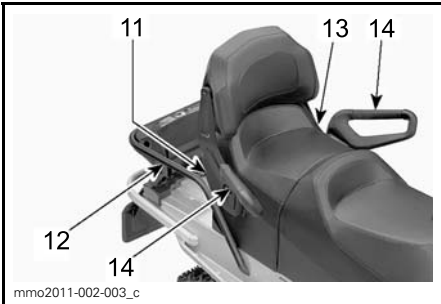
1. Engine identification number

CONTROLS, INSTRUMENTS AND EQUIPMENT

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



TYPICAL



TYPICAL



mmo2011-009-002_aL



mmo2011-009-003_b

- 15. Drive Belt Holder
- 16. Drive Belt Guard
- 17. Hood
- 18. Side Panels
- 19. Shift Lever

1) 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

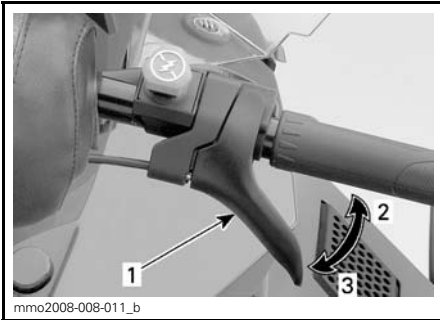
Fast reverse while turning, could result in loss of stability and control.

2) Throttle Lever

Throttle lever is located on the RH side of handlebar.

- 1. Handlebar
- 2. Throttle Lever
- 3. Brake Lever
- 4. Parking Brake Lever
- 5. Engine Cut-Off Switch
- 6. Emergency Engine Stop Switch
- 7. Multifunction Switch
- 8. Tool Kit
- 9. Grab Handle /Bumper
- 10. Gauge
- 11. Storage Compartment
- 12. Rear Rack
- 13. Passenger Seat
- 14. Passenger Handholds

Designed to be thumb activated. When squeezed, it increases the engine speed. When released, engine speed returns automatically to idle.

**TYPICAL**

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

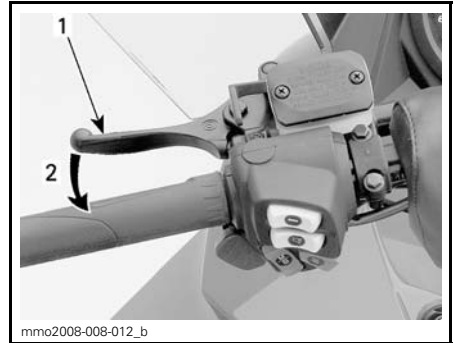
WARNING

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.

3) 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.

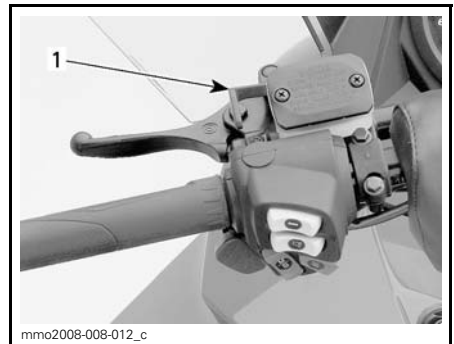
**TYPICAL**

1. Brake lever
2. To apply brake

4) Parking Brake Lever

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

Parking brake should be used whenever snowmobile is parked.

**TYPICAL**

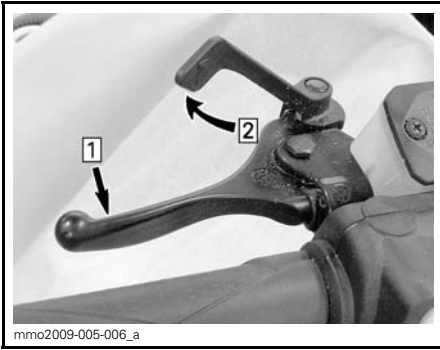
1. Parking brake lever

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

Step 1: Apply and hold brake

Step 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.

5) Engine Cut-off Switch

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

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

NOTE: After engine starting, 2 short beeps should be heard if a programmed D.E.S.S. key (tether cord cap) is correctly snapped on engine cut-off switch. If another beep code is heard, refer to *MONITORING SYSTEM* for D.E.S.S. malfunction codes information.

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.

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

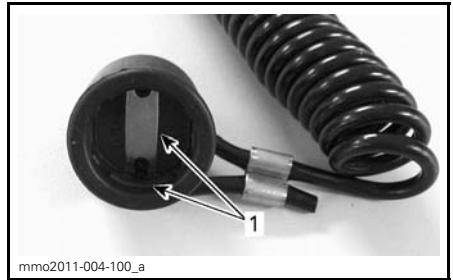
The tether cord cap has an integrated D.E.S.S. key to provide you and your snowmobile with the equivalent security of a conventional lock key.

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

Your authorized Lynx dealer has programmed 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.



TETHER CORD CAP

1. Free of dirt or snow

D.E.S.S. Flexibility

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

We recommend the purchase of additional tether cords from your authorized Lynx dealer. If you have more than one D.E.S.S. equipped

Lynx snowmobile, each can be programmed by your authorized Lynx dealer to accept the other vehicles D.E.S.S. keys.

6) Emergency Engine Stop Switch

The emergency engine stop switch is located on the RH side of handlebar.

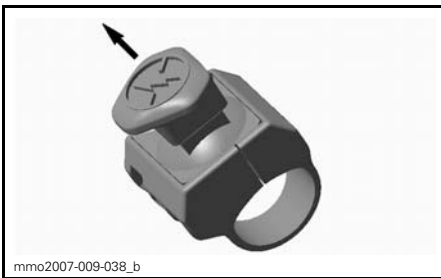
Use the emergency stop switch to stop engine in a emergency situation.

To stop the engine, push switch down (OFF position).



OFF POSITION

To allow engine starting, the switch must be in the ON position (UP).



ON POSITION

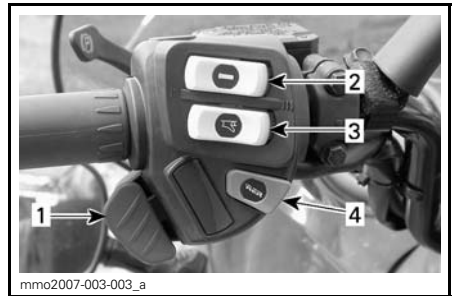
All operators of the snowmobile should familiarize themselves with the function of the emergency engine stop switch by using it several times on first outing and whenever stopping the engine thereafter. This engine stopping procedure will become a reflex and will prepare operators for emergency situations requiring its use.

⚠ WARNING

If the switch has been used in an emergency caused by a suspected malfunction, the source of the malfunction should be determined and corrected before restarting engine. See an authorized Lynx dealer for servicing.

7) Multifunction Switch

Multifunction switch is located on the LH side of handlebar.



1. Headlights dimmer switch
2. Heated grips switch
3. Heated throttle lever switch
4. Start button

Start Button

Press to start engine. Refer to *ENGINE STARTING PROCEDURE* in the *OPERATING INSTRUCTIONS* subsection.

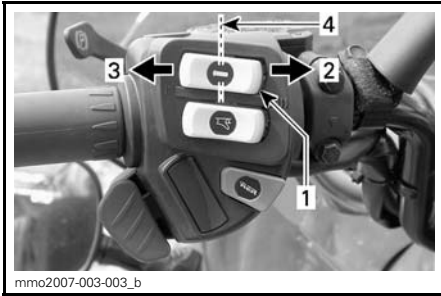
Headlights Dimmer Switch

Press to select HI or LOW beam. Lights are automatically ON when the engine is running.

Heated Grips Switch

NOTE: The heated grips are enabled above 2000 engine RPM.

Select the switch position according to the desired heating intensity to keep your hands at a comfortable temperature.



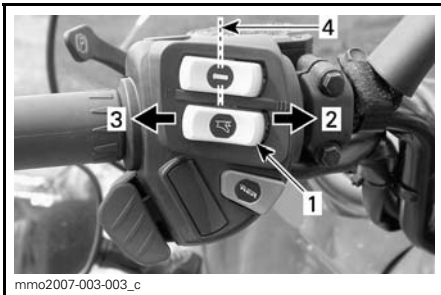
TYPICAL

1. Heated grip switch
2. Hot
3. Warm
4. Off

Heated Throttle Lever Switch

NOTE: The heated grips are enabled above 2000 engine RPM.

Select the switch position according to the desired heating intensity to keep your thumb at a comfortable temperature.



TYPICAL

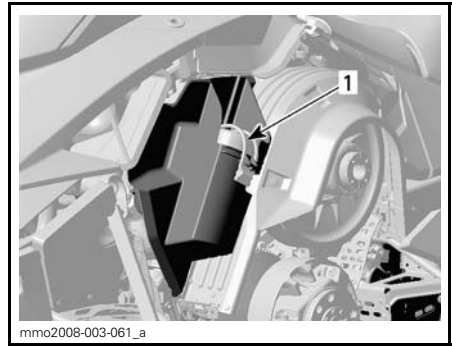
1. Heated throttle lever switch
2. Hot
3. Warm
4. Off

8) Tool Kit

A tool kit containing tools for basic maintenance is supplied with the vehicle.

The tool kit support is located in engine compartment on pulley guard.

To remove the tool kit support from the pulley guard, unlock the tab from underneath the pulley guard and pull the tool kit support towards front to release it.



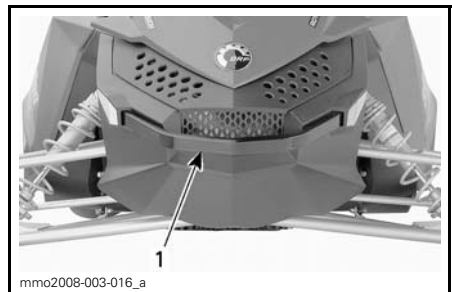
TYPICAL

1. Tool kit

9) Grab Handle/Bumper

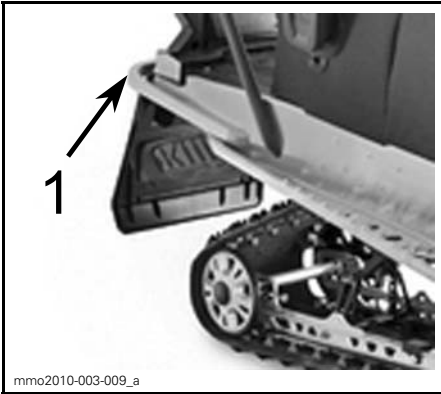
To be used whenever snowmobile requires manual lifting.

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



FRONT

1. Grab handle/bumper



mmo2010-003-009_a

REAR

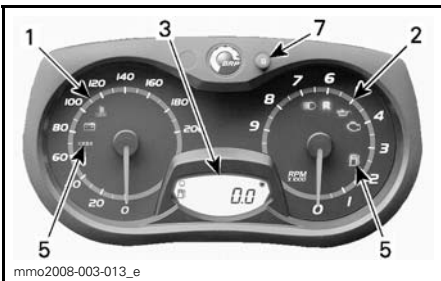
1. Grab handle/bumper

NOTICE Do not use skis to pull or lift snowmobile.

10) Gauge

NOTE: Some features are not applicable to all models or may be available as an option.

