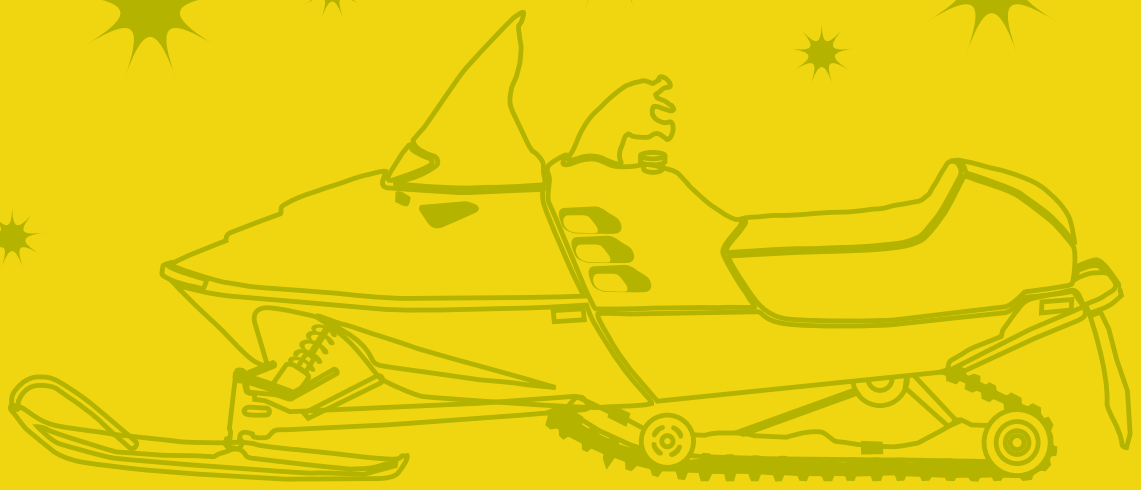
2002



POLARIS®

120 XC SP Youth Snowmobile

Universal Owner's Safety and Maintenance Manual

Read this manual carefully. It contains important safety information.
No one under the age of 6 should ride this vehicle

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⚠WARNING

Read, understand, and follow all of the instructions and safety precautions in this manual and on all product labels.

Failure to follow the safety precautions could result in serious injury or death.

PROPOSITION 65 WARNING

Snowmobile engines discharge fuel and exhaust, which contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm, onto the snow on which they operate. Keep this engine properly tuned and avoid unnecessary idling and spillage during fueling.

⚠WARNING

The engine exhaust from this product contains chemicals known to cause cancer, birth defects or other reproductive harm.

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What's the hottest thing on snow?

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- Technical tips
- New product introductions
- Event schedules
- Parts and Service Manual information
- Exciting details about The Way Out

Check it out...

www.polarisindustries.com/owner

POLARIS®
The Way Out.

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FOREWORD TO PARENTS

Thank you for purchasing a Polaris snowmobile and welcome to our world wide family of Polaris enthusiasts. Polaris takes great pride in engineering a product for the youngsters of the sport. Afterall, kids need a Way Out too.

Following the instructions and recommendations in this manual will help assure safe and enjoyable operation of your vehicle. Your Owner's Manual also contains instructions for minor maintenance. Major repairs are covered in the Polaris Service Manual and should be performed by a Factory Certified MSD (Master Service Dealer) Technician.

Before the snowmobile is used, take a few minutes to read through this manual and familiarize yourself and your child with maintenance and operation procedures. It may be the most important time spent in knowing how to keep your machine running perfectly every day.

This manual also contains important pages devoted to safety and environment. Since the operator will be a newcomer to this exciting winter sport, make certain he understands his information.

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Comments and suggestions regarding this manual may be forwarded in writing to: Polaris Industries Inc., Consumer Service, 2100 Highway 55Medina, MN 55340

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IMPORTANT NOTES FOR OWNERS AND DRIVERS

