



OPERATOR'S

**GUIDE**

**SKI-DOO**



1996 1996 WT  
Operator's guide  
Supplement

THIS SUPPLEMENT MUST  
BE USED IN CONJUNCTION  
WITH 1996 OPERATOR'S  
GUIDE (P/N 414 9706 00)

1996

414 9706 10



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## FOREWORD

Congratulations on your purchase of a new SKI-DOO snowmobile. Whatever model you have chosen, it is backed by the Bombardier warranty and a network of authorized Ski-Doo snowmobile dealers ready to provide the parts, service or accessories you may require.

Your dealer is committed to your satisfaction. He has taken training to perform the initial set-up and inspection of your snowmobile as well as completed the final adjustment required to suit your specific weight and riding environment before you took possession. At delivery, your dealer would have explained the snowmobile controls and provided you with a brief explanation of the various suspension adjustments. We trust you have taken full advantage of this! If you need more complete servicing information, please ask your dealer about the proper model-year Ski-Doo *Shop Manual*.

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

You are invited to contact our customer service staff should you experience problems which cannot be resolved by your dealer.

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



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## NOTICE

The *Operator's Guide* and the *Snowmobiler's Safety Handbook* have been prepared to acquaint the owner / operator or passenger of a new snowmobile with the various snowmobile controls, maintenance and safe operating instructions. Each is indispensable for the proper use of the product.

These guides use the following symbols.

◆ **WARNING** : Identifies an instruction which, if not followed, could cause serious personal injuries including possibility of death.

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

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

Although the mere reading of such information does not eliminate the hazard, your understanding of the information will promote its correct use.

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

We also reserve the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

The illustrations show the typical construction of the different assemblies and, in all cases, may not reproduce the full detail or exact shape of the parts shown, however, they represent parts which have the same or a similar function.



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## TABLE OF CONTENTS

<b>SAFETY MEASURES</b> .....	7
<b>BOMBARDIER LIMITED WARRANTY 1996</b>	
<b>SKI-DOO® SNOWMOBILE</b> .....	*
<b>OFTEN ASKED QUESTIONS</b> .....	*
<b>LISTING OF AREA DISTRIBUTORS</b> .....	*
<b>HOW TO IDENTIFY YOUR SNOWMOBILE</b> .....	8
Vehicle Serial Number Location .....	8
Engine Serial Number Location .....	9
Track Serial Number Location .....	9
<b>CONTROLS / INSTRUMENTS</b> .....	10
1) Throttle Lever .....	10
2) Brake Lever .....	10
3) Parking Brake Button .....	11
4) Gear Shift Lever .....	12
5) Ignition Switch .....	13
6) Tether Cut-Out Switch .....	14
7) Emergency Cut-Out Switch .....	15
8) Headlamp Dimmer Switch .....	16
9) Rewind Starter Handle .....	16
10) Choke Lever .....	16
11) Speedometer / Odometer .....	17
12) Trip Meter .....	17
13) Trip Meter Reset Button .....	18
14) Fuel Tank Cap / Gauge .....	18
15) High Beam Pilot Lamp (Blue) .....	18
16) Injection Oil Level Pilot Lamp (Red) .....	18
17) Heated Grip Switch .....	18
18) Heated Throttle Lever Switch .....	19
19) Hood Latches .....	19
Fuses .....	20
Front Bumper .....	21
Storage Compartment / Tool Kit .....	21
Spare Drive Belt Holder .....	22
<b>FUEL AND OIL</b> .....	*
Recommended Fuel .....	*
Recommended Oil .....	*
Oil Injection System .....	*
<b>BREAK-IN PERIOD</b> .....	*
Engine .....	*
Belt .....	*
10 - Hour Inspection .....	*
Break-In Fuel / Oil Ratio .....	*
<b>PRE-START CHECK</b> .....	*
Check Points .....	*

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\* Refer to *1996 Operator's Guide*

<b>STARTING PROCEDURE .....</b>	<b>*</b>
Manual Starting .....	*
Electric Starting .....	*
Before Riding .....	*
Emergency Starting .....	*
<b>SUSPENSION ADJUSTMENT .....</b>	<b>23</b>
General .....	*
Guidelines to Adjust Suspension .....	*
Troubleshooting Chart .....	*
Suspended Extension Adjustment .....	23
Pulling a Load .....	23
<b>LUBRICATION AND MAINTENANCE CHART .....</b>	<b>24</b>
<b>FLUID LEVELS .....</b>	<b>26</b>
Gearbox Oil Level .....	26
Oil Injection System .....	27
Battery Electrolyte .....	27
<b>MAINTENANCE .....</b>	<b>*</b>
Belt Guard Removal and Installation .....	*
Drive Belt Removal / Installation .....	*
Drive Belt Condition .....	*
Brake Condition .....	*
Brake Adjustment .....	*
Rear Suspension Condition .....	*
Suspension Stopper Strap Condition .....	*
Track Condition .....	*
Track Tension and Alignment .....	*
Steering and Front Suspension Mechanism .....	*
Wear and Condition of Skis and Runners .....	*
Exhaust System .....	*
High Altitude Kit .....	*
Bulb Replacement .....	*
<b>STORAGE .....</b>	<b>*</b>
<b>TROUBLESHOOTING .....</b>	<b>*</b>
<b>SPECIFICATIONS .....</b>	<b>28</b>
<b>OTHER PUBLICATIONS AVAILABLE .....</b>	<b>*</b>
<b>EXPENSES LOG .....</b>	<b>*</b>
<b>TRAVEL LOG .....</b>	<b>*</b>
<b>NAMES AND IMPORTANT ADDRESSES .....</b>	<b>*</b>
<b>CHANGE OF ADDRESS OR OWNERSHIP .....</b>	<b>*</b>