⚠ WARNING
 Never adjust or set functions on the multifunction gauge while riding the vehicle.



mmo2008-003-013_e

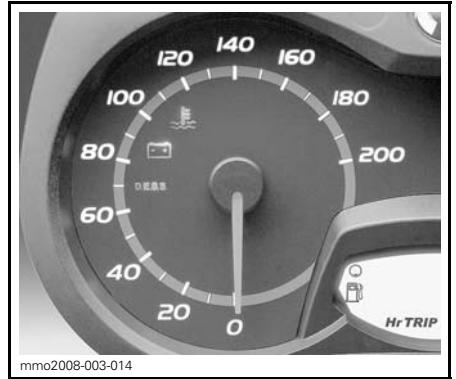
ANALOG/DIGITAL GAUGE

1. Speedometer
2. Tachometer
3. Digital display
4. Pilot lamps
5. Pilot lamps
7. Set button

NOTE: The gauge is factory preset in Imperial units but it is possible to change it to metric units, contact an authorized Lynx dealer for unit settings.

Speedometer

Measures vehicle speed (in miles per hour or kilometers per hour depending on the setting).



mmo2008-003-014

LH PORTION OF GAUGE

Tachometer (RPM)

Measures engine revolution per minute (RPM). Multiply by 1000 to obtain the actual revolutions.



mmo2008-003-019

RH PORTION OF GAUGE





Pilot Lamps and Messages



mmo2008-003-024_a

TYPICAL — PILOT LAMPS

See table below for usual pilot lamps information. Refer to *MONITORING SYSTEM* for details on malfunction pilot lamps.

PILOT LAMP(S) ON	BEEPER	DESCRIPTION
	4 short beeps every 5 minutes	Low engine oil pressure. Stop vehicle in a safe place then, check oil level. Fill to proper level. If oil level was correct, discontinue use and contact an authorized Lynx dealer.
	—	Low fuel level. One (1) bar left in fuel level display. Replenish fuel tank as soon as possible.
	Long beeps repeating slowly	Reverse is selected.
	—	High beam headlights are selected.

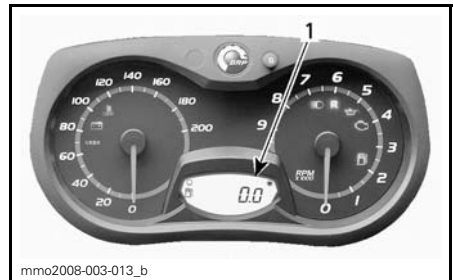
SET (S) Button

Button used to navigate, adjust or re-set gauge multifunction display.

In order to memorize settings, engine must be running.

Digital Display

Digital display that supplies several real time useful information to the driver.



ANALOG/DIGITAL GAUGE

1. Digital display

⚠ WARNING

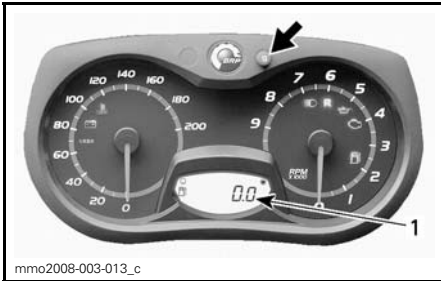
Reading the gauge digital display can distract from the operation of the vehicle, particularly from constantly scanning the environment which could lead to a collision or loss of control. Before reading the gauge digital display, ensure your environment is clear and free from obstacle, and bring the vehicle to a low speed. Before proceeding with any adjustments, park vehicle in a safe place and away from the trail.

DISPLAY FEATURES	
FUNCTIONS	REFER TO TOPICS
Odometer	A)
Trip meter "A" or "B"	B)
Trip hour meter	C)
Fuel level	D)

NOTE: The display is factory preset in Imperial units but it is possible to change it to Metric units, contact an authorized Lynx dealer for unit settings.

A) Odometer

Records the total distance travelled.
Press the SET (S) button to select odometer mode.



mmo2008-003-013_c

1. Odometer mode

B) Trip Meter "A" or "B"

Trip meters records distance travelled since it has been reset.
Press the SET (S) button to select trip meter (TRIP A/TRIP B) mode.



mmo2008-003-013_c

1. Trip meter (TRIP A/TRIP B) mode

Press and hold the SET (S) button to re-set.

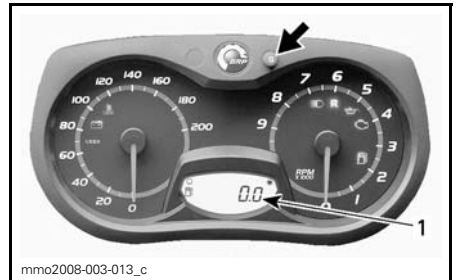


mmo2008-003-013_d

C) Trip Hour Meter

Records vehicle running time when the electrical system is activated since it has been reset.

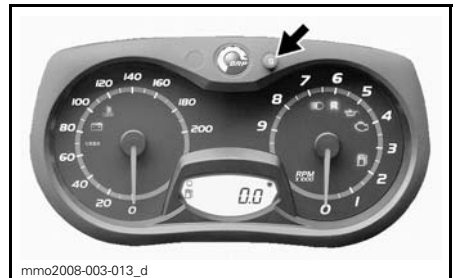
Press the SET (S) button to select trip hour meter (HrTRIP) mode.



mmo2008-003-013_c

1. Trip hour meter (HrTRIP) mode

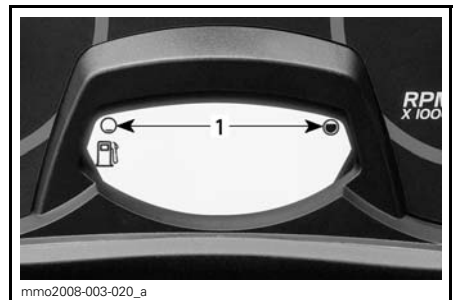
Press and hold the SET (S) button to re-set.



mmo2008-003-013_d

D) Fuel Level

Bar gauge that continuously indicates the amount of fuel left in the fuel tank.



mmo2008-003-020_a

1. Operating range

11) Storage Compartment

⚠ WARNING

All storage compartments must be securely closed and must not contain any sharp, heavy or breakable objects.

The storage compartment is located at rear of the rear seat.

Simply open and close using the zipper.



1. Storage compartment zipper

12) Rear Rack

⚠ WARNING

All objects in rear rack must be properly latched. Do not carry any breakable objects. Excessive weight in rack may reduce steering ability. Always readjust suspension according to the load. The capacity of this rack is limited, the **MAXIMUM** cargo load is 15.8 kg (35 lb). Ride at very low speed when loaded. Avoid speed over bumps.

13) Passenger Seat

A fixed passenger seat with backrest.

⚠ WARNING

Any passenger must be able to firmly lay his feet on the footrests and keep his hands on the handholds at all times when seated. Respecting those physical criteria is important to ensure that the passenger is stable and to reduce the risks of ejection.

14) Passenger Handholds

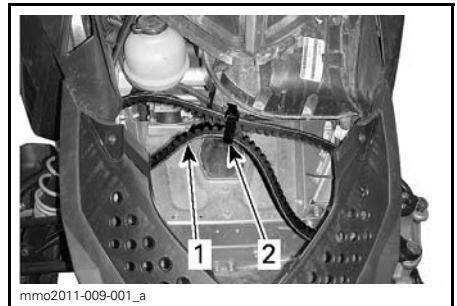
Rear handholds provide a grip for the passenger.

15) Drive Belt Holder

The drive belt holder is provided to secure a spare drive belt (not supplied).

Remove the hood, refer to *HOOD* in this subsection.

Position drive belt on the holder as shown and secure with the Velcro® strap.



1. Spare drive belt
2. Velcro strap

Velcro® is a registered trademark of Velcro industries B.V.

16) Drive Belt Guard

Drive Belt Guard Removal

⚠ WARNING

NEVER operate engine:

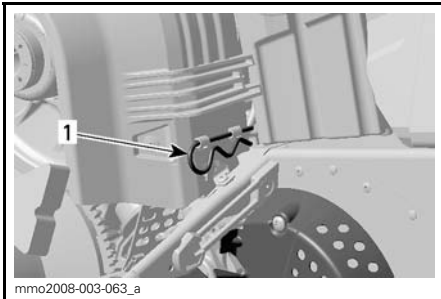
- Without shields and drive belt guard securely installed.
- With hood and/or side panels opened or removed.

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

Remove tether cord cap from engine cut-off switch.

Open engine compartment LH side panel, see procedure in this subsection.

Remove retaining pin.



1. Retaining pin

Lift rear portion of guard then release from front tabs by pivoting the guard outwards.

Drive Belt Guard Installation

When reinstalling drive belt guard, position its cutaway toward front of snowmobile.

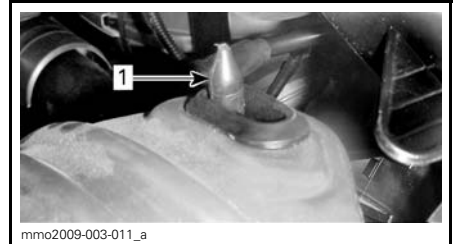
Place the front LH slot of the guard over the longest tab.

Pivot the guard inward to engage the shortest tab in the RH slot.



1. Tabs

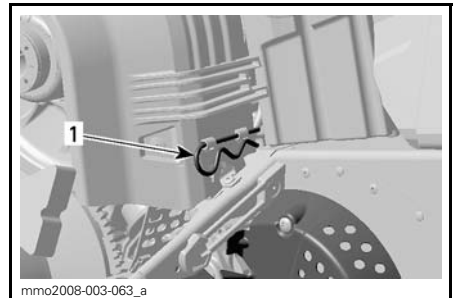
Position the grommet over the retaining rod. It may be necessary to slightly lift the console to make room.



1. Retaining rod

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

NOTE: The drive 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.

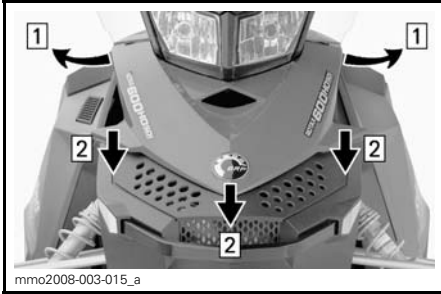


1. Retaining pin

17) Hood

Hood Removal

To open hood, release hood retaining pins then slide hood towards the front of the vehicle.



Step 1: Release retaining pins

Step 2: Slide hood towards the front

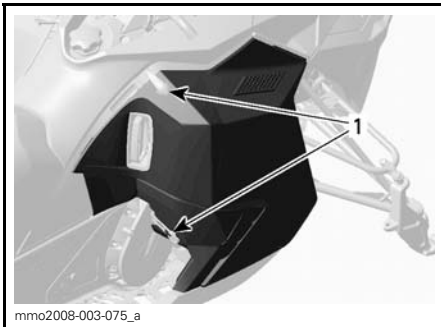
⚠ WARNING

Never operate engine with hood removed from vehicle.

18) Side Panels

Side Panel Opening and Closing

To open a side panel, stretch and unhook the latches, slightly lift the top of side panel, then open sideways.



TYPICAL

1. Latches

Reverse procedure to close side panel.

⚠ WARNING

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

Side Panel Removal and Installation

To remove a side panel, open it then lift it up. Free the lower hinge from its slot, then free the upper hinge by lowering the panel.

1. Open side panel as explained in this subsection.
2. Lift side panel up, then free the lower hinge from its slot.
3. Lower side panel, then free the upper hinge from its slot.
4. Remove side panel.

Reverse procedure to install side panel.

⚠ WARNING

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

19) Shift Lever

Use this lever to shift in forward or reverse.