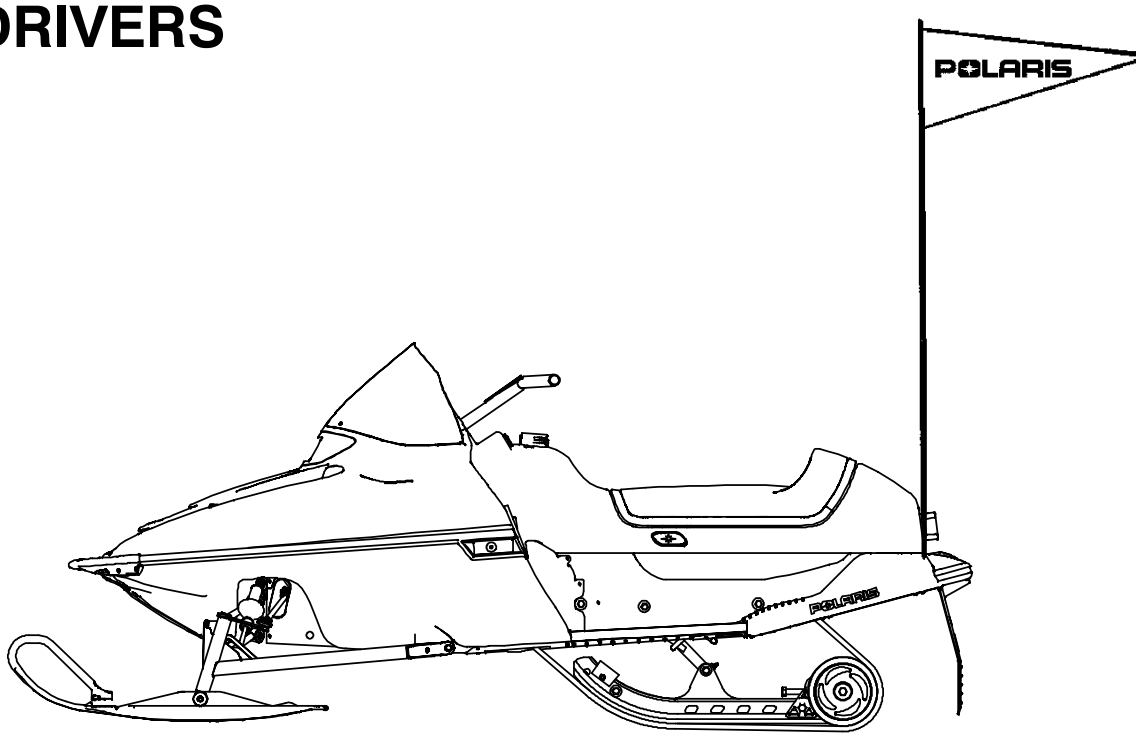
- After you read this manual store it in the vehicle for convenient reference. It should remain with the vehicle when sold.
- This manual contains the latest information at the time of printing. We reserve the right to make product changes and improvements without further notice.
- The drawings and photos used in this manual are general representations. Your model may differ.
- Follow the maintenance program outlined in this manual. Preventive maintenance ensures the critical components of the snowmobile are inspected by your dealer at various mileage intervals.
- You and your dealer must complete the registration form included with your snowmobile and forward it to us. This completed form is necessary to insure warranty coverage.
- Protect and preserve your right to ride by joining your local trail riding clubs.
- Polaris and Polaris The Way Out are registered trademarks.
- Polaris designs and manufactures a full line of personal recreational vehicles. Visit our web site at www.polarindustries.com for more exciting details on The Way Out.

IMPORTANT

Parents should sit down with their child and read the Rider's Section with them before letting them use this snowmobile. Parents should also read the Adult Section before allowing their child to ride this snowmobile.

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IMPORTANT NOTES FOR OWNERS AND DRIVERS



PARENTS: Do not allow anyone under the age of 6 to operate this machine. Review the information in this manual with any child who may be operating the snowmobile. It is up to you to teach any operator the proper and safe way to ride a snowmobile. You must set boundaries and adhere to them, keeping the operator's safety foremost in your mind. Never allow a child to operate this machine without adult supervision.

CHILDREN: Before you ride your new Polaris snowmobile, there are some important things you should know. How to keep safe is the most important thing. You must also learn some things that will keep you and those around you safe while you are riding.

Pay attention when you see these symbols and these words:

This is the safety alert symbol. When you see this symbol on your machine or in this manual it means PAY ATTENTION. If you don't, you could get hurt very badly or even killed. Your safety is involved!