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\* Refer to 1996 Operator's Guide



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## **SAFETY MEASURES**

### **Observe the Following Warnings :**

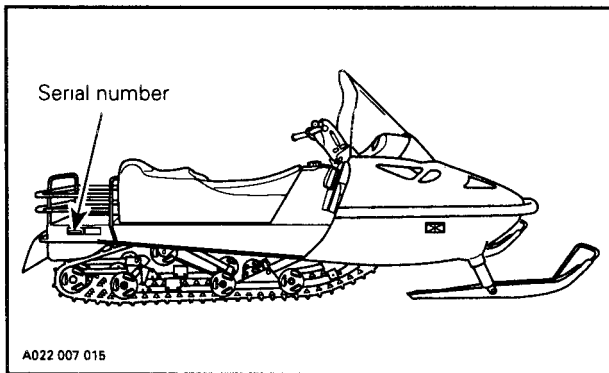
- ◆ For vehicles with a parking brake : always engage brake when vehicle is not in use.
- ◆ Throttle mechanism should be checked for free movement before starting engine.
- ◆ The snowmobile engine can be stopped by activating the emergency cut-out button, pulling the tether cord or turning off the key.
- ◆ Engine should be running only when belt guard and / or pulley guard is secured in place. Never run the engine without drive belt installed. Running an unloaded engine can prove to be dangerous.
- ◆ Never run the engine when the track is raised off the ground or with the hood removed.
- ◆ Maintain your snowmobile in top mechanical condition at all times.
- ◆ Your snowmobile is not designed to be operated on public streets, road or highways. In most States and Provinces, it is considered an illegal operation.
- ◆ **Electric start models only :** Never charge or boost a battery while installed on snowmobile.
- ◆ Do not lubricate throttle and / or brake cables and housings.
- ◆ Only perform procedures as detailed in this guide. Unless otherwise specified, engine should be turned OFF and cold for all lubrication and maintenance procedures.
- ◆ **Liquid cooled engines only :** When removing coolant tank cap, first place a cloth over cap then turn cap to its first step to release pressure. Never drain or refill the cooling system when engine is hot.
- ◆ Some snowmobiles are designed for the driver only and no provisions have been made for a passenger.
- ◆ The performance of some snowmobiles may significantly exceed that of other snowmobiles you have operated. Therefore, use by novice or inexperienced operators is not recommended.
- ◆ The engine and components used in a particular model should not be used on other models. Use of Rotax® snowmobile engines in other than Ski-Doo snowmobiles is not recommended or authorized by Bombardier Inc.
- ◆ Most components of this snowmobile are built with parts dimensioned in the metric system. Most fasteners are metric and must not be replaced by customary fasteners or vice versa.
- ◆ Maintenance procedures and tightening torques must be strictly adhered to, never attempt repairs unless the appropriate tools are available.

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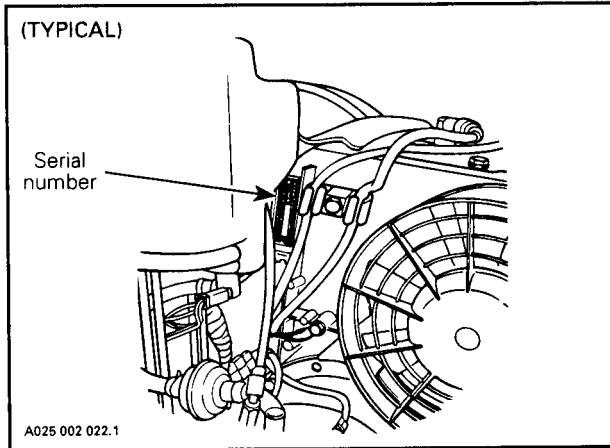
## HOW TO IDENTIFY YOUR SNOWMOBILE