1. Reverse shift lever



PULL TO ENGAGE REVERSE GEAR

Refer to *OPERATING IN REVERSE* in *OPERATING INSTRUCTIONS* for details.

FUEL

Recommended Fuel

Use unleaded gasoline available from most service stations or oxygenated fuel containing a maximum total of 10% of ethanol or methanol. The gasoline used must have the following recommended minimum octane rating.

MINIMUM OCTANE RATING	
ENGINES	95 RON
600 ACE	X

NOTICE Never experiment with other fuels. The use of inadequate fuel can result in snowmobile performance deterioration and damage to critical parts in the fuel system and engine components.

Fuel Antifreeze Additives

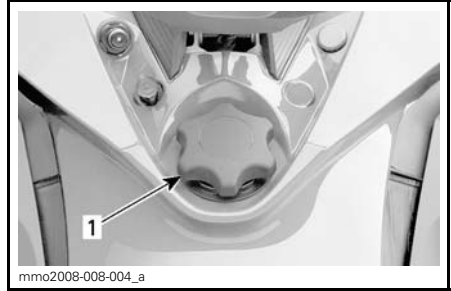
When using oxygenated fuel, additional gas line antifreeze or water absorbing additives are not required and should be not used.

When using non-oxygenated fuel, isopropyl base gas line antifreeze can be used in a proportion of 150 ml (5 U.S. oz) of gas line antifreeze added to 40 L (10.6 U.S. gal.) of gas.

NOTE: Use only methyl hydrate free gas line antifreeze.

Fueling Procedure

Unscrew to fill up tank then fully tighten.



TYPICAL
1. Fuel tank cap

⚠ WARNING

- Always stop engine before refueling. Open cap slowly.
- If a differential pressure condition is noticed (whistling sound heard when loosening fuel tank cap) have vehicle inspected and/or repaired before further operation.
- 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.
- Never top up the fuel tank before placing the vehicle in a warm area. As temperature increases, fuel expands and may overflow.
- Always wipe off any fuel spillage from the vehicle.

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

BREAK-IN PERIOD

Break-In Period Duration

A break-in period of 10 operating hours or 500 km (300 mi) is required.

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.

Drive Belt

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

During the break-in period:

- Avoid strong acceleration and deceleration.
- Avoid pulling a load.
- Avoid high speed cruising.

Break-In Inspection

After the break-in period, the vehicle should be inspected by an authorized Lynx dealer. Refer to *MAINTENANCE* section.

OPERATING INSTRUCTIONS

Pre-Operation Check

WARNING

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

- Remove snow and ice from body including seat, footrests, controls and instruments.
- Lights — The headlamp, the taillight and the brake light are standard equipment. Be sure lights are clear of dirt, slush or snow and are in good working order or condition.
- Verify that track and idler wheels are free to turn and not frozen.

WARNING

Always use a wide base snowmobile mechanical stand to properly support vehicle during any track verification. Slowly accelerate engine in order to rotate track at very low speed when it is not on ground.

- Activate the brake control lever and make sure the brake fully applies before the brake control lever touches the handlebar grip. It must fully return when released.
- Check the parking device. Apply parking brake and check if it operates properly.
- Activate the throttle control lever several times to check that it operates easily and smoothly.

WARNING

Throttle lever must operate easily and smoothly. It must return to idle position when released.

- Check operation of tether cord cap (DESS key), engine cut-out switches, headlamp switch (HI-LO), taillight, brake light and pilot lamps.
- Verify that skis and steering operate freely. Check corresponding action of skis versus handlebar.
- Check fuel and oil for levels and leaks. Replenish as necessary and see an authorized LYNX dealer in case of any leaks.
- Verify that air silencer prefilter is free of snow.
- 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.

WARNING

All adjustable features should be positioned at optimal setting. Securely tighten all adjustment locks.

- Make certain your snowmobile is pointed away from people or objects before you start it. No one is to be standing in front of or in back of the snowmobile.
- Be warmly dressed with clothing designed for snowmobiling.

PRE-OPERATION CHECK LIST		
ITEM	OPERATION	✓
Body including seat, footrests, lights, controls and instruments	Check that there is no snow or ice.	
Track and idler wheels	Check for free movement.	
Brake lever	Check proper action.	
Parking device	Check proper action.	
Throttle lever	Check proper action.	
Switches and lights	Check proper action. Tether cord must be attached to driver clothing eyelet.	
Skis and steering	Check for free movement and proper action.	
Fuel and oil	Check for proper level and leaks.	
Air silencer prefilter	Check that there is no snow or ice.	
Adjustable features	Check for optimal adjustment and securely tightened adjustment locks.	
Storage compartment	Check for proper latching and no heavy or breakable objects.	
Vehicle vicinity	Snowmobile must be pointed away from people or objects. No one is to be standing in front of or in back of the snowmobile.	
Clothing	Be warmly dressed with clothing designed for snowmobiling.	

Engine Starting Procedure

Procedure

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

6. Depress the START button to engage the electric starter and start the engine. Release button immediately when engine has started.

WARNING

Never depress throttle while starting engine.

- NOTICE** Do not engage electric starter for more than 10 seconds at a time. A rest period should be observed between the cranking cycles to allow electric starter to cool down.

7. Release parking brake.

NOTE: For an initial cold start, do not release parking brake. Perform the *VEHICLE WARM-UP* procedure as explained below.

Riding Conditions and your Snowmobile

Altitude

At factory, your snowmobile was calibrated to be used at sea level (up to 600 m (2,000 ft) above sea level).

If your snowmobile is to be used at an altitude above 600 m (2,000 ft), have it calibrated accordingly by an authorized Lynx dealer.

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

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.

NOTICE It is not recommended to let engine running at idle speed for more than 10 minutes.

3. Disengage parking brake.
4. 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.

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

WARNING

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

Operating in Reverse

WARNING

When shifting in reverse, wait until the reverse alarm sounds and the pilot lamp comes on in the analog/digital gauge before operating throttle. The reverse speed is not limited. Always proceed with caution as fast reverse could result in loss of vehicle stability. Come to complete stop before depressing engaging the reverse. Always remain seated and apply the brake before shifting. Ensure the path behind is clear of obstacles or bystanders before proceeding.

Shifting in Reverse

To engage reverse gear, proceed as follows:

1. Bring vehicle to a complete stop.
2. Apply and hold brake. Remain seated, refer to *RIDER POSITION (REVERSE OPERATION)* for posture information.
3. With engine at idle speed, pull the reverse shift lever all the way out.
4. Gently depress throttle lever.

Shifting in Forward

To engage forward gear, proceed as follows:

1. Bring vehicle to a complete stop.
2. Apply and hold brake.
3. With engine at idle speed, push the reverse shift lever all the way in.
4. Gently depress throttle lever.

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.

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, theft or use by unauthorized persons.

Towing an Accessory

Always use a rigid tow bar to tow an accessory. Any towed accessory should have reflectors on both sides and at the rear. Check local laws for brake light(s) requirements.

WARNING

Never tow an accessory with a rope. Always use a rigid tow bar. Using a rope would result in a collision between the object and the snowmobile and possibly in a tip over in case of a rapid deceleration or on a downward slope.

Towing Another Snowmobile

If a snowmobile is disabled and must be towed use a rigid tow bar. Remove the drive belt from disabled snowmobile, refer to *DRIVE BELT* in the *MAINTENANCE PROCEDURES* subsection and tow at moderate speed.

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

In an emergency situation only, if a rigid tow bar is not available, a rope can be used provided you proceed with extra caution. In some areas, it may be illegal to do so. Check with state or local authorities.

Remove the drive belt, attach the rope to the ski legs (spindles), have someone sit on the towed snowmobile to activate the brake, and tow at low speed.

NOTICE In order to prevent damage to the steering system, never attach the tow rope to the ski loops (handles).

WARNING

Never ride at high speed when towing a disabled snowmobile. Proceed slowly with extra caution.

TUNE YOUR RIDE

Snowmobile handling and comfort depend upon suspension 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, driver'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:

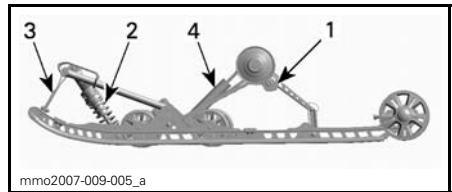
- Park in a safe place.
- Remove the tether cord cap from the engine cut-off switch.
- Use appropriate lifting device or have assistance to share lifting stress. If a lifting device is not used, use proper lifting techniques, notably using your legs force.
- Do not attempt to lift the front or rear of 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, driver 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.

Rear Suspension Adjustments



TYPICAL - SC-5M REAR SUSPENSION

1. Rear springs preload
2. Center spring preload
3. Stopper strap
4. Rear shock absorber

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

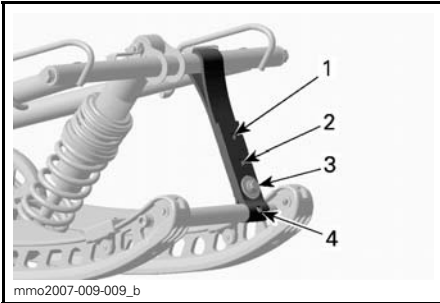
Stopper Strap Length

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.

ACTION	RESULT
Increasing stopper strap length	Lighter ski pressure under acceleration.
	More center spring travel.
	More bump absorption capability.
Decreasing stopper strap length	Heavier ski pressure under acceleration.
	Less center spring travel.
	Less bump absorption capability.

**TYPICAL**

1. Position 1 (longest)
2. Position 2
3. Position 3
4. Position 4

NOTE: Decreasing the stopper strap length may reduce comfort. If too much weight transfer is felt, try to correct it by adjusting the coupling blocks first. Always install stopper strap bolt as close as possible to the lower shaft.

When operating the snowmobile in deep snow, 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 in deep snow on a flat landscape.

Rear Spring Preload

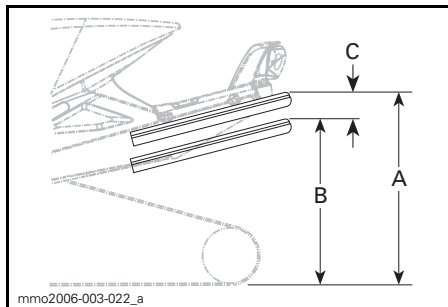
Rear spring preload has an effect on comfort, ride height and load compensation.

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
Increasing preload	Firmer rear suspension.
	Higher rear end.
	More bump absorption capability.
	Heavier steering.
Decreasing preload	Softer rear suspension.
	Lower rear end.
	Less bump absorption capability.
	Lighter steering.
	Better performance and handling in deep snow.

Refer to the following to determine if preload is correct.



TYPICAL — PROPER ADJUSTMENT
 A. Suspension fully extended
 B. Suspension has collapsed with driver, passenger(s) and load added
 C. Distance between dimension "A" and "B", see table below

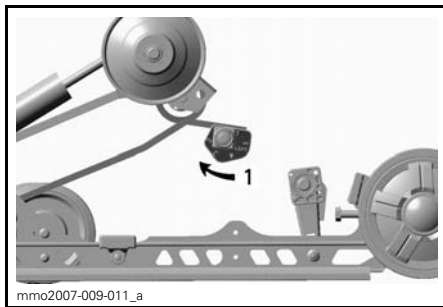
"C"	WHAT TO DO
50 mm to 75 mm (2 in to 3 in)	No adjustment required.
More than 75 mm (3 in)	Adjusted too soft. Increase preload.
Less than 50 mm (2 in)	Adjusted too firm. Decrease preload.