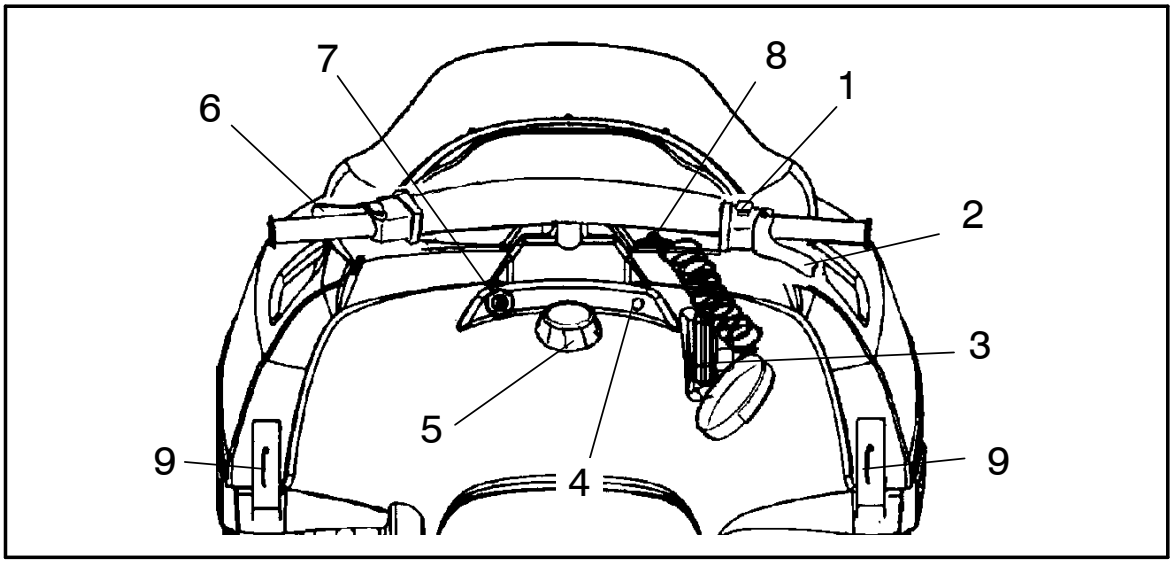
IMPORTANT

Parents should sit down with their child and read the Rider's Section with them before letting them use this snowmobile. Parents should also read the Adult Section before allowing their child to ride this snowmobile.

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KNOW YOUR MACHINE

Before you have an adult start the engine for you for the first time, let's learn about the controls on your new machine.



1. **Engine Stop Switch** - When the engine is running, you can push this button and the engine will stop. The stop switch must be in the "up" position to start the engine again.
2. **Throttle Control** - This makes your snowmobile go forward when you press it with your thumb. You must always make sure the throttle control does not stick before you operate your snowmobile. Read more about it on page R-11.
3. **Recoil Starter Handle** - Pull this to start your snowmobile. An adult will help you start it the first time.
4. **Choke Knob** - You may need to use this to help start your snowmobile if the engine is cold.
5. **Gas Cap** - This is where the gas goes that will run your snowmobile. Your snowmobile will not run without gas. Only adults should fill the gas tank.

⚠

Always have an adult put gas in your machine.

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6. **Brake Lever** - Squeeze this towards the handle to make your snowmobile slow down or stop.

> ⚠
>
> Always take your thumb off the throttle control when you pull the brake lever.

7. **Ignition Switch** - The key must be turned “on” before pulling on the recoil starter handle to start your snowmobile. You can also use this key to turn off the engine.

8. **Tether Strap/Switch** - This must always be attached snugly to your wrist and your machine when you are riding. If you fall off your snowmobile, the tether will pull off the switch and the engine will stop. Put one end of the tether strap around your wrist. The other end must be attached to the snowmobile. Always attach the tether strap before you ride.

> ⚠
>
> Never ride without the tether strap attached to your wrist and machine. Be careful not to get the cord tangled around the handlebars or any part of your body.

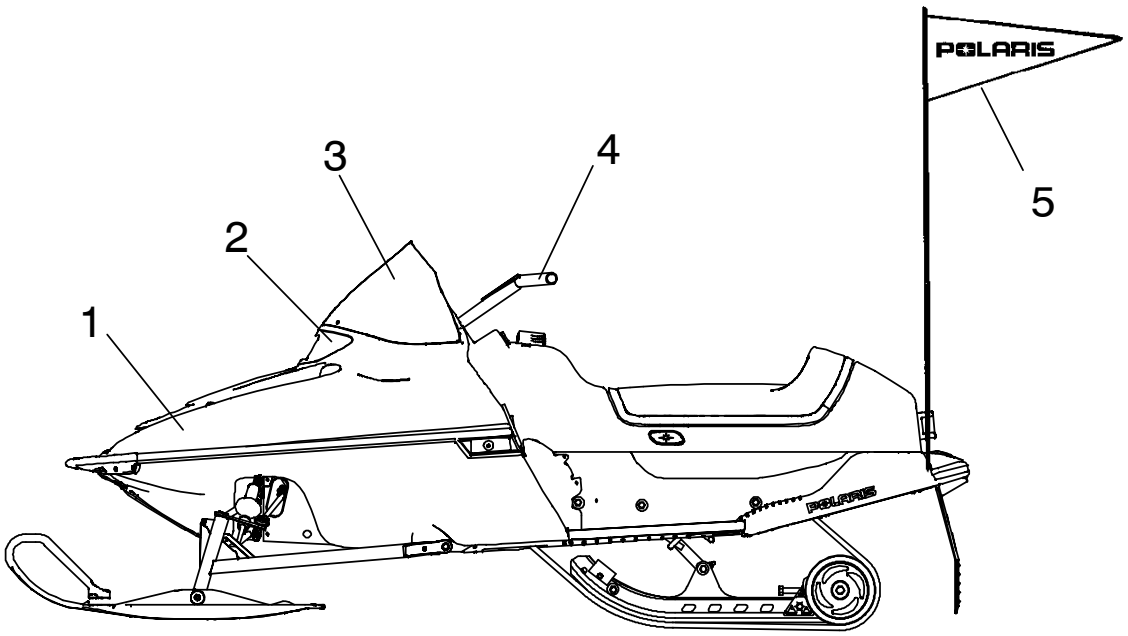
9. **Hood Hold-Down** - There are two straps to hold down the hood of your snowmobile. They must always be latched before you start your machine.

