



# ***2020***

## OPERATOR'S MANUAL



***p/n: 2262-564***

***Lynx 2000***

***Lynx 2000 LT***

***Bearcat 2000 XT***

## **This vehicle can be hazardous to operate.**

A snowmobile is a very high performance vehicle. Because it does accelerate rapidly and is capable of very high speeds, it should not be operated by a novice or an inexperienced operator. Never accelerate rapidly or drive at high speed beyond the limits of visibility or without being totally familiar with the terrain and what lies in front of you. Obey speed limits and never operate at speeds that do not allow adequate maneuvering and stopping distances. Read and study the entire Operator's Manual and Snowmobile Safety Handbook.

Failure to follow this warning could result in personal injury to yourself or others. For your safety, understand and follow all the warnings contained in this Operator's Manual and on the labels on this vehicle.

Keep this Operator's Manual with this vehicle at all times. If you lose your manual, contact your authorized dealer for a free replacement. The labels should be considered permanent parts of the vehicle. If a label comes off or becomes hard to read, contact your authorized dealer for a free replacement. Contact Arctic Cat Service Department, P.O. Box 810, Thief River Falls, MN 56701, for proper registration information.

**FAILURE TO FOLLOW THE WARNINGS CONTAINED IN THIS MANUAL CAN RESULT IN SERIOUS INJURY OR DEATH.**

The Operator's Manual, Snowmobile Safety Handbook, and Snowmobile Decals display important information:



The Safety Alert Symbol means **ATTENTION! BE ALERT! YOUR SAFETY IS INVOLVED.**



**WARNING**

**WARNING** identifies personal safety-related information. Follow the directive because it deals with the possibility of serious personal injury or even death.

**CAUTION**

**CAUTION**, without the safety alert symbol, identifies unsafe practices which may result in snowmobile-related damage. Follow the directive because it deals with the possibility of damaging part or parts of the snowmobile.

**■ NOTE:**

A **NOTE** identifies supplementary information worthy of particular attention.

### **Personal Injury**

- To avoid injury to yourself and others, **NEVER** operate the snowmobile without first reading and understanding this manual and the Snowmobile Safety Handbook; then follow the instructions and heed the warnings given.
- **USE COMMON SENSE.**
- **DON'T DRINK and DRIVE.**
- **STAY IN CONTROL at ALL TIMES.**
- **TELL YOUR FRIENDS.** If you see a friend operating a snowmobile recklessly, at excessive speeds, while intoxicated, or in other unsafe ways, don't wait until it is too late to warn of the consequences of snowmobile misuse. Such conduct endangers everyone. **TAKE AN ACTIVE ROLE IN THE SAFETY OF YOURSELF AND OTHERS.**

## **California Proposition 65**



**WARNING**

**The Engine Exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.**

# Table of Contents

|                                           |       |                                                |       |
|-------------------------------------------|-------|------------------------------------------------|-------|
| <b>Foreword</b> .....                     | 2     | <b>Lubrication</b> .....                       | 18-19 |
| <b>Declaration of Conformity</b> .....    | 3     | Gear Case .....                                | 18    |
| <b>Snowmobile Safety Rules</b> .....      | 4     | Front Suspension .....                         | 19    |
| <b>General Information</b> .....          | 5-13  | Rear Suspension .....                          | 19    |
| Control Locations .....                   | 5     | <b>Maintenance</b> .....                       | 20-39 |
| Snowmobile Identification .....           | 5     | Periodic Maintenance Checklist .....           | 20    |
| Gasoline — Oil .....                      | 5     | Fuel System .....                              | 21    |
| Engine Break-In .....                     | 6     | Adjusting/Calibrating Carburetors .....        | 22    |
| Drive Belt Break-In .....                 | 6     | Spark Plugs .....                              | 25    |
| Speedometer/Tachometer/Digital Gauge ..   | 6     | Battery .....                                  | 25    |
| Handlebar Tilt .....                      | 7     | Fuses .....                                    | 27    |
| Exhaust System .....                      | 8     | Brake System .....                             | 28    |
| Air-Intake Silencer .....                 | 8     | Burnishing Brake Pads.....                     | 30    |
| Battery .....                             | 8     | Drive Belt.....                                | 31    |
| Drive Clutch and Driven Clutch .....      | 9     | Checking/Adjusting Deflection.....             | 32    |
| Drive Clutch/Driven Clutch Alignment..... | 10    | Track Tension .....                            | 32    |
| Fuel Pump .....                           | 10    | Track Alignment.....                           | 33    |
| Shock Absorbers .....                     | 10    | Suspension.....                                | 34    |
| Standard-Lug Track.....                   | 10    | Lights.....                                    | 35    |
| Track Studs .....                         | 10    | Ski Wear Bars .....                            | 38    |
| Reverse Operation .....                   | 11    | Adjusting Ski Stance .....                     | 39    |
| Adjustable/Movable Backrest .....         | 12    | Rail Wear Strips .....                         | 39    |
| Removable Rear Seat .....                 | 12    | <b>Preparation for Storage</b> .....           | 40    |
| Towing .....                              | 13    | <b>Preparation after Storage</b> .....         | 41    |
| <b>Operating Instructions</b> .....       | 14-17 | <b>Limited Warranty</b> .....                  | 42    |
| Starting and Stopping Engine .....        | 14    | <b>Warranty Procedure/Owner Responsibility</b> | 43    |
| Braking .....                             | 15    | <b>U.S. EPA Emission Control Statement/</b>    |       |
| Emergency Stopping .....                  | 16    | <b>Warranty Coverage (U.S. Only)</b> .....     | 44    |
| Throttle/Ignition Monitor Switch .....    | 16    | <b>Change of Address, Ownership, or</b>        |       |
| Varying Altitude Operation .....          | 17    | <b>Warranty Transfer</b> .....                 | 45    |
|                                           |       | <b>Reference Information</b> .....             | 47    |

# Foreword

Congratulations! You have chosen a quality Arctic Cat Snowmobile designed and assembled to give dependable service. Be sure, as the owner/operator of an Arctic Cat Snowmobile, to become thoroughly familiar with its basic operation, maintenance, and off-season storage procedures. Read this manual and the accompanying Snowmobile Safety Handbook before operating the snowmobile to learn safe and proper use of your new Arctic Cat Snowmobile. Always operate the snowmobile within your level of skill and current terrain conditions.

This manual covers operator-related maintenance, operating instructions, and off-season storage instructions. If major repair or service is ever required, contact an authorized Arctic Cat Snowmobile dealer for professional service.

At the time of publication, all information and illustrations were technically correct. Some illustrations used in this manual are used for clarity purposes only and are not designed to depict actual conditions. Because Arctic Cat Inc. constantly refines and improves its products, no retroactive obligation is incurred.

This Operator's Manual should be considered a permanent part of the snowmobile and must remain with the snowmobile at the time of resale. If the snowmobile changes ownership more than once, contact Arctic Cat Inc., Service Department, P.O. Box 810, Thief River Falls, MN 56701, for proper registration information. This manual was prepared by the Product Service and Warranty Department of Arctic Cat Inc.

Every Arctic Cat Snowmobile meets or exceeds the standards of the Snowmobile Safety and Certification Committee and displays the SSCC decal. Arctic Cat Inc. endorses and encourages the safe use of all snowmobiles. Always wear a helmet and eye protection. Drive with caution, observe all state and local regulations, and respect the rights of others. ISMA members like Arctic Cat do their part to improve trails, sponsor events, and generally support the sport of snowmobiling. As a member of the National Snowmobile Foundation, Arctic Cat Inc. promotes snowmobiling through education, charity, and research programs.

© 2019 Arctic Cat Inc.

Printed in U.S.A.

# Declaration of Conformity

Application of Council Directives:  
Issued by European Commission.  
Type of Equipment: Snowmobile  
Model Numbers:

EMC Directive: 2014/30/EC  
EC Machinery Directive: 2006/42/EC  
Brand Name: Arctic Cat

S2020LXDFCUSB    S2020LXDLTUSB    S2020BCDWTNAL

Standards to which conformity is declared:

EMC: EN 55012, EN 61000-6-2

MACHINERY: EN 12100:2010

Manufacturer (if not issuing agent):

Arctic Cat Inc.  
601 Brooks Ave. S.  
Thief River Falls, MN 56701 USA

I, the undersigned, hereby declare that the equipment specified above conforms to the directive(s) and standard(s) as specified.



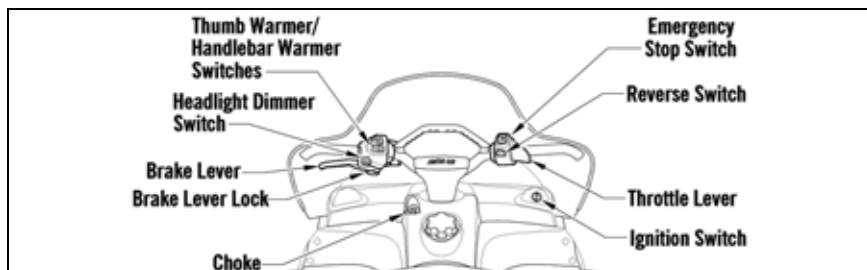
---

Craig Kennedy  
Vice President



# General Information

## Control Locations



0744-441

## Snowmobile Identification

The Arctic Cat Snowmobile has two important identification numbers. The Vehicle Identification Number (VIN) is stamped into the tunnel near the right-side footrest. The Engine Serial Number (ESN) is stamped into the crankcase of the engine.

These numbers are required by the dealer to complete warranty claims properly. No warranty will be allowed by Arctic Cat Inc. if the engine serial number or VIN is removed or mutilated in any way.

Always provide the snowmobile name, VIN, and ESN when contacting an authorized Arctic Cat Snowmobile dealer for parts, service, accessories, or warranty. If the complete engine must be replaced, ask the dealer to notify Arctic Cat for correct registration information.

## Gasoline — Oil

### Recommended Gasoline

The recommended gasoline to use in these snowmobiles is 87 octane regular unleaded. In many areas, oxygenates are added to the gasoline. Oxygenated gasolines containing up to 10% ethanol are acceptable gasolines; however, whenever using oxygenated gasolines, the carburetor main jet must be one size larger than the main jet required for regular unleaded gasoline. For example, if a 220 main jet is recommended for regular unleaded gasoline, a 230 main jet must be installed if using an oxygenated gasoline.

When using ethanol-blended gasoline, it is not necessary to add a gasoline antifreeze since ethanol will prevent the accumulation of moisture in the fuel system.

### CAUTION

**Do not use white gas or gasolines containing methanol.**

## Recommended Engine Oil

### CAUTION

**Any oil used in place of the recommended oil could cause serious engine damage.**

The recommended oil to use in the oil-injection system is Arctic Cat Formula 50 Injection Oil (p/n 5639-475 – qt) or (p/n 5639-476 – gal.). This oil is specially formulated to be used either as an injection oil or as a pre-mix oil (for break-in) and meets all of the lubrication requirements of the Arctic Cat snowmobile engine.

## Filling Gas Tank

Since gasoline expands as its temperature increases, the gas tank must be filled to its rated capacity only. Expansion room must be maintained in the tank particularly if the tank is filled with cold gasoline and then moved to a warm area.

Also, if the snowmobile is to remain on a trailer after filling the gas tank, the bed of the trailer must be maintained level to prevent gasoline from draining out through the gas tank vent hose.

### **⚠ WARNING**

**Always fill the gas tank in a well-ventilated area. Never add gasoline to the snowmobile gas tank near any open flames or with the engine running. DO NOT SMOKE while filling the gas tank.**

## **Engine Break-In**

Before mixing gasoline and oil, make sure the oil is at room temperature (20° C/68° F). Use a U.L.-approved 6 U.S. gal. (22.7 L) gasoline container for mixing the gasoline and oil. To properly mix the fuel at a 100:1 ratio, use the following procedure:

### **CAUTION**

**Never mix oil and gasoline in the snowmobile gas tank.**

1. Pour gasoline into the gasoline container until approximately half full.
2. Pour 236 ml (8 fl oz) of the recommended 2-cycle oil into the gasoline container.
3. Install cap on gasoline container and shake the mixture vigorously.
4. Fill the gasoline container with gasoline; then cap the gasoline container and shake the mixture vigorously.
5. Using a fine-mesh screened funnel, pour the fuel mixture from the gasoline container into the snowmobile gas tank.

### **⚠ WARNING**

**Always fill the gas tank in a well-ventilated area. Never add gasoline to the snowmobile gas tank near any open flames or with the engine running. DO NOT SMOKE while mixing fuel or filling the gas tank.**

## **Drive Belt Break-In**

Drive belts require a break-in period of 40 km (25 miles). Drive the snowmobile for 40 km (25 miles) at 3/4 throttle or less. By revving the engine up and down, but not exceeding 96 km/h (60 mph), the exposed cord on the side of a new belt will be worn down. This will allow the drive belt to gain its optimum flexibility and will extend drive belt life.

■ **NOTE:** Before starting the snowmobile in extremely cold temperatures, the drive belt should be removed and warmed up to room temperature. Once the drive belt is at room temperature, install the drive belt.

### **CAUTION**

**Never run the engine with the drive belt removed. Excessive revving of the engine could result in serious engine damage and drive clutch failure.**

## **Speedometer/Tachometer/Digital Gauge**

These snowmobiles are equipped with a gauge that combines an analog speedometer with a multifunctional digital screen.



FZ003H

## **Digital Tachometer and Speedometer**

Press the left button to display engine RPM or MPH (km/h) on the digital screen.

When speed is displayed on the digital screen, press and hold the left button for more than two seconds to display standard mph or metric km/h. Release the button to select the display.

When RPM is displayed on the digital screen, press and hold the left button to display maximum RPM. The maximum RPM will reset when the right button is pushed (while maximum RPM is displayed).

### **Odometer/Trip Meter (1)/ Trip Meter (2)/Hour Meter/Clock**

Push the right button to display the odometer, trip meter (1), trip meter (2), hour meter, and clock on the digital screen. To reset the trip meter with the trip meter displayed, push and hold the right button until the display is cleared. The hour meter will not reset.

### **Clock**

With the clock selected on the digital screen, press and hold the right button for two seconds to display the option of selecting the 12-hour or 24-hour clock. Push the left button for 12-hour display; push the right button for 24-hour display. At this point, the hours and minutes will begin to flash. Push the left button to change the hour display; push the right button to change the minute display (either tap the buttons for individual number display or push and hold the buttons for rapid number display).

■ **NOTE: During clock setting, if neither button (left or right) is pushed within a 5-second time period, the clock-setting mode will be exited with changes saved.**

### **A. Low Oil Warning Indicator**

This indicator icon is designed to alert the snowmobile operator when the oil level in the oil injection reservoir drops below a prescribed level; however, it is highly recommended that a visual verification of the oil level in the reservoir be done prior to operating the snowmobile. Once the Low Oil Warning Icon illuminates during operation of the snowmobile, the operator must periodically monitor the level of oil in the reservoir and must fill the reservoir the next time gasoline is added to the gas tank.

The “alert level” of the Low Oil Warning Icon is approximately equal to one tankful of gasoline under normal operating conditions.