NOTE: If the specification is unattainable with the original springs, see an authorized Lynx dealer for other available springs.

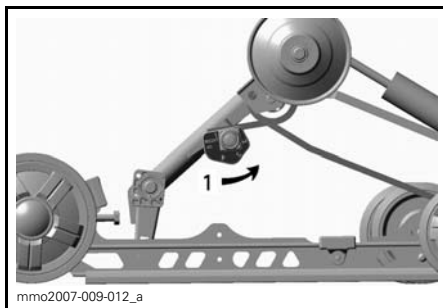
NOTICE To increase spring preload, always turn the left side adjustment cam in a clockwise direction, and the right side cam in a counterclockwise direction.

CAUTION Never set preload cams directly from position 5 to 1 or directly from position 1 to 5.

The adjustment cams have 5 different settings, 1 being the softest.



TYPICAL — SC-5 — LH SIDE
 1. Adjust spring preload



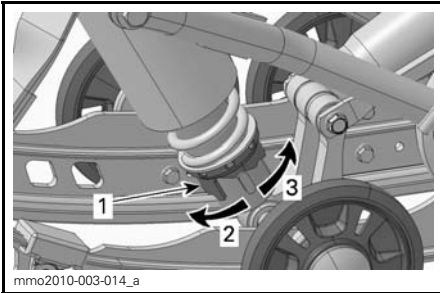
TYPICAL — SC-5 — RH SIDE
 1. Adjust spring preload

Center Spring Preload

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.



CAM TYPE - MOTION CONTROL SHOCK ABSORBER

1. Spring preload adjustment cam
2. Increase preload
3. Decrease preload

NOTE: For cam type preload adjuster, use the suspension adjustment tool provided in the tool kit.

Coupling Blocks (SC-5)

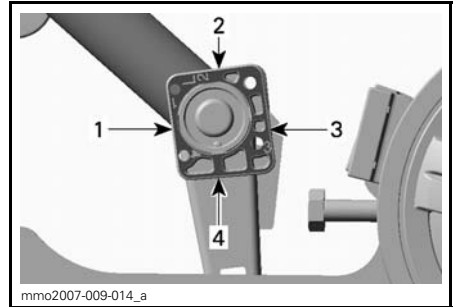
Coupling blocks adjustment has an effect on vehicle handling during acceleration only.

To adjust, turn coupling blocks using the suspension adjustment tool provided in the tool kit.

Place the desired setting number towards rubber stopper.

⚠ WARNING

Both blocks must be set at the same position. Otherwise vehicle behavior may be unpredictable and suspension may become warped.



COUPLING BLOCK — LEFT SIDE VIEW ("L" — LEFT EMBOSSED ON BLOCK)

1. Position 1 (minimum)
2. Position 2
3. Position 3
4. Position 4 (maximum)

Coupling Blocks Setting

POSITION	USE
1	More ski lift during acceleration.
2	Intermediate setting.
3	Intermediate setting.
4	Less ski lift during acceleration.

Front Suspension Adjustments

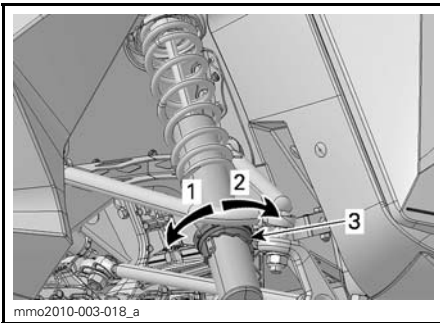
Ski Stance

Spring Preload

Front spring preload has an effect on front suspension firmness.

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

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.



mmo2010-003-018_a

CAM TYPE - MOTION CONTROL SHOCK ABSORBER

1. Increase preload
2. Decrease preload
3. Spring preload adjustment cam

Adjustment Tips According to Vehicle Behavior

PROBLEM	CORRECTIVE MEASURES
Front suspension darting	Check ski alignment. <ul style="list-style-type: none"> – Reduce front suspension spring preload. – Increase center spring preload. – Reduce rear spring preload.
Steering feels too heavy at steady speeds	<ul style="list-style-type: none"> – Reduce front suspension spring preload. – Increase center spring preload.
Steering feels too heavy during acceleration	<ul style="list-style-type: none"> – Set coupling blocks to a lower position. – Reduce rear spring preload. – Lengthen limiter strap.
Too much ski lift during cornering or acceleration	<ul style="list-style-type: none"> – Set coupling blocks to a higher position. – Shorten limiter strap. – Increase rear spring preload.
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 style="list-style-type: none"> – Increase rear spring preload. – Increase center spring preload. – Lengthen limiter strap.
Snowmobile seems to pivot around its center	<ul style="list-style-type: none"> – Reduce center spring preload. – Increase rear spring preload. – Increase front suspension spring preload. – Shorten limiter strap.
Track spins too much at start	<ul style="list-style-type: none"> – Set coupling blocks to a lower position. – Lengthen limiter strap.

VEHICLE TRANSPORTATION

Make sure the fuel tank cap is properly installed.

Tilt bed trailers can easily be equipped with a winch mechanism to afford maximum safety in loading. Simple as it may seem, never drive your snowmobile onto a tilt bed trailer or any other kind of trailer or vehicle. Many serious accidents have resulted from driving up and over a trailer. Anchor your vehicle securely, front and rear, even on short hauls. Be certain all equipment is securely fastened. Cover your snowmobile when trailering to prevent road grime from causing damage.

Be certain your trailer meets state or provincial requirements. Ensure the hitch and safety chains are secure and the brake, turn indicators and clearance lights all function.

MAINTENANCE

BREAK-IN INSPECTION

After the first 10 hours or 500 km of operation, whichever comes first, your vehicle have to be inspected by an authorized Lynx dealer. The break-in inspection is very important and must not be neglected.

NOTE: The break-in inspection is at the expense of the vehicle owner.

BREAK-IN INSPECTION (4-STROKE)
Inspect engine seals and gaskets for leaks
Inspect exhaust system and check for leaks
Check coolant level
Change engine oil and filter
Inspect fuel lines and connections
Inspect throttle cable
Inspect drive belt
Visually inspect drive pulley
Tighten drive pulley retaining screw to specified torque
Inspect driven pulley
Adjust and align track
Change chaincase oil
Retorque gearbox cover screws both sides of speedometer sensor connector to 10Nm (Only XU Models)
Adjust drive chain (Not for models equipped with gearbox)
Check brake fluid level
Inspect brake hose, pads and disk
Inspect steering mechanism
Inspect skis and runners
Tighten frame pyramid rod screws to specified torque
Inspect front suspension
Inspect rear suspension and slider shoes

PERIODIC MAINTENANCE CHART

WARNING

It is recommended that the assistance of an authorized LYNX dealer be periodically obtained on other components/systems not covered in this guide. Unless otherwise specified, engine must be cold and not running. Remove the tether cord cap (DESS key) before performing any maintenance or adjustment, unless otherwise specified. Vehicle must be parked in a safe place, away from the trail.

WARNING

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

Some items may not apply to your particular model. Refer to *MAINTENANCE* in *SHOP MANUAL* for more details.

MAINTENANCE SCHEDULE (4-STROKE)

NOTE: The maintenance schedule does not exempt the pre-ride inspection.

EVERY 1 500 KM

T/A shocks oil change. First at 1500 km, then every 3000 km or once a year

Models with chaincase: Adjust drive chain

Models with gearbox: Check oil level

EVERY 3 000 KM OR 1 YEAR (WHICHEVER COMES FIRST)

Replace drive pulley O-rings (1200 4-TEC only)

Clean drive pulley

Tighten drive pulley retaining screw to specified torque

Clean driven pulley

Adjust and align track

Inspect brake hose, pads and disk

Inspect steering mechanism

Inspect front suspension

Inspect rear suspension and stopper strap. PPS Suspension: Replace stopper strap.

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

Lubricate QRS axle gearbox end. (XU models)

EVERY 6 000 KM OR AT PRE-SEASON (WHICHEVER COMES FIRST)

Change engine oil and filter

EVERY 6 000 KM OR 2 YEARS (WHICHEVER COMES FIRST)

Replace fuel filter

Inspect drive pulley sliders and replace if necessary (1200 4-TEC only)

Replace brake fluid

Inspect throttle cable

**EVERY 10 000 KM OR 3 YEARS
(WHICHEVER COMES FIRST)**

Replace spark plugs

EVERY 20 000 KM

Check valve clearance and adjust if necessary. (1200 4-TEC only)

EVERY 5 YEARS

Replace engine coolant

PRESEASON PREPARATION

PRESEASON PREPARATION (2-STROKE)
Inspect engine motor mounts
Check exhaust system condition and check for leaks
Tighten exhaust manifold screws or nuts to specified torque
Replace spark plugs. (All except E-TEC)
Inspect cooling system cap, hoses and clamps
Check coolant density
Inspect crankshaft PTO seal
Inspect fuel lines and connections
Clean and inspect throttle body
Inspect throttle cable
Inspect drive belt (adjust at every drive belt replacement)
Clean and visually inspect drive pulley
Clean and inspect driven pulley
Inspect, adjust and align track
Adjust drive chain (Not for models equipped with gearbox)
Change chaincase oil
Check brake fluid level
Inspect brake hose, pads and disk
Inspect steering mechanism
Inspect skis and runners
Inspect front suspension
Inspect rear suspension stopper strap
Charge battery (if so equipped)
Adjust headlight beam aiming

PRESEASON PREPARATION (4-STROKE)

Visually inspect engine seals and gaskets and check for leaks

Check exhaust system condition and check for leaks

Change engine oil and filter

Check coolant density

Inspect fuel lines and connections

Clean and inspect throttle body

Inspect throttle cable

Inspect drive belt (adjust at every drive belt replacement)

Clean and visually inspect drive pulley

Clean and inspect driven pulley

Inspect, adjust and align track

Adjust drive chain (Not for models equipped with gearbox)

Change chaincase oil

Check brake fluid level

Inspect brake hose, pads and disk

Inspect steering mechanism

Inspect skis and runners

Inspect front suspension

Inspect rear suspension and stopper strap.

Charge battery (if so equipped)

Adjust headlight beam aiming

STORAGE

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

STORAGE
Clean the vehicle
Add fuel stabilizer to fuel following the product manufacturer recommendations Run the engine after adding the product to the fuel
2-Stroke models: Lubricate engine. See owners manual for instruction.
Lubricate brake lever pivot
Inspect and lubricate rear suspension
Charge battery monthly to keep it fully charge during storage
Block muffler with rags
Lift rear of vehicle until track is clear of the ground. Do not release track tension

MAINTENANCE SCHEDULE

MAINTENANCE PROCEDURES

This section includes instructions for basic maintenance procedures. If you have the necessary mechanical skills and the required tools, you can perform these procedures. If not, see your authorized Lynx dealer.

Other important items in the maintenance schedule that are more difficult and require special tools are best performed by your authorized Lynx dealer.

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.

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 Oil

Recommended Engine Oil

ENGINE	RECOMMENDED ENGINE OIL
600 ACE	XPS SYNTHETIC OIL (WINTER GRADE) (P/N 293 600 112)

NOTICE The engine of this snowmobile has been developed and validated using the BRP XPS™ Synthetic 4-stroke oil. BRP strongly recommends the use of its XPS Synthetic 4-stroke oil at all times. Damages caused by oil which is not suitable for the engine will not be covered by the BRP limited warranty.

If the recommended oil is not available, use SAE 0W-40 synthetic-based oil that meets or exceeds the requirements for API service classification SM.