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

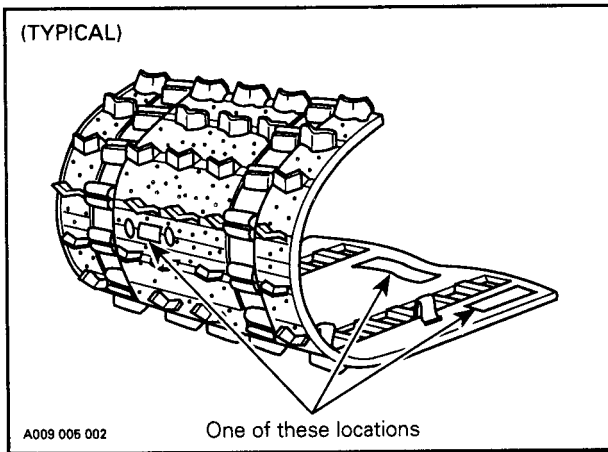
### Vehicle Serial Number Location



## Engine Serial Number Location

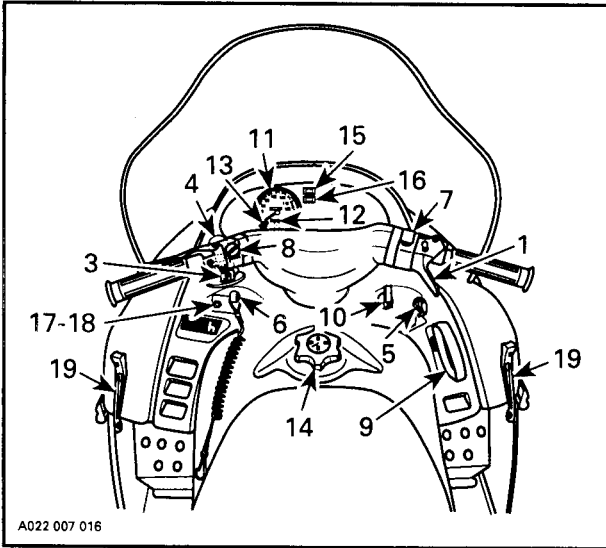


## Track Serial Number Location



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## CONTROLS / INSTRUMENTS



◆ **WARNING** : If the throttle, brake, engine cut-out systems malfunction or do not operate as described, do not start the engine. Contact an authorized dealer for inspection / repair.

### 1) Throttle Lever

Located on the right side of handlebar. When compressed, it controls the engine speed and the engagement of the transmission. When released, engine speed returns automatically to idle.

### 2) Brake Lever

Located on the left side of handlebar. When compressed, the brake is applied. When released, it automatically returns to its original position. Braking effect is proportional to the pressure applied on the lever and to the type of terrain and its snow coverage.

◆ **WARNING** : Excessive or repetitive use of brakes for high speed stops will cause an overheated brake system. This overheated condition could cause sudden loss of brakes and / or fire.

### 3) Parking Brake Button

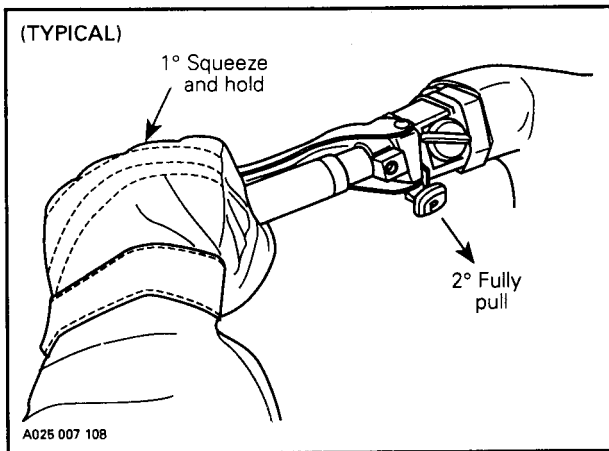
Located on left side of handlebar Parking brake should be used whenever snowmobile is parked.

Whenever parking brake is applied and engine is running, injection oil level pilot lamp lights up to remind you that it is engaged.

To engage mechanism, squeeze brake lever and maintain while pulling button with the other hand. There are 2 retaining notches on button lever ; pull button until it locks on a notch then release brake lever.

To release mechanism, squeeze brake lever then fully push parking brake button. Always release parking brake before riding.

▼ **CAUTION :** Make sure parking brake is fully disengaged before operating the snowmobile.

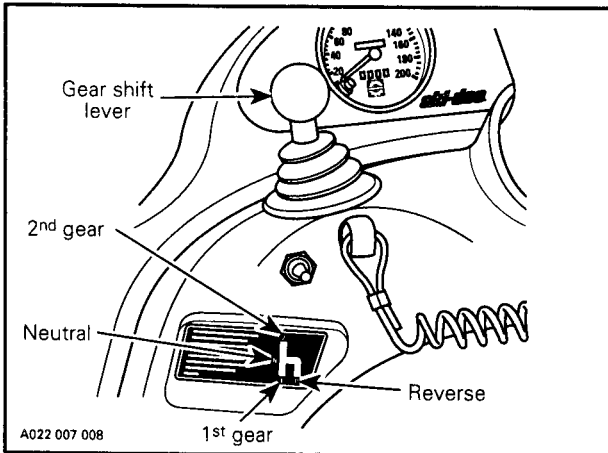


#### 4) Gear Shift Lever

○ NOTE : A warning buzzer will sound when the shift lever is in reverse gear position.

##### **Skandic WT**

A 4-position lever



#### Shifting Procedure

▼ CAUTION : Bring snowmobile to a complete stop before changing gear.

With snowmobile completely stopped and engine at idle, move lever to engage in desired gear.

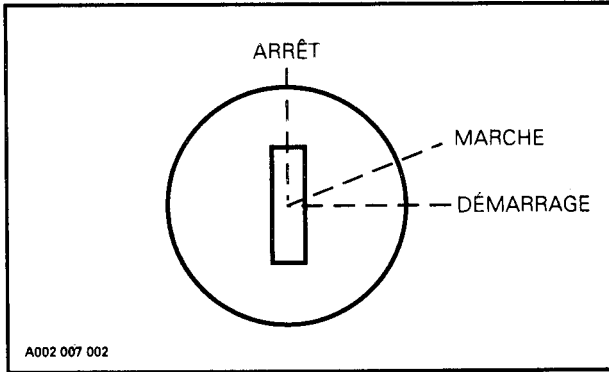
Do not force lever. If unable to shift, apply throttle to move snowmobile and try again.

◆ WARNING : These snowmobiles are capable of a fast reverse. Always apply the brake before shifting and come to a complete stop then change gear. Ensure the path behind is clear of obstacles or bystanders. Fast reverse while turning, could result in loss of stability.

