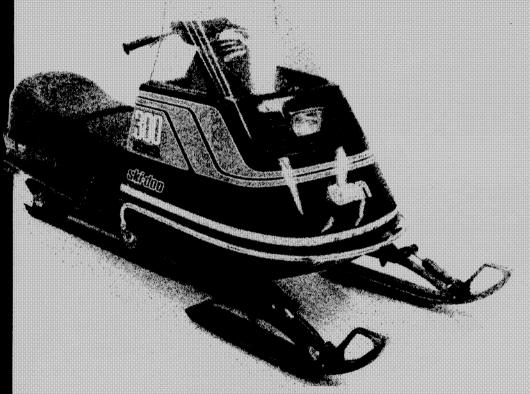
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Operator Manual



YOUR KEY TO WINTER

In the past sixteen years, over seven million people have discovered that winter can be both fun and enjoyable. The key of course is to do as you have done . . . participate in the exciting, invigorating sport of snowmobiling. We commend your decision, and thank you for selecting the Ski-Doo snowmobile as your partner in the many winter seasons to come.

To truly enjoy this wonderful sport, we urge you to join your local snowmobile club. You will find its activities and trail systems are planned for both fun and safety.

If your area does not have such benefits, you can find added social enjoyment by forming a new club and assisting with the

layout, construction and marking of a snowmobile trail. You will find the activities both stimulating and rewarding. And only you can make it happen.

We also suggest that you enroll in a safety/driver education program. The benefits derived are invaluable toward the safe and sane operation of any snowmobile.

We, at Bombardier Limited, fully realize the ramifications associated with the sport, and toward this end this manual is prepared. Please take the time to have every member of your family read and fully understand the content of this manual . . . Ride safe . . . and have fun!

Laurent Beaudoin, President - Executive Officer, Bombardier Limited.





This manual has been published by the

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INDEX

*The follo	wing are	trademarks of	Bombardie
Limited.			
Ski-Doo	T'NT	Bom	bardier

Ski-Boose Élan Nordic Blizzard Alpine Carry-Boose

Élan Elite Blizzard Everest Carry-Boose

PATENTS and DESIGNS

This vehicle is covered by one or more of the following patents and design registrations.

Canadian Patents: 605.317 - 710.592 - 724.395

853,505 895,749 897,747 914,457 916,204 918,200 921,521 923,523 923,939 928,746 932,253 937,264 United States Patents: 2,899,242 3,066,546 3,536,153 3,637,254 3,666,323 3,673,844 3,693,892 3,704,918 3,707,297 3,732,939 3,742,205 3,756,667

- 3,774,465 - 3,770,330.
Canadian Designs: D1/217 - F/28172 - D1/249
F/31317 and 316 - D32,479 - D32,535 D32,655 to 657 - D32,661 to 669 - 33,982 33,983 - 34,006 and 607 - 35,341 to 6345 35,366 - 36,086 - 36,493 - 36,582 - 36,868 36,892

United States Design Patents: 221,332 to '334 221,637 and '638 - 222,244 to '247 - 222,649 - 222,858 - 222,995 - 223,604 - 223,709 - 224,005 - 224,907 and '908 - 225,105

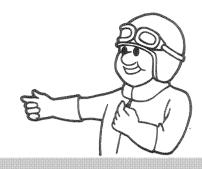
Others: Swedish Design No. 6038-Swiss Design No. 104,756-Norwegian Design No. 51,444. Other patent and design applications pending.

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SAFETY IN MAINTENANCE

To many of us winter is a revealing experience. Weather, atmospheric conditions, snow surfaces, individual driving habits and vehicle usage have considerable affects. We ask that you familiarize yourself with them . . . read the operator manual; it has been prepared to acquaint you with the operation of your vehicle, its safety aspects and systems as well as preventative maintenance procedures that must be periodically upheld . . all aimed toward a more enjoyable winter season.

Observe the following precautions:

Throttle mechanism should be checked for free movement before starting engine.

Engine should be running only when pulley guard is secured in place.

Never run engine without drive belt installed. Running an unloaded engine can prove to be dangerous.

Never run the engine at high R.P.M. when the track of the vehicle is raised off the ground.

It can be dangerous to run engine with the cab open.

Gasoline is flammable and explosive under certain conditions. Always perform procedures in a well ventilated area. Do not smoke or allow open flames or sparks in the vicinity. If gasoline fumes are noticed while driving, the cause should be determined and corrected without delay.

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.

Maintain your vehicle in top mechanical condition at all times.

Your snowmobile is not designed to be driven or operated on black top, bare earth, or other abrasive surfaces. Abnormal and excessive wear of critical parts is inevitable.

Slide Suspension.

During normal driving, snow will act as a lubricant and coolant for the slider shoes. Extensive riding on ice or sanded snow, (not to mention dirt, asphalt, etc. never recommended) will create excessive heat build up and cause premature slider shoe wear.

Please read and understand all other warnings contained elsewhere in this manual.





SKI-DOO DIVISION HEADQUARTERS

ROMBARDIER LIMITED VALCOURT, QUEBEC, CANADA

SERVICE AREAS

CANADIAN DISTRIBUTORS

ALPINE DISTRIBUTORS 3206 - 28th Avenue, Vernon, B.C.

BOMBARDIER LIMITED EASTERN CANADA DISTRIBUTION

DIVISION (Atlantic Branch)

P.O. Box 670 Shediac, N.B.

BOMBARDIER LIMITED EASTERN CANADA DISTRIBUTION DIVISION

(Quebec Branch)

1350 Nobel, Boucherville, Que,

BOMBARDIER (ONTARIO) LTD 28 Currie St. Barrie, Ont.

BROOKS FOUIPMENT LTD 1616 King Edward St.

P.O. Box 985, Winnipeg R3C 2U8, Man.

HUDSON'S BAY CO. 121 Richmond West.

Toronto, Ont.

J.W. RANDALL LIMITED P.O. Box 757 Corner Brook Newfoundland

TRACK EQUIPMENT LTD

14325 - 114th Ave., Edmondton, Atla.

British Columbia

Prince Edward Island

Magdalen Island Nova Scotia

New Brunswick Quebec

Est of Ontario

Ontario (less East of province) Manitoba

Saskatchewan

North-West Territories Franklin District & Keewatin

Newfoundland Labrador

Yukon Alberta

AMERICAN DISTRIBUTORS

BOMBARDIER EAST INC. Railroad St., Lee.

Massachusetts 01238

CRAIG TAYLOR EQUIPMENT CO. P.O. Box 3338, Anchorage,

Alaska 99501

ELLIOTT & HUTCHINS INC. East Main Street Road.

Malone, New York 12953

Pennsylvania New Jersey Maryland Delaware

District of Columbia Virginia

TIMBERLAND MACHINES INC. 10 Main St. North, Lancaster,

New Hampshire 03584

New York

Alaska

Massachusetts

Connecticut

Rhode Island

Maine

New Hampshire Vermont

BOMBARDIER CORPORATION

325 South Lake Avenue. Duluth 2. Minn. 55802

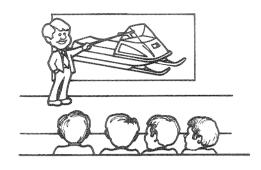
North Dakota

BOMBARDIER WEST INC. 609 West Broadway. Idaho Falls, Idaho 83401

South Dakota Minnesota Wisconsin lowa Illinois Missouri Michigan Indiana Ohio Tennessee Kentucky W. Virginia

California New Mexico Nevada Arizona Montana Kansas Idaho Nebraska Wyoming Washington Utah Oregon Colorado

We recommend you contact your local Authorized Ski-Doo dealer when your Ski-Doo snowmobile requires service. However, for further inquiries, you may contact your Regional Distributor listed below





A WORD TO ALL SNOWMOBILERS

Everybody is a Beginner the first time he sits behind the controls of a snowmobile, regardless of previous experience in driving an automobile, a motorcycle or a motorboat!