Engine Oil Level Verification

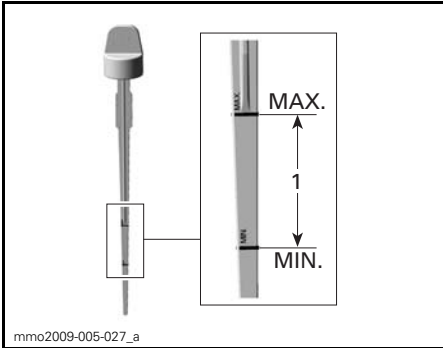
NOTICE Check level every 10 hours of use and refill if necessary. Do not overfill. Operating the engine with an improper level may severely damage engine. Wipe off any spillage.

Make sure the engine is at normal operating temperature.

NOTE: The engine reaches normal temperature when the rear radiator gets warm indicating the thermostat has opened.

Place vehicle on a level surface and proceed as follows to check oil level:

1. Let engine run at idle for approximately 30 seconds.
2. Stop engine.
3. Open the LH side panel, refer to *CONTROLS, INSTRUMENTS AND EQUIPMENT*.
4. Remove the drive belt guard, refer to *CONTROLS, INSTRUMENTS AND EQUIPMENT*.
5. Remove dipstick from the filler tube, then wipe it clean.
6. Completely insert dipstick in the filler tube.
7. Remove dipstick and check the oil level. Oil level should be between the MIN and MAX marks as shown, add if necessary.



1. Oil level between MIN. and MAX.

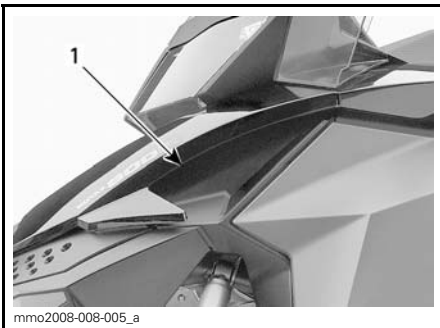
⚠ WARNING

Wipe off any oil spills. Oil is highly flammable when heated.

Air Filter with Single Air Intake

Air Filter Verification

Ensure the air intake prefilter is properly installed, clean and in good condition.



1. Air filter

If the air filter has to be cleaned or replaced, see an authorized Lynx dealer.

Engine Coolant

⚠ WARNING

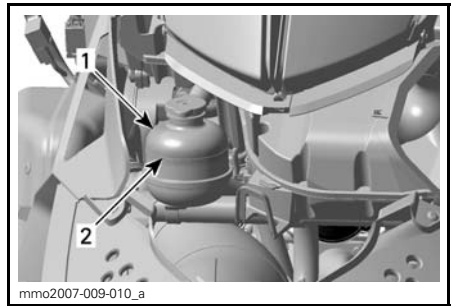
Never open coolant tank cap when engine is hot.

Engine Coolant level

Check coolant level at room temperature with the cap removed. Liquid should be at cold level line (engine cold) 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 Lynx dealer.



TYPICAL

- 1. Coolant tank
- 2. COLD LEVEL line

Recommended Engine Coolant

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

Cooling system must be filled with BRP PREMIXED COOLANT (P/N 219 700 362) or with distilled water and antifreeze solution (50% distilled water, 50% antifreeze).

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.

Check retaining springs condition and replace if necessary.

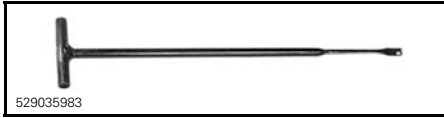
The exhaust system is designed to reduce noise and to improve the total performance of the engine. Modification may be in violation of local laws.

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

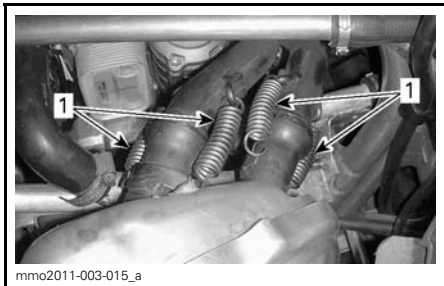
Muffler Removal and Installation

1. Refer to *CONTROLS, INSTRUMENTS AND EQUIPMENT* subsection and remove:
 - Hood
 - RH side panel.
2. Remove the springs retaining the exhaust pipes to the muffler using the following tool.

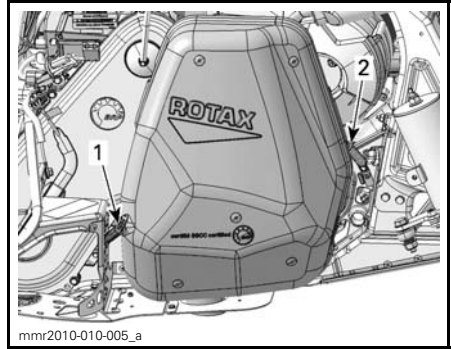
SPRING INSTALLER/REMOVER
(P/N 529 035 983)



CAUTION Wear protective eye glasses when removing exhaust components. Beware of sudden spring tension release.



1. Exhaust pipes to muffler retaining springs
3. Remove the two muffler retaining springs.



TYPICAL

1. Aft muffler retaining spring
2. Front muffler retaining spring

4. Remove the muffler.

Inspect doughnut shaped muffler gaskets and replace if necessary.

To install muffler, reverse removal procedure.

Spark Plugs

Spark plugs inspection or replacement must be done by an authorized Lynx dealer.

Brake Fluid

Recommended Brake Fluid

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

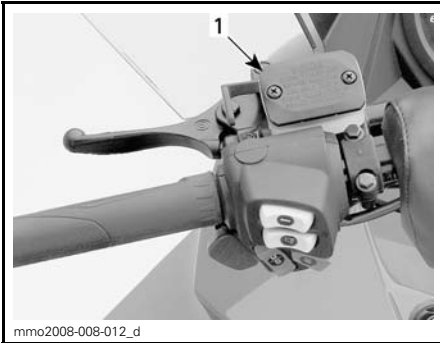
Use only DOT 4 brake fluid from a sealed container. To avoid serious damage to the braking system, do not use fluids other than the recommended one, nor mix different fluids for topping up.

NOTICE Brake fluid can damage painted and plastic parts. Handle with care. Rinse thoroughly in case of spillage.

Brake Fluid Level Verification

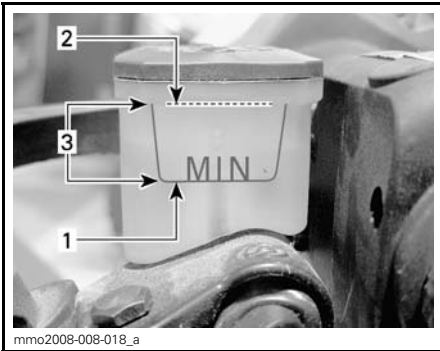
NOTICE Vehicle must be on a level surface before checking any fluid levels.

Check brake fluid in reservoir for proper level. Add recommended brake fluid as required.



TYPICAL

1. Brake fluid reservoir



1. Minimum
2. Maximum
3. Operating range

CAUTION Avoid getting brake fluid on skin or eyes - it may cause severe burns. In case of contact 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.

Chaincase Oil

Recommended Chaincase Oil

RECOMMENDED CHAINCASE OIL
XPS SYNTHETIC CHAINCASE OIL (P/N 413 803 300)

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

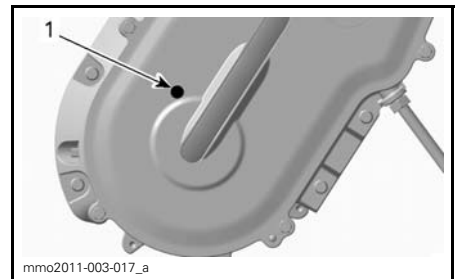
Access to Chaincase

Open RH side panel, refer to *CONTROLS, INSTRUMENTS AND EQUIPMENT*.

Chaincase Oil Level Verification

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

Oil level must reach the threaded hole.

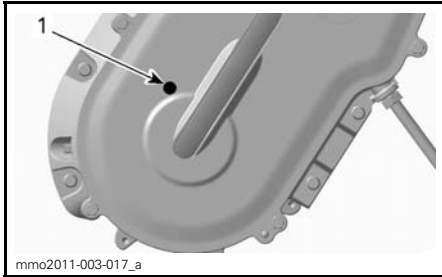


TYPICAL

1. Check plug

Chaincase Filling Procedure

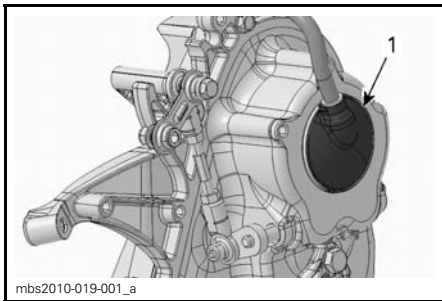
Remove the check plug.



TYPICAL

1. Check plug

Remove the filler cap on the chaincase cover.



1. Filler cap

Pour recommended oil in chaincase by the filler hole until oil comes out by the check plug hole.

Reinstall check plug and torque to $6\text{ N}\cdot\text{m} \pm 1\text{ N}\cdot\text{m}$ ($53\text{ lbf}\cdot\text{in} \pm 9\text{ lbf}\cdot\text{in}$).

Reinstall the filler cap.

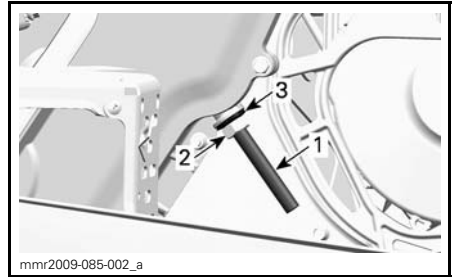
Drive Chain

Access to Chaincase

Open RH side panel, refer to *CONTROLS, INSTRUMENTS AND EQUIPMENT*.

Drive Chain Adjustment

1. Remove muffler, refer to *EXHAUST SYSTEM* in this subsection.
2. Unscrew tensioner lock nut several turns.



1. Tensioner adjustment screw
2. Lock nut
3. Seal washer

3. Unscrew tensioner adjustment screw a few turns.
4. Pull seal washer back.
5. Clean adjustment screw threads if necessary.

NOTICE Adjustment screw threads must be clean to obtain an accurate adjustment.

6. Tighten tensioner adjustment screw by hand.

NOTE: Turn adjustment screw until resistance is strong enough that it can not be turned by hand.

7. Hold tensioner adjustment screw and tighten lock nut to $36\text{ N}\cdot\text{m} \pm 3\text{ N}\cdot\text{m}$ ($27\text{ lbf}\cdot\text{ft} \pm 2\text{ lbf}\cdot\text{ft}$).

8. Install muffler.

Drive Belt

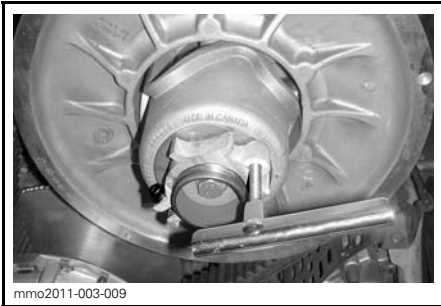
Drive Belt Inspection

Inspect drive 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 drive belt or distorted spare drive belt. Contact an authorized Lynx dealer.

Drive Belt Replacement

Drive Belt Removal

1. Remove tether cord cap from engine cut-off switch.
2. Remove drive belt guard, refer to *CONTROLS, INSTRUMENTS AND EQUIPMENT*.
3. Insert the driven pulley expander provided in the tool kit in the threaded hole on the adjuster hub as shown.