### **B. Low Fuel Indicator**

The indicator icon illuminates whenever the gas level in the gas tank is low.

### **C. Fuel Level Display**

This bar display shows the approximate amount of gas remaining in the gas tank.

### **D. Service Indicator**

The service indicator icon should illuminate each time the key is turned to RUN or START, and it should go out when the engine starts. If the icon stays illuminated or it illuminates while the engine is running, the system is receiving input that is outside of its established parameters. If the icon illuminates indicating an error, take the snowmobile to an authorized Arctic Cat Snowmobile dealer for service. If not under warranty, this service is at the discretion and expense of the snowmobile owner.

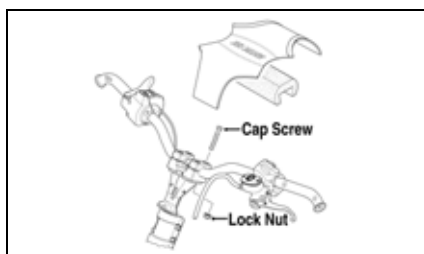
### **E. High Beam Indicator**

The indicator icon is illuminated whenever the high beam mode is selected by the headlight switch.

### **Handlebar Tilt**

The handlebar can be adjusted to the operator's preference. To adjust the handlebar, use the following procedure:

1. Loosen the four cap screws and lock nuts securing the handlebar caps to the riser and the riser to the steering post.



744-439A

2. Adjust the handlebar to operator's desired position, tighten the cap screws evenly to 34 N-m (25 ft-lb), and check steering for maximum right/left turning capabilities.

■ **NOTE:** Do not rotate the handlebar to a position that allows air to enter the brake system.

### **WARNING**

Tighten lock nuts/cap screws according to specifications to prevent unexpected "movement" of the handlebar during operation over rough terrain. DO NOT position the handlebar so steering (maximum right/left turning capabilities) or throttle and brake controls are affected.

## **Exhaust System**

The exhaust system is designed to reduce noise and to improve the total performance of the engine. If any exhaust system component is removed from the engine and the engine is run, severe engine damage will result.

## **Air-Intake Silencer**

Used in conjunction with the fuel intake system is a specially designed air-intake silencer. The purpose of the silencer is to quiet the intake of fresh air. Since the fuel intake system is calibrated with the air-intake silencer in place, the engine must never be run with the silencer removed. Performance will not be improved if the air-intake silencer is removed. In contrast, severe engine damage will occur.

### **CAUTION**

These snowmobiles are not designed to be operated in dusty conditions. Operating the snowmobile in dusty conditions will result in severe engine damage.

## **Battery**

It is extremely important that the battery be maintained at full charge at all times and that the battery connections be clean and tight. If charging the battery becomes necessary, refer to Battery sub-section in the Maintenance section.

### **CAUTION**

Always turn the ignition switch key to the OFF position when the snowmobile is not being used. Leaving the ignition switch in the ON position will result in discharging the battery and possible damage to the battery.

## **Jump-Starting**

■ **NOTE:** Arctic Cat does not recommend jump-starting a snowmobile with a dead battery but rather to remove the battery, service it, and correctly charge it; however, in an emergency, it may be necessary to jump-start a snowmobile. If so, use the following procedure to carefully and safely complete this procedure.

### **WARNING**

Improper handling or connecting of a battery may result in severe injury including acid burns, electrical burns, or blindness as a result of an explosion. Always remove rings and watches.

1. On the snowmobile to be jump-started, slide any terminal boots away.

### **WARNING**

Any time service is performed on a battery, the following must be observed: keep sparks, open flame, cigarettes, or any other flame away. Always wear safety glasses. Protect skin and clothing when handling a battery. When servicing a battery in an enclosed space, keep the area well-ventilated.

2. Inspect the battery for any signs of electrolyte leaks, loose terminals, or bulging sides. Leaking or bulging battery cases may indicate a frozen or shorted battery.

### **WARNING**

If any of these conditions exist, DO NOT attempt to jump-start, boost, or charge the battery. An explosion could occur causing serious injury.

3. Inspect the vehicle to be used for jump-starting to determine if voltage and ground polarity are compatible. The vehicle must have a 12-volt DC, negative ground electrical system.

### **CAUTION**

Always make sure the electrical systems are of the same voltage and ground polarity prior to connecting jumper cables. If not, severe electrical damage may occur.

4. Move the vehicle to be used for the jump-start close enough to ensure the jumper cables easily reach; then set and lock the brakes, shut off all electrical accessories, and turn the ignition switch OFF.

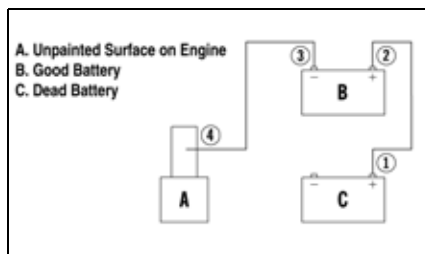
■ **NOTE: Make sure all switches on the snowmobile to be jump-started are turned OFF.**

5. Disconnect all external accessories such as cell phones, GPS units, and radios on both vehicles.

### CAUTION

**Failure to disconnect electronic accessories during jump-starting may cause system damage due to power spikes.**

6. Attach one clamp of the positive (red) cable to the positive (+) terminal (1) of the dead battery (C) being careful not to touch any metal with the other clamp; then attach the other clamp of the positive (red) cable to the positive (+) terminal (2) of the good battery (B).



0744-527

■ **NOTE: Some jumper cables may be the same color but the clamps or ends will be color-coded red and black.**

7. Attach one clamp of the negative jumper cable (black) to the negative (-) terminal (3) of good battery (B); then attach the other clamp of the negative (black) jumper cable (4) to an unpainted metal surface (A) on the engine or frame well away from the dead battery and fuel system components.

### ⚠ WARNING

**Never make the final connection to a battery as a spark could ignite hydrogen gases causing an explosion of the battery resulting in acid burns or blindness.**

8. Stand well away from the dead battery and start the vehicle with the good battery. Allow the vehicle to run for several minutes applying some charge to the dead battery.
9. Start the snowmobile with the dead battery and allow it to run for several minutes before disconnecting the jumper cables.
10. Remove the jumper cables in opposite order of hook-up (4, 3, 2, 1). Be careful not to short cables against bare metal.

■ **NOTE: Have the battery and electrical system checked prior to operating the snowmobile again.**

## Drive Clutch and Driven Clutch

The drive clutch and driven clutch do not require lubrication; therefore, no special maintenance is required by the snowmobile owner except for periodical cleaning (see the Periodic Maintenance Checklist in the Maintenance section).

However, the drive clutch and driven clutch should be disassembled, cleaned, and inspected by an authorized Arctic Cat Snowmobile dealer after every 1,288 km (800 miles) of operation or at the end of the snowmobiling season whichever occurs first. This service is at the discretion and expense of the snowmobile owner.

When operating the snowmobile at high altitudes, it may be necessary to change certain component parts of the drive clutch and/or the driven clutch. See an authorized Arctic Cat Snowmobile dealer for further information.

### **CAUTION**

**DO NOT attempt to service the drive clutch and driven clutch. The drive clutch and driven clutch must be serviced by an authorized Arctic Cat Snowmobile dealer only.**

## **Drive Clutch/Driven Clutch Alignment**

The offset between the drive clutch and driven clutch are set at the factory. Normally, no adjustment is necessary as long as neither the drive clutch nor the driven clutch is removed or disassembled. However, if premature drive belt wear is experienced or if the drive belt turns over, the drive clutch/driven clutch alignment must be checked. Take the snowmobile to an authorized Arctic Cat Snowmobile dealer for this service. If not under warranty, this service is at the discretion and expense of the snowmobile owner.

## **Fuel Pump**

The fuel pump is designed to provide adequate amount of gas to the injectors at all throttle settings. If a fuel delivery problem is suspected, take the snowmobile to an authorized Arctic Cat Snowmobile dealer. If not under warranty, this service is at the discretion and expense of the snowmobile owner.

## **Shock Absorbers**

Each shock absorber should be visibly checked weekly for fluid leakage, cracks or breaks in the lower case, or a bent plunger. If any one of these conditions is detected, replacement is necessary. Take the snowmobile to an authorized Arctic Cat Snowmobile dealer for this service. If not under warranty, this service is at the discretion and expense of the snowmobile owner.

## **Standard-Lug Track**

Accelerated wear strip wear caused by operating on ice or hard-packed snow conditions is NOT covered under Arctic Cat Inc. warranty policy.

## **Track Studs**

■ **NOTE:** Stud or hooker plate installation will void track and tunnel warranty.

■ **NOTE:** Arctic Cat does not recommend studding a track with a 38 mm (1.5 inch) lug or greater.

■ **NOTE:** Stud installation can be performed by the snowmobile owner if qualified to do so. If the owner does not feel qualified, take the snowmobile to an authorized Arctic Cat Snowmobile dealer for this service. This service is at the discretion and expense of the snowmobile owner.

### **⚠ WARNING**

**When installing studs on a single-ply track, it is important to use Arctic Cat-approved studs (proper head diameter). If approved studs (proper head diameter) are not used, studs could tear free of the track causing possible injury or even death. Consult an authorized Arctic Cat Snowmobile dealer for information.**

For proper installation, use the following procedure:

1. Using a Stud Template, mark the desired stud pattern to be used.
2. Using the proper-sized stud hole drill bit, drill out the stud holes.
3. Push the stud through the hole from inside the track; then place the domed support plate and lock nut on the exposed stud.
4. Using a wrench to secure the stud, tighten the lock nut on the exposed stud.

It is also recommended that whenever studs are installed on a track, carbide wear bars should be installed on the skis. Carbide wear bars complement the track studs to balance steering control under these conditions. The length of the carbide on the wear bars should be proportionate to the number of track studs (i.e. small number of track studs = short length of carbide; many track studs = long length of carbide). The proper proportion between the number of studs and carbide length on the wear bar will maintain steering balance.

### **WARNING**

**Always balance the snowmobile with the proper proportion between the number of studs and carbide length on the wear bars. Do not “over drive” conditions; use common sense in all operating conditions.**

### **CAUTION**

**Do not use studs that are more than 9.525 mm (0.375 in.) longer than the track lug height.**

### **WARNING**

**Do not operate a snowmobile with loose studs as they may be thrown from the track. Always use a shielded safety stand whenever performing any maintenance or adjustments.**

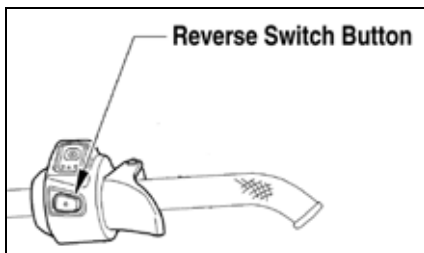
### **WARNING**

**DO NOT stand behind the snowmobile or near the rotating track. NEVER run the track at high speed when the track is suspended.**

## **Reverse Operation**

The reverse function offers the operator the convenience of being able to back up the snowmobile rather than having to turn the snowmobile around by hand.

## **Shifting into Reverse**



741-438A

1. Always warm up the engine for 2-3 minutes prior to shifting into reverse. The reverse function is canceled when engine temperature is below or above normal operating range.
2. Shift only with the engine at idle RPM and the snowmobile completely stopped. The reverse function will not engage if engine is above 3000 RPM.
3. Upon pressing the reverse switch button, the reverse function will make up to three attempts to engage into reverse. If the function is not completed after the third attempt, the engine will shut down.

### **CAUTION**

**Never shift into reverse while the snowmobile is moving forward as it is hard on the driven clutch torque bracket and the cam rollers.**

## **Operating in Reverse**

### **CAUTION**

**Never engage the electric starter or pull the recoil starter rope when the engine is running or when operating in reverse. Damage to the engine and/or either the electric start or recoil start system will occur.**

1. When reverse is engaged, a reverse icon will illuminate in the speedometer/tachometer and a reverse alarm sounds.

2. The reverse function will cancel if operated in reverse longer than 45 seconds. Whenever the reverse function has been canceled, the engine must be run in the forward mode for a minimum of 60 seconds at 2000 RPM before the reverse function can be used again.

### **WARNING**

**Do not use high speed when backing up. Control could be lost and injury could occur.**

■ **NOTE:** While operating in reverse, a “rev-limiter” will activate at 6000 RPM.

3. To shift into forward, stop the snowmobile and allow the engine to idle (under 3000 RPM); then press the reverse button and release. The forward selection will be complete.
4. After shifting from reverse to forward (or from forward to reverse), apply the throttle slowly and evenly to allow the driven clutch to engage properly.
5. The reverse function is canceled whenever the engine is shut off.

### **CAUTION**

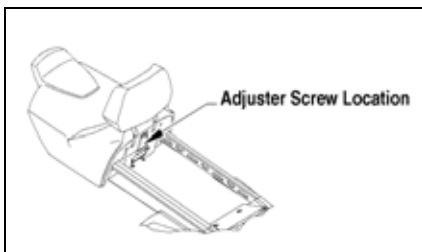
**After reversing in deep powder snow conditions, make sure the snowflap does not become “caught up” in the track. Track and/or snowflap damage may occur.**

## **Adjustable/Movable Backrest**

### **Lynx 2000 LT**

The backrest is designed for maximum comfort and safety. When riding double, the backrest must be in the passenger seat position.

To change the height of the backrest, loosen the adjuster screw, move the backrest up or down to the desired position, and tighten the adjuster screw to lock the backrest in place.



744-610A

When riding single, the backrest can be moved to the forward seat position.

### **WARNING**

**Moving the backrest to the forward seat position limits the seating capacity to one person only.**

To move the backrest, loosen, but do not remove, the cap screw at the rear of seat, install/adjust the passenger seat, and tighten the cap screw securely.

■ **NOTE:** If moving the backrest to the forward seat position, the passenger seat must be removed.

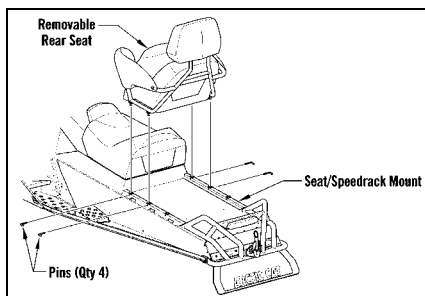
## **Removable Rear Seat Bearcat 2000 XT**

These snowmobiles are equipped with a removable rear seat to allow for additional cargo space when no passenger is being carried.

■ **NOTE:** If additional cargo is being added, maximum weight on the snowmobile (operator/passenger/cargo) should not exceed the maximum limitation set for each snowmobile. See the chart in the Overload Springs portion of the Suspension sub-section of the Maintenance section. Also, the overload springs should be engaged.

To remove the rear seat, use the following procedure:

1. Remove the four pins securing the rear seat to the seat/Speedrack mount.



743-329A

2. Lift on the back of the rear seat and move it rearward to remove it from the mount.

To install the rear seat, use the following procedure:

1. Place the rear seat into position on the mount making sure the four pin holes are properly aligned with the mounting location on mount.
2. Install the four pins making sure they are properly seated.