> ⚠
>
> Always make sure that these straps are latched before you ride.

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KNOW YOUR MACHINE

Let's learn more about your machine before we talk about riding.



1. **Hood** - The hood covers the moving and hot parts of the engine and must be securely latched before you ride the snowmobile.

2. **Headlight** - The headlight is always on when the engine is running. It helps others see you when you are riding.

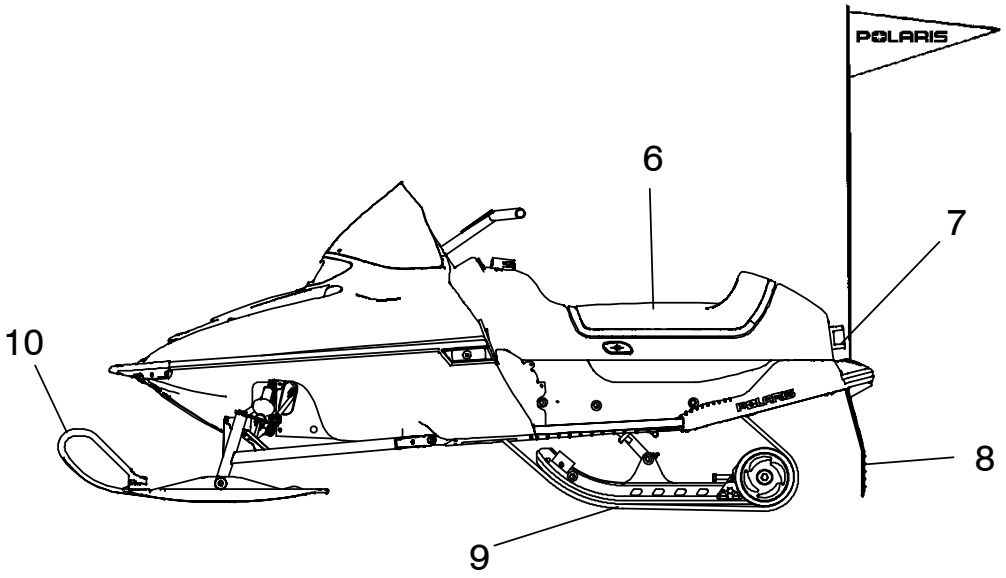
3. **Windshield** - Always keep your windshield clean to help you see where you are driving.

4. **Handlebar** - The handlebar is connected to the skis. When you turn the handlebar, the skis turn in the same direction.

5. **Flag -** The flag helps other people see where you are riding your snowmobile. Never remove the flag from your snowmobile.

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KNOW YOUR MACHINE



6. **Seat / Storage** - You sit on the seat. When the engine isn't running, you can take the cushion off and put things under the seat in the special compartment.

7. **Taillight** - The taillight is always on when the engine is running. It will help others see you when you are riding.

8. **Snow Flap** - The snow flap keeps snow, ice, or other things from flying out behind your snowmobile.

9. **Track** - The engine makes the track turn. The turning track makes your snowmobile go forward.

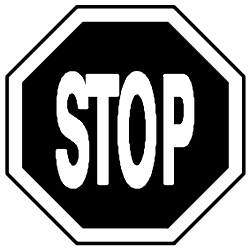
⚠

Never get close to a moving track.

Never wear clothing that could get caught in a moving track, like a long scarf or clothing that is too big. Tie up long hair.

10. **Skis** - The skis turn your snowmobile in the same direction that you turn the handlebar.