PULLEY EXPANDER INSTALLED ON ADJUSTER HUB

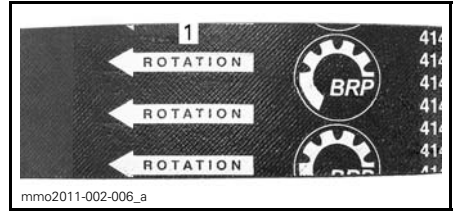
4. Open the driven pulley by screwing the tool in.
5. Remove the drive belt by slipping it over the top of the driven pulley, then over the drive pulley.

Drive Belt Installation

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

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

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



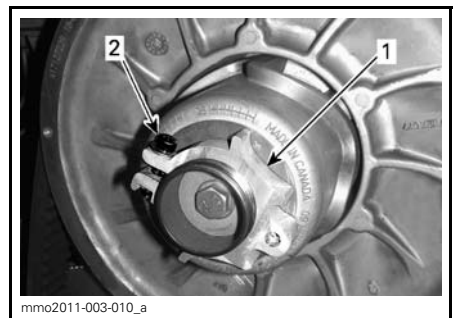
1. To be pointed in the direction of rotation
2. Unscrew and remove the driven pulley expander from the pulley.
3. Rotate the driven pulley several times to properly set the drive belt between the sheaves.
4. Refer to *DRIVE BELT HEIGHT ADJUSTMENT* below.
5. Install drive belt guard and close side panel. Refer to *CONTROLS, INSTRUMENTS AND EQUIPMENT*.

Drive Belt Height Adjustment

The drive belt height must be checked every time a new drive belt is installed.

To adjust the drive belt height, proceed as follows:

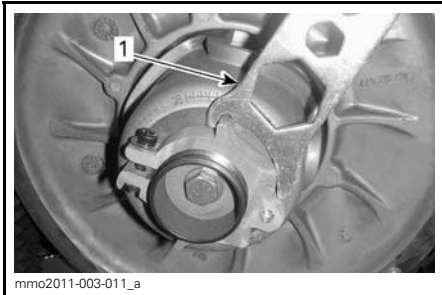
1. Remove tether cord cap from engine cut-off switch.
2. Remove drive belt guard, refer to *CONTROLS, INSTRUMENTS AND EQUIPMENT*.
3. Loosen the clamping screw.



1. Adjuster hub
2. Clamping screw

4. Using the suspension adjustment tool provided in the tool kit, turn the ring 1/4 turn at a time then ro-

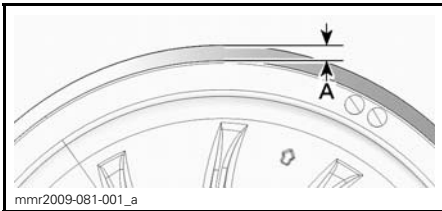
tate the driven pulley to properly set the drive belt between the pulley sheaves.



1. Suspension adjustment tool

NOTE: The adjustment ring has left hand threads.

Repeat step 5 until the external surface of drive belt exceeds driven pulley edge by 0 mm to 2 mm (0 in to .08 in).



TYPICAL - PRELIMINARY SETTING
A. 0 mm to 2 mm (0 in to .08 in)

NOTE: Turning the ring counterclockwise lowers the drive belt in the pulley. Turning the ring clockwise raises the drive belt in the pulley.

5. Firmly tighten the clamping screw. If possible, tighten to $5.5 \text{ N}\cdot\text{m} \pm 0.5 \text{ N}\cdot\text{m}$ ($49 \text{ lbf}\cdot\text{in} \pm 4 \text{ lbf}\cdot\text{in}$) using a torque wrench.
6. Install drive belt guard, refer to *DRIVE BELT GUARD INSTALLATION*.
7. Close side panel, refer to *DRIVE BELT GUARD INSTALLATION*.

NOTE: This setting is correct as a preliminary adjustment for most models and drive belt types. In some cases, when starting the engine, the vehicle could creep, indicating that the drive belt is too tight.

If the vehicle creeps, lower the drive belt height from the preliminary setting. Repeat procedure until creeping stops.

Reverse Activation

NOTE: The reverse may not activate or may be harder to activate if the drive belt is positioned too high in the driven pulley. If reverse activation does not work properly, ensure the drive belt is properly adjusted. Adjust the drive belt lower in the driven pulley if needed.

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.

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 Lynx dealer.

⚠ WARNING

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

Track Tension and Alignment

NOTE: 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.

Track Tension Verification

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

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

⚠ 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.

3. Allow rear suspension to fully extend.
4. Use the TENSIO METER (P/N 414 348 200).

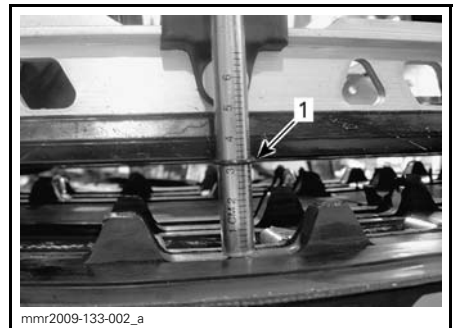
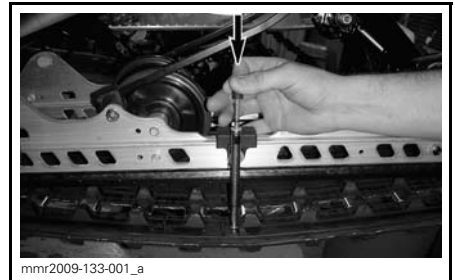


5. Set deflection between 30 mm and 35 mm (1-3/16 in and 1-3/8 in) using bottom O-ring.



DEFLECTION SETTING

1. *Bottom O-ring*
6. Place upper O-ring to 0 kgf (0 lbf).
7. Position the tensiometer on track, halfway between front and rear idler wheels.
8. Push the tensiometer downwards until bottom O-ring (deflection set earlier) be aligned with the bottom of slider shoe.



1. *Deflection O-ring aligned with slider shoe*

- Read load recorded by the upper O-ring on the tensiometer.



LOAD READING

- Upper O-ring

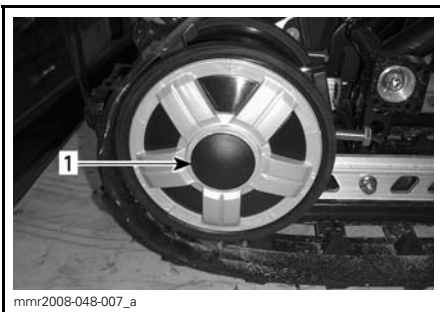
- Load reading must be as per the following table.

TRACK ADJUSTMENT SPECIFICATION	
Track deflection setting	30 mm - 35 mm (1-3/16 in - 1-3/8 in)
Track load reading	7.3 kg (16 lb)

- If load reading is not in accordance with the specification, adjust track tension. Refer to *TRACK TENSION ADJUSTMENT*.

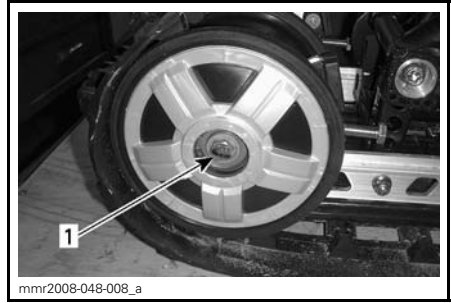
Track Tension Adjustment

- Remove tether cord cap from engine cut-off switch.
- Remove rear wheel caps (if so equipped).



- RH rear idler wheel cap

- Loosen the rear idler wheel retaining screws.



- RH rear idler wheel bolt

- Tighten or loosen both adjustment screws to increase or decrease track tension.



- RH adjustment screw

- If correct tension is unattainable, contact an authorized Lynx dealer.
- Retighten retaining bolts to $48 \text{ N}\cdot\text{m} \pm 6 \text{ N}\cdot\text{m}$ ($35 \text{ lbf}\cdot\text{ft} \pm 4 \text{ lbf}\cdot\text{ft}$).
- Check track alignment as described below.

Track Alignment

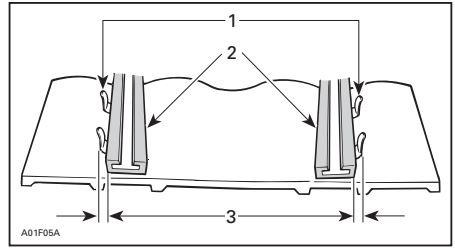
⚠ WARNING

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.

1. Lift rear of vehicle and support it off the ground.

⚠ 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.

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



1. Guides
2. Slider shoes
3. Equal distance

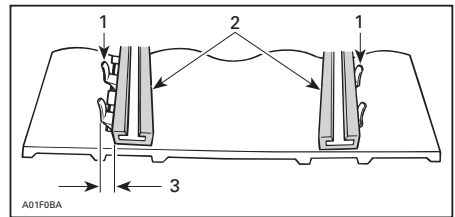
4. To correct track alignment:

- 4.1 Stop engine.
- 4.2 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.

- 4.3 Loosen rear wheel retaining screws.
- 4.4 Tighten adjustment screw on side where the slider shoe is the farthest from the track insert guides.

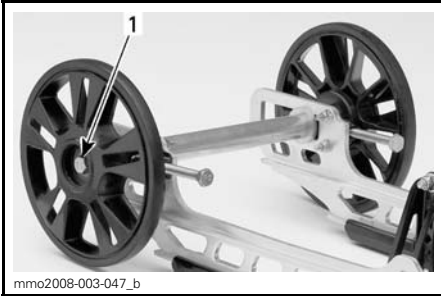


1. Guides
2. Slider shoes
3. Tighten on this side

5. Tighten retaining screws.

⚠ WARNING

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



TYPICAL

1. Retighten to $48\text{ N}\cdot\text{m} \pm 6\text{ N}\cdot\text{m}$
($35\text{ lbf}\cdot\text{ft} \pm 4\text{ lbf}\cdot\text{ft}$)

6. Restart engine and rotate track slowly to recheck alignment.
7. Reposition snowmobile on the ground.
8. Install rear wheel caps if so equipped.

Suspension

Rear Suspension Condition

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

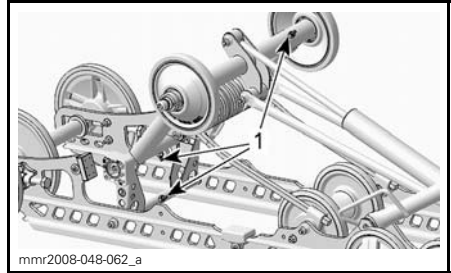
NOTE: During normal driving, snow will act as a lubricant and coolant for the slider shoes. Extensive riding on ice or sanded snow, will create excessive heat build-up and cause premature slider shoe wear.

Suspension Stopper Strap Condition

Inspect stopper strap for wear and cracks, bolt and nut for tightness. If loose inspect holes for deformation. Replace as required. Torque nut to $10\text{ N}\cdot\text{m} \pm 1\text{ N}\cdot\text{m}$ ($89\text{ lbf}\cdot\text{in} \pm 9\text{ lbf}\cdot\text{in}$).

Rear Arm Lubrication

Lubricate rear arm at grease fittings using **SUSPENSION GREASE** (P/N 293 550 033). Refer to *MAINTENANCE SCHEDULE* for maintenance frequency.



TYPICAL

1. Grease fittings

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 Lynx dealer.