When shifting from 1<sup>st</sup> gear to 2<sup>nd</sup> gear vehicle may be in motion but engine must be at idle.

## 5) Ignition Switch

The lights are automatically ON whenever the engine is running.



### Electric Starting

Key operated, 3-position switch. To start engine, turn key to START position and hold. See illustration above.

▼ **CAUTION** : Do not hold key at START position more than 30 seconds. A rest period should be observed between the cranking cycles to let starter cool down. Holding key in START position when engine has started could damage starter mechanism.

Release key immediately when engine has started. Key returns to ON position as soon as it is released.

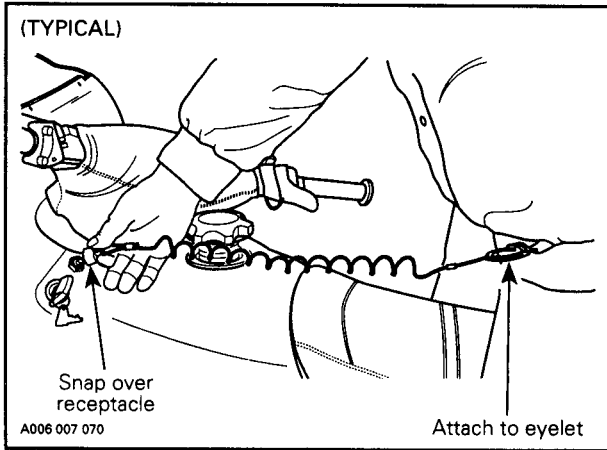
If engine does not start on first try, key must be turned fully back to OFF each time. To stop engine, turn key to OFF position.

○ **NOTE** : Engine may be manually started with rewind starter if necessary.

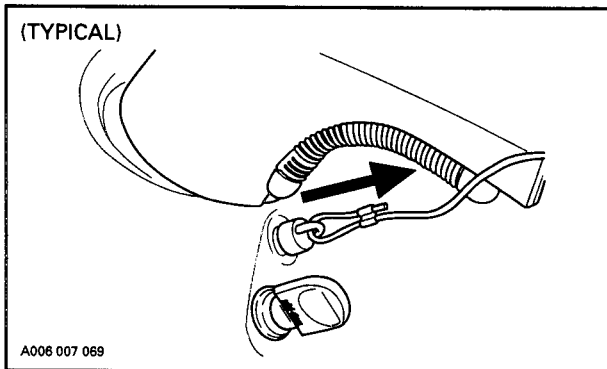
If starter does not operate, check starting system fuse condition. Refer to starting system fuse below.

## 6) Tether Cut-Out Switch

Attach tether cord to wrist or clothing then snap tether cut-out cap over receptacle before starting engine.



If emergency engine shut off is required, completely pull cap from safety switch.

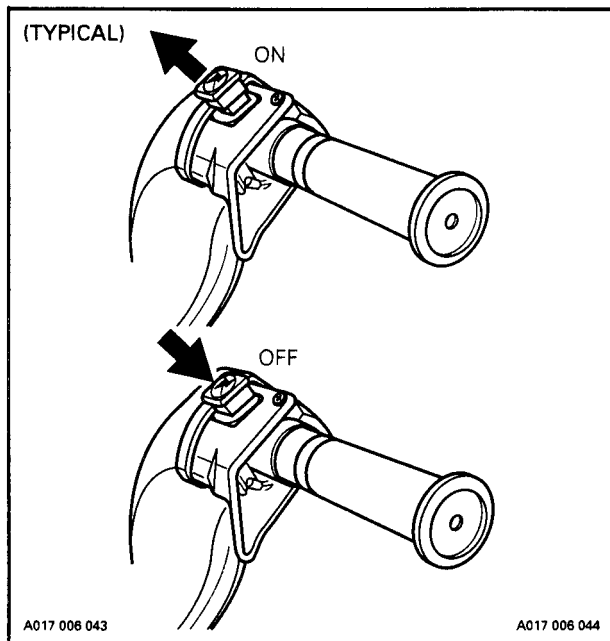


◆ **WARNING** : If the switch is used in a mechanical malfunction, the source of malfunction should be determined and corrected before restarting engine.



## 7) Emergency Cut-Out Switch

A push-pull type switch located on the right side of the handlebar. To stop the engine in an emergency, push the button to the lower OFF position and simultaneously apply the brake. To restart, button must be at the upper ON position.



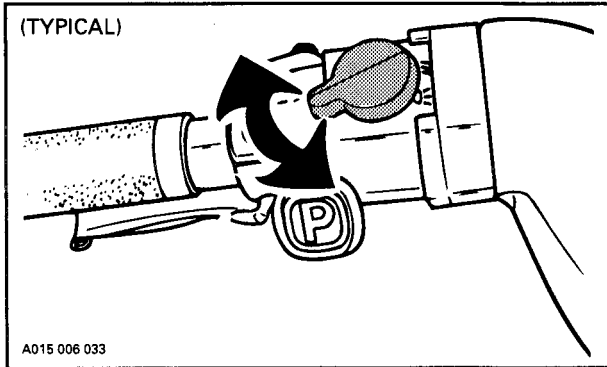
All drivers of the snowmobile should familiarize themselves with the function of this device by using it several times on first outing and to stop the engine there after. Thereby being mentally prepared for emergency situations requiring its use.