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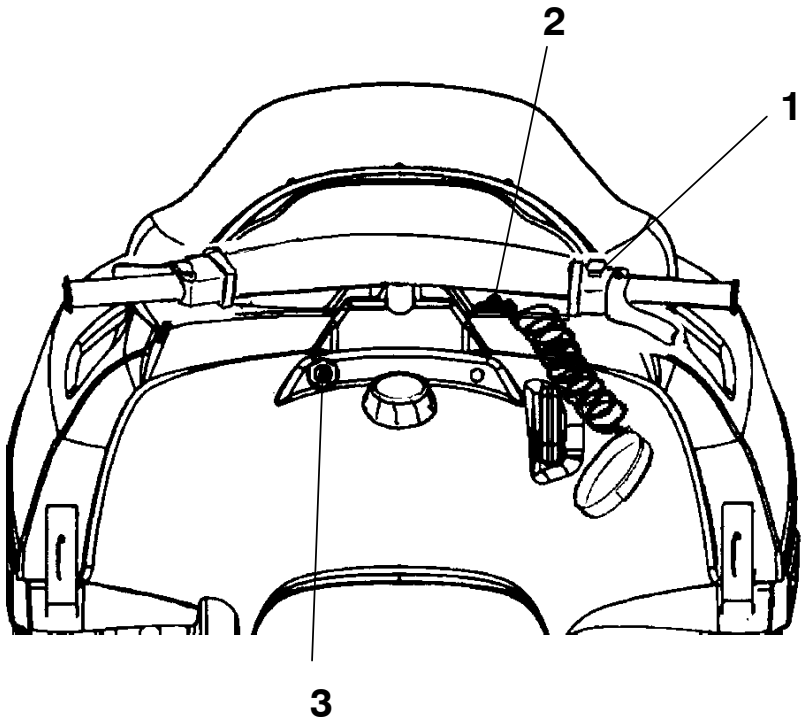


Let's review the three ways to stop your snowmobile.

1. Pushing down on the engine stop switch on the right handlebar control will shut off the engine.

2. Disconnecting the tether strap will shut off the engine.

3. Turning the key to off will shut off the engine.



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PRE OPERATION CHECK

You are almost ready to have an adult start your snowmobile. Before the snowmobile is started for the first time, you must do a **PRE-OPERATION CHECK**. In fact, every time you ride your snowmobile you must have an adult help you check these things before starting it. Let's learn about these things now.

- Make sure the throttle doesn't stick. Check this by pushing the lever toward the handlebar and then letting go. The lever should come right back to where it was before you pushed it. If it comes back slowly or stays open, you have a sticky throttle. This means that something is wrong or broken.



If you have a sticky throttle, do not start the engine. You could get hurt if you ride when you have a sticky throttle. Have an adult or your Polaris Dealer fix the throttle.

- Make sure the brakes don't stick. Check the brake lever by squeezing the lever toward the handlebar and then letting it go. It should come right back to where it was before you squeezed it. If it goes back slowly or stays on, your brakes are sticking.



If you have sticky brakes, do not start the engine. You could get hurt if you ride when you have sticky brakes. Have an adult or your Polaris Dealer fix the sticky brakes.

- If you have used the storage area under the seat, make sure the seat locking tabs are in place.

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- Make sure your track and skis are not frozen to the snow. Stand behind the machine and lift up on the back of the sled. This will free the track if it is frozen to the ground. Turn the handlebars to move the skis back and forth to make sure they aren't frozen. If any of this is hard to do, have an adult help you.

> ⚠
>
> Never check the track or skis when the engine is running. You could get hurt. Never stand behind or in front of any snowmobile when the engine is running.

- Have an adult check the gas level to see if your snowmobile needs more. Children should never add their own gasoline. This should always be done by an adult. Before anyone adds gasoline to your snowmobile they must read the instructions and warnings on pages A-29 and A-30 in this Owner's Manual.

> ⚠
>
> Always have an adult put gas in your machine.

- Have an adult check the engine oil level when the engine is cold. The engine is very hot after it has been running. It could burn you. Children should never check the oil on their own. An adult should be in charge of keeping the gas and oil levels to the full marks.
- Make sure your hood is latched tight before starting your machine.
- This last check is done with the engine running. You must check to make certain that **ALL THREE WAYS TO STOP** your snowmobile are working the way they should. Do you remember what they are? If you cannot list them, go back to page R-10 and review.

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RIDING RULES

Any operator of this machine must be at least 6 years old. Now you are ready to learn about riding a snowmobile. You will learn what you can do and what you cannot do. The adult with you is your teacher. You must listen and pay attention or you won't be safe when you ride. Remember that safety while you ride is the most important thing. Let's learn how to ride!



You must always follow the safe riding rules found on the next pages. If you do not, you could be hurt really bad or even killed.

▶ Your snowmobile is made for one person. Never carry a passenger. A passenger will make the snowmobile harder to drive. You may lose control and hurt yourself and your passenger. Never pull anything behind your snowmobile.

▶ Make sure you know where you are going to drive when your snowmobile is started. Make sure the area is safe all around your snowmobile.