Skis

Wear and Condition of Skis and Runners

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

⚠ WARNING

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

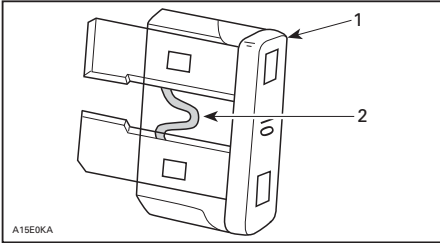
Fuses

Fuse Inspection

The electrical system is protected with fuses.

Check fuse condition and replace it if necessary.

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



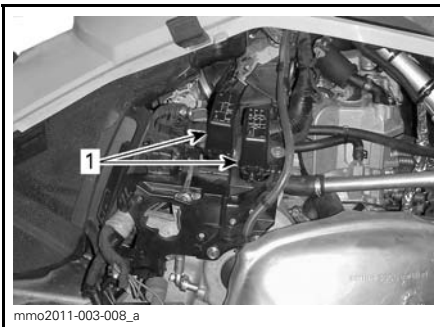
1. Fuse
2. Check if melted

NOTICE Do not use a higher rated fuse as this can cause severe damage to electrical components and/or be a potential fire.

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

Fuse Location

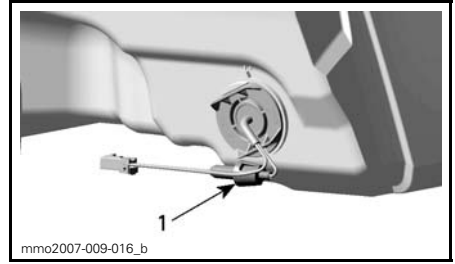
The fuse boxes (two) are located on the RH Side, behind the side panel.



1. Fuse boxes

Refer to the cover decal or the *SPECIFICATIONS* subsection of this guide for fuses identification.

The electric fuel level sender fuse is located behind the air intake silencer.



BEHIND AIR INTAKE SILENCER
 1. Fuse location

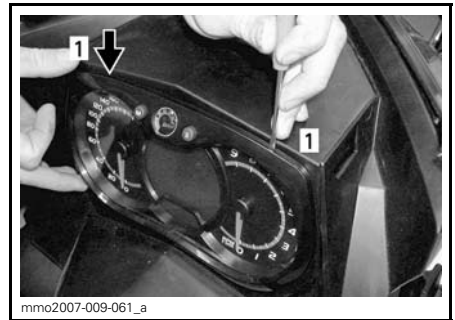
Lights

Always check light operation after bulb replacement.

Headlights Bulb Replacement

NOTICE Never touch glass portion of an halogen bulb with bare fingers, it shortens its operating life. If glass is touched, clean it with isopropyl alcohol which will not leave a film on the bulb.

1. By using a small screwdriver, release multifunction gauge locking tabs.

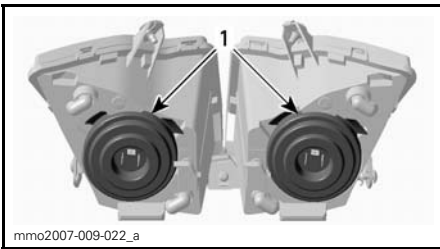


1. Locking tab

2. Gently pull on multifunction gauge and set aside.

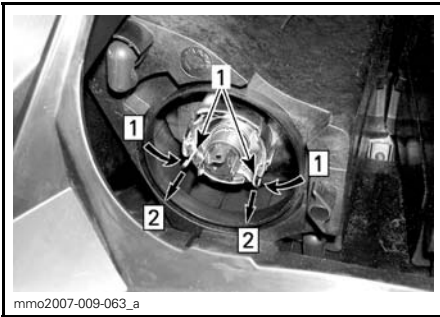


3. Disconnect burnt bulb connector. Remove the rubber boot.



1. Rubber boots

4. Press and pull both sides of the retaining clip at the same time to release it from bulb support.

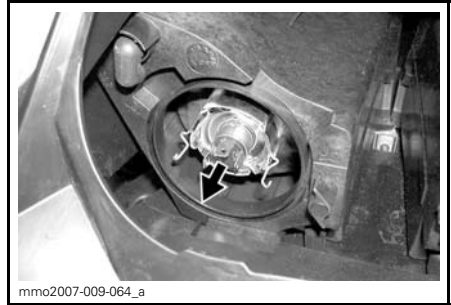


Step 1: Push both sides

Step 2: Pull to release

1. Retaining clip

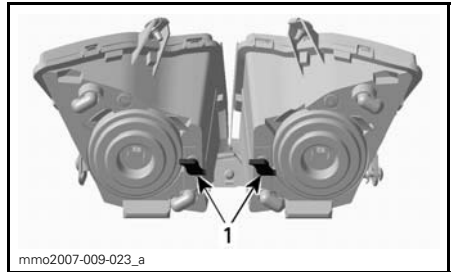
5. Pull bulb and replace. Properly reinstall parts.



PULL BULB AND REPLACE

Headlights Beam Aiming

Remove multifunction gauge, refer to *HEADLIGHTS BULB REPLACEMENT*. Turn knob to adjust beam height.



TYPICAL

1. Knobs

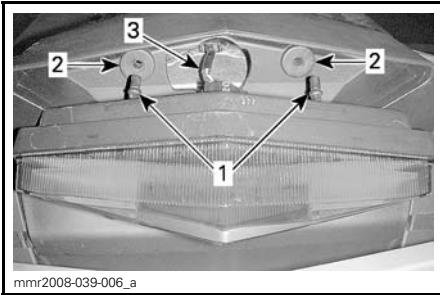
Taillight Bulb Replacement

1. Remove taillight housing by carefully pulling on lens at both ends using an equal force.



TYPICAL - CAREFULLY PULL OUT AT CORNERS

NOTICE If taillight housing is not removed perpendicularly to the taillight holder, mounting pins may break and taillight housing will have to be replaced.

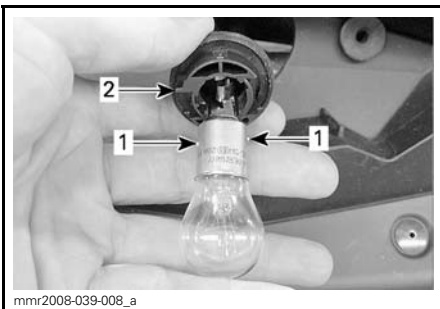


1. Taillight housing retaining pins
2. Retaining grommets
3. Light wire harness

NOTICE Do not pull taillight housing out too far to avoid damaging wiring.

2. Rotate bulb socket counterclockwise to remove it from taillight housing.
3. Push in and rotate bulb counterclockwise to remove it from its socket.
4. Install the new bulb by pushing it in the socket and turning it clockwise.

NOTE: Note position of bulb locking pins on its base, and socket alignment key.



1. Bulb locking pins
2. Bulb holder alignment key

VEHICLE CARE

Post-Operation Care

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

WARNING

Make sure tether cord cap is away from engine cut-off switch 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 maintain its appearance.

Vehicle Cleaning and Protection

Remove any dirt or rust.

To clean the entire vehicle, use only flannel cloths or equivalent.

NOTICE It is necessary to use flannel cloths or equivalent on windshield and hood to avoid scratching the surfaces.

To remove grease, oil and grime, use BRP HEAVY DUTY CLEANER (P/N 293 110 001).

NOTICE Do not use Heavy duty cleaner on decals or vinyl.

To remove stubborn dirt from all plastic and vinyl surfaces, use XPS MULTI-PURPOSE CLEANER (P/N 219 701 709).

To remove scratches on windshield or hood use the SCRATCH REMOVER KIT (P/N 861 774 800).

NOTICE Never clean plastic parts or hood with strong detergent, degreasing agent, paint thinner, acetone, products containing chlorine, etc.

Wax painted portion of the vehicle for better protection.

NOTE: Apply wax on glossy finish only.

STORAGE AND PRESEASON PREPARATION

WARNING

Have an authorized Lynx dealer inspect fuel system integrity as specified in *MAINTENANCE SCHEDULE*.

Storage


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

To prepare your snowmobile, refer to an authorized Lynx dealer.

To facilitate the inspection and ensure adequate lubrication of components, it is recommended to clean the entire vehicle.

When storage procedure is completed, block muffler with clean rags.

Lift rear of vehicle until track is clear of the ground. Install on a wide-base snowmobile mechanical stand with a rear deflector panel.

 **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.

NOTE: Do not release track tension.

Protect the vehicle with an approved cover to prevent dust accumulation during storage.

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.

Preseason Preparation

To prepare your snowmobile, refer to an authorized Lynx dealer.

TECHNICAL INFORMATION

The EC-Declaration of Conformity does not appear in this version of the Operator's Guide.

Please refer to the printed version that was delivered with your vehicle.

EPA CERTIFIED ENGINES

Maintenance, replacement, or repair of the emission control devices and systems may be performed by any snowmobile SI (spark ignition) engine repair establishments or individual.

Engine Emissions Information

Manufacturer's Responsibility

Beginning with 2007 model year engines, snowmobile manufacturers of snowmobile engines need to determine the exhaust emission levels for each engine family and certify these engines with the United States of America Environmental Protection Agency (EPA). An emissions control information label, showing emission levels and engine specifications, must be placed on each vehicle at the time of manufacture.

Dealer's Responsibility

When performing service on a certified Lynx snowmobiles that carry an emissions control information label, adjustments must be kept within published factory specifications.

Replacement or repair of any emission related component must be executed in a manner that maintains emission levels within the prescribed certification standards.

Dealers are not to modify the engine in any manner that would alter the power or allow emission levels to exceed their predetermined factory specifications.

Exceptions include manufacturer's prescribed changes, such as altitude adjustments for example.

Owner Responsibility

The owner/operator is required to have engine maintenance performed to maintain emission levels within prescribed certification standards.

The owner/operator is not to, and should not allow anyone to modify the engine in any manner that would alter the power or allow emissions levels to exceed their predetermined factory specifications.

EPA Emission Regulations

All Lynx snowmobiles manufactured by BRP are certified to the EPA as conforming to the requirements of the regulations for the control of air pollution from new snowmobile engines. This certification is contingent on certain adjustments being set to factory standards. For this reason, the factory procedure for servicing the product must be strictly followed and, whenever practicable, returned to the original intent of the design.