### **⚠ WARNING**

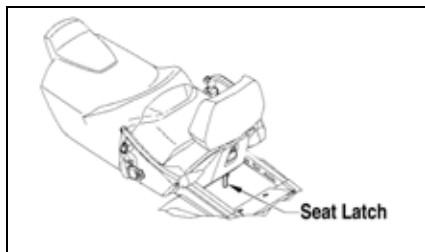
**Make sure the rear seat is securely locked in place with the pins before carrying a passenger or personal injury may result.**

## **Lynx 2000 LT**

These snowmobiles are equipped with a removable rear seat to allow for additional cargo space when no passenger is being carried.

■ **NOTE:** If additional cargo is being added, maximum weight on the snowmobile (operator/passenger/cargo) should not exceed the maximum limitation set for each snowmobile. See the chart in the Overload Springs portion of the Suspension sub-section of the Maintenance section. Also, the overload springs should be engaged.

To remove the rear seat, rotate the seat latch either clockwise or counterclockwise and hold it in that position; then lift and remove the seat from the tunnel.



742-593B

To install the seat, use the following procedure:

1. Place the seat into position on the tunnel.
2. Rotate the seat latch either clockwise or counterclockwise and hold it in that position; then slide the seat forward, allow it to settle into position, and release the latch to lock the seat securely.

### **⚠ WARNING**

**Make sure the rear seat is securely locked in place before carrying a passenger or personal injury may result.**

## **Towing**

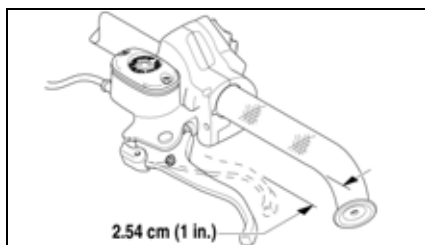
If the snowmobile is to be towed by another snowmobile, do not tow using the loops in the skis. The tow rope should be attached to the spindles.

# Operating Instructions

## Starting and Stopping Engine

It is imperative that the brake system be checked for wear and proper operation and that all safety checks found in the accompanying Snowmobile Safety Handbook be performed before attempting to start the engine. **Also, be sure the correct carburetor main jets for the operating temperature, altitude, and gasoline are being used.** After the engine has been started, check the headlights (high and low beam), taillight, and brake light to be sure they are working properly and adjusted correctly. Make sure all lights are clean to provide maximum illumination. The headlight and taillight must be clean and must be illuminated whenever the engine is running.

1. Test the operation of the brake system by compressing the brake lever. The brake lever must feel firm when compressed; then while holding the brake lever in the compressed position, measure the distance between the brake lever and the handlebar. The distance must be greater than 2.54 cm (1 in.).



741-328C

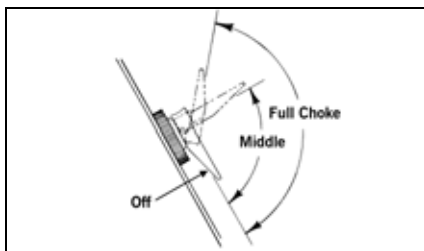
2. Check the fluid level in the reservoir. The brake fluid level must be visible in the sight glass. Add Arctic Cat-approved brake fluid as necessary.

■ **NOTE:** If the sight glass appears dark, there is a sufficient amount of fluid in the reservoir.

### **WARNING**

Do not start the engine if the brake system is not functioning properly. Service the brake system or have it properly repaired prior to operating the snowmobile. Serious personal injury or even death may occur if the brake system is not operating properly.

3. Test the throttle control lever by completely compressing and releasing it several times. The lever **MUST** return to the idle position quickly and completely.
4. Move the emergency stop switch to the UP or RUN position.
5. Insert key into ignition switch; then rotate key to the RUN position.
6. For a cold engine, move the choke lever to the full-choke position. If the engine is warm, choking is normally not necessary.



0725-001

■ **NOTE:** When the engine is being started with aid of the choke, **DO NOT COMPRESS THE THROTTLE CONTROL LEVER.** If the throttle control lever is compressed, the engine will not start because the gas/air mixture will be too lean. To start a warm engine, however, the throttle control lever may have to be compressed slightly.

7. If using the recoil, pull the recoil handle slowly until resistance is felt; then give a short quick pull. Repeat until the engine starts.

■ **NOTE:** In extremely cold weather, pull the recoil handle slowly two to three times to begin the starting procedure.

### **CAUTION**

To avoid damaging the recoil starter, **DO NOT** pull the recoil rope to its limit or release the recoil handle from an extended position. Allow the rope to rewind slowly.

■ **NOTE:** Rotate the key to the **START** position; then when the engine starts, release the key.

### **CAUTION**

**Do not continuously run the starter for more than 5 seconds at a time.**

8. When the engine starts, allow it to warm up for approximately 30 seconds with the choke lever in full-choke position. After the 30-second warm-up, move the choke lever to the middle position. The choke lever should be moved to the OFF position when engine is warm. Slight throttle control lever compression may be necessary after the engine starts and during warm-up. Idle the engine several minutes until the engine has reached normal operating temperature.

■ **NOTE:** When a cold engine is being started, **DO NOT COMPRESS THE THROTTLE CONTROL LEVER**. If the throttle control lever is compressed, the engine will not start because the fuel/air mixture will be too lean.

### **CAUTION**

**It is extremely important that the engine is properly warmed up before subjecting the engine to high speed operation or heavy loads. The engine should be allowed to idle at least 3-4 minutes before it is operated at more than 1/2 throttle. In extremely cold conditions, the warm-up time will be longer. Cold seizure and piston scuffing caused by insufficient warm-up will not be covered by warranty. Also, do not idle the engine for excessively long periods of time.**

9. To shut off the engine, turn the ignition key to the OFF position or push the emergency stop switch to the DOWN position.

### **CAUTION**

**Always turn the ignition switch key to the OFF position when the snowmobile is not being used. Leaving the ignition switch in the ON position will result in discharging the battery and possible damage to the battery.**

## **Braking**

The following items are items that the operator must be familiar with when operating this snowmobile and its hydraulic brake system. Important additional information on the proper maintenance of the brake system is found in the Maintenance section.

1. Use the brakes wisely. Each time the brakes are applied in all hydraulic brake systems (including automotive applications), heat is transferred to the brake fluid. The amount of heat transferred during high speed stops and/or repetitive use may be high enough to boil the brake fluid and cause the brakes to either fade or may cause an unexpected loss of brakes.

If this occurs, the brake fluid requires a cool-down period before the brakes will again function properly. This cool-down period will vary depending upon the ambient air temperature and the temperature of the brake fluid. If loss of brakes has occurred because of high fluid temperatures, do not operate the snowmobile until the cool-down period has expired and brake lever firmness has returned.



### **WARNING**

**Excessive, repetitive use of the hydraulic brake for high speed stops will cause overheating of the brake fluid and premature brake pad wear which will result in an unexpected loss of brakes.**

2. Be sure to maintain the brake fluid at the proper level and take care not to get any moisture in the system as moisture in the brake fluid lowers the boiling point. If the brake fluid is ever boiled (by high speed stops or repetitive use) or if moisture is allowed to enter the system, it must be changed. Never substitute or mix different types or grades of brake fluid.

### **WARNING**

**Use only Arctic Cat-approved DOT 4 brake fluid. Never substitute or mix different types or grades of brake fluid. Brake loss can result. Check brake fluid level and pad wear before each use. Brake loss can result in severe injury or even death.**

3. Never ride the brake. Even maintaining minimal pressure on the brake lever will cause the brake pads to drag on the disc and may overheat the brake fluid.
4. The brake lever lock is not a parking brake and should not be applied for periods exceeding 5 minutes. NEVER OPERATE THE SNOWMOBILE WITH THE BRAKE LEVER LOCK ENGAGED.

### **WARNING**

**The brake lever lock is not a parking brake and should not be applied for periods exceeding 5 minutes. The brake lever lock maintains the brake lever in the compressed position and maintains pressure against the brake disc; however, after a period of time, the pressure applied to the brake disc may relax below the amount required to hold the snowmobile stationary.**

5. Pumping the brake lever is permissible; however, if pumping the brake lever more than twice is necessary to obtain the necessary stopping power, immediately take the snowmobile to an authorized Arctic Cat Snowmobile dealer for service. If not under warranty, this service is at the discretion and expense of the snowmobile owner.

6. When new brake pads are installed, a "burnishing" process is required. Drive the snowmobile slowly and compress the brake lever several times until the pads just start to heat up; then allow them to thoroughly cool down. This process stabilizes the pad material and extends the life of the pads.

## **Emergency Stopping**

There are several methods of stopping or slowing the snowmobile under a variety of situations. Identified in the following chart are the ways a snowmobile may be brought to a stop and the effectiveness under normal conditions.

| Item                             | Function                    | Condition |
|----------------------------------|-----------------------------|-----------|
| Emergency Stop Switch            | Interrupts ignition circuit | ALL       |
| Throttle/Ignition Monitor Switch | Interrupts ignition circuit | ALL       |
| Ignition Switch                  | Interrupts ignition circuit | ALL       |
| Brake                            | Slows the drive system      | ALL       |

## **Throttle/Ignition Monitor Switch**

The throttle control is equipped with a monitor switch for safety purposes which will stop the engine when a loss of return spring force occurs. If ice forms in the throttle system or if there is some other malfunction of the throttle system resulting in a loss of return spring force, the monitor switch will stop the engine when the throttle control lever is released.

### **WARNING**

**If any malfunction of the throttle system occurs (such as freezing in fluffy snow) and the monitor switch does not shut off the engine, press down on the emergency stop switch IMMEDIATELY to stop the engine. DO NOT start the engine until the malfunction in the throttle system has been located and corrected.**

If the snowmobile engine stops abruptly when the throttle control lever is released and the activation of the monitor switch is suspected, use the following procedure:

1. Rotate the ignition key to the OFF position.

2. Remove ice and snow from the throttle system and wait 5-10 minutes for the engine heat to thaw ice from the throttle system.
3. Test the throttle control lever by compressing and releasing it several times. The lever **MUST** return to the idle position quickly and completely.

■ **NOTE:** If the throttle control lever operates properly and the engine does not start, compress the throttle lever slightly (approximately 1/8 throttle) and try starting the engine. If the engine now starts and stops when the throttle lever is released, take the snowmobile to an authorized Arctic Cat Snowmobile dealer for service. If not under warranty, this service is at the discretion and expense of the snowmobile owner.

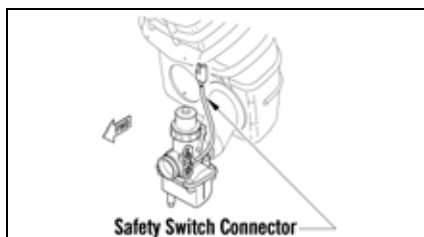
### **WARNING**

If the throttle control lever does not work properly, **DO NOT ATTEMPT TO START THE ENGINE.**

4. If the throttle control lever operates properly, rotate the ignition key to the RUN position and go through normal starting procedures.

■ **NOTE:** If the throttle control lever operates properly and the engine does not start, either a malfunctioning monitor switch or a misadjusted magnetic carburetor switch may be the problem. Take the snowmobile to an authorized Arctic Cat Snowmobile dealer for service. If not under warranty, this service is at the discretion and expense of the snowmobile owner. However, if a dire emergency exists wherein the engine must be started, disconnect the carburetor safety switch connectors. If disconnection of the carburetor safety switch connectors is needed to start the engine, take the snowmobile to an authorized Arctic Cat Snowmobile dealer for service as soon as possible. If not under warranty, this service is at the discretion and expense of the snowmobile owner.

■ **NOTE:** To access the switch connectors, open the left-side access panel and remove the belt guard; then locate the switch on the left side of the carburetor and trace the wire to the connector.



0743-448

## **Varying Altitude Operation**

Operating a snowmobile at varying altitudes requires changes in performance components. These changes affect drive train components and carburetion components.

The altitude information decal is incorporated into the Carburetor Jet Chart decal on the belt guard.

■ **NOTE:** Just as important as calibrating the snowmobile for higher altitudes is recalibrating the snowmobile when going to lower altitudes. Always consult the altitude decal.

### **CAUTION**

Carefully follow the Carburetor Jet Chart recommendations for proper altitude calibration.

■ **NOTE:** Carburetion and drive train changes can be made by the snowmobile owner if qualified to do so. If the owner does not feel qualified, take the snowmobile to an authorized Arctic Cat Snowmobile dealer for this service. This service is at the discretion and expense of the snowmobile owner.

# Lubrication

## Gear Case

It is very important that the gear case be flushed and the lubricant be replaced after each season of use. Arctic Cat recommends that the flushing and replacing be done prior to off-season storage.

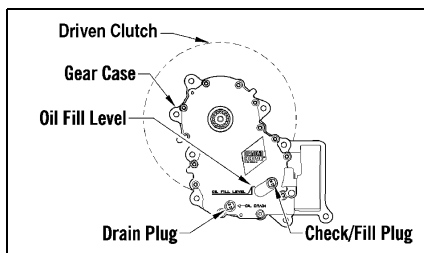
■ **NOTE:** Flushing the gear case and replacing the lubricant can be done by the snowmobile owner if qualified to do so. If the owner does not feel qualified, take the snowmobile to an authorized Arctic Cat Snowmobile dealer for this service. This service is at the discretion and expense of the snowmobile owner.

To flush the gear case and replace the lubricant, use the following procedure:

1. Open the left-side access panel; then remove the panel and the belt guard.
2. Remove the drive belt: then remove the driven clutch.

■ **NOTE:** If excessive oil deposits are noticed, take the snowmobile to an authorized Arctic Cat Snowmobile dealer for service. If not under warranty, this service is at the discretion and expense of the snowmobile owner.

3. Using Handlebar Stand (p/n 5639-152) or a suitable substitute, tip the snowmobile onto its right side.
4. Remove the drain plug from the gear case; then install a drain adapter fitting with hose into the drain plug hole.



0743-456

■ **NOTE:** To aid in draining the lubricant, it is advisable to fashion a drain adapter by acquiring a fitting — Gear Case Drain Fitting (p/n 0644-552) — and a length of 9,5 mm (3/8-in.) hose.

5. Tip the snowmobile back to the upright position; then place a drain pan on the floor next to the drain hose and tip the snowmobile toward its left side far enough to allow the lubricant to drain from the gear case into the drain pan.
6. Secure the snowmobile in this position until the lubricant is completely drained.
7. When the lubricant has completely drained from the gear case, tip the snowmobile back to the upright position, remove the drain adapter, and install and securely tighten the drain plug; then remove the check/fill plug.
8. Pour Arctic Cat ACT Drive Flush Fluid (p/n 4639-333) into the check/fill hole; then install the plug. Tighten securely.

## CAUTION

**Do not add more or less than the recommended amount (6 fl oz) of flush fluid to the gear case.**

9. Install the driven clutch; then install the drive belt (see Drive Belt subsection in the Maintenance section) and the belt guard.
10. Install the left-side access panel; then close the access panel.
11. Position the tips of the skis against a wall; then using a shielded safety stand, raise the rear of the snowmobile off the floor making sure the track is free to rotate.