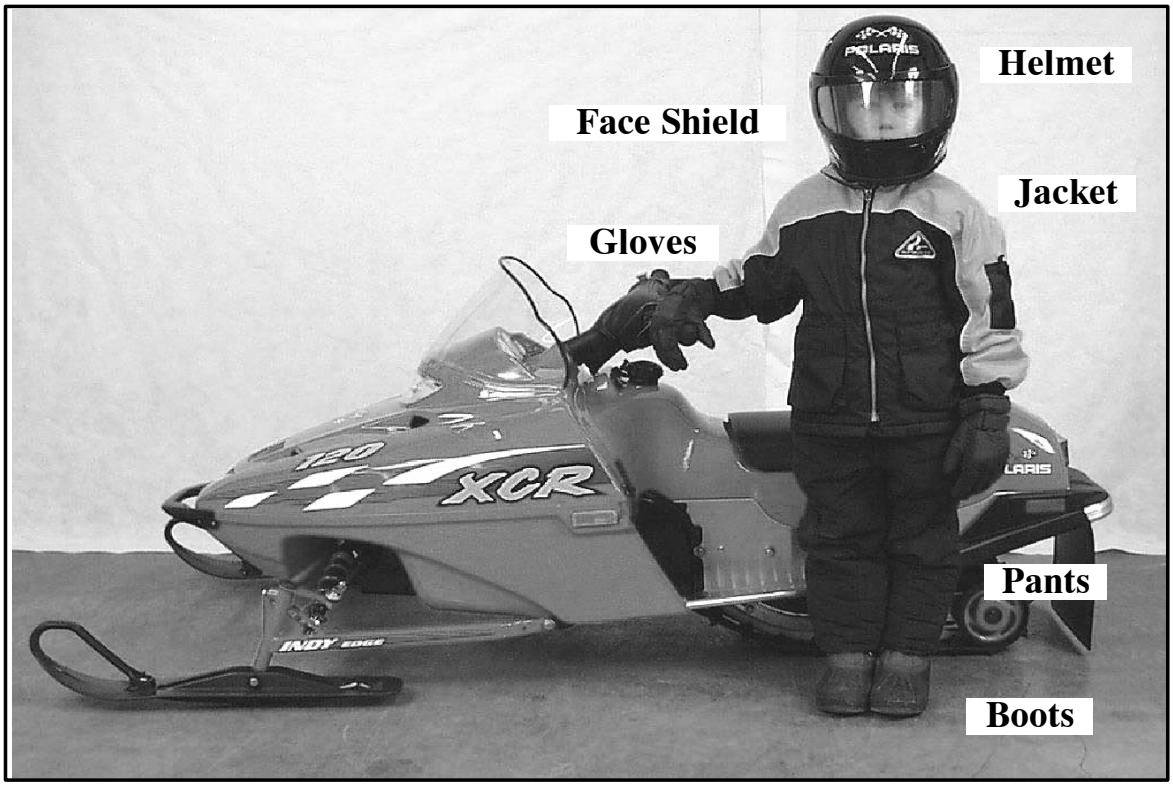
You must always follow the safe riding rules found on the next pages. If you do not, you could be hurt really bad or even killed.

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▶ Always wear the right kind of clothing when you are riding your snowmobile. You will need a good helmet with a face shield or goggles. Wear a warm jacket and snowpants. Make sure your clothing fits properly. If it is too small, it could keep you from moving easily. If it is too big, it could hang down and get caught in the track or another moving part. Never, ever wear a long scarf. Wear warm snowmobile boots and gloves. Make sure your boot laces are tied. If you have long hair, be sure to tie it up.

▶ Never ride alone. An adult should always be watching you in case you need help. Always drive within the sight of an adult.

▶ Never ride on public trails.



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RIDING RULES

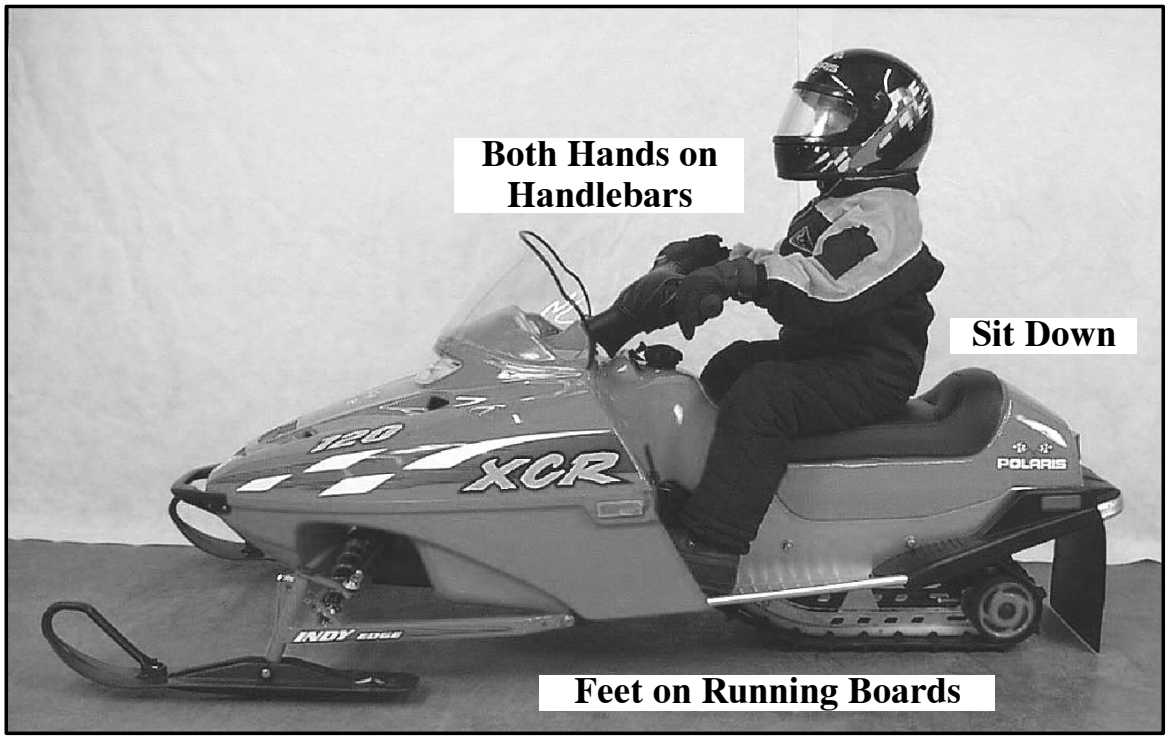
▶ Always drive your snowmobile while sitting down. Keep both hands on the handlebars and keep both feet on the running boards.

▶ When you are a beginner, always stay on level ground.

▶ Don't ride your snowmobile on roads or over railroad tracks. Your snowmobile makes noise that will keep you from hearing cars, trucks or trains that may be coming towards you.

▶ Fences and snowmobiles don't mix. Make sure you know where all the fences are before you ride. If you drive into one, you could get hurt.

▶ Don't ride at night. The headlight on your snowmobile is there only so that others can see you driving during the day.



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You must always follow the safe riding rules found on the next pages. If you do not, you could be hurt really bad or even killed.

▶ Learn where there are lakes, rivers, ponds and ditches in your driving area. Stay away from them. Never ride on frozen water. You could get hurt or you could even die. All ice can be dangerous!

▶ Always be alert and pay attention to where you are driving. Pay attention to other drivers and be even more careful around them because you don't know what they're going to do.

▶ Never follow another snowmobile too closely. Always allow lots of time and space to stop your snowmobile.

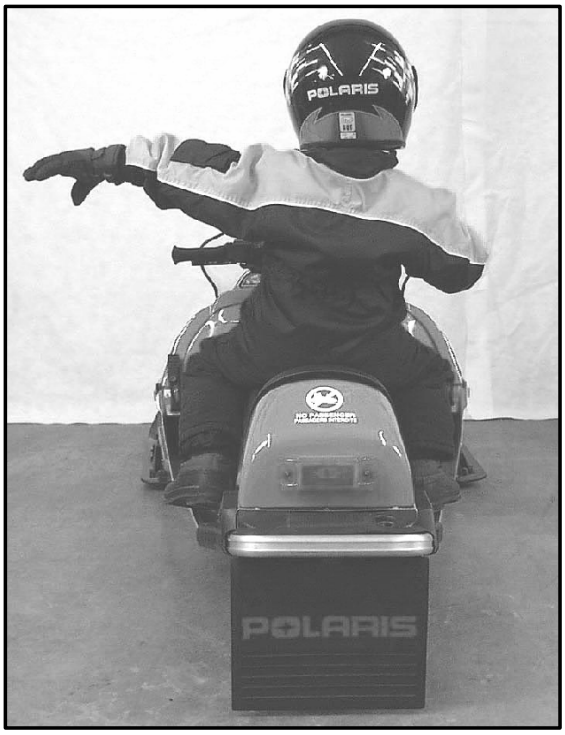
▶ Only ride your snowmobile where you know it is safe to drive. No driving over the flower garden or on the little trees you planted. Be careful of the things around you.

▶ Always attach the tether strap to your wrist and machine before riding.

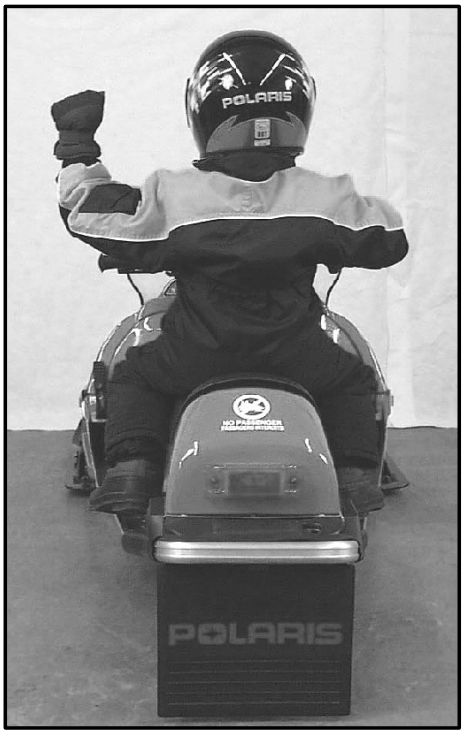
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RIDING RULES

Learn how to ride safely and correctly. Learn how to use your hands and arms as signals. Read and understand your Owner's Manual.



Left Turn



Right Turn



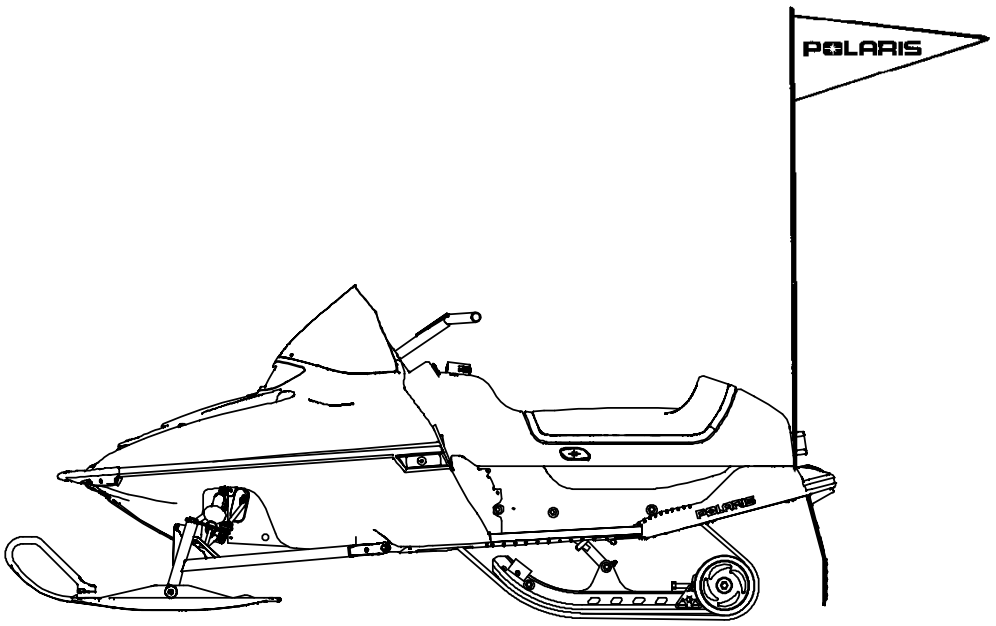
Stop

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- NOTES -

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UNDERSTANDING WARNINGS



The following precautionary signal words are used throughout this manual to convey the following messages: It is very important this owner's manual is read and thoroughly explained to each operator(s) of this machine.

The operator(s) should be at least 6 years old and be aware of the risk involved if these important warnings and cautions are not heeded.

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UNDERSTANDING WARNINGS

⚠ This is the safety alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury. Your safety is involved!

⚠WARNING

Indicates a potential hazard which could result in severe injury or death.

⚠ CAUTION

Indicates a potential hazard which may result in minor personal injury or damage to the machine.

CAUTION

Indicates a situation that can result in damage to the machine.

NOTE

The word “NOTE:” in this manual will alert you to key information or instructions.

IMPORTANT

“IMPORTANT:” will alert you to important information or instructions.

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UNDERSTANDING WARNINGS

As with all snowmobiles, caution must be observed to ensure operator safety. Particular caution must be taken to make sure that the snowmobile is in excellent operating condition at all times. It is strongly recommended that the operator as well as an adult check major and vital safety components each time before riding.

All Polaris snowmobiles have been designed and tested to provide safe operation when used as directed. Failure of critical machine components may result from operation with any modification; especially those which increase speed or power. There is a significant possibility of loss of control at higher speeds.

Due to our concern for the safety of our customers and the general public, Polaris hereby requests that consumers do not install on a Polaris snowmobile any equipment which is intended to increase the speed or power of the machine, or make any other modifications to the machines for these purposes. Any modifications to the original equipment or the snowmobiles substantially increase the risk of bodily injury. Be aware that these modifications may create a substantial safety hazard.

Polaris hereby informs you that the warranty on a snowmobile is terminated on the entire machine if any such equipment has been added to the machine or any modifications have been made to the machine which increase its speed or power.

We also advise you to strictly follow the recommended maintenance program outlined on pages A-37-A-67. This preventive maintenance program is designed to ensure that all critical components on the snowmobile are thoroughly inspected by your dealer at various mileage intervals.

Your snowmobile is not a toy. It is a well-engineered and well-constructed recreational vehicle. The following information is provided to aid you in its safe operation.

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SAFETY DECALS