◆ **WARNING :** If the switch has been used in a mechanical malfunction, the source of malfunction should be determined and corrected before restarting engine.

## 8) Headlamp Dimmer Switch

Located on left side of handlebar, allows selection of headlamp beam.

To obtain high or low beam simply switch.

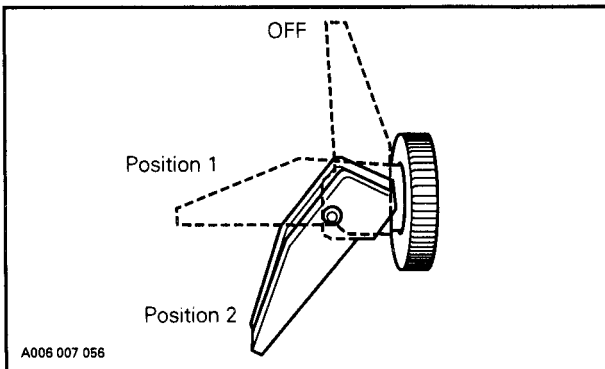


## 9) Rewind Starter Handle

Auto-rewind type located on right hand side of snowmobile. To engage mechanism, pull handle slowly until a resistance is felt then pull vigorously. Slowly release handle.

## 10) Choke Lever

This device features a 3-position lever to facilitate cold start.



### Initial Cold Starting

Move choke lever to position 2. Start engine without activating throttle lever. Let it idle for about a minute then, move to position 1. When engine reaches a rough idle or a normal temperature, release choke (OFF position).

### Cool Engine Starting

Move choke lever to position 1. Start engine without activating throttle lever. When engine reaches a rough idle or a normal temperature, release choke (OFF position).

### Warm Engine Starting

Do not activate choke.

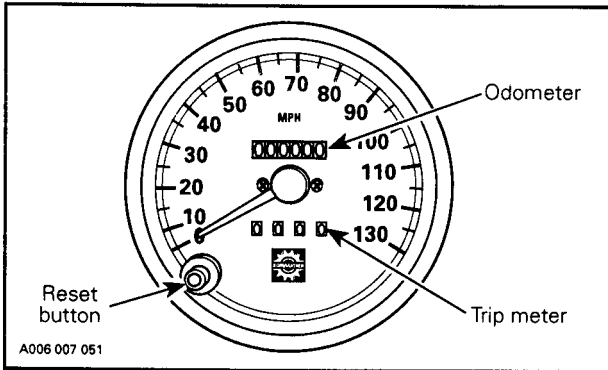
## 11) Speedometer / Odometer

Direct-reading dial indicates the speed of the snowmobile in kilometers or miles per hour. Odometer records the total distance travelled in kilometers or miles.

## 12) Trip Meter

These vehicles are equipped with a speedometer graduated in km or miles according to country of use.

Records distance travelled in kilometers or miles until it is reset. It can be used to record a fuel tank range or distance between 2 relays for instance.



### 13) Trip Meter Reset Button

To reset, push on or turn button depending on models until all numbers read zero.

### 14) Fuel Tank Cap / Gauge

Unscrew to fill up tank then fully tighten.

Cap features a dipstick or a mechanical gauge.

◆ **WARNING** : Never use an open flame to check fuel level.

### 15) High Beam Pilot Lamp (Blue)

Lights when headlamp is on HIGH beam.

### 16) Injection Oil Level Pilot Lamp (Red)

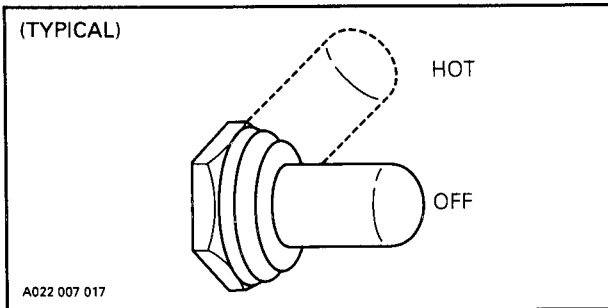
Lights when injection oil level is low. Check oil level and replenish as soon as possible. Also lights when parking brake is applied (with engine running).

▼ **CAUTION** : Do not run engine out of oil. Serious engine damage will occur.

○ **NOTE** : Whenever brake lever is actuated, oil injection level pilot lamp should light up when engine is running. If not replace lamp.

### 17) Heated Grip Switch

Two-position toggle switch. Select the desired position to keep your hands at a comfortable temperature.



## 18) Heated Throttle Lever Switch

Two-position toggle switch. Select the desired position to keep your throttle thumb at a comfortable temperature. See illustration above.

## 19) Hood Latches

Unhook the latches to unlock the hood from its anchors.

Always lift hood gently until stopped by retaining device.

◆ **WARNING** : It is dangerous to run an engine with the hood opened, unfastened or removed.