## WARNING

**The tips of the skis must be positioned against a wall or similar object.**

## WARNING

**DO NOT stand behind the snowmobile or near the rotating track. NEVER run the track at high speed when the track is suspended.**

12. Start the engine and accelerate slightly. Use only enough throttle to turn the track several revolutions. SHUT ENGINE OFF.

13. Open the left-side access panel; then remove the panel and the belt guard.
14. Remove the drive belt (see Drive Belt sub-section in the Maintenance section); then remove the driven clutch.
15. Using Handlebar Stand (p/n 5639-152) or a suitable substitute, tip the snowmobile onto its right side.
16. Remove the drain plug from the gear case; then install the drain adapter fitting with hose into the drain plug hole.
17. Tip the snowmobile back to the upright position; then place a drain pan on the floor next to the drain hose and tip the snowmobile toward its left side far enough to allow the flush fluid to drain from the gear case into the drain pan.
18. Secure the snowmobile in this position until the flush fluid is completely drained.

### CAUTION

**It is critical that all of the flush fluid be drained from the gear case prior to filling with new lubricant.**

19. When the fluid has completely drained from the gear case, tip the snowmobile back to the upright position, remove the drain adapter, and install and securely tighten the drain plug; then remove the check/fill plug.

### CAUTION

**The correct lubricant to use in the gear case is Arctic Cat Synthetic ACT Gear Case Fluid (see chart). Any substitute may cause serious damage to the drive system.**

20. Pour 444 ml (15 fl oz) of Arctic Cat Synthetic ACT Gear Case Fluid into the check/fill hole; then install the plug. Tighten securely.

### CAUTION

**Do not add more or less than the recommended amount of lubricant to the gear case or damage to the gear case will occur. Oil level should be at the Oil Fill Level on the gear case cover.**

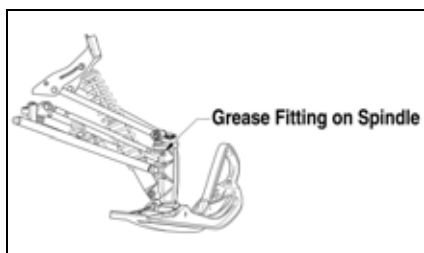
21. Install the driven clutch; then install the drive belt (see Drive Belt sub-section in the Maintenance section) and the belt guard.

22. Install the left-side access panel; then close the access panel.

## Front Suspension

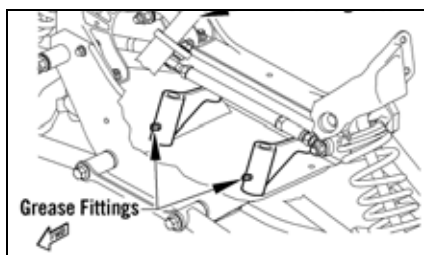
■ **NOTE:** Arctic Cat recommends that **Arctic Cat Low-Temp Grease (p/n 7639-517)** be used for this procedure.

It is very important that the front suspension is greased on a monthly basis using low-temperature grease. The front suspension should also be greased after trailering the snowmobile on an open trailer. Pump grease into the spindle grease fitting (both sides) until grease is noted coming out of the top and bottom of the spindle. Wipe excess grease from the spindle.



741-335A

Turn the handlebar to the right; then from the right side, pump grease into the steering arms until grease is noted coming out of either end of the arms. Wipe excess grease from the arms.



0741-440

## Rear Suspension

This procedure should be done every 40 operating hours.

■ **NOTE:** Arctic Cat recommends that **Arctic Cat Low-Temp Grease (p/n 7639-517)** be used for this procedure.

1. Shut engine off and wait for all moving parts to stop.
2. Lubricate the grease fittings with low-temperature grease.

# Maintenance

| Periodic Maintenance Checklist                        |                     |        |                                                                                                                                                                     |
|-------------------------------------------------------|---------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Item                                                  | Interval            | Page   | Remarks                                                                                                                                                             |
| Battery                                               | Daily               | 8, 25  | Check for proper charge and tight connections                                                                                                                       |
| Brake System                                          | Daily               | 28     | Check for binding, leakage, and proper operation; lever firmness, travel, caliper, disc, and pads                                                                   |
| Drive Belt                                            | Daily<br>Monthly    | 31     | Check for wear, cracks, and fraying<br>Check length and width dimensions                                                                                            |
| Headlight & Taillight/Brake Light                     | Daily               | 35     | Check for proper operation and cleanliness                                                                                                                          |
| Hoses                                                 | Daily               | —      | Check for damage, leakage, and wear                                                                                                                                 |
| Oil System                                            | Daily               | —      | Check for leakage, damage, and injection/engine oil level                                                                                                           |
| Rail Wear Strips                                      | Daily<br>Weekly     | 39     | Check for wear and damage                                                                                                                                           |
| Ski Wear Bars                                         | Daily               | 38     | Check for wear and damage                                                                                                                                           |
| Steering System                                       | Daily               | —      | Check for proper operation, tightness of bolts, and binding                                                                                                         |
| Stop Switch                                           | Daily               | —      | Check for proper operation                                                                                                                                          |
| Throttle Control System                               | Daily               | 16     | Check for binding, sticking, proper operation, throttle cable tension, and wear                                                                                     |
| Electrical Wiring                                     | Weekly              | —      | Check for wear, damage, and tight connections                                                                                                                       |
| Exhaust System                                        | Weekly              | 8      | Check for damage, leakage, and obstructions                                                                                                                         |
| Fuel System — Tank, Pump, In-Line Filter, & Vent Hose | Weekly              | —      | Check for damage, wear, obstructions, and leakage                                                                                                                   |
| Nuts, Bolts, Fasteners                                | Weekly              | —      | Check tightness                                                                                                                                                     |
| Shock Absorbers                                       | Weekly              | 10, 34 | Check for fluid leakage and damage                                                                                                                                  |
| Suspension                                            | Weekly              | 34     | Check for damage, loose components, and proper adjustment                                                                                                           |
| Track Tension/Alignment                               | Weekly              | 32, 33 | Check/adjust as necessary                                                                                                                                           |
| Wires & Cables                                        | Weekly              | —      | Check for wear, damage, and fraying                                                                                                                                 |
| Drive Clutch/Driven Clutch                            | Monthly             | 9      | Check for damage, binding, and wear/remove drive belt, clean drive clutch/driven clutch with compressed air, and clean sheaves with suitable parts-cleaning solvent |
| Front & Rear Suspension                               | Monthly             | 19     | Grease                                                                                                                                                              |
| Heat Exchangers                                       | Monthly             | —      | Check for wear, leakage, and damage                                                                                                                                 |
| Transmission/Chain Case/Gear Case                     | Seasonal            | 18     | Flush and change drive fluid prior to storage                                                                                                                       |
| Fuel Filter                                           | 5000 Mi/<br>2 Years | —      | Replace                                                                                                                                                             |

## California Proposition 65



## WARNING

The Engine Exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

The longevity and safety of the snowmobile can be increased by making periodic checks of the items in the preceding checklist.

If, at any time, abnormal noises, vibrations, or improper working conditions of any component of this snowmobile are detected, **DO NOT OPERATE THE SNOWMOBILE**. Take the snowmobile to an authorized Arctic Cat Snowmobile dealer for inspection and adjustment or repair. If not under warranty, this service is at the discretion and expense of the snowmobile owner.

The snowmobile should be taken to an authorized Arctic Cat Snowmobile dealer at the end of each snowmobiling season for general inspection and for off-season storage servicing. This inspection and servicing is at the expense of the snowmobile owner.

## Fuel System

### **WARNING**

Whenever any maintenance or inspection is made on the fuel system in which there may be fuel leakage, there should be no welding, smoking, open flames, etc., in the area.

### **In-Line Fuel Filter**

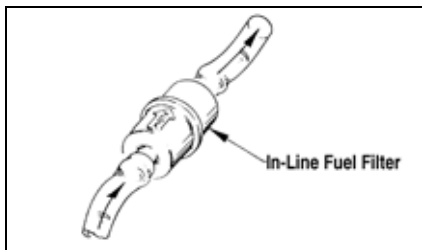
Arctic Cat recommends that the in-line fuel filter be checked weekly. The in-line fuel filter is located just in front of the fuel pump inlet fitting. The filter must be clean to allow the fuel hose to transmit the amount of gasoline required.

If the in-line fuel filter is obstructed, gasoline flow will be restricted; therefore, the filter must be replaced. To remove and install the in-line fuel filter, use the following procedure:

1. Pinch off the fuel hose between the gas tank and fuel filter.
2. Remove and discard the clamps; then pry the fuel hoses off the in-line fuel filter and remove the filter.

■ **NOTE: The in-line fuel filter must be replaced if obstructed. Filters are available from an authorized Arctic Cat Snowmobile dealer.**

3. Install the new in-line fuel filter (if necessary) in the fuel hose so the arrow on the filter points toward the fuel pump. Make sure the fuel hoses fit tightly on the filter. If the existing fuel hose does not fit tightly on the filter, cut 6 mm (1/4 in.) from the end of the fuel hose; then install on the filter and secure with new clamps.



728-272B

### **WARNING**

The fuel hoses must fit tightly on the fuel filter. If the fuel hose length doesn't permit this procedure, replace the fuel hose. Also, after installing the fuel hoses on the filter, check to be sure that the fuel hoses do not contact any hot or rotating components.

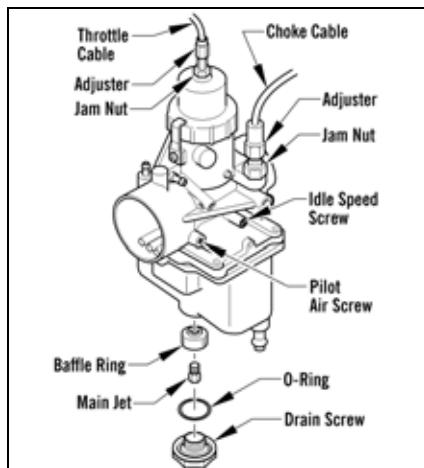
### **Gasoline Additives**

Fuel de-icer can be used for all models. Also, periodic use of an injector cleaner is recommended especially in the last tank of gasoline before storage. Arctic Cat Fuel Stabilizer (p/n 0436-907) should also be added to the last tank of gasoline before storage.

### **Fuel Pickup Valves**

If ever there is a restricted fuel flow and a pickup valve is suspected, take the snowmobile to an authorized Arctic Cat Snowmobile dealer for this service. If not under warranty, this service is at the discretion and expense of the snowmobile owner.

## Adjusting/Calibrating Carburetors



0745-141

The carburetors have been adjusted/calibrated at the factory for average riding conditions; however, altitude, temperature, and general wear may necessitate certain carburetor adjustments.

### CAUTION

For information on altitude operation, see Varying Altitude Operation subsection in the Operating Instructions section.

Carburetor adjustments critically affect engine performance; therefore, the following three external adjustments and two internal calibrations can be made on each carburetor.

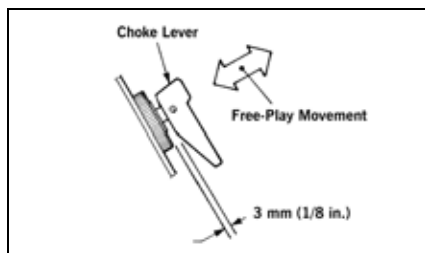
### CAUTION

Make sure to perform these adjustment/calibration procedures on both carburetors.

■ **NOTE:** The following external carburetor adjustments may be done by the snowmobile owner if qualified to do so. If the owner does not feel qualified, take the snowmobile to an authorized Arctic Cat Snowmobile dealer for this service. This service is at the discretion and expense of the snowmobile owner.

## Adjusting Choke Cable (External)

1. Be sure the ignition switch key is in the OFF position and the brake lever lock is set.
2. Slide the insulators away from the adjusters; then loosen the jam nut securing each choke cable adjuster. Rotate each choke cable adjuster clockwise until free-play is noted in the choke lever.
3. Slowly rotate one choke cable adjuster counterclockwise while checking the choke lever for free-play. As soon as all free-play has been removed from the end of the lever, stop rotating the adjuster.
4. With free-play removed from the lever, slowly rotate each choke cable adjuster once again clockwise while checking the choke cable lever for free-play. Adjust until 3 mm (1/8 in.) free-play between front bottom edge of lever and housing is attained. Securely tighten the adjuster jam nut; then slide the insulators onto the adjusters.



732-848B

■ **NOTE:** If a carburetor choke cable is adjusted too tight when the engine reaches operating temperature, the air/fuel mixture will be incorrect and the engine will idle poorly and may operate only on one cylinder.

## Synchronizing Throttle Cable/Piston Valves (External)

1. Remove the air-intake silencer boots from the silencer to access the intake bores.
2. Rotate the idle speed screws counterclockwise until all spring tension is removed.

3. Slide the insulators away from the adjusters; then loosen the jam nut securing each throttle cable adjuster. Rotate each adjuster clockwise until each piston valve bottoms in the piston valve bore.
4. In turn on each carburetor, place a finger lightly against the side of the piston valve; then rotate the carburetor adjuster counterclockwise until slight upward movement of the valve is noted.
5. Check to make sure the valves start to open at the exact same moment by placing a thumb and finger against the valves; then lightly compress the throttle lever.

■ **NOTE:** If an individual piston valve starts to open before another, rotate the adjuster on the valve which is lifting first clockwise, just enough to synchronize the valves. Recheck by repeating steps 2-5.

6. With the piston valves synchronized, tighten the adjuster jam nuts securely; then slide the insulators onto the adjusters.

■ **NOTE:** There must be free-play in the throttle lever.

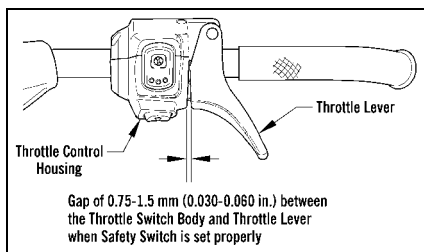
### **WARNING**

Be sure to tighten the adjuster jam nuts securely. If an adjuster jam nut is not tightened, the adjuster can rotate out of the carburetor cap causing the piston valve not to return to the full-closed position.

7. In turn on each carburetor, place a finger against the piston valve. Rotate the idle speed screw clockwise until it contacts the valve.
8. Compress the throttle lever to the full-open position; then rotate each idle speed screw clockwise two complete turns. Release the throttle lever.

■ **NOTE:** There must be 0.75-1.5 mm (0.030-0.060 in.) free-play between the throttle lever and the control housing.

9. At this point, there must be 0.75-1.5 mm (0.030-0.060 in.) of cable free-play gap in the throttle lever. If there is no cable free-play in the throttle lever, the throttle safety switches will not function properly, and the engine will cut out in the idle position.



0741-518

■ **NOTE:** If cable free-play gap is not correct, rotate each adjuster an equal amount until recommended free-play is achieved. Each piston valve must be resting against the tip of its idle speed screw.

■ **NOTE:** If throttle cable free-play is incorrect, the carburetor safety switches will be activated prematurely and the engine will not start.