The responsibilities listed above are general and in no way a complete listing of the rules and regulations pertaining to the EPA requirements on exhaust emissions for snowmobile products. For more detailed information on this subject, you may contact the following locations:

MAIL:

U.S. Environmental Protection Agency
Office of Transportation and Air Quality
1200 Pennsylvania Ave. NW
Mail Code 6403J
Washington D.C. 20460

INTERNET WEB SITE:

www.epa.gov/otaq/

SPECIFICATIONS

MODEL		600 ACE
ENGINE		
Engine type	Rotax 602, liquid cooled, 4-stroke, D.O.H.C., dry sump	
Cylinders	2	
Displacement	600 cm ³ (36.6 in ³)	
Bore	74 mm (2.91 in)	
Stroke	69.7 mm (2.74 in)	
Maximum horsepower RPM	7250 RPM	
Exhaust system	Double front pipe, baffle muffler	
Engine oil	XPS SYNTHETIC OIL (WINTER GRADE) (P/N 293 600 112) or SAE 0W 40 API SM synthetic oil	
Engine oil capacity	Oil change, 2.2 L (2.32 qt (U.S. liq.))	
Engine coolant	Ethyl glycol/water mix (50% coolant, 50% distilled water). Use BRP premix coolant or coolant specifically designed for aluminum engines	
FUEL SYSTEM		
Fuel injection system	Multi point EFI, 46 mm throttle body	
Recommended fuel	Regular unleaded	
Minimum octane rating	Inside North America	(87 (RON + MON)/2)
	Outside North America	95 RON
Fuel tank capacity	40 L (10.6 U.S. gal.)	
DRIVE SYSTEM		
Drive pulley type	eDrive	
Driven pulley type	QRS	
Engagement	2200 RPM	
Chaincase oil	Type	XPS SYNTHETIC CHAINCASE OIL (P/N 413 803 300)
	Capacity	500 ml (16.9 U.S. oz)
Small sprocket number of teeth	21	
Large sprocket number of teeth	49	
Drive sprocket number of teeth	8	
Track nominal width	381 mm (15 in)	
Track nominal length	3 486 mm (137.24 in)	
Track profile height	25.4 mm (1 in)	

MODEL		600 ACE
DRIVE SYSTEM (cont'd)		
Track tension	Deflection	30 mm to 35 mm (1-3/16 in to 1-3/8 in)
	Force	7.3 kg (16 lb)
Track alignment		Equal distance between edges of track guides and slider shoes
BRAKE SYSTEM		
Brake system type		Hydraulic, REV-XP™ brake type
Brake fluid		DOT 4
SUSPENSION		
Front suspension		LFS
Front shock		Motion control
Front suspension max. travel		163 mm (6.4 in)
Rear suspension		SC-5 M
Center shock		Motion control
Rear shock		HPG™
Rear suspension max. travel		340 mm (13.4 in)
ELECTRICAL SYSTEM		
Lightning system output		420 Watts @ 6000 RPM
Headlights bulb HI/LOW beam		2 x 60/55 Watts (H-4)
Taillight bulb		5/21
Spark plug	Type	NGK CR7EB
	Gap	.8 mm (.031 in)
Fuses and relays	F1: Main	30 A
	F2: Start button, relays	5 A
	F3: Fuel pump, starter solenoid	10 A
	F4: Fan	15 A
	F5: ignition coil, fuel injectors	10 A
	F6: ECM, gauge, CAPS	10 A
	F7: Accessories, heating elements	15 A
	F8: Headlights, taillight, brake light	20 A
	R1: Fuses 3, 5, 6 and communication connector	-
	R2: Fuse 8	-
R3: Fuse 10	-	

SPECIFICATIONS

MODEL	600 ACE
WEIGHT AND DIMENSIONS	
Dry weight	232 kg (511 lb)
Vehicle overall length	3 110 mm (122.4 in)
Vehicle overall width	1 217 mm (47.9 in)
Ski stance	107.7 cm (42.4 in)
Ski width	160 mm (6.3 in)

TROUBLESHOOTING

TROUBLESHOOTING GUIDELINES

STARTER DOES NOT WORK

1. Engine stop switch in OFF position or tether cord cap (D.E.S.S. key) away from post.
 - *Place engine stop switch in the ON position and install tether cord cap (D.E.S.S. key) on post.*
2. Throttle applied while attempting an engine start.
 - *Release throttle while cranking.*

ENGINE RPM DOES NOT REACH CLUTCH ENGAGEMENT POINT

1. D.E.S.S. did not read tether cord cap (D.E.S.S. key) code. D.E.S.S. pilot lamp blinks (slow short beeps/repetitive).
 - *Properly install tether cord cap (D.E.S.S. key).*
2. D.E.S.S. has read a different code than the one programmed. D.E.S.S. pilot lamp blinks rapidly (fast short beeps/repetitive).
 - *Install a tether cord cap (D.E.S.S. key) for which this snowmobile was programmed.*

ENGINE OVERHEATS

1. Insufficient snow or hard packed snow.
 - *Drive in loose snow. If there is no loose snow near, pull over, stop engine and let it cool down. Once engine has cooled down, reach loose snow as soon as possible.*
2. Low coolant level.
 - *Check coolant level, see MAINTENANCE PROCEDURES*
3. Clogged heat exchangers
 - *Clean heat exchangers.*
4. Rear suspension adjusted too high (too much distance between the snow guard and the ground)

ENGINE LACK OF POWER/VEHICLE DOES NOT REACH FULL SPEED

1. Drive and driven pulleys require servicing.
 - *Contact an authorized Lynx dealer.*
2. 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.*
3. Incorrect track adjustment.
 - *See MAINTENANCE INFORMATION and/or an authorized Lynx dealer for proper alignment and tension adjustments.*

ENGINE MISFIRES

1. Water in fuel.
 - *Drain fuel system and refill with fresh fuel.*

MONITORING SYSTEM

Pilot Lamps, Messages and Beeper Codes

Gauge pilot lamp(s) will inform you if an anomaly occurs or to inform you of a particular condition.








TYPICAL — PILOT LAMPS

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

Beeper codes will be emitted to catch your attention.

See table below for details.

NOTE: Some of the listed pilot lamps do not apply this model.

PILOT LAMP(S) ON	BEEPER	DESCRIPTION
	4 short beeps every 30 seconds	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 <i>MAINTENANCE</i> . If coolant level is correct and overheating persists, contact an authorized Lynx dealer. Do not run the engine if condition persists.
	Short beeps repeating rapidly	Critical overheat. Stop engine immediately and let engine cool down. Check coolant level, refer to <i>MAINTENANCE</i> . If coolant level is correct and overheating persists, contact an authorized Lynx dealer. Do not run the engine if condition persists.
	4 short beeps every 5 minutes	Indicate a low or high battery voltage condition. See an authorized Lynx dealer as soon as possible.
	4 short beeps	Engine fault, see an authorized Lynx dealer as soon as possible.
—	4 short beeps every 5 minutes	Engine RPM limited for protection when certain faults occur.
—	Short beeps repeating rapidly	Shutdown procedure in force due to engine overheating or fuel pump problem, remove tether cord cap from engine cut-off switch and contact an authorized Lynx dealer.
DESS	2 short beeps	Good key, vehicle ready to operate.
	2 short beeps, repeating slowly	Unable to read key (bad connection). Make sure the key is clean and correctly snapped on post.
	Short beeps repeating rapidly	Invalid key or key not programmed. Use the proper key for the vehicle or have the programmed.
 (blinking)	—	Fuel level sender problem.

WARRANTY

BRP FINLAND OY INTERNATIONAL LIMITED WARRANTY: 2011 LYNX® SNOWMOBILES

1) SCOPE OF THE LIMITED WARRANTY

BRP Finland Oy ("BRP") warrants its 2011 LYNX snowmobiles from defects in material or workmanship for the period and under the conditions described below.

All genuine LYNX parts and accessories, installed by an authorized BRP distributor/dealer (as hereinafter defined) at the time of delivery of the 2011 LYNX snowmobile, carry the same warranty as that of the snowmobile.

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

2) WARRANTY COVERAGE PERIOD

This warranty will be in effect from the date of delivery to the first retail consumer or the date the product is first put into use, whichever occurs first and for a period of:

A) TWELVE (12) CONSECUTIVE MONTHS, for private use owners

B) TWELVE (12) CONSECUTIVE MONTHS, for commercial use owners

C) TWENTY FOUR (24) CONSECUTIVE MONTHS, for private use owners when product was sold in a member state of the European Union and Russia. The repair or replacement of parts or the performance of service under this warranty does not extend the life of this warranty beyond its original expiration date.

3) CONDITIONS TO HAVE WARRANTY COVERAGE

This warranty coverage is available only on 2011 LYNX snowmobile purchased as new and unused by its first owner from a BRP distributor/dealer authorized to distribute LYNX products in the country in which the sale occurred ("BRP distributor/dealer"), and then only after the BRP specified pre-delivery inspection process is completed and documented. Warranty coverage only becomes available upon proper registration of the product by an authorized BRP distributor/dealer. Moreover, this warranty coverage is only available if the LYNX snowmobile is purchased in the country in which the purchaser resides. BRP will not honor this limited warranty to any private use owner or commercial use owner if the preceding conditions have not been met. Such limitations are necessary in order to allow BRP to preserve both the safety of its products, and also that of its consumers and the general public.

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

4) WHAT TO DO TO OBTAIN WARRANTY COVERAGE

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

5) WHAT BRP WILL DO

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

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

6) EXCLUSIONS

The following are not warranted under any circumstances:

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

7) LIMITATIONS OF LIABILITY

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

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

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

8) TRANSFER

If the ownership of a product is transferred during the warranty coverage period, this warranty shall also be transferred and be valid for the remaining coverage period provided BRP or an authorized BRP distributor / dealer receives a proof that the former owner agreed to the transfer of ownership, in addition to the co-ordinates of the new owner.

9) CONSUMER ASSISTANCE

1. In the event of a controversy or a dispute in connection with this limited warranty, BRP suggests that you try to resolve the issue at the dealership level. We recommend discussing the issue with the authorized distributor/dealer's service manager or owner.
2. If further assistance is required, the distributor's service department should be contacted in order to resolve the matter.
3. If the matter still remains unresolved then contact BRP by writing to us at the address below.

ADDRESS:

BRP-FINLAND OY
SERVICE DEPARTMENT
P.O. BOX 8040
FIN-96101 ROVANIEMI
FINLAND

CUSTOMER INFORMATION

PRIVACY INFORMATION

BRP wishes to inform you that your coordinates will be used for safety and warranty related purposes. Furthermore, BRP and its affiliates may use its customer list to distribute marketing and promotional information about BRP and related products.

To exercise your right to consult or correct your data, or to be removed from the addressee-list for direct marketing, please contact BRP.

By E-mail: privacyofficer@brp.com

By mail: BRP
 Senior Legal Counsel-Privacy Officer
 726 St-Joseph
 Valcourt QC
 Canada
 J0E 2L0

CHANGE OF ADDRESS/OWNERSHIP

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

- Mailing one of the change of address cards on the following pages.
- Notifying an authorized Lynx dealer.

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 Lynx dealer. We will ask you to provide your name, address, phone number, the vehicle identification number and the date it was stolen.

Scandinavian countries

BRP FINLAND OY
Service Department
Isoaavantie 7
FIN-96320 Rovaniemi

CHANGE OF ADDRESS CHANGE OF OWNERSHIP 

VEHICLE IDENTIFICATION NUMBER

Model Number

Vehicle Identification Number (V.I.N.)

OLD ADDRESS
OR PREVIOUS OWNER:

NAME

NO.

STREET

APT

CITY

STATE/PROVINCE

ZIP/POSTAL CODE

COUNTRY

TELEPHONE

NEW ADDRESS
OR NEW OWNER:

NAME

NO.

STREET

APT

CITY

STATE/PROVINCE

ZIP/POSTAL CODE

COUNTRY

TELEPHONE

E-MAIL ADDRESS

CHANGE OF ADDRESS CHANGE OF OWNERSHIP 

VEHICLE IDENTIFICATION NUMBER

Model Number

Vehicle Identification Number (V.I.N.)

OLD ADDRESS
OR PREVIOUS OWNER:

NAME

NO.

STREET

APT

CITY

STATE/PROVINCE

ZIP/POSTAL CODE

COUNTRY

TELEPHONE

NEW ADDRESS
OR NEW OWNER:

NAME

NO.

STREET

APT

CITY

STATE/PROVINCE

ZIP/POSTAL CODE

COUNTRY

TELEPHONE

E-MAIL ADDRESS



brp.com

LYNX



® ™ and the BRP logo are trademarks of Bombardier Recreational Products Inc. or its affiliates.