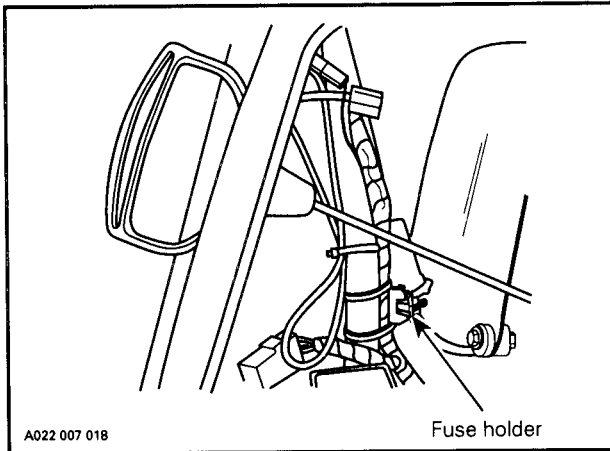
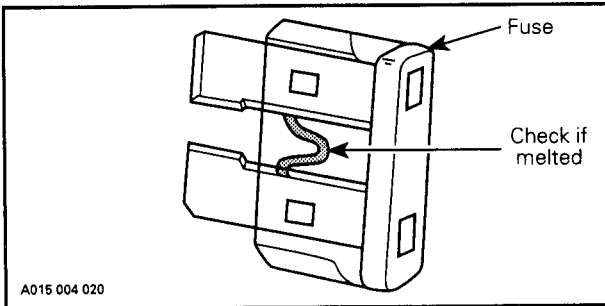
## Fuses

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

### Starting System Fuse

Starting system is protected with a 30 ampere rated fuse. See following illustration for fuse holder location. If starter does not operate, check fuse condition and replace if necessary.

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



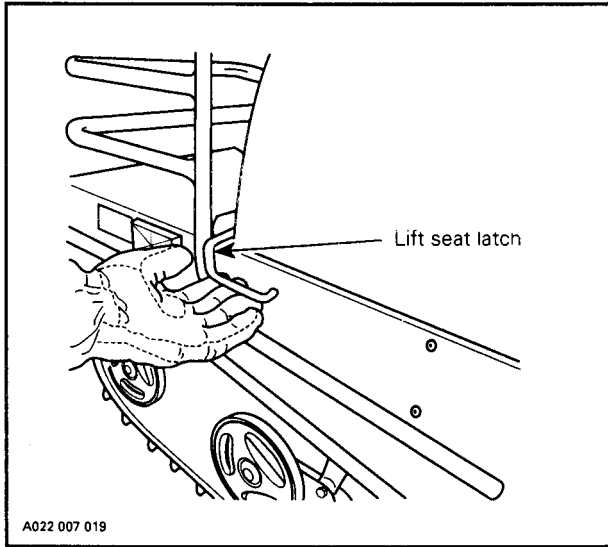
## Front Bumper

To be used whenever front of snowmobile requires lifting.

◆ **WARNING** : Do not use skis to pull or lift snowmobile.

## Storage Compartment / Tool Kit

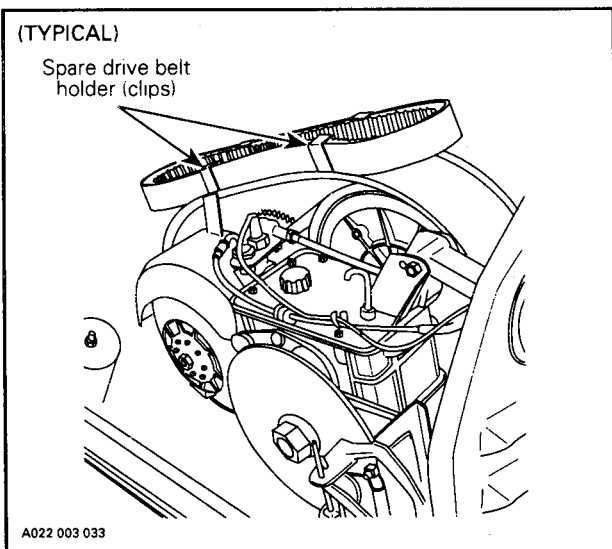
A storage compartment is provided under seat. A tool kit containing tools for basic maintenance can be found there. To open storage compartment, lift seat latch then tip seat over.



## Spare Drive Belt Holder

A spare drive belt can be installed in drive belt holder clips.

○ NOTE : Spare drive belt is not supplied with snowmobile.





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## SUSPENSION ADJUSTMENT

### Suspended Extension Adjustment

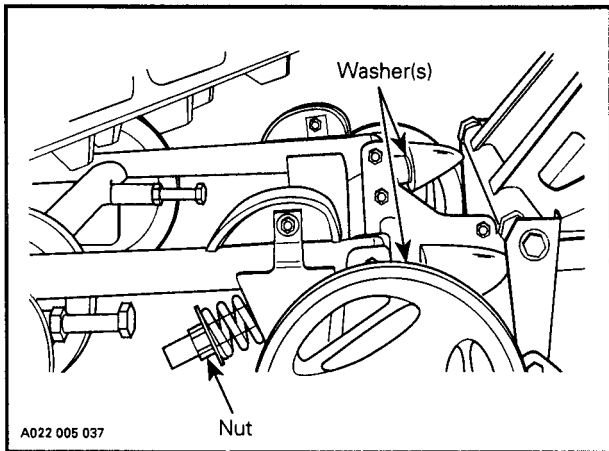
Suspended extension can be adjusted according to the driving need and the circumstances. A "loose" extension improves running characteristics in soft snow. A "stiff" extension gives the best pulling effect on hard terrain and a better driving comfort when driving with a passenger.

To adjust, screw in nut to stiffen and unscrew to loosen.

### Pulling a Load

To keep skis on the ground for steering when pulling a load, install washers (included in tool kit) underneath rubber stoppers. Hand tighten stoppers then install 1 or 2 washers. Retighten stoppers.






▼ **CAUTION:** Always install same amount of washers on both sides.