### **Fine-Tuning Pilot Air Screws and Idle Speed Screws (External)**

1. While counting the rotations, carefully rotate the pilot air screws clockwise until lightly seated.

### **CAUTION**

Do not force a pilot air screw when rotating it clockwise; damage to the pilot air screw needle tip will result.

2. Rotate the pilot air screws counterclockwise the exact number of rotations  $\pm 1/4$  turn from the seated position as an initial setting.
3. Install the air-intake silencer boots taking care that the boots are properly positioned and that the boots are not "folded" in the air-intake silencer causing a restriction of air flow.

4. With the snowmobile on a shielded safety stand, start the engine, release the brake lever lock, and thoroughly warm up the engine.

**⚠ WARNING**

**DO NOT stand behind the snowmobile or near the rotating track. NEVER run the track at high speed when the track is suspended.**

■ **NOTE:** Make engine idle adjustment only after the engine has reached running temperature. Since the idle speed screws have not been fine-tuned, slight throttle pressure may be necessary to keep the engine running. Allow engine to warm up for 2-3 minutes.

5. After the engine has been thoroughly warmed up, fine-tune the pilot air screws (equally) and the idle speed screws (equally) until the engine runs smoothly.

■ **NOTE:** Engine idle should be within a range of 1600-1700 RPM.

**⚠ WARNING**

If a tachometer is not available, care must be taken not to adjust engine idle speed too high.

**CAUTION**

It is important that the pilot air screws are adjusted equally and that the idle speed screws are adjusted equally.

6. Test the throttle control lever by compressing and releasing it several times. The lever must return to the idle position quickly and completely.

**⚠ WARNING**

**DO NOT operate the snowmobile when any component in the throttle system is damaged, frayed, kinked, worn, or improperly adjusted. If the snowmobile is operated when the throttle system is not functioning properly, personal injury could result.**

## **Calibrating Main Jets/ Pilot Jets/Jet Needle E- Clips (Internal)**

Altitude, temperature, and the use of oxygenated gasoline affect the carburetion needed for optimum engine performance. The carburetor main jets must be changed in conjunction with changes in operating altitude, oxygenated gasoline usage, and temperature. Also, the pilot jets and jet needle E-clip positions may have to be changed with changes in operating altitude. To change pilot jets and E-clip positions, the carburetors must be removed and disassembled (float chamber, etc.). Arctic Cat highly recommends that this service be done by an authorized Arctic Cat Snowmobile dealer only.

**CAUTION**

**For information on altitude operation, see Varying Altitude Operation subsection in this manual.**

■ **NOTE:** The following internal carburetor calibrations may be done by the snowmobile owner if qualified to do so. If the owner does not feel qualified, take the snowmobile to an authorized Arctic Cat Snowmobile dealer for this service. This service is at the discretion and expense of the snowmobile owner.

As the ambient temperature rises or as the snowmobile is operated at a higher altitude, the main jets must be replaced with leaner main jets. The original equipment (production) main jets may need to be changed (depending on the type of gasoline you are using, your operating altitude, and temperature). A Carburetor Jet Chart decal is located on the belt guard of the snowmobile. It should be noted that when selecting the proper main jets, it is better to be too rich rather than too lean. To change carburetor main jets, use the following procedure:

■ **NOTE:** Refer to Illustration 0745-141 at the beginning of this section for location of components.

## **WARNING**

Whenever any maintenance is performed on the fuel system, there should be no welding, smoking, open flames, etc., in the area.

## **CAUTION**

Use only GENUINE Mikuni brass main jets. Also, if using an oxygenated gasoline (up to 10% ethanol), the carburetor main jet must be one size larger than the main jet required for regular unleaded gasoline.

## **CAUTION**

A main jet which is too small will cause severe engine damage. Engine damage caused by lean jetting WILL NOT be covered by Arctic Cat Inc. warranty policy.

1. Loosen each carburetor flange clamp and remove each carburetor from the intake flange and boot.
2. Remove each drain screw and O-ring from the carburetor float chamber and drain the gas into a small container or shop towels.
3. Using the main jet wrench (from the tool kit), thread the main jet out of each carburetor. Account for the baffle ring. Install the new main jet and the existing baffle ring. Tighten the main jet securely.
4. Install each drain screw and O-ring; then tighten securely.
5. Install and secure the carburetors.

## **Spark Plugs**

■ **NOTE:** Always use the recommended spark plugs in the engine. See the appropriate specifications sheet for correct spark plug gap.

Varying terrain conditions and operating usage may require spark plugs of a different heat range. For example, sustained cross-country riding will usually require colder heat-range spark plugs while trail riding or other continual slow speed operation will usually require hotter heat-range spark plugs.

1. Open the hood and remove the spark plug caps from the plugs.

2. Using a spark plug wrench, remove the plugs.
3. Install the plugs and finger-tighten.
4. Tighten the spark plugs to 25.8 N-m (19 ft-lb); then install the spark plug caps and close the hood.

## **Battery**

These sealed batteries after being in service require regular cleaning and charging in order to deliver peak performance and maximum service life. The following procedure is recommended for cleaning and maintaining sealed batteries. Always read and follow instructions provided with battery chargers and battery products.

■ **NOTE:** Battery maintenance may be done by the snowmobile owner if qualified to do so. If the owner does not feel qualified, take the snowmobile to an authorized Arctic Cat Snowmobile dealer for this service. This service is at the discretion and expense of the snowmobile owner.

## **WARNING**

Improper handling or connecting of a battery may result in severe injury including acid burns, electrical burns, or blindness as a result of an explosion. Always remove rings and watches. Any time service is performed on a battery, the following must be observed: keep sparks, open flame, cigarettes, or any other flame away. Always wear safety glasses. Protect skin and clothing when handling a battery. When servicing a battery in an enclosed space, keep the area well-ventilated.

## **WARNING**

Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

1. Remove the negative battery cable and ground wire; then remove the positive cable.

### **WARNING**

**Avoid spillage and contact with skin, eyes, and clothing.**

### **CAUTION**

**Do not charge the battery while it is in the snowmobile with the battery terminals connected.**

2. Thoroughly wash the battery with soap and water; then using a wire brush, clean the battery posts and cable ends removing all corrosive buildup. Replace damaged cables or cable ends.

**■ NOTE: If battery posts or cable ends have a build-up of white/green powder residue, apply water and baking soda to neutralize acid; then flush off with warm soapy water.**

### **CAUTION**

**Do not remove seal strip on a sealed battery.**

### **WARNING**

**Battery acid is harmful if it contacts eyes, skin, or clothing. Care must be taken whenever handling a battery.**

3. Using a multimeter, test the battery voltage. The meter must read no less than 12.8 DC Volts for a fully charged battery.
4. If the meter reads less than specified voltage, charge the battery using the following guidelines:
  - A. When using an automatic battery charger, always follow the charger manufacturer's instructions.
  - B. When using a constant-current battery charger, use the following Battery Charging Chart.

### **CAUTION**

**Never exceed the standard charging rate.**

### **WARNING**

**An overheated battery could explode causing severe injury or death. Always monitor charging times and charge rates carefully. Stop charging if the battery becomes very warm to the touch. Allow it to cool before resuming charging.**

### **Battery Charging Chart (Constant-Current Charger)**

| Battery Voltage (DC) | Charge State | Charge Time Required (at 1.5-2.0 Amps) |
|----------------------|--------------|----------------------------------------|
| 12.8-13.0            | 100%         | None                                   |
| 12.5-12.8            | 75%-100%     | 3-6 hours                              |
| 12.0-12.5            | 50%-75%      | 5-11 hours                             |
| 11.5-12.0            | 25%-50%      | 13 hours (minimum)                     |
| 11.5 or less         | 0-25%        | 20 hours (minimum)                     |

**■ NOTE: If the battery voltage is 11.5 DC Volts or less, some chargers may "cut off" and fail to charge. If this occurs, connect a fully charged booster battery in parallel (positive to positive and negative to negative) for a short period of time with the charger connected. After 10-15 minutes, disconnect the booster battery leaving the charger connected and the charger should continue to charge. If the charger "cuts off," replace the battery.**

5. After charging the battery for the specified time, remove the battery charger and allow the battery to sit for 1-2 hours.
6. Connect the multimeter and test the battery voltage. The meter should read no less than 12.8 DC Volts. If the voltage is as specified, the battery is ready for service.

**■ NOTE: If voltage in step 6 is below specifications, charge the battery an additional 1-5 hours; then retest. The battery is ready for service.**

7. Place the battery into position in the snowmobile; then coat the battery posts and cable ends with a light coat of multi-purpose grease.

## CAUTION

**Before installing the battery, make sure the ignition switch is in the OFF position.**

8. Secure the red positive cable to the positive terminal on the battery using a cap screw, lock washer, and a flat washer. Tighten securely.
9. Secure the main black negative cable and the small black negative cable to the battery using a cap screw, lock washer, and a flat washer. Tighten securely.

## CAUTION

**Connecting cables in reverse (positive to negative and negative to positive) can cause serious damage to the electrical system.**

■ **NOTE:** Ensure the harness wires and cables are routed properly as noted during removing battery procedure.

## Fuses

Fuses protect the snowmobile electrical system from overloading. If electrical parts in the snowmobile are not working, the system may have been overloaded and caused a blown fuse. Before repairing or replacing any electrical part, check the appropriate fuses. If a fuse blows (opens a circuit), all the parts of the snowmobile that use that circuit will not work.

1. Locate the fuse block; then remove the cover.



ZJ306A

Lynx 2000 LT  
Bearcat 2000 XT



IO121A

■ **NOTE:** There are spare fuses beneath the fuse block cover.

2. Remove the suspected fuse.

■ **NOTE:** Fuse function descriptions are next to the fuse contacts in the fuse block.

3. Look through the clear side of the fuse to see if the element inside is burned or separated. If it is, the fuse is blown and should be replaced with a fuse of the correct amperage rating.

## ⚠ WARNING

**Always replace a fuse with one having the same specified amperage rating. Using a fuse with a higher rating can cause severe wire damage and could start a fire.**

4. Install the fuse panel cover.

Even after replacing a fuse, it may continue to blow if the cause of the overload is not determined. If the fuse continues to blow, take the snowmobile to an authorized Arctic Cat Snowmobile dealer for service. If not under warranty, this service is at the discretion and expense of the snowmobile owner.

## Brake System

Arctic Cat recommends that the brake system (brake lever, fluid reservoir, hose, caliper, pads, and brake disc) be checked daily for fluid leakage, wear, or damage and for proper operation. Also, the brake fluid level must be checked every time before starting the engine. The brake fluid must be visible in the sight glass.

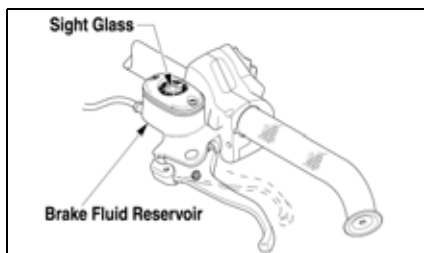
### **⚠ WARNING**

**DO NOT** operate the snowmobile when the brake lever lock is engaged or when any component in the brake system is damaged, worn, or adjusted improperly. If the snowmobile is operated and the brake system is not functioning properly, severe personal injury could result.

### Checking/Adding Brake Fluid

1. With sight glass reservoir in a level position, check the fluid level. The brake fluid level must be visible in the sight glass.

■ **NOTE:** If the sight glass appears dark, there is a sufficient amount of fluid in the reservoir.



741-328A

2. If the brake fluid is not visible in the sight glass, remove the reservoir cover and add Arctic Cat-approved DOT 4 brake fluid until the fluid is at the recommended level. Install and secure the reservoir cover. Do not allow moisture to contaminate the brake system.

### **CAUTION**

**Brake fluid is highly corrosive. Do not spill brake fluid on any surface of the snowmobile.**

### **⚠ WARNING**

**Do not overfill the brake fluid reservoir. Overfilling the reservoir may cause the brake system to hydraulically lock. Use only Arctic Cat-approved DOT 4 brake fluid. Never substitute or mix different types or grades of brake fluid. Brake loss can result. Brake loss can result in severe injury or even death.**

### Changing Brake Fluid

The brake fluid must be changed on a regular basis and whenever the brake fluid has been overheated or contaminated. The brake fluid should be changed every 1610 km (1000 miles) or at the end of the snowmobiling season, whichever occurs first. Take the snowmobile to an authorized Arctic Cat Snowmobile dealer for this service. This service is at the discretion and expense of the snowmobile owner.

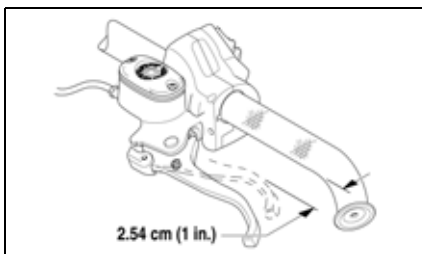
### Checking Brake Lever Travel

Before each use, check the brake lever travel using the following procedure:

1. Compress the brake lever fully.

■ **NOTE:** Do not pump the brake lever as it will produce an inaccurate reading.

2. Measure the distance between the brake lever and the handlebar. The distance must be greater than 2.54 cm (1 in.).



741-328B

3. If the resultant distance is less than specified, take the snowmobile to an authorized Arctic Cat Snowmobile dealer for service. If not under warranty, this service is at the discretion and expense of the snowmobile owner.

## **⚠ WARNING**

Do not operate the snowmobile if the compressed distance between the brake lever and the handlebar is less than 2.54 cm (1 in.). Brake loss may occur. Brake loss can result in severe personal injury.

### **Bleeding Brake System**

If the brake lever feels spongy when applied, the brake system may need to be bled. To bleed the brake, use the following procedure.

■ **NOTE:** The brake system may be bled by the snowmobile owner if qualified to do so. If the owner does not feel qualified, take the snowmobile to an authorized Arctic Cat Snowmobile dealer for this service. This service is at the discretion and expense of the snowmobile owner.

1. Remove the reservoir cover and (if necessary) fill the reservoir to the high brake fluid mark with Arctic Cat-approved DOT 4 brake fluid.

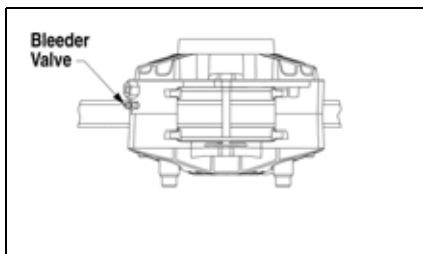
## **CAUTION**

Brake fluid is highly corrosive. Do not spill brake fluid on any surface of the snowmobile.

## **⚠ WARNING**

Use only Arctic Cat-approved DOT 4 brake fluid. Any substitute may result in a loss of brakes.

2. Slide a piece of flexible tubing over the ball of the bleeder valve and direct the other end into a container.



739-269B

3. Slowly compress the brake lever until maximum pressure is attained; then hold the lever in the compressed position to maintain pressure. Open the bleeder valve to release the fluid and air. When the fluid stops, close the bleeder valve; then release the brake lever.

4. Repeat step 3 until the brake fluid flows free of air bubbles.

■ **NOTE:** It may be necessary to refill the reservoir during the bleeding process. Never allow the brake fluid to go below the low brake fluid mark in the reservoir.

5. When the brake fluid is free of all air and the brake lever feels firm when compressed, fill the reservoir to the high brake fluid mark; then install and secure the cover. Remove the tube from the bleeder valve.

### **Checking/Changing Brake Pads**

The condition of the brake pads must be checked daily and changed if worn or damaged. To check and change the brake pads, use the following procedure.

■ **NOTE:** The brake pads may be changed by the snowmobile owner if qualified to do so. If the owner does not feel qualified, take the snowmobile to an authorized Arctic Cat Snowmobile dealer for this service. This service is at the discretion and expense of the snowmobile owner.

■ **NOTE:** When installing new brake pads, always install them as a set. Never install just one pad or use brake pads which have been used in another snowmobile.

1. Remove the brake fluid reservoir cover; then remove most of the brake fluid from the reservoir. Install the cover.

## **CAUTION**

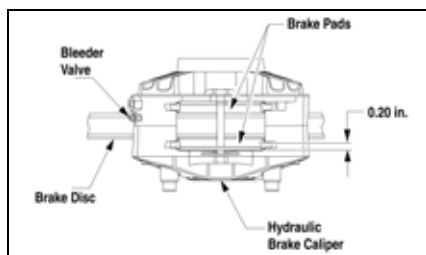
Brake fluid is highly corrosive. Do not spill brake fluid on any surface of the snowmobile.

■ **NOTE:** The above procedure will allow room for the fluid from the caliper when the pistons are pushed into the caliper for installing new brake pads. Replacing the cover will prevent fluid spillage.

2. Open the left-side access panel.
3. Remove the Torx-head screws securing the brake shield to the belt guard mount; then remove the cap screws securing the brake shield to the brake caliper.
4. Carefully move the shield out of the way; then remove the hairpin clip securing the brake pads to the caliper assembly.
5. Using a pair of pliers, pull the outer brake pad out of the caliper assembly.

■ **NOTE:** Changing one pad at a time will prevent one piston from pushing out the other piston from the caliper.

6. Measure the thickness of the brake pad. The brake pad thickness must be greater than 1 mm (0.04 in.). If the brake pad thickness is less than specified, replacement of both pads is necessary.



7. Using a flat-blade tool, slowly and carefully push the piston into the caliper.
8. Position the outer brake pad into the caliper; then install the hairpin clip into the caliper assembly.
9. Repeat steps 5-8 for the inner pad; then secure the pad with the hairpin clip.
10. Remove the reservoir cover and remove the remaining fluid; then fill the reservoir with fresh fluid and install the cover.

11. Pump the brake lever to ensure correct positioning of the brake pads and proper brake lever travel; then release.

■ **NOTE:** If brake lever travel is not within specification, bleed the brake system.

12. Remove the reservoir cover and fill the reservoir (if necessary) to the proper level with fresh brake fluid; then install the cover.
13. Secure the brake shield and the driven clutch (tightened to 69.4 N-m/ 51 ft-lb); then close and secure the left-side access panel.

■ **NOTE:** When new brake pads are installed, a “burnishing” process is required (see Burnishing Brake Pads sub-section).

## Burnishing Brake Pads

After changing brake pads, the new brake pads must be burnished to achieve full braking effectiveness. Braking distance will be extended until brake pads are properly burnished.

To properly burnish the brakes, use following procedure:

1. Choose an area sufficiently large to safely accelerate to 48-64 km/h (30-40 mph) and to brake to a stop.

■ **NOTE:** This procedure can also be accomplished using a shielded jack stand.

2. Accelerate to 30-40 mph; then compress brake lever to decelerate to a stop.

■ **NOTE:** Lightly apply the brake lever to come to an easy stop; do not over-apply brakes or “lock up” the track.

3. Repeat procedure 10-15 times allowing some cooling between stops.

■ **NOTE:** Do not repeat too soon or too aggressively as to get the brake disc “red hot.”

## **WARNING**

Do not attempt sudden stops or put yourself into a situation where a sudden stop will be required until the brake pads are properly burnished.

■ **NOTE:** This procedure stabilizes the pad material and extends the life of the pads.

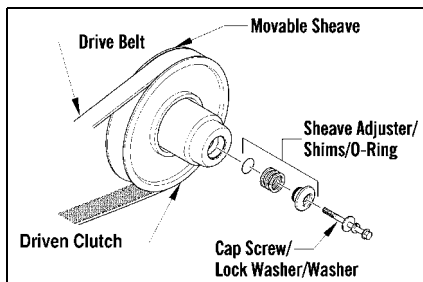
## **Drive Belt**

■ **NOTE:** Changing a drive belt can be done by the snowmobile owner if qualified to do so. If the owner does not feel qualified, take the snowmobile to an authorized Arctic Cat Snowmobile dealer for this service. This service is at the discretion and expense of the snowmobile owner.

■ **NOTE:** If a new drive belt is being installed, see Drive Belt Break-In sub-section in the General Information section.

## **Removing**

1. Turn ignition key to the OFF position and wait for all moving parts to stop.
2. Set the brake lever lock.
3. Open the left-side access panel.
4. Remove the cap screw, lock washer, washer, and sheave adjuster from the end of the driven clutch; then remove the sheave adjuster from the cap screw.



0743-395

■ **NOTE:** Each time the driven clutch cap screw is removed, the hole in the driven shaft should be cleaned free of any Loctite residue.

■ **NOTE:** Verify the shims and O-ring are not removed from the adjuster.

5. Remove the lock washer and flat washer from the cap screw and reverse the sheave adjuster.
6. Install the cap screw into the driven clutch; then tighten the cap screw until the movable sheave opens far enough to allow the belt to be removed.
7. Remove the drive belt from the driven clutch first; then from the drive clutch.

■ **NOTE:** Before installing the drive belt, use a suitable cleaning solvent to thoroughly clean the sheaves.

## **Installing**

1. Place the drive belt (so the part number can be read and the arrows are facing the front of the snowmobile) between the sheaves of the drive clutch first; then between the sheaves of the driven clutch.

## **CAUTION**

Before securing the driven clutch, be sure the rollers are up against the torque bracket or damage to the back-side cams may occur.

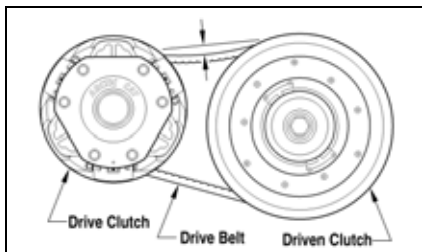
2. Install the cap screw, lock washer, washer, and sheave adjuster back into the driven clutch. Tighten the cap screw (apply a few drops of blue Loctite #243 to the threads) to 27.2 N-m (20 ft-lb).
3. Install the left-side access panel.

## **WARNING**

Never operate the snowmobile without the belt guard/access panel secured in place.

4. Release the brake lever lock.

## Checking/Adjusting Deflection



Drive belt length, condition, and deflection are all important for peak performance.

1. With the engine off; remove the left-side access panel.
2. Make sure the drive belt is sitting at the top of the driven clutch sheaves.
3. Place a straightedge on the top of the drive belt. The straightedge should reach from the drive clutch to the top of the driven clutch.

**NOTE:** Make sure the drive belt is all the way out in the driven clutch before checking drive belt deflection.

4. Using a stiff ruler centered between the drive clutch and driven clutch, push down on the drive belt just enough to remove all slack and note the amount of deflection. The deflection should be within the range of 28.5-31.8 mm (1 1/8-1 1/4 in.).

**NOTE:** Push down on the belt with the ruler only until the bottom of the belt flexes upward; then read the amount of deflection.

**NOTE:** Turning the set screw clockwise increases distance between the sheaves (increases belt deflection measurement); turning the set screw counterclockwise decreases distance between the sheaves (decreases belt deflection measurement).

5. To correct drive belt deflection, remove the sheave adjuster from the clutch, remove or add shim washers to the adjuster, and install the adjuster.

**NOTE:** Adding shim washers will decrease belt deflection and removing shim washers will increase belt deflection. Available shim washers from Arctic Cat are p/n 0648-714 (0.090 in.) (one included in the tool kit), p/n 0648-715 (0.030 in.), and p/n 0648-716 (0.060 in.).

**NOTE:** Removing/adding shim washers may be done by the snowmobile owner if qualified to do so. If the owner does not feel qualified, take the snowmobile to an authorized Arctic Cat Snowmobile dealer for this service. This service is at the discretion and expense of the snowmobile owner.

## Track Tension

Track tension is directly related to the overall performance of the snowmobile. If the track is too loose, it may slap against the tunnel causing wear or it may "ratchet" on the track drive sprockets. If extremely loose, the idler wheels may climb over the track lugs forcing the track against the tunnel causing the track to "lock."

Arctic Cat recommends that the track tension be checked daily during the first 480 km (300 miles) of operation and once a week thereafter and adjusted according to need. The track will stretch and take a "set" during break-in. Track deflection must be maintained within the recommended range.

### WARNING

Track tension must be properly maintained. Personal injury could result if a track is allowed to become excessively loose.

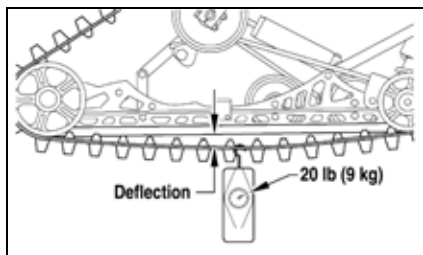
## Checking Track Tension

### WARNING

DO NOT attempt to check or adjust track tension with engine running. Turn ignition key to the OFF position. Personal injury could result from contact with a rotating track.

1. Remove excess ice and snow buildup from the track, track drive sprockets, and the inside of the skid frame.

2. Elevate the snowmobile on a shielded safety stand high enough to use a spring scale.
3. At mid-point of the track (on the bottom side), hook a spring scale around a track clip; then pull down on the scale to 9 kg (20 lb). Measure the deflection (distance) between the bottom of the wear strip and the inside surface of the track clip. Measurement should be 51 mm (2 in.).



0743-188

## Adjusting Track Tension

■ **NOTE:** To ensure proper track tension adjustment, perform all adjustments on both sides of the snowmobile.

1. Loosen the rear idler wheel adjusting bolt jam nuts.
2. If the deflection (distance between the bottom of the wear strip and the inside surface of the track clip) exceeds specifications, tighten the adjusting bolts to take up excessive slack in the track.
3. If the distance between the bottom of the wear strip and the inside surface of the track is less than specified, loosen the adjusting bolts to increase the slack in the track.
4. Check track alignment (see Track Alignment sub-section in this section).
5. After proper track tension is obtained, tighten the adjusting bolt jam nuts against the axle housings; then tighten the rear axle cap screws to 27.2 N-m (20 ft-lb).

■ **NOTE:** Since track tension and track alignment are interrelated, always check both even if only one adjustment seems necessary.

## ⚠ WARNING

If jam nuts are not tightened properly, the adjusting bolts could loosen causing the track to become extremely loose and, under some operating conditions, allow the idler wheels to climb over the track lugs forcing the track against the tunnel causing the track to “lock.” If a track “locks” during operation, severe personal injury could result.

## Track Alignment

Proper track alignment is obtained when the rear idler wheels are equal distance from the inner track drive lugs. Excessive wear to the idler wheels, drive lugs, and track will occur if the track is improperly aligned. Arctic Cat recommends that the track alignment be checked once a week or whenever the track tension is adjusted.

## Checking Track Alignment

## ⚠ WARNING

Make sure the ignition key is in the OFF position and the track is not rotating before checking or adjusting track alignment. Personal injury could result if contact is made with a rotating track.

1. Remove excess ice and snow buildup from the track, track drive sprockets, and the inside of the skid frame.
2. Position the tips of the skis against a wall; then using a shielded safety stand, raise the rear of the snowmobile off the floor making sure the track is free to rotate.

## ⚠ WARNING

The tips of the skis must be positioned against a wall or similar object.

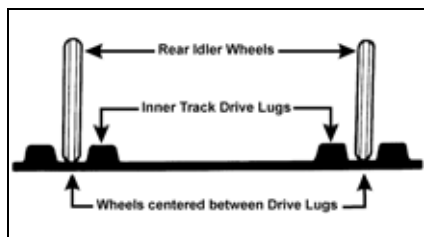
## ⚠ WARNING

DO NOT stand behind the snowmobile or near the rotating track. NEVER run the track at high speed when the track is suspended.

3. Start the engine and accelerate slightly. Use only enough throttle to turn the track several revolutions. SHUT ENGINE OFF.

■ **NOTE:** Allow the track to coast to a stop. **DO NOT** apply the brake because it could produce an inaccurate alignment condition.

- When the track stops rotating, check the relationship of the rear idler wheels and the inner track drive lugs. If the rear idler wheels are centered between the inner track drive lugs, no adjustment is necessary.



725-070A

- If the idler wheels are not centered between the inner track drive lugs, an adjustment is necessary.

## Adjusting Track Alignment

- On the side of the track which has the inner track drive lugs closer to the rear idler wheel, loosen the adjusting bolt jam nut; then rotate the adjusting bolt clockwise 1 to 1 1/2 turns.

■ **NOTE:** The rear axle cap screws must also be loosened.

- Check track alignment and continue adjustment until proper alignment is obtained.

■ **NOTE:** Make sure correct track tension is maintained after adjusting track alignment.

- After proper track alignment is obtained, tighten the adjusting bolt jam nut against the axle housing.

## ⚠ WARNING

If jam nuts are not tightened properly, the adjusting bolts could loosen causing the track to become extremely loose and, under some operating conditions, allow the idler wheels to climb over the track lugs forcing the track against the tunnel causing the track to "lock." If a track "locks" during operation, severe personal injury could result.

- Tighten the rear axle cap screws to 27.2 N-m (20 ft-lb).
- Field test the track under actual conditions.
- After the field test, check the alignment of the track. If additional adjustment is necessary, repeat Adjusting Track Alignment procedure.

## Suspension

The suspension should be adjusted for the operational needs and riding preference of the operator.

The front shock springs determine the amount of ski pressure and the reaction of the front suspension to rough terrain. The amount of ski pressure can also be changed by adjusting the length of the skid frame front arm limiter straps.

The rear springs influence the load carrying capability of the snowmobile and should be adjusted for the weight and riding preference of the operator.

## Adjusting Rear Spring Preload

Proper adjustment of rear spring preload is necessary to get the most desirable ride. The chart is designed to help in setting up rear spring preload; however, riding style is the single greatest factor in determining rear spring requirements.

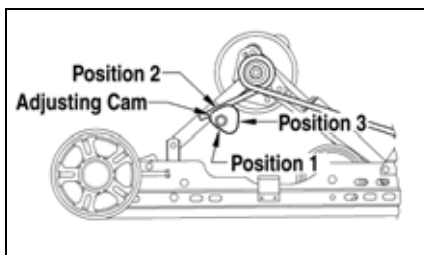
| Rider Weight (lb) | Cam Position |
|-------------------|--------------|
| Up to 180         | 1            |
| 180-240           | 2            |
| Over 240          | 3            |

■ **NOTE:** These cam position settings are suggestions only. Personal riding style will greatly influence cam position settings. Spend time to determine setting preferences.

Rear spring preload adjustment is accomplished by rotating the adjusting cams. Position 3 provides the stiffest ride, and position 1 is for the light driver or low-speed trail riding. Position 2 is for the average operator under normal conditions. Always rotate the cam from the lighter position to the heavier position.

## CAUTION

**Never force the adjustment cams from the low position to the high position. Cam damage may occur.**



741-450A

To rotate an adjusting cam, use the spark plug socket from the tool kit. Rotate the socket until the cam is in the desired position. To stiffen the ride, rotate the cam so as to raise the spring end. Make the appropriate adjustment on the other cam.

## Overload Springs

Some models have overload springs built into the rear suspension. When either carrying a heavy load or riding 2-up, the overload springs should be engaged by rotating the spring tension blocks to the UP position. The spring tension blocks lock in an over-center position when engaged.

■ **NOTE:** Arctic Cat recommends that the overload springs be engaged whenever a load on the snowmobile (operator/passenger/cargo) exceeds 136 kg (300 lb).

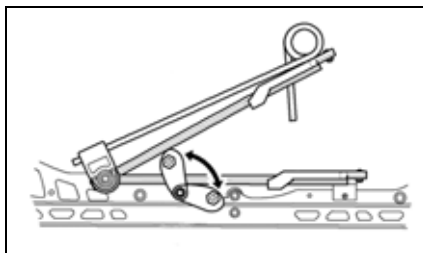
## CAUTION

**There are weight limitations for these snowmobiles. If additional cargo is being added, maximum weight on the snowmobile (operator/passenger/cargo) should not exceed the maximum limitation set for each snowmobile. See chart for details. Also, the overload springs should be engaged.**

## Maximum Weight Limitations

|                 |        |        |
|-----------------|--------|--------|
| Bearcat 2000 XT | 272 kg | 600 lb |
| Lynx 2000 LT    | 170 kg | 375 lb |

To either engage or disengage the spring tension blocks, use the spark plug socket from the tool kit and a screwdriver to adjust the spring block to the desired position. Make sure both spring blocks are in the same position (either engaged or disengaged).



744-457A

## Lights

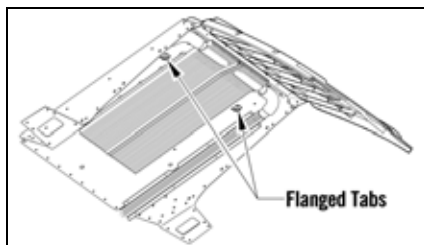
For the correct headlight bulb and/or taillight/brake light LED, see the specifications sheet.

## Removing and Installing Taillight/Brake Light

### Lynx 2000

These models are equipped with an LED taillight/brake light. If the LED fails, it must be replaced. To remove and install the LED, use the following procedure.

■ **NOTE:** To access the harness connector and the two self-tapping screws securing the taillight to the snowflap, compress the two flanged tabs (located on the underside of the tunnel) and carefully pry up on the front of the taillight/snowflap.

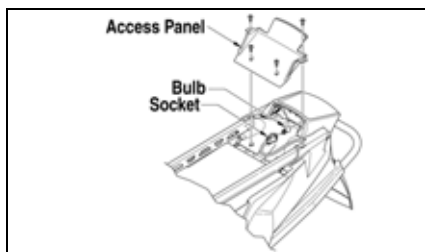


0744-462

1. Disconnect the taillight harness connector.
2. Remove the two self-tapping screws securing the taillight to the snowflap.
3. Secure the taillight to the snowflap with the two self-tapping screws; then connect the taillight connector.
4. Secure the front of the snowflap to the tunnel by carefully tapping the snowflap until the two flanged tabs snap into place.

## Lynx 2000 LT

1. Remove the Torx-head cap screws securing the taillight access panel.

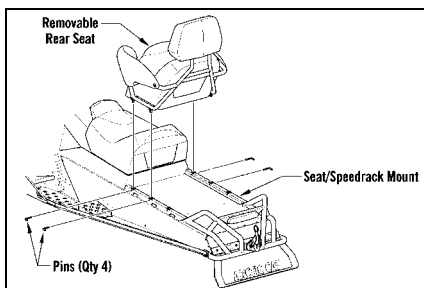


742-467A

2. Disconnect the harness connector and remove housing.
3. Push in on the socket and rotate it counterclockwise to remove it from the housing.
4. Remove the old bulb by pulling it straight out of the socket.
5. Install the new bulb in the socket by pushing it straight in.
6. Push the socket into the housing and rotate it clockwise to lock into place.
7. Connect the harness connector.
8. Secure the access panel with the Torx-head cap screws.

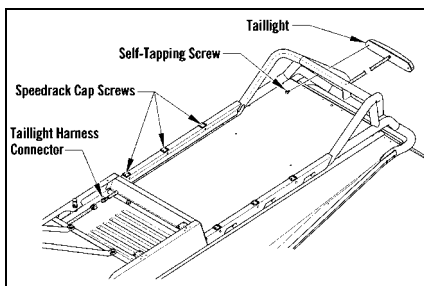
## Bearcat 2000 XT

1. Remove the four pins securing the rear seat to the seat/Speedrack mount.



743-329

2. Lift on the back of the rear seat and move rearward to remove it from the mount.
3. Compress the latch on the right side of the front seat and lift the front seat away; then disconnect the taillight harness connector.



743-444

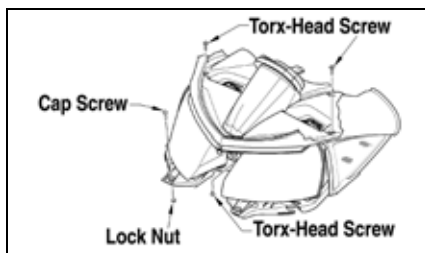
4. Loosen (but do not remove) the three right-side seat/Speedrack mount cap screws.
5. Carefully route the harness connector through the hole in the storage compartment panel; then remove the harness from beneath the seat/Speedrack mount.
6. Remove the two self-tapping screws securing the taillight to the bumper; then route the harness out of the bumper and remove the taillight.
7. Route the taillight harness through the bumper; then secure the taillight to the bumper with the two self-tapping screws.
8. Carefully route the harness beneath the Speedrack mount and through the hole in the storage compartment panel; then connect the harness connector.

9. Tighten the three right-side mount cap screws; then lower the front seat.
10. Place the rear seat into position on the mount making sure the four pin holes are properly aligned with the mounting location on the mount.
11. Install the four pins making sure they are properly seated.

## Removing/Installing Headlight Bulb

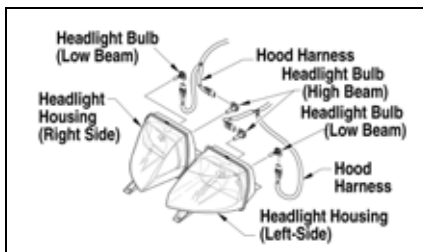
■ **NOTE:** The bulb portion of headlight is fragile. **HANDLE WITH CARE.** When replacing the headlight bulb, the bulb assembly must first be removed from the housing. Do not touch the glass portion of the bulb. If the glass is touched, it must be cleaned with a dry cloth before installing.

1. Remove the two Torx-head screws located to the outside of the headlight adjustment knobs; then remove the single Torx-head screw from beneath the console (located between the headlights).



743-439A

2. Remove the cap screw and lock nut securing the front of the headlight assembly to the air-intake silencer.
3. Lift the front of the console enough to allow the headlight housing to be removed; then remove the housing.
4. Remove the bulb from the headlight housing and disconnect the wiring harness from the bulb.



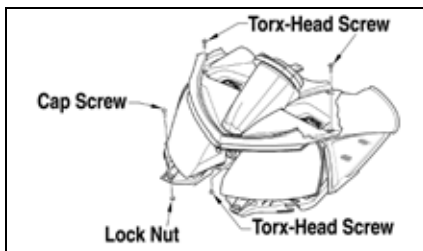
741-329A

5. Plug the wiring harness into the headlight bulb.
6. Insert the bulb into the headlight housing.

## CAUTION

**Do not touch the glass portion of the bulb. If the glass portion is touched, it must be cleaned with a dry cloth before installing.**

7. Lift the front of the console enough to allow the headlight housing to be installed; then install the housing making sure the forks of the housing go into the grommets on top of the air-intake silencer. Secure with the cap screw and lock nut.



743-439A

8. Position the console onto the air-intake silencer; then secure with the single Torx-head screw beneath the console (located between the headlights).
9. Install the two Torx-head screws located to the outside of the headlight adjustment knobs; then tighten securely.

10. Check headlight aim (see Adjusting Headlight Aim in this sub-section).

### **⚠ WARNING**

**Do not operate the snowmobile unless headlight beam is adjusted properly. An incorrectly adjusted beam will not provide the operator with the optimum amount of light.**

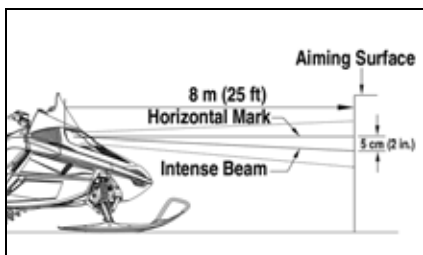
## **Adjusting Headlight Aim**

The headlight can be adjusted for vertical aim of the HIGH/LOW beam. The geometric center of HIGH beam zone is to be used for vertical aiming.

1. Position the snowmobile on a level floor so the headlight is approximately 8 m (25 ft) from an aiming surface (wall or similar surface).

■ **NOTE:** There should be an “average” operating load on the snowmobile when adjusting headlight aim.

2. Measure the distance from the floor to midpoint of the headlight.
3. Using the measurement obtained in step 2, make a horizontal mark on the aiming surface directly in front of the headlight.
4. Make a vertical mark which intersects the horizontal mark on the aiming surface directly in front of the headlight.
5. Engage the brake lever lock and start the engine. Move the headlight dimmer switch to the HIGH beam position. **DO NOT USE LOW BEAM.**
6. Observe the headlight beam aim. Proper aim is when the most intense beam is centered on the vertical mark 5 cm (2 in.) below the horizontal mark on the aiming surface.



0741-448

7. Adjust the headlight using the adjustment knobs until correct aim is obtained. Shut the engine off; then disengage the brake lever lock.

## **Ski Wear Bars**

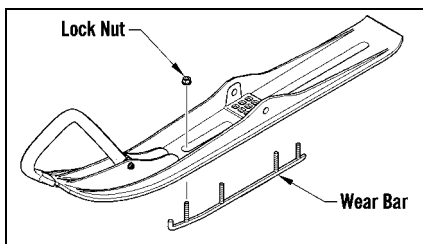
The ski wear bar is a replaceable bar attached to the underside of the ski. The purpose of the wear bar is to assist in turning the snowmobile, to minimize ski wear, and to maintain good steering control. If the snowmobile is operated primarily in deep snow, ski wear bar wear will be minimal; however, if the snowmobile is operated on terrain where the snow cover is minimal, the ski wear bar will wear faster. To maintain positive steering characteristics, Arctic Cat recommends that the ski wear bars be checked before each use and replaced if worn beyond 1/2 of the original diameter. Ski wear bars are available from an authorized Arctic Cat Snowmobile dealer.

### **⚠ WARNING**

**Operating the snowmobile with excessively worn ski wear bars may result in a loss of steering control.**

## **Removing Ski Wear Bars**

1. Using Front End Lift (p/n 5639-151), elevate the front of the snowmobile.
2. Remove the lock nuts securing the wear bar to the ski.



0743-185

3. Remove the wear bar from the ski.

## **Installing Ski Wear Bars**

1. Move the wear bar into position on the bottom of the ski.

■ **NOTE:** If installing a double-offset wear bar for normal steering capabilities, the carbide edge should be directed to the inside of the ski.

2. Align the wear bar studs with the holes in the ski; then install the lock nuts. Tighten to 15-20.4 N-m (11-15 ft-lb).

## Adjusting Ski Stance

■ **NOTE:** Local laws and/or regulations as to maximum width of the ski stance on these snowmobiles may be applicable. Always comply with the maximum width laws and/or regulations when adjusting ski stance.

■ **NOTE:** Lynx models do not have an adjustable ski stance.

1. Place the front of the snowmobile on a support stand.
2. Remove the cotter pin; then remove the slotted nut and cap screw securing the ski assembly to the spindle. Remove the ski. Account for the rubber damper, inserts, and washers.
3. To increase ski stance, place both ski stance spacers to the outside of spindle.
4. To decrease ski stance, place ski stance spacers to the inside of spindle.
5. Apply a low-temperature grease to the non-threaded portion of the cap screw; then slide the cap screw through the ski accounting for the rubber damper, inserts, and washers.

■ **NOTE:** Install the cap screw so the slotted nut will be located to the inside of the ski.

6. Apply red Loctite #271 to the threads of the cap screw; then tighten the nut to 61.2 N-m (45 ft-lb).
7. Place the cotter pin into the ski cap screw and spread the pin.
8. Repeat procedure for the other ski.

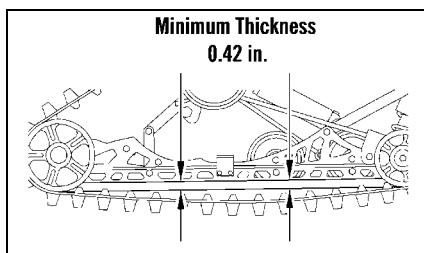
## Rail Wear Strips

Arctic Cat recommends that the wear strips be checked weekly and replaced as necessary. Measure the wear strips at 25.4 cm (10 in.) intervals. Wear strips must be 10.7 mm (0.42 in.) thick or thicker.

If wear strip measurements are less than specified, replacement of both wear strips is necessary to prevent premature track clip wear and possible track damage. Take the snowmobile to an authorized Arctic Cat Snowmobile dealer for this service. This service is at the discretion and expense of the snowmobile owner.

Each time a new set of wear strips are installed, they should be tempered. Temper the wear strips by driving the snowmobile for approximately a mile on a hard pack trail; then immediately drive into deep snow and allow the wear strips to cool. Repeat the procedure (warming up the wear strips; then cooling them down) two or three times.

■ **NOTE:** The rail wear strips will wear rapidly if the snowmobile is operated on terrain on which the snow cover is minimal. Loose snow is required to cool and lubricate the wear strips and prevent accelerated wear.