Driver Etiquette and snowmobile safety go hand-in-hand. With so many snowmobiles cruising the countryside, it is vitally important, that you do your part to make snowmobiling a welcome activity in rural and suburban neighborhoods.

Basic Training is required for the safe operation of any snowmobile. Study your Operator Manual. Join your local snowmobile club and learn from experts. Obtain basic instructions from your snowmobile dealer, friend or fellow club member. Enroll in your state or provincial safety training program.

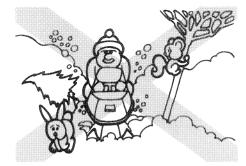
Know the Laws regarding snowmobiles. Become familiar with and respect the federal, local, state or provincial regulations governing the licensing and use of snowmobiles. Also be aware of the liability, property damage and insurance laws relating to your equipment.

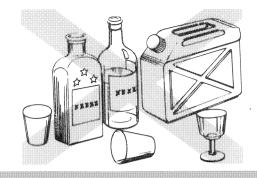
Treat Your Snowmobile with the respect and care due any power-driven machine. A snowmobile is not just a plaything, it is a finely engineered self-propelled vehicle. Common sense, proper handling and proper maintenance will result in safe and enjoyable use of your machine.

Show Proper Courtesy and Respect for other people, their privacy and their property. Do not trespass. Obtain consent of property owners before snowmobiling on private lands. Check with officials before using public lands. Drive slowly in residential areas. Do not damage the landscape or existing facilities. Do not litter. Snowmobiling and liquor do not mix. Don't drink and drive.

Know your Snowmobile. Become familiar with your machine, its capabilities and it's limitations. Proper maintenance of your snowmobile is important. Have it checked by your dealer on a regular basis to assure all components are kept in a good working condition. Check your machine before each ride.







SNOWMOBILE CODE OF ETHICS

Developed by a committee comprised of representatives from the U.S. Forest Service, Bureau of Outdoor Recreation; Michigan Department of Natural Resources; Minnesota Department of Natural Resources; Department of Lands and Forests, Ontario, Canada; U.S. National Park Service; and snowmobile manufacturers.

- 1. I will be a good sportsman. I recognize that people judge all snowmobile owners by my actions. I will use my influence with other snowmobile owners to promote sportsmanlike conduct.
- 2. I will not litter any trails or areas. I will not pollute streams or lakes.

- 3. I will not damage living trees, shrubs, or other natural features.
- 4. I will respect other people's property and rights.
- 5. I will lend a helping hand when I see someone in distress.
- 6. I will make myself and my vehicle available to assist search and rescue par ties.
- 7. I will not interfere with or harass hikers, skiers, snowshoers, ice fishermen or other winter sportsmen. I will respect their rights to enjoy our recreation facilities.

- 8. I will know and obey all federal, state and local rules regulating the operation of snowmobiles in areas where I use my vehicle. I will inform public officials, as required, when using public lands.
- 9. I will not harass wildlife. I will avoid areas posted for the protection or feeding of wildlife.
- 10. I will use marked trails, areas, or only roads open to snowmobiles. I will not travel cross-country when prohibited.

Extracted from I.S.IA "Snowmobile Safety Handbook". Copies of handbook can be obtained from your area dealer or distributor







DRIVING TECHNIQUE

Driving Positions.

There are three driving positions on a snowmobile—standing, kneeling or sitting. Each presents certain advantages depending on the nature of the terrain, snow conditions, the turns you desire or the personal preference of the driver.

Standing—This position is undoubtedly the best for climbing steep hills, traveling a short stretch of bumpy trail or when manoeuvering in deep snow. In this position, however, always keep your knees slightly flexed to absorb surface shocks. **Deep Snow.**

Use the standing position recommended earlier and if your vehicle continues to make reasonable headway, responding to light changes in acceleration, you are safe enough to explore new areas. If not, turn in as wide an arc as possible and look for firmer trails.

Kneeling—crossing a steep slope, for example from side to side, you will find the kneeling position a definite advantage. Place one foot on the footboard (on the high side of the hill), the opposite knee on the seat then lean into the hill.

Warning: Side hills and steep slopes are not recommended for a beginner.

An alternate recommended kneeling position and one that is frequently used, is to place both knees on the seat, with one foot on each side, loosely pressing against the seat

Sitting—for all normal driving. Feet should be on the footboards, body midway back on the seat. **Avoid** placing your foot inside the support braces of the footboard.

Warning: Prolonged sitting while riding over rough terrain may cause kidney and/or spinal discomfort, specially for the driver or passenger having an existing back weakness.

Ice Surface.

Ice or extremely hard-packed snow can be difficult to negotiate as both skis and track do not have much traction. Best advice is to slow down and avoid rapid acceleration or braking.





Turning.

To snowmobile properly you must learn to "body english", (using the weight or position of your body). Shifting to left or right as the turn demands and keeping your center of gravity as low as possible will give you the mark of an experienced snowmobiler.

Moving your body weight toward the front of the vehicle, particularly in hard-packed snow, adds pressure to the skis and ski runners so that they bite more deeply into the snow surface.

Passenger Carrying

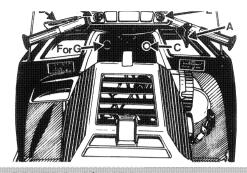
Always play safe with children aboard. Go more slowly with young passengers. Exert extra care. Avoid sidehills and broken terrain. See that the child firmly grips the handles and is protectively seated with feet on running boards.

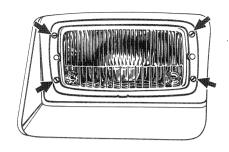
Check frequently to make sure child is still riding correctly. When carrying small children always position so they can be watched.

When ferrying tots or any other passengers, smooth starting and stopping are required. A fast start could result in a whiplash injury to the passenger seated behind you or in the tow sled behind. You have the benefit of knowing about the start and also the additional support of your grip on the handlebars. Your passenger can only rely on your careful and safe machine operation. Use moderate speeds. Too much speed over a bump could result in a serious back injury to any unsuspecting passenger. Warn your passenger of dangers that you may encounter; branches, low hanging limbs, etc., can thus be safely avoided. Be certain passengers are warm.

Dress

Cloth yourself according to the wind chill factor. Avoid wearing loose clothing, scarves etc. that could get entangled in the moving parts of your snowmobile.





CONTROLS/INSTRUMENTS

Steering

Rotation of the handlebar causes a pushpull action on the steering linkage and forces the skis to turn in the required direction. Incorporated in the padded handlebar are the dimmer switch, cut-out button, brake and throttle levers.

Throttle Lever (A)

Located on right side of handlebar. When depressed, the lever controls the **engine speed** and the **engagement of the transmission.** When lever is released the engine speed returns automatically to idle.

Brake Lever (B)

Located on left side of handlebar. When lever is depressed, the brake is applied. When released, it automatically returns to its original position. Braking effect is proportionate to the applied pressure on the lever.

Ignition/Lights Switch (C)

(Twin cylinder models)

Key operated, 3 position switch (OFF/ON/LIGHTS). To start engine, first turn key clockwise to ON position. To stop engine, turn key counter-clockwise to OFF position. Turning key fully clockwise, with engine running, illuminates both headlamp and taillight.

Ignition/Lights Switch (C)

(Single cylinder engine)

Key operated, 4 position switch (OFF/LIGHTS/ON/START). To start engine, turn key to ON position on manual start vehicle; on electric start vehicle, turn key to START position and allow it to return to ON position immediately engine has started. To stop engine, turn key counterclockwise to OFF position. To illuminate both headlamp and taillight, turn key to LIGHTS position (Manual start engine must be running).