## LUBRICATION AND MAINTENANCE CHART

Refer to LUBRICATION and MAINTENANCE section of *Shop Manual* for more details.

- ① 10-HOUR INSPECTION (To be performed by dealer)
- ② WEEKLY OR EVERY 240 km (150 mi)
- ③ MONTHLY OR EVERY 800 km (500 mi)
- ④ ONCE A YEAR OR EVERY 3200 km (2000 mi)
- ⑤ STORAGE
- ⑥ PRE-SEASON PREPARATION (To be performed by dealer)

LUBRICATION AND MAINTENANCE CHART		①	②	③	④	⑤	⑥
	Starting Rope Condition						✓
	Engine Head Nuts	✓			✓		
	Engine Mount Nuts	✓			✓		
	Exhaust System	✓		✓			
	Engine Lubrication					✓	
	Cooling System Condition	✓			✓		
	Condition of Seals						✓
	Injection Oil Filter Condition			✓			
	Injection Oil Filter Replacement						✓
	Oil Injection Pump Adjustment	✓			✓		
	Fuel Stabilizer					✓	
	Fuel Filter Replacement						✓
	Fuel Lines and Connections	✓					✓
	Carburetor Adjustment	✓			✓		
	Throttle Cable Inspection	✓			✓		✓
	Air Filter Cleaning			✓			
	Drive Belt Condition	✓	✓				
	Condition of Drive and Driven Pulleys	✓		✓		✓	
	Cleaning of Drive and Driven Pulleys						✓
	Retorquing of Drive Pulley Screw	✓					
	Driven Pulley Preload	✓			✓		

LUBRICATION AND MAINTENANCE CHART		①	②	③	④	⑤	⑥
	Brake Condition	✓	✓				
	Brake Adjustment			✓			
	Lubrication of Ratchet Wheel						✓
	Gearbox Oil Change				✓		
	Chaincase / Gearbox Oil Level	✓		✓		✓	
	Lubrication of Drive Axle Bearing			✓		✓	
	Handlebar Bolts, Retorque to 26 N•m (19 lbf•ft)	✓					
	Steering and Front Suspension Mechanism	✓		✓		✓	
	Wear and Condition of Skis and Runners	✓	✓				
	Steering Adjustment	✓		✓			
	Suspension Adjustments		AS REQUIRED				
	Suspension Lubrication			✓		✓	
	Suspension Condition	✓			✓		
	Suspension Stopper Strap Condition				✓		
	Track Condition	✓		✓			
	Track Tension and Alignment	✓	AS REQUIRED				
	Spark Plugs*	✓		✓			
	Engine Timing	✓					✓
	Battery Condition	✓		✓		✓	
	Headlight Beam Aiming				✓		
	Wiring Harnesses, Cables and lines	✓		✓			
	Operation of Lighting System (HI / LO Beam, Brake Light, etc.), Test Operation of Emergency Cut-out Switch and Tether Cut-out Switch	✓	✓				✓
	Rags in Air Intake and Exhaust System					✓	✓
	Engine Compartment	✓		✓			
	General Inspection	✓		✓		✓	

\* Before installing new spark plugs at pre-season preparation, it is suggested to burn excess storage oil by starting the engine with the old spark plugs. Only perform this operation in a well ventilated area.

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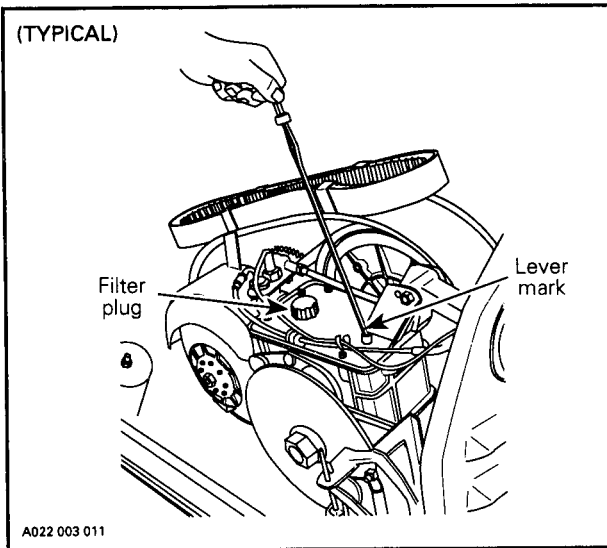
## FLUID LEVELS

### Gearbox Oil Level

To check, pull dipstick. Oil should reach level mark.

To fill, remove filter plug from top of transmission. Refill as required using Bombardier synthetic chaincase oil (P / N 413 8028 00-250 mL).

▼ **CAUTION:** Do not use unrecommended other types of oil when servicing. Do not mix this synthetic oil with other types of oil.

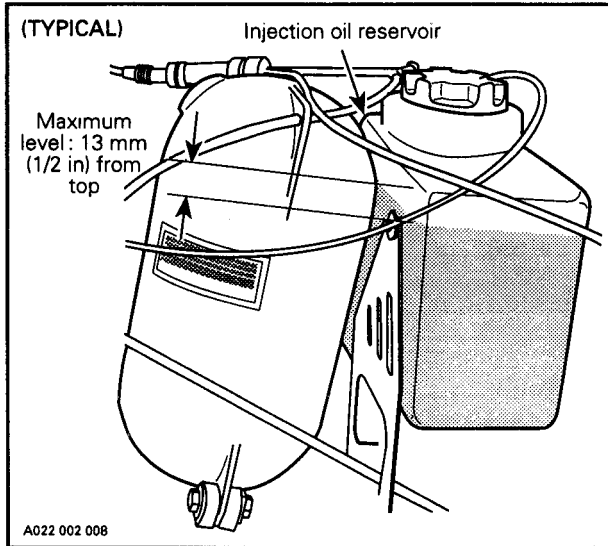


## Oil Injection System

Always maintain a sufficient amount of BOMBARDIER Snowmobile Injection Oil in the injection oil reservoir.