0743-189

# Preparation for Storage

Prior to storing the snowmobile, it must be properly serviced to prevent corrosion and component deterioration. An authorized Arctic Cat Snowmobile dealer should perform this service; however, the owner/operator can perform this service if desired. This service is at the discretion and expense of the snowmobile owner. To prepare the snowmobile for storage, Arctic Cat recommends the following procedure:

1. Clean the seat cushion with a damp cloth and a Vinyl Protectant.
2. Clean the snowmobile thoroughly by hosing dirt, oil, grass, and other foreign matter from the skid frame, tunnel, hood, and belly pan. Allow the snowmobile to dry thoroughly. DO NOT get water into any part of the engine.
3. Change the engine oil and replace the air filter if necessary.
4. Place the rear of the snowmobile up on a shielded safety stand.
5. Carefully pry the intake boots partially over the throttle body inlets; then start the engine and allow to idle.
6. Spray an Engine Storage Preserver into the intakes until the engine exhaust starts to smoke heavily or until the engine starts to drop in RPM. Turn engine off. Install the intake boots.
7. Plug the exhaust system outlet with a clean cloth.
8. Fill the gas tank to its rated capacity; then add Arctic Cat Fuel Stabilizer (p/n 0436-907) to the gas tank following directions on the container for the stabilizer/gasoline ratio. Tighten the gas tank cap securely.
9. Flush the transmission and replace the lubricant.
10. Remove the drive belt from the drive clutch/driven clutch. Lay the belt on a flat surface or slide it into a cardboard sleeve to prevent warping or distortion during storage.
11. Clean and inspect the drive clutch and driven clutch.
12. Apply light oil to the upper steering post bushing and shafts of the shock absorbers.
13. Lubricate the rear suspension, spindles, and steering arms with low-temperature grease.
14. Tighten all nuts, bolts, and cap screws making sure all nuts, bolts, and cap screws are tightened securely. Make sure all rivets holding the components together are tight. Replace all loose rivets.
15. Clean and polish the hood, console, and chassis with Cat Cleaner (p/n 4639-371). DO NOT USE SOLVENTS. THE PROPELLANT WILL DAMAGE THE FINISH.
16. Disconnect the battery cables making sure to disconnect the negative cable first; then clean the battery posts and cables. Charge the battery.
17. If possible, store the snowmobile indoors. Raise the track off the floor by blocking up the back end making sure the snowmobile is secure. Loosen the track adjusting bolts to reduce track tension. Cover the snowmobile with a machine cover or a heavy tarpaulin to protect it from dirt and dust.
18. If the snowmobile must be stored outdoors, position the snowmobile out of direct sunlight; then block the entire snowmobile off the ground making sure the snowmobile is secure. Loosen the track adjusting bolts to reduce track tension. Cover with a machine cover or a heavy tarpaulin to protect it from dirt, dust, and rain.

## CAUTION

**Avoid storing in direct sunlight and using a plastic cover as moisture may collect on the snowmobile causing corrosion.**

## Preparation after Storage

Taking the snowmobile out of storage and correctly preparing it for another season will ensure many miles and hours of trouble-free snowmobiling. Arctic Cat recommends the following procedure:

1. Clean the snowmobile thoroughly. Polish the exterior of the snowmobile.
  2. Clean the engine. Remove the cloth from the exhaust system. Check exhaust system and air-intake silencer for obstructions.
  3. Inspect all control wires and cables for signs of wear or fraying. Replace if necessary. Use cable ties or tape to route wires and cables away from hot or rotating parts.
  4. Inspect the drive belt for cracks and tears. Check belt specifications. Replace if damaged or worn. Install the drive belt.
- **NOTE: If the old belt is worn but in reasonable condition, retain it with the snowmobile as a spare in case of emergency.**
5. Inspect all fuel hoses and oil hoses for deterioration or cracks; replace if necessary.
  6. Verify the condition of and the adjustment of the throttle cable.
  7. Tighten all nuts, bolts, and cap screws making sure all nuts, bolts, and cap screws are tightened securely.
  8. If not done during preparation for storage, lubricate the rear suspension, spindles, and steering arms with low-temperature grease.
  9. Charge the battery until fully charged; then connect the battery cables making sure to connect the positive cable first. Test the electric start system.
  10. Inspect the entire brake system, all controls, headlight, taillight, brake light, ski wear bars, and headlight aim; adjust or replace as necessary.
  11. Adjust the track to the proper tension and alignment.

## Limited Warranty

Arctic Cat Inc. (hereinafter referred to as Arctic Cat) extends a limited warranty as described below on each new Arctic Cat Snowmobile it assembles and on each genuine Arctic Cat Snowmobile part and accessory assembled and sold by an authorized Arctic Cat Snowmobile dealer. The limited warranty on an Arctic Cat Snowmobile is extended to the original retail purchaser for the time periods described below; however, the balance of the remaining warranty may be transferred to another party unless the purchase is for commercial use (see below). Warranty coverage is only available in the country in which the original retail purchase occurs to the original retail purchaser resident in that country or to a transferee resident in that country of the balance of the remaining warranty.

Arctic Cat warrants only the products it assembles and/or sells and does not warrant that other products will function properly when used with an Arctic Cat Snowmobile or will not damage the Arctic Cat Snowmobile. Arctic Cat does not assume any liability for incidental or consequential damages.

Arctic Cat will repair or replace, at its option, free of charge (including any related labor charges), any parts that are found to be warrantable in material or workmanship. This repair work MUST be done by an authorized Arctic Cat Snowmobile dealer. No transportation charges, rental charges, or inconvenience costs will be paid by Arctic Cat. The warranty is validated upon examination of said parts by Arctic Cat or an authorized Arctic Cat Snowmobile dealer. Arctic Cat reserves the right to inspect such parts at its factory for final determination if warranty should apply.

The warranty periods are as follows:

1. For snowmobiles used for recreational purposes:
  - If purchased between May 1 and November 30, warranty expires ONE (1) YEAR from December 1 of the current year.
  - If purchased between December 1 and April 30, ONE (1) YEAR from the date of sale.
2. For snowmobiles used for commercial purposes (including rental operations), ONE (1) YEAR from the date of invoice and/or 5000 MILES whichever comes first (non-transferable).
3. THIRTY (30) DAYS from date of sale of snowmobile on Arctic Cat supplied batteries.

Exclusions to this warranty include normal wear, abuse (i.e. a track run on marginal snow conditions without proper lubrication or additional idler wheels), and the following parts:

|             |                    |             |                            |                              |
|-------------|--------------------|-------------|----------------------------|------------------------------|
| Fuel Filter | Light Bulbs        | Windshield  | Drive Belt                 | Torn or Punctured Upholstery |
| Wear Bars   | Brake Pads         | Spark Plugs | Drive Clutch/Driven Clutch | Wear Parts                   |
| Wear Strips | Shock Absorber(s)* |             |                            |                              |

\*Limited to one (1) year or 1000 miles of "normal" riding conditions — replace for defective or leaking shock, corroded or pitted shaft, peeling chrome.

■ **NOTE: Snowmobiles that are factory equipped with FOX shocks and experience a shock failure within the factory warranty period (1 year) must not be tampered with. Only the "Schrader" (air pressure) valve is serviceable during the warranty period. Failures (air leaks) must be confirmed by following the test procedure as shown in the service manual. Any other tampering with the shock will void the FOX warranty.**

The following will VOID Arctic Cat's warranty:

1. Failure to perform the proper break-in procedure and all related maintenance, storage procedures (if stored for extended periods), and/or service as recommended in the Operator's Manual.
2. Repairs and/or adjustments by anyone other than an authorized Arctic Cat Snowmobile dealer.
3. Use of an improper fuel mixture ratio.
4. Use of improper carburetor jets.
5. Use of improper gasoline, lubricating oils, or spark plugs.
6. An accident or subjecting the snowmobile to misuse, abuse, or negligent operation.
7. Any modification, addition, or removal of parts unless instructed to do so by Arctic Cat.
8. Use of the snowmobile in any way for racing purposes.
9. Removal of the engine for use in another vehicle.
10. Removal or mutilation of the Vehicle Identification Number or Engine Serial Number.
11. Use of parts not sold or approved by Arctic Cat.
12. Track and tunnel damage resulting from either ice stud or hooker plate installation.
13. Damage due to improper transportation.

Arctic Cat shall not be responsible for and this limited warranty excludes recovery of economic, punitive, consequential and incidental damages, lost profits, and loss of use. Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. Arctic Cat's aggregate liability may not exceed the price of the product. The law of the State of Minnesota shall apply to all claims or disputes, exclusive of its conflicts of law provisions.

### IMPLIED WARRANTY EXCLUSION AND DISCLAIMER

To the fullest extent permitted by law, Arctic Cat excludes and disclaims all implied warranties of merchantability and fitness for a particular purpose.

If you are not satisfied with warranty service or repairs, you should contact Arctic Cat at: (U.S.) 218-681-9851 or (Canada) 204-982-1656.

## Warranty Procedure/Owner Responsibility

At the time of sale, an Owner Registration form is to be completed by the selling dealer and consumer. The receipt of the registration form by Arctic Cat is a condition precedent to warranty coverage. It is the selling dealer's responsibility to retain and/or submit the appropriate copies of the form to the appropriate place(s) to initiate warranty coverage.

The dealer will furnish to the consumer a signed copy of the form which must be presented to the dealer when requesting warranty service. **The registration form is the consumer's proof of ownership and warranty eligibility. The form is used by the dealer to validate the warranty claim.** Retain your copy of the form and keep it in a safe place.

When warranty repair is suspected, the snowmobile should be taken to the selling dealer, who has the primary responsibility to perform warranty repairs. Subject to the limitations set forth in the Limited Warranty, in the event the selling dealer has ceased to do business, you have moved, or you are in a location away from your selling dealer, warranty may be performed by any authorized Arctic Cat Snowmobile dealer.

The authorized Arctic Cat Snowmobile dealer will examine the snowmobile or part to determine if, in his opinion, a warrantable condition exists. If a warrantable condition appears to exist, the dealer will repair or replace, at Arctic Cat's option, free of charge, including any related labor costs, all parts that are found to be warrantable and any other parts which the warrantable part caused to be damaged. You, the consumer, will then be asked to sign a warranty form to ensure Arctic Cat that the warranty work was actually performed.

It is the consumer's responsibility to maintain and service the snowmobile in accordance with Arctic Cat's recommendations in the Operator's Manual. To protect yourself and your snowmobile, follow all safety and service tips. **Arctic Cat will NOT warrant repairs required as a result of not performing standard operator maintenance, storage procedures, and service as outlined in the Operator's Manual.**

Should you have any questions concerning the warranty, contact an authorized Arctic Cat Snowmobile dealer.

Arctic Cat Inc., P.O. Box 810, Thief River Falls, MN 56701 218-681-9851

# **U.S. EPA Emission Control Statement/Warranty Coverage (U.S. Only)**

## **STATEMENT/WARRANTY**

Arctic Cat warrants to the original retail purchaser, and each subsequent purchaser, that all U.S. EPA-certified Arctic Cat snowmobiles are designed, built, and equipped to conform to all U.S. EPA Emission Control Regulations. Please read the following information completely.

Your authorized Arctic Cat snowmobile dealer will repair or replace any defective emission-related component at no cost to you during the warranty period. You may have non-warranty service performed by any repair establishment that uses equivalent components. The regulations provide significant civil penalties for tampering that causes your snowmobile to no longer meet U.S. EPA emission standards.

Arctic Cat further warrants that the engine and its emission-related components are free from defects in materials or workmanship that could cause the engine to fail to comply with applicable regulations during the warranty period.

If you have any questions about this information, or the emission warranty coverage statement, contact your local authorized Arctic Cat snowmobile dealer.

## **WARRANTY PERIOD**

The emission warranty period for this snowmobile begins on the same date as the standard warranty coverage and continues for 30 months or 2500 miles, whichever comes first.

## **COMPONENTS COVERED**

The emissions warranty covers major emissions control components and emission-related components listed as follows:

### **Engine Management and Sensors**

Barometric Pressure Sensor  
Camshaft Position Sensor  
Engine Control Module (ECM)  
Engine Coolant Temperature Sensor  
Intake Air Temperature Sensor  
Manifold Absolute Pressure Sensor  
Throttle Position Sensor

### **Fuel/Air System**

Fuel Injectors  
Fuel Pressure Regulator  
Fuel Pump  
Carburetor(s)  
Throttle Bodies  
Oxygen Sensor  
Crankcase Ventilation System  
ISC Valve

### **Ignition System**

Ignition Coil  
Knock Sensor System  
Crankshaft Position Sensor  
Exhaust Temperature Sensor  
Capacitive Discharge Ignition (CDI) Module  
Magnet Pick-Up  
Spark Plugs

### **Miscellaneous Items Used in Aforementioned Systems**

Connectors  
Switches  
Grommets  
Clamps  
Hoses  
Ties  
Gaskets  
Wiring

**For U.S. EPA Emission Control Warranty coverage questions, contact us at:**  
**(U.S.) 218-681-9851 or (Canada) 204-982-1656.**

## **OWNER'S RESPONSIBILITIES**

The owner of any snowmobile warranted under this Arctic Cat Emission Control Statement is responsible for the proper maintenance and use of the snowmobile in accordance with Arctic Cat's recommendations in the Operator's Manual.

## **Change of Address, Ownership, or Warranty Transfer**

Arctic Cat Inc. keeps on file the current name and address of the owner of this vehicle. This allows Arctic Cat to reach the current owner with any important safety information which may be necessary to protect customers from personal injury or property damage. Please make sure a copy of this form is completed and returned to Arctic Cat Inc. if you move or if the vehicle is sold to another party.

This form may also be used to transfer the unused portion of the original warranty to a second party. In order to transfer warranty, fill out this form completely; then return a copy of this form to Arctic Cat Inc. Arctic Cat will then process the application and issue warranty for the balance of the time remaining of the original warranty. Warranty coverage is only available in the country in which the original retail purchase occurs to the original retail purchaser resident in that country or to a transferee resident in that country of the balance of the remaining warranty.

- ☐ Address Change
- ☐ Ownership Change
- ☐ Warranty Transfer

### **CHANGE OF ADDRESS/OWNERSHIP/WARRANTY TRANSFER TO:**

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State (Province) \_\_\_\_\_

Zip Code (Postal Code) \_\_\_\_\_

Phone (     ) \_\_\_\_\_

Email \_\_\_\_\_

Year and Model \_\_\_\_\_

Vehicle Identification Number (VIN) \_\_\_\_\_

Fold Back

**CHANGE OF ADDRESS/OWNERSHIP**

Place  
Stamp  
Here

ARCTIC CAT INC.  
PRODUCT SERVICE AND WARRANTY DEPT.  
PO BOX 810  
THIEF RIVER FALLS MN 56701

# Reference Information

Write the appropriate information for your Arctic Cat Snowmobile in the spaces below.

Always use these numbers when referring to your snowmobile.

Model: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

Vehicle Identification Number: \_\_\_\_\_

Engine Serial Number: \_\_\_\_\_

**Your Arctic Cat Dealer:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

## Parts and Accessories

When in need of replacement parts, oil, or accessories for your Arctic Cat Snowmobile, be sure to only use GENUINE ARCTIC CAT PARTS, OIL, AND ACCESSORIES. Only genuine Arctic Cat parts, oil, and accessories are engineered to meet the standards and requirements of your Arctic Cat Snowmobile. For a complete list of accessories, refer to the current Arctic Cat Accessory Catalog. To aid in service and maintenance procedures on these snowmobiles, an Illustrated Parts Manual and a Service Manual are available through your local Arctic Cat Snowmobile dealer.

# NOTES



©2019 Textron Specialized Vehicles, a division of Textron, Inc.  
®™ Trademarks of Arctic Cat Inc.