Headlamp Dimmer Switch (D)

The dimmer switch, located on left side of handlebar, allows correct selection of headlamp beam. To obtain Hi or Low beam simply depress switch.

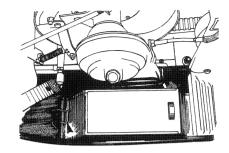
Note: The angle of your headlamp beam has been pre-adjusted prior to delivery. Should you wish readjustment, remove headlamp chrome ring and turn upper or lower adjusting screws to obtain desired beam position.

Cut-Out Button (E)

A push button switch located on right side of handlebar. For emergency stops, press button down into **lower** position. Before re-starting engine always depress button into released **upper** position.

4





The driver of this vehicle should familiarize himself with the function of this device by using it several times on first outing, thereby being mentally prepared for emergency situations requiring its use. After such a situation, the source of malfunction should be determined and corrected **before** re-starting engine.

Decompressor (F)

(Single cylinder engine only)
Two position, (OFF/ON), push-pull knob, located on left of dashpanel. To engage, pull decompressor knob fully out.

Caution: The decompressor provides easier starting by reducing engine compression. However, leaving decompressor engaged while running will damage your engine. Use decompressor when starting but always disengage immediately engine has started.

Choke (G)

Two position, (OFF/ON) dial knob, located on lower left side of console. To engage choke, turn dial clockwise to ON position. To disengage, turn to OFF position.

The choke should always be used for easier cold engine starts. After engine is warm however, it is not necessary to use choke when starting.

Note: The purpose of the choke is to reduce the amount of air flowing through the carburetor, in effect enriching the fuel/air mixture.

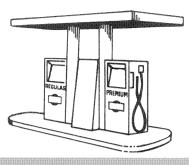
Manual Starter (H)

Auto-rewind type located at lower right side of console. To start engine, pull handle. (See Starting Procedure).

Warning: It can be dangerous to run engine with cab open.

Tool Box

Sliding cover box located under the cab, alongside the chaincase. To remove box from vehicle, unlock latch, disengage from footrest and lift from vehicle.





50/1

FUEL MIXING

With Ski-Doo snowmobiles, the **oil** must be added to the **gasoline** in pre-measured amounts then both oil and gasoline should be thoroughly mixed together **before** fueling the tank.

Which Gasoline to Use

On single cylinder models, the correct gasoline is **regular** gasoline, (not less than 92 octane) available from all service stations.

On twin cylinder models, the correct gasoline to be used is **premium** (not less than 98 octane).

Caution: Never experiment with other than recommended fuels or fuel ratios. Never use no lead gasoline †, naphtha, methanol or similar products.

†Tests are not conclusive enough therefore we do not recommend the use of no-lead gasolines.

Which Oil to Use

Use **concentrated 50/1** Ski-Doo oil available from your Ski-Doo dealer. This type of oil has specially formulated oil bases to meet the lubrication requirements of the Bombardier-Rotax engine.

Caution: The carburetors of the Ski-Doo snowmobile have been calibrated for a mixture of gasoline and concentrated Ski-Doo oil.

Unless absolutely necessary, do not use regular snowmobile oil, if such oil is used, observe mixing instructions on the container. Never use outboard or straight mineral oils.

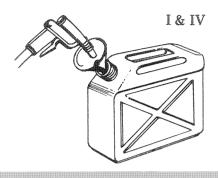
Fuel Mixing Ratio

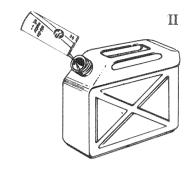
The importance of using the correct fuel mixture cannot be overstressed. Prior experience has shown that an incorrect fuel ratio results in serious engine damage.

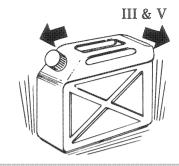
Recommended fuel ratio is 50/1.

5 gallons recommended gasoline plus 1 can of 50/1 Ski-Doo concentrated oil=correct fuel mixture.

Note: To facilitate fuel mixing, oil should be kept at room temperature.







FUEL MIXING

Fuel Mixing Procedure

To mix the gasoline and oil always use a separate clean container. Never mix directly in your snowmobile tank. For best results, acquire two containers, either plastic or metal. Draw from one until empty then use the second one.

Warning: Gasoline is flammable and explosive under certain conditions. Always perform procedures in a well ventilated area. Do not smoke or allow open flames or sparks in the vicinity. If gasoline fumes are noticed while driving, the cause should be determined and corrected without delay. Never add fuel while engine is running.

- I. Pour approximately one gallon of gasoline into a clean container.
- II. Add the full amount of concentrated Ski-Doo oil.
- III. Shake the container thoroughly.
- IV. Add the remainder of the gasoline.
- V. Once again thoroughly agitate the container. Using a funnel with a fine mesh screen to prevent the entry of water and foreign particles, transfer mixture from container into the snowmobile tank.

Note: When using pre-mixed fuel, always shake the container thoroughly as the oil has a tendency to settle.

Warning: Never 'top up' gas tank before placing vehicle in a warm area. At certain temperatures, gasoline will expand and overflow.

Fuel consumption

A good idea is for you to rate the fuel consumption of your snowmobile at the first opportunity. Starting with a full fuel tank, mark the time of your departure then note time elapsed until tank is half-full. Repeat on different occasions to get a mean average of your snowmobiles' consumption and length of running time under varying conditions.





BREAK-IN PERIOD

PRE-START CHECK

With Ski-Doo snowmobile engines, a break-in period is required before running the vehicle at full throttle. Manufacturer's recommendation for the Bombardier-Rotax engine is 10 to 15 operating hours. During this period, maximum throttle should not exceed 34. However, brief full accelerations and speed variations contribute to a good break-in. Continued wide open throttle accelerations, prolonged 'cruising' speeds and lugging are detrimental during the-break-in period.

Inspection

After the break-in period, each Ski-Doo snowmobile must have an inspection check. This inspection is at the expense of the vehicle owner. (See "Responsibilities").

Fuel Tank Quantity

Check that there is sufficient fuel in the tank for your trip. A good habit to acquire is to refill the tank before starting out each day.

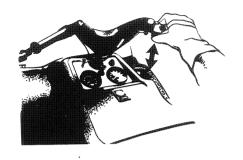
Since mixed fuel has a tendency to settle overnight, agitate the fuel in the tank by standing on the footboards and rocking the vehicle from side to side.

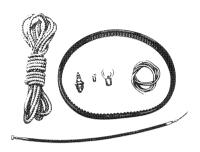
Track (Daily, before first run)

Under certain climatic conditions, the track of a snowmobile left outdoors overnight may freeze to the ground or snow surface. Always make sure that the track is free before attempting to start the vehicle. (This procedure will eliminate unnecessary drive belt wear).

Steering Operation

Check operation of steering mechanism by rotating the handlebar several times from side to side. If roughness or binding is felt, check for ice or snow that may be blocking the mechanism.





IN CASE OF EMERGENCY

Throttle and Brake

Depress and release levers several times to check that they operate easily and smoothly. The throttle lever should return to the idle position when released. The brake lever should be fully applied when it has minimum clearance from the handlebar grip (see Maintenance. Brake). If the levers do not return swiftly, remove cables and/or housings and replace. Re-check lever operation.

Warning: Throttle mechanism should be checked for free movement before starting engine. Once all components are checked and functioning properly, you can start your Ski-Doo snowmobile.

Emergency situations are accepted hazards with any moving vehicle. A hidden rock or stump on the trail, a burnt light bulb while driving at night, an empty fuel tank while miles from anywhere. can all cause varying degrees of inconvenience. Unlike an automobile, which has a distinct advantage in that service stations are usually within walking distance, snowmobiles are specifically designed to travel off the highways. When the unexpected happens, the driver often has only his own ingenuity and that of his companions to return home safely. Fortunately, 9 out of 10 difficulties encountered on the trail can be fixed on the spot. However, you must carry at least a minimum assortment of tools and spare parts to enable you to effect minor repairs.

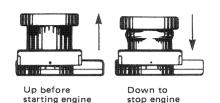
Emergency Materials

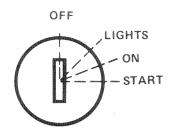
In addition to those tools which the manufacturer provides, you should carry the following:

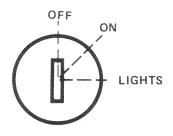
Tools: General Purpose Pliers—Adjustable Wrench (34" opening)—Flashlight.

Spare Parts: Spark Plug—Drive belt—Headlamp and Taillight bulbs—Throttle Cable and Housing—Starting and towing rope—Fuse (electric models).

Important: 'Always carry spare plugs and drive belt. Check condition of spark plug frequently and look for signs of a fouled or defective plug.







STARTING PROCEDURE

Warning: Never run the engine at high RPM when the track of the vehicle is raised off the ground.

Note: Before starting the engine make sure the cut-out button is in the released upper position.

Electric Starting:

- 1. Insert key in ignition switch.
- 2. Pull decompressor knob fully out.
- 3. Engage choke. (Choke is not necessary if engine is warm).
- 4. Test throttle operation then apply throttle lever slightly.
- 5. Turn ignition key clockwise until starter engages.

Caution: Do not engage starter longer than 30 seconds. If engine does not

start on first try, key must be turned fully back to OFF each time. Allow starter to cool for 2 minutes before repeating procedure.

- 6. **Release** throttle and key **immediately** after engine has started.
- 7. Disengage choke and push in decompressor knob.
- 8. Allow the engine to warm before operating at full throttle

Caution: Never operate the Ski-Doo snowmobile with the battery removed or disconnected.

Manual Starting

- 1. Insert key in ignition and turn to ON position.
- 2. Pull decompressor knob fully out. (Single cylinder only)

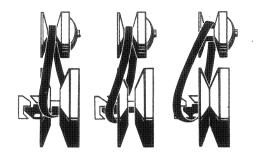
- 3. Engage choke. (Choke is not necessary if engine is warm).
- 4. Test throttle operation then apply throttle lever slightly.
- 5. Grasp manual starter handle firmly and pull slowly until a resistance is felt then pull vigorously and engine will start. Allow handle to return **slowly** to its original position. If engine does not start, repeat the procedure.

Note: Do not pull starting rope to its fullest extent or allow starting handle to "fly back" to its original position.

- 6. **Release** throttle, disengage choke and push in decompressor, **immediately** engine has started.
- 7. Allow the engine to warm before operating at full throttle.







LUBRICATION

Frequency of Lubrication

It is recommended that the steering mechanism and suspension be lubricated monthly or after every 40 hours of operation. However, if the vehicle is operated in wet snow, the suspension and steering system should be lubricated more frequently.

Caution: On Elan 250 Deluxe and 300SS models the drive and driven pulley requires no lubricant. On model 250 (single cyl.) do not lubricate driven pulley. Lubricant will destroy bushing material.

Cab Latches

For those procedures that require cab open, unlock latches on both sides where

cab meets frame then lift cab gently up until stopped by restraining device.

Warning: It can be dangerous to run engine with cab open.

Console Removal

For any procedure that may require removal of the console, proceed as follows:

- 1. Unlock latch where console and dash panel meet.
- 2. Push (jirk) the console downward then tilt away from engine. To reinstall, reverse procedure.

Pulley Guard Removal

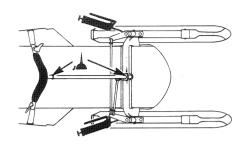
- 1. Tilt cab and remove console.
- 2. Pull out retaining clip and pull on spring bolt to disengage pin from bracket.
- 3. Push pulley guard forward to disengage from frame lift from vehicle.

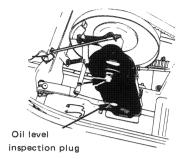
Warning: Engine should be running only when pulley guard is secured in place.

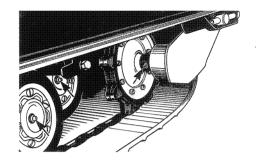
Drive Belt Removal

- 1. Tilt cab, remove console and pulley guard. (On SS model, unlock and raise driven pulley support).
- 2. Open the driven pulley, (larger pulley, most forward). Twist and push the sliding half then hold in open position.
- 3. Pull the bottom of belt in toward the front of the driven pulley then slip slackened belt over the top edge of the sliding half.
- 4. Slip the belt out from the drive pulley (centrifugal governor) and remove completely from vehicle by passing it between muffler and end of driven pulley. To install drive belt, reverse procedure.

Warning: Never run the engine without drive belt installed. Running an unloaded engine can prove to be dangerous.







Steering Mechanism

Using light machine oil, lubricate the two steering column bushings. Lubricate the ski legs at grease fittings until new grease appears at the joints.

Chaincase

Each week, remove oil level inspection plug (smallest plug) from chaincase and check if oil is visible at bottom lip of hole. If not, fill to this level with Ski-Doo chaincase oil. The chaincase has an oil capacity of approximately 8 ozs. To replenish, remove filler cap and refill to level.

Note: Tool box must be removed in order to check chaincase oil level.

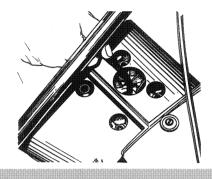
Bogie Wheels

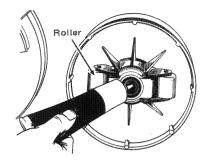
Lubricate the suspension bogie wheels with low-temp, grease, using a low pressure grease gun. Pump through the grease fitting at the center of each wheel until new grease appears at the joint of inner side of shaft.

Rear Axle

Lubricate the rear axle with low-temp, grease. Pump grease through the rear axle fittings.

Caution: Always use a low-pressure grease gun.





Drive Pulley

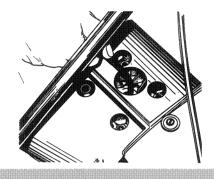
(Single cylinder model) The drive pulley requires lubrication bimonthly or every 20 hrs of operation.

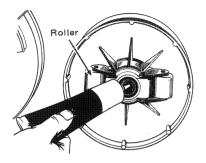
- 1. With cab tilted, remove console, pulley guard and drive belt.
- 2. Remove centrifugal governor as follows:
- Remove spark plug and position the piston 3/4" to 1 1/4" before top dead center, making sure that the piston closes the exhaust port.
- Accede by the spark plug hole and pack the cylinder with 3/16" dia. rope.

- Pull manual starter to rotate crankshaft until piston bears against "cushioning".
- Unscrew drive pulley bolt, remove cup, outer pulley half and spring. Pull rope from spark plug hole.
- 3. Thoroughly clean the inner pulley shaft using fine steel wool and a clean cloth. Inspect all components for excessive wear.
- 4. Install spring and outer pulley. Pack inside of pulley shaft with Ski-Doo High Performance Drive Pulley Lubricant.

- 5. Rotate crankshaft until piston is 3/4" approx. after top dead center. Insert rope into cylinder.
- 6. Using light machine oil, lubricate the governor bolt threads. Install governor and torque bolt to 37-54 ft/lbs.

Warning: Make sure that the governor bolt is fully tightened before removing rope from cylinder.





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Carbonized



Normal



Burnt

MAINTENANCE

Code	Weekly	Page
W1	Spark Plug	18
W2	Battery (electrolyte level)	18
W3	Suspension Springs	18
W4	Track	19
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W6	Track Alignment	19
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W9	Steering Mechanism	21
W10	Ski	21
Code	Weekly	Page
M1	Battery (connections)	21
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M3	Drive Belt Wear	21
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M3 M4 M5 M6	Drive Belt Wear Brake Steering Adjustment Engine Head Nuts	21 21 22 22

(W1) Spark Plug

- 1. Disconnect spark plug wire and remove spark plug.
- 2. Check condition of plug.
 - A brownish tip reflects ideal conditions. (Correct caburetor adjustment, spark plug heat range; etc.).
 - A black insulator tip indicates fouling caused by: carburetor idle speed mixture too rich, incorrect fuel mixing ratio, wrong type of spark plug (heat range), or excessive idling.
 - A light grey insulator tip indicates a lean mixture caused by: carburetor idle speed mixture adjusted too lean, wrong spark plug heat range, incorrect fuel mixing ratio, or a leaking seal or gasket.

Caution: If, when checking spark plug color, you find that the engine is not running under ideal conditions, contact your authorized Ski-Doo dealer.

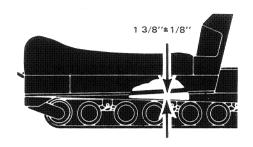
3. Reinstall plug and connect wire.

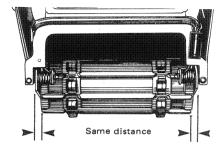
(W2) Battery

Remove battery caps then check electrolyte level at each cell. Electrolyte level must touch bottom of filler hole. If necessary, add distilled water to this level.

(W3) Suspension Springs

With engine off, visually inspect bogie wheel springs and link plate springs. Replace any weak or broken spring.





(W4) Track

Lift the rear of the vehicle and support it off the ground so that the track is free to turn. With engine **off**, rotate track by hand and visually inspect track condition. If bad cuts or missing inserts are noted see your dealer.

Note: Without these inserts continual abrasion would wear and cut the track therefore, always replace a missing or damaged insert as soon as possible.

(W5) Track Tension

(Bogie wheel suspension)

Lift the rear of vehicle and support it off the ground. Using a rule, check the track tension from the middle set of bogie wheels. The track tension (distance between top inside edge of track and the bottom of the footboard) should be 1 3/8 inch plus or minus 1/8 inch. If track tension is too loose, the track will have a tendency to thump. If too tight, performance will be affected.

If necessary to adjust:

- I. Using wrench, loosen both track adjusters by unscrewing the lock nuts situated on the inner side of the suspension springs.
- 2. Adjust to proper tension by turning adjuster bolts clockwise to tighten track, counter-clockwise to slacken. Adjust both sides equally.
- 3. Proceed with track alignment.

Note: Track tension and alignment are inter-related. Do not adjust one without checking the other.

(W6) Track Alignment

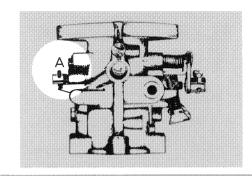
(Bogie wheel suspension)
After track tension has been corrected.

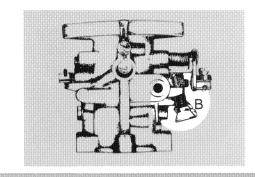
start the engine and accelerate slightly so that track turns slowly. Check that track is well centered and turns evenly on the rear sprockets. The distance between the edges of the track and the link plates should be the same on both sides. Misalignment can cause excessive wear of track edges and sprocket teeth.

To adjust:

- 1. Using wrench, turn track adjuster bolt clockwise on the side where the track is closest to the link plate until track aligns.
- 2. Firmly retighten adjuster lock nuts.
- 3. Rotate track slowly and recheck alignment.

Warning: Before checking track alignment, ensure that the track is free of all particles which could be thrown out while track is rotating. Keep hands, feet and clothing clear of track.





(W7) Carburetor Adjustment

The carburetor adjustments for the Ski-Doo snowmobile are: Maximum Throttle Opening, Idle Speed Mixture and Idle Speed.

Note: A relationship exists between each adjustment. Do not correct one without checking the other.

Maximum Throttle Opening

With engine **off**, remove air silencer box from carburetor. Unscrew the Idle Speed Adjusting Screw until a gap exists between screw end and carburetor shaft lever. Adjust throttle cable so that the throttle butterfly is fully open when throttle lever gently touches handlebar grip. Install air silencer hox

Warning: Before starting engine, carburetor throttle lever must return to idle position (butterfly closed). Do not start engine unless this is verified.

Idle Mixture Adjustment (A)

A primary adjustment (with engine off), should be made by first turning Idle Mixture Screw fully clockwise until closed. Back off screw 3/4 of a turn counterclockwise. One turn on 250 Deluxe model.

Turning screw clockwise produces a leaner mixture, (more air/less fuel), counter-clockwise, a richer mixture (less air/more fuel).

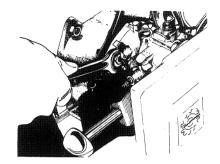
Note: Do not close too tightly as needle and/or needle seat can be damaged.

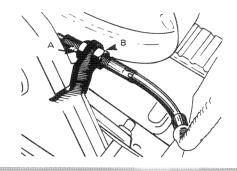
For final adjustment, start engine and allow it to warm. Turn Idle Mixture Screw until engine reaches maximum R.P.M. and obtain a steady idle and a fast response of the engine to the throttle.

Idle Speed Adjustment (B)

Turn the Idle Speed Adjusting Screw clockwise to increase idling speed, counter-clockwise to decrease.







(W8) Drive Belt Condition

To check the condition of the drive belt:

1. With cab tilted, remove the console

- 2. Remove pulley guard and drive belt.
- 3. Check condition of belt. Inspect for cracks, fraying or abnormal wear. (Uneven wear, wear on one side, etc.). If abnormal wear is noted, probable cause is misalignment of drive and driven pulleys. Contact your dealer.

(W9) Steering Mechanism

Inspect steering mechanism for tightness of components (steering arms, tie rods, etc.). Retighten if necessary.

(W10) Ski

Check condition of skis and ski runners. Replace if worn.

(M1) Battery Connections

Check that battery connections are tight and free of corrosion. If not, remove corrosion using a stiff brush then clean with a solution of baking soda and water. Rinse and dry well. After reconnecting, coat battery terminals and connectors with petroleum jelly to prevent corrosion. Check that battery is well secured.

Caution: Do not allow cleaning solution to enter battery. It will destroy the chemical properties of the electrolyte.

(M2) Carburetor Flange Nuts

After the first 2 hours of operation, check tightness of carburetor flange nuts. Open tab locks, tighten nuts and close tab lock

Caution: The tab locks should be changed after being opened three times.

(M3) Drive Belt Wear

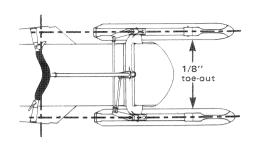
Tilt cab, remove console and pulley guard. Inspect drive belt for wear. If belt is less than 7/8" wide, it should be replaced.

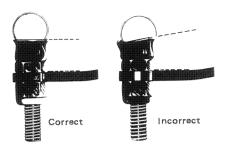
(M4) Brake

The brake mechanism on your snowmobile is an essential safety device. Keep this mechanism in proper working condition. Above all, do not operate your snowmobile without an effective brake system. Check operation of brake mechanism by depressing brake lever. Brake should apply fully while lever is still 1 inch minimum from handlebar grip.

If a **minor** adjustment is indicated: Slacken off cable housing nut **(A)** and tighten nut **(B)** to increase lever clearance. Turn each nut vice versa to decrease.







To proceed with major adjustment:

Slacken off the nut retaining brake cable to lower brake lever. Adjust cable to required length and retighten nut. Ensure that **minor** adjustment nuts are located approximately half way on adjuster threads.

Note: Always check the stop light to see if it functions after performing brake adjustment. If necessary, loosen stop light switch lock nuts and adjust.

(M5) Steering Adjustment

Skis should have a toe out of 1/8". To check, measure distance between skis at front and rear of leaf springs. If necessary to adjust:

- 1. Using a wrench, loosen the lock nuts of the longer tie rod.
- 2. Turn tie rod manually until skis are

properly aligned.

3. Firmly retighten lock nuts.

Handlebar should also be horizontal when the skis are pointed toward front. To adjust:

- 1. Using a wrench, loosen the lock nuts of the shorter tie rod.
- 2. Turn tie rod manually until handlebar is horizontal.
- 3. Retighten lock nuts firmly.

Warning: The cut off section of the ball joint must run parallel with the steering arm. When tightening lock nuts, restain the ball joint with appropriate size wrench.

(M6) Engine Head Nuts

After the first 5 hours of operation, check that engine head nuts are tight and equally torqued (13 to 17 ft/lbs when **cold**). Repeat monthly.

(M7) Engine Mount Nuts

With cab tilted, remove console and pulley guard then check engine mount nuts. Retighten if necessary.

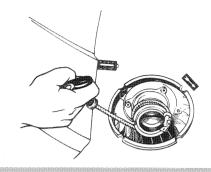
(M8) Muffler Attachment

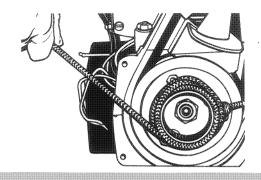
The engine/muffler attaching parts are vital toward efficient muffler function. Check all attachments and tighten if necessary.

(M9) Vehicle General Inspection

Check electrical wiring, retighten loose connections. Inspect vehicle and tighten loose bolts, nuts and linkage.







EMERGENCY GUIDE

Burnt Light Bulb

If headlamp is burnt, stop engine, unlock cab latches (2) and tilt cab. Unfasten bulb retainer clips. Detach bulb and replace. If taillight bulb is burnt, expose bulb by removing red plastic lens. To remove, unscrew the two (2) Phillips head screws.

Note: Immediately replace a burnt light bulb. This will prevent the other bulbs from burning out.

Broken Throttle Cable

Remove throttle cable and replace. Check lever operation. If necessary replace housing.

Warning: Before starting engine, handlebar throttle lever must return swiftly to its original position. Carburetor throttle lever must also return to an idle position (butterfly closed). Do not start engine unless both are verified.

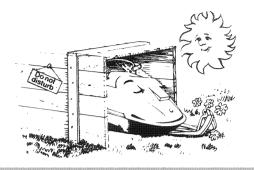
Broken Rewind Starter Rope

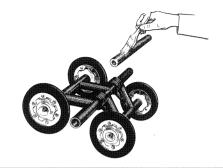
Abuse of the rewind starter may cause the rope to fray and break. Should this situation arise, remove starter unit using wrench supplied in tool kit. Transfer rope grip to your emergency rope. Make a knot at the end of emergency starter rope and wind rope around starter pulley. Pull vigorously as per usual manual start. See your dealer for immediate repair or replacement of starter unit.

TROUBLE SHOOTING GUIDE

Symptoms	Possible Causes	What To Do			
Engine turns over but fails to	1. No fuel to the engine	Check the tank level and fill up with correct gas-oil mixture. Check for possible clogging of fuel line, item 5.			
start or starts with difficulty	2. Spark plug	Check for fouled or defective spark plug. Disconnect spark plug wire, unscrew plug and remove from cylinder head. Reconnect wire and ground exposed plug on engine head, being careful to hold away from spark plug hole. Follow engine starting procedure and check for spark. If no sparks appear, replace spark plug. If trouble persists, check item 3.			
	3. Faulty ignition	Disconnect spark plug wire from plug,unscrew the spark plug cap, then position wire about '%'' from the cylinder head. Follow engine starting procedure and if no sparks appear, it means a faulty ignition system. Do not attempt to repair. Contact your dealer.			
	4. Flooded engine	Disengage choke, wait 60 seconds or more then depress throttle lever fully and try to start engine. Release throttle lever immediately after engine starts.			
	5. Clogged fuel line (water or dirt)	Remove and clean the fuel filter. Change filter cartridge if necessary. Check condition and connections of fuel lines. Check the cleanliness of the fuel tank. Clean tank if necessary. (See Fuel Tank, Storage Section).			
	6. Faulty Carburetor	First make primary adjustments on carburetor (See Maintenance Section). If buretor is still faulty, contact your dealer for repair.			
	7. Too much oil in fuel	Drain the fuel tank and refill with the correct gas/oil mixture.			
	8. Breaker points	Breaker points may be worn or out of adjustment. Contact your dealer.			
	9. Poor engine compression	Running with a lean fuel mixture may produce excessive engine wear resulting poor engine compression. If this occurs, contact your dealer at once.			
Engine will not turn manually	1. Seized engine	In the case of a seized engine, contact your dealer. Seizure is a direct result of poor lubrication.			

Symptoms	Possible Causes	What to do			
Engine will not start (electric	1. Battery	Check condition at battery by turning lights ON. If lights are dim or out, battery mabe discharged or defective. Contact your dealer. If battery is good, check item 2.			
model only). Note: If failure is in starting	2. Poor connections	Check for loose or corroded battery or starter connections. Tighten and clean if necessary. Try to restart engine electrically.			
system, engine will start manually	3. Starter	If connections are tight and battery is in working order probable cause of troubl is defective starter. Contact your dealer for repair.			
Engine lacks acceleration or	1. Fouled or defective spark plug	Check item 2 of "Engine turns over but fails to start or starts with difficulty".			
power	2. Clogged fuel line (water or dirt)	Check fuel line condition. (See item 5 of "Engine turns over but fails to start or starts with difficulty").			
	3. Carburetor	Readjust the carburetor. (See Maintenance Section). If trouble persists, contact your dealer.			
	4. Defective ignition	First check item 2 and 3 of "Engine turns over but fails to start or starts with difficulty". If the ignition system still seems defective, contact your dealer.			
	5. Engine	If unable to locate specific symptoms, contact your dealer.			
Engine contin-	1. Faulty spark plug	Check item 2 of "Engine turns over but fails to start or starts with difficulty".			
ually backfires	2. Overheated	Contact your dealer.			
	3. Engine timing incorrectly set	Contact your dealer.			
Snowmobile	1. Drive belt	Check for defective or worn drive belt. Replace if necessarry.			
cannot reach full speed	2. Incorrect track adjustment	Check track tension and alignment. Readjust to specifications. (See Maintenance Section).			
	3. Faulty engine.	Check item 1 to 5 of "Engine lacks acceleration or power".			
	4. Pulley misaligned	Contact your dealer.			





OFF-SEASON STORAGE

It is during Summer, or when a vehicle is not in use for any length of time that proper storage is a **necessity**.

Storage of the Ski-Doo snowmobile during long periods of inactivity consists of checking and replacing missing or worn parts: Proper lubrication and treatments to insure that parts do not become rusted, and in general, preparing the vehicle so that when the time comes to use the snowmobile again it will start and be in top condition.

Important: The necessity of proper storage cannot be overstressed. If you lack the time or proper tools, see your authorized Ski-Doo Dealer.

Track

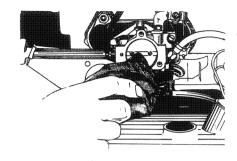
- 1. Inspect track for cuts, missing track inserts or broken rods and make any necessary replacement.
- 2. Lift rear of vehicle until track is clear of ground then support with brace or trestle. The Ski-Doo snowmobile should be stored in such a way that track does not stay in contact with cement floor or bare ground.

Note: The track should be rotated periodically, (every 40 days).

Suspension (Bogie Wheels)

- 1. Remove bogie wheel sets.
- 2. Remove cross shaft from each bogie wheel set. Clean bogie wheel assembly and shaft of dirt and rust. Check condition of cross shaft, replace if necessary. Apply a coat of low temp. grease over shaft.
- 3. Grease each set and spray springs with metal protector, or wipe with an oil soaked cloth.
- 4. Assemble and install each set in proper position.
- 5. Lubricate rear hub through grease fittings.





Ski Assembly

- 1. Wash or brush all dirt or rust accumulation from skis and springs.
- 2. Grease ski legs at grease fittings.
- 3. Check condition of ski runners. Replace if worn.
- 4. Apply metal protector on ski assembly. If unavailable, wipe the entire ski with cloth soaked in oil to prevent rust formation.

Fuel Tank

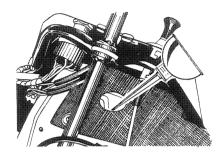
Tilt cab and remove gas tank cap. Using a syphon remove gasoline from tank.

Warning: Gasoline is flammable and explosive under certain conditions. Always perform procedures in a well ventilated area. Do not smoke or allow open flames or sparks in the vicinity.

Carburetor

The carburetor must be dried out completely to prevent gum formation during the storage period.

- 1. Assure that inlet fuel line is disconnected then start the engine and run it out of gas.
- 2. Engage choke (turn to ON), then pack the carburetor throat with a clean piece of cloth and turn the engine a few more times. The suction should eliminate the remaining fuel.
- 3. The air filter incorporated within the air silencer of the twin cylinder models should be cleaned. The filter can be washed using mild soap and water.



Cylinder Lubrication

Engine internal parts must be lubricated to protect cylinder walls from possible rust formation during storage.

- 1. Remove spark plug.
- 2. Operate rewind starter to bring piston at top position.
- 3. Pour about one spoonful of Ski-Doo oil into spark plug hole.
- 4. Slowly crank engine 10 to 12 times using manual starter.

Caution: To prevent magneto damage, make sure that the ignition switch is at the OFF position.

5. On twin cylinder engine, repeat above steps for other cylinder. Install spark plug.

Note: This operation should be repeated every 40 days during storage.

Chaincase

Drain the chaincase completely and refill

with 8 ozs of fresh Ski-Doo chaincase oil. To drain, open access plug, (lower plug) and tilt vehicle hard left.

Controls

- 1. Oil steering mechanism. Inspect components for tightness, (tie rods, ball joints, etc.). Tighten if necessary.
- 2. Oil moving joints of brake mechanism. Avoid getting oil on brake lining.

3. Coat all electrical connections and switches with a greaseless metal protector. If unavailable, use petroleum jelly.

Pulleys

Open the driven pulley then thoroughly clean driven pulley shaft.

On single cylinder model; clean and lubricate drive pulley as outlined in Lubrication Section.

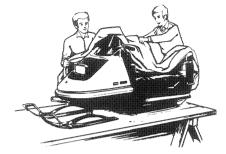
On twin cylinder models;

1. a) Remove drive pulley bolt as follows:

Remove both spark plugs and position P.T.O. (drive pulley side) piston 3/4" to 1 1/4" before top dead center. Make sure that the piston closes the exhaust port.

- b) Accede by the spark plug hole and pack the same P.T.O. cylinder with 3/16'' dia. rope.
- c) Pull manual starter to rotate crankshaft until piston bears against "cushioning".
- d) Straighten tab lock and unscrew drive pulley bolt.
- Remove tab lock, washer, cup, outer pulley half, and spring. Pull rope from spark plug hole.
- Thoroughly clean the inner pulley shaft using fine steel wool and a clean cloth. Inspect all-components for excessive wear.





- Rotate crankshaft until same piston (clutch side) is 3/4" approx. after top dead center. Insert rope into cylinder.
- 4. Install spring and outer pulley half.
- 5. Using the "U" clamp supplied in tool kit, hold the outer pulley half.
- Install the cup making sure that the shaft end rests in the cup seating. Install new tab lock.
- Using light machine oil, lubricate the governor bolt threads. Install bolt and torque to 83-92 ft/lb. After torquing, loosen, then retorque. Bend tab lock over bolt

Warning: Make sure that the governor bolt is fully tightened before removing rope from cylinder. A tab lock should never be used more than once.

8. Spray internal pulley surfaces with metal protector.

Note: Leave drive belt off during storage.

Battery

- 1. Disconnect battery and remove from vehicle.
- 2. Clean outside surface of battery with solution of baking soda and water. Remove all deposits from connection posts then rinse with clear tap water.

Caution: Do not allow cleaning solution to enter battery interior since it will destroy the electrolyte.

- 3. Check electrolyte level in each cell. Refill if necessary using distilled water.
- 4. Fully charge battery.

Warning: Gases given off by a battery being charged are highly explosive. Always charge in a well ventilated area. Keep battery away from cigarettes or open flames.

- 5. Coat battery terminals with petroleum ielly.
- 6. Store the battery in a cool, dry place.

Note: A stored battery will gradually lose its charge and begin to sulphate. If allowed to continue, the battery will become useless and cannot be salvaged. Fully recharge (trickle charge), at least every 40 days. Lack of preventive maintenance could void warranty on this item.

Chassis

- 1. Clean the vehicle thoroughly using mild detergents or isopropyl alcohol.
- 2. Inspect cab and repair damage.
- 3. Wax the complete cab for better protection.
- 4. Touch up all worn metal spots where paint has been scratched off.
- 5. Spray all bare metal parts of vehicle with metal protector.
- 6. Protect the vehicle with a Ski-Doo cover to prevent dust accumulation during storage.

PRE-SEASON PREPARATION

Snow is falling and you are now anticipating the next snowmobile safari. If you have observed and adhered to the storage procedures outlined in this manual, your vehicle preparation becomes a relatively easy task.

To simplify the pre-season preparation we have drawn up a small check list.

Again we mention, should you lack the time or tools to complete the task, to contact the Ski-Doo dealer of your choice and obtain his professional assistance.

- Spark plug; Change.
- Chaincase: Check oil level.

- Pulleys; Clean, lubricate and align drive and driven pulleys.
- · Skis; Align.
- Fuel Filter; Change.
- Fuel lines; Connect then check attaching points at tank and carburetor.
- Track; Check tension and alignment.
- Suspension; Lubricate, wipe off excess grease.
- Drive belt; Inspect and install.
- Cables; Check for damage.
- Brake; Inspect lining, adjust.
- Oil seals; Inspect for possible cuts or leaks.
- Engine Timing; Replace breaker points. Set timing.
- Wiring; Check electrical wiring for broken or damaged insulation. Inspect connections.
- Manual Starter; Inspect condition of starting rope.

- Fasteners; Check tightness of all nuts, bolts and linkage. Pay particular attention to engine head nuts—13-17 ft/lbs torque. Drive pulley bolt, 35-54 ft/lbs for single cylinder model, 83-92 ft/lbs for twin cylinder models.
- Gas Tank: Refill
- Carburetor; Adjust

IMPORTANT: Observe all Warnings and Cautions mentioned throughout this manual which are pertinent to the item being checked. When component conditions seem less than satisfactory, replace with genuine Bombardier parts.

SPECIFICATIONS

MODEL	ELAN	250	250 Deluxe	300SS
Engine	Numbers of cylinders	1	2	2
	Bore	2.716'' (69mm)	2.126" (54mm)	2.444" (57.5mm)
	Stroke	2.598'' (66mm)	2.126" (54mm)	2.444" (57.5mm)
	Displacement	15.1 cu. in. (246.8cc)	15 cu. in (247.3cc)	17.9 cu. in. (293.5cc)
	Compression ratio	7.5:1	11.8:1	11,8:1
	Carburetor (Tillotson)	HR	HR	HR
	Starting	Manual (electric optional)	Manual	Manual
Chassis	Overall length	88 1/2'' (224.79cm)	88 1/2" (224.79cm)	88 1/2" (224.79cm)
	Overall width	30 1/2" (77.47 cm)	30 1/2" (77.47 cm)	30 1/2" (77.47 cm)
	Height	43'' (109.22cm)	43" (109.22 cm)	43" (109.22 cm)
	Weight W/O windshield	34'' (86.36cm)	34" (86.36cm)	34" (86.36cm)
	Weight	298 lbs (134.994 kg)	302 lb (136.806 kg)	330 lbs (149.49 kg)
	Bearing area	1070 in ² (6.902.57 cm ²)	1070 in ² (6.902.57 cm ²)	1070 in ² (6,902.57 cm ²)
	Ground pressure	.278 lb/in ² (0.019 kg/cm ²)	.282 lb/in ² (0.020 kg/cm ²)	.308 lb/in ² (0.022 kg/cm ²)
	Maximum load capacity	200 lbs	200 lbs	200 lbs
Power Train	Track width	15" (38.1 cm)	15'' (38.1 cm)	15'' (38.1 cm)
	Std. gear ratio	10/25	14/35	15/34
Electrical	Lighting system (output)	75/23W	55/18W	35/18W
System Headlamp		60/60W (35/35W, electric start)	35/35W	35/35W
	Tail/stop light	8/23W	5/18W	5/18W
	Spark plug (Bosch)	M-175-T-1	W-240-T-1	W-260-T-1
	Spark plug gap	.020'' (0.50mm)	.020'' (0.50mm)	.020'' (0.50mm)
	Advanced Ignition Timing	.147''167'' (3.73mm-4.24mm)	.077"097" (1.96mm-2.46mm)	.087"110" (2.21mm-2.79mm)
		B.T.D.C. (direct)	B.T.D.C. (indirect)	B.T.D.C. (indirect)
Fuel	Tank capacity -U.S.	4.20 gals	4.20 gals.	4.20 gals.
	— lmp.	3,5 gals.	3.5 gals.	3.5 gals.
	— Metric	15.9 lt	15.9 It	15.9 lt.
	Gasoline	Regular	Premium	Premium
	Gas/oil ratio	50/1	50/1	50/1
Brake	Туре	Drum	Drum	Drum

All information, illustration and component/system description, contained in this manual are correct at the time of publication. However, Bombardier Limited reserves the right to make changes in design and specifications, and/or to make additions to, or improvements in its product without imposing any obligations upon itself to install them on its products previously manufactured.

1975 SKI-DOO® SNOWMOBILE WARRANTY

Bombardier Limited (Bombardier) as manufacturer, warrants every 1975 Ski-Doo® snowmobile, (except T'NT® F/A and Alpine®, and Ski-Boose® or Carry-Boose® tow sled, SOLD AS A NEW VEHICLE BY AN AUTHORIZED SKI- DOO DEALER, to be free from defects in material, and workmanship under normal use and service, for a period of twelve (12) consecutive months **from first date of sale.**

If defective, Bombardier obligation is strictly limited to the repair and/or replacement at its option, and such repair or replacement is valid only at an authorized dealer in Canada or in the United States.

CONDITIONS FOR WARRANTY VALIDITY

- Proof of ownership submitted to the servicing dealer, by means of the Ski-Doo service card.
- An INSPECTION of the vehicle MUST BE PERFORMED by an authorized dealer after ten (10) hours of use or no later than thirty (30) days after first use. Such inspection will be at the owner's expense. (The time for such an inspection should be approximately 2 hours).
- Proper maintenance; to be performed at owner's expense. Guidelines for proper use and maintenance are detailed in each operator manual.

EXCLUSIONS: non-warrantable

- Variable speed drive belt, windshield, filters, ignition breaker points, condensers, spark plugs, light bulbs, protective lenses, brake linings, ski runner shoes, slider shoes on suspension and variable speed pulleys, labels, soft trim, appearance items, lubricants and paints and all tune-ups and adjustments required.
- Defects resulting from accident and/or installation of parts other than genuine Bombardier parts.
- Any vehicle used for racing purpose.
- Any losses incurred to the vehicle owner other than parts and labour.
- Any damage or premature wear incurred as a result of operating the snowmobile on other than snow covered terrain.

This warranty is expressly in lieu of all other expressed or implied warranties of Bombardier, its distributors and the selling dealer, including any implied warranty of merchantability of fitness for any particular purpose.

Neither Bombardier, its distributors nor the selling dealer shall be responsible, under any circumstances, for any loss or damage as a result of hidden defects, accidents, misuses or other faults.

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

November 1973 BOMBARDIER LIMITED Valcourt, Quebec, Canada In the event of change of ownership, complete the NOTICE OF TRANSFER form in order to qualify the new owner for balance of warranty.

All such transfers should be reported to an authorized Ski-Doo dealer for modification of the Ski-Doo Service Card.



NOTICE OF TRANSFER

Model	Vehicle	Serial No				
The ownership of this vehicle is transferred From						
	Signature of regis	tered own	er			
То						
Full name of purchaser	Block letters					
Address						
NO	Street or Villa	ge				
	City	County				
		Date				
Signature of purchaser		Date				
REPLACEMENT RE	QUEST FORM	//LOST S	ERVICE CARD			
			Date of sale Month Day Year			
Name						
	Block letter	5				
Street/Address						
	4"					
City	State		Zip code			

Model

Serial No.

In the event of a lost Service Card, contact the original selling dealer for completion of the "Request for New Service Card" form.

For a \$2.00 handling charge, Bombardier will mail your new personalized Service Card to you.



Dealer's number

INDIVIDUAL WARRANTY RESPONSIBILITIES

The following has been prepared for ease of understanding the actual warranty policy. In no manner, way or form should these responsibilities be misconstrued as being the actual terms of the current warranty policy.

The Manufacturer will:

- Produce a quality vehicle.
- Comply with safety/engineering standards.
- Make available replacement parts.
- Provide dealer/mechanic training, and repair procedures.
- Absorb cost of parts and labour on warranty repairs.
- Retain right to cancellation if snowmobile is subject to abuse or modification.

The Dealer will:

- Perform adequate pre-delivery.
- Stock and use genuine replacement parts.
- Have trained staff, facilities and tools.
- Honour warranty policy terms.
- Observe recommended labour time for ten (10) hour inspection.
- Properly complete warranty form.
- Inspect snowmobile for abuse/modification
- Notify owner of routine lubrication and maintenance changes.

The Owner will:

- Observe routine lubrication and maintenance
- Observe break-in period recommendations.
- Submit snowmobile to the ten (10) hour inspection.
- Operate snowmobile in a responsible manner on adequate snow covered terrain.
- Not modify or abuse snowmobile.
- Submit proof of ownership, by means of the Ski-Doo Service Card.
- Utilize only genuine quality tested manufacturers parts.
- Return snowmobile for servicing to the authorized selling Ski-Doo dealer, if within realistic travelling distance.
- Provide adequate seasonal preparation, spring and fall maintenance. This precaution will inhibit rust formation of vital parts, gum formation in fuel system, plus other benefits.

Ski-Doo snowmobiles are designed for operation at sea level and/or altitudes below 5,000 ft. When operating the snowmobile above 5,000 feet, maximum performance is affected, therefore it is suggested that a suitable gearing and carburetor calibration be employed. This modification can be performed by an authorized Ski-Doo dealer, and at the owner's expense.

Important: Operating a snowmobile which has been modified for high altitude operation, below 5,000 feet, can cause over heating and/or over reving of engine that could contribute to engine failure/damage.