▼ **CAUTION** : Never allow oil level to drop more than 2/3.

▼ **CAUTION** : Check level and refill every time you refuel. Do not overfill. Wipe off any spillage. Oil is highly flammable.



## Battery Electrolyte

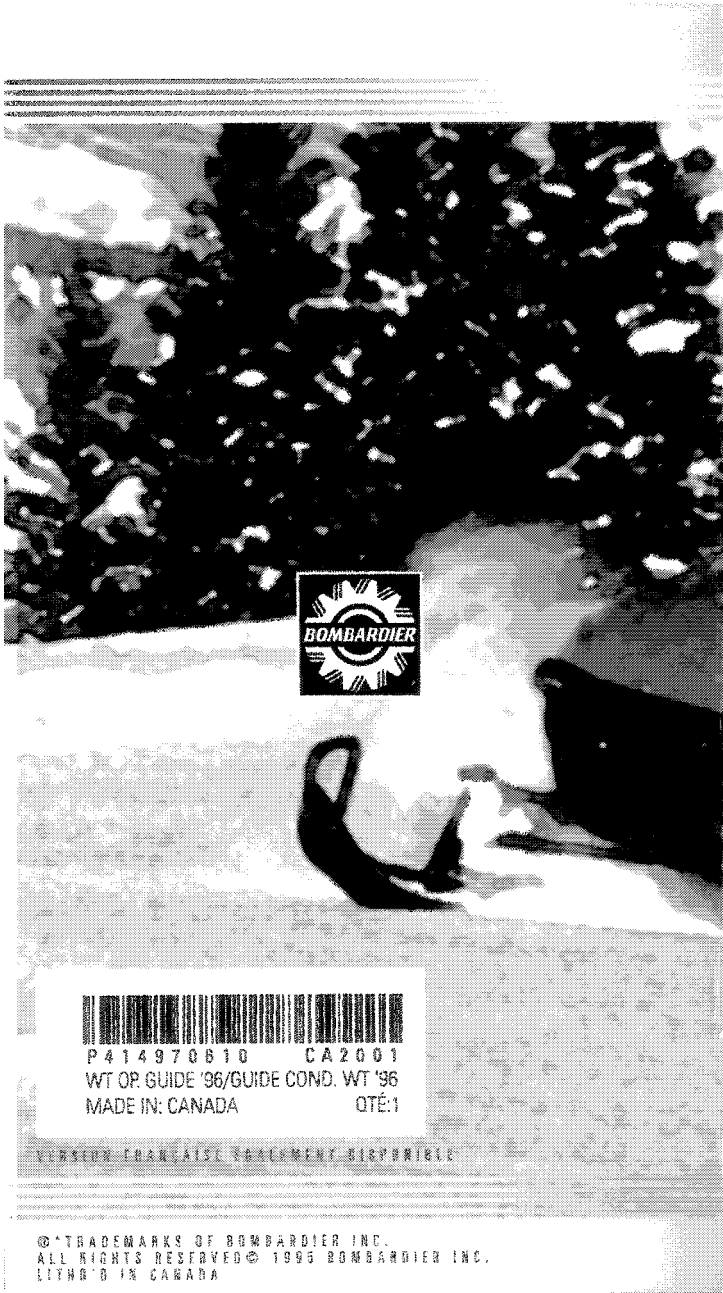
See your dealer.

## SPECIFICATIONS

GENERAL	SKANDIC WT
<b>Drive Belt</b>	
- Number	414 6175 00
- New belt width mm (in)	34.9 (1-3/8)
- Wear limit width mm (in)	30 (1-3/16)
<b>Spark Plug</b>	
- Type	NGK BR9ES
- Gap mm (in)	0.45 (.018)
<b>Track</b>	
- Tension mm (in)	50 (1-31/32) ①
- Alignment	②
<b>FLUIDS</b>	
<b>Fuel</b>	
- Type	③
- Tank capacity L (US gal)	40 (10.6)
<b>Oil (Engine)</b>	
- Type	④
- Tank capacity L (US oz)	2.55 (86)
<b>Chaincase / Transmission Oil</b>	
- Type	⑤
- Capacity mL (US oz)	500 (17)
<b>Cooling System</b>	
- Type	N.A.
- Capacity L (US oz)	N.A.

- ① Measure gap between slider shoe and bottom inside of track when exerting a downward pull of 7.3 kg (16 lb) to the track.
- ② Equal distance between edges of track guides and slider shoes.
- ③ Regular unleaded gasoline with a minimum octane number of 87 (R + M) / 2.
- ④ Bombardier Injection Oil (P / N 496 0133 00 - 1 L).
- ⑤ Bombardier Synthetic Chaincase Oil (P / N 413 8028 00).





P414970610 CA2001  
 WT OR GUIDE '96/GUIDE COND. WT '96  
 MADE IN: CANADA QTE:1

VERSION FRANÇAISE ÉGALMENT DISPONIBLE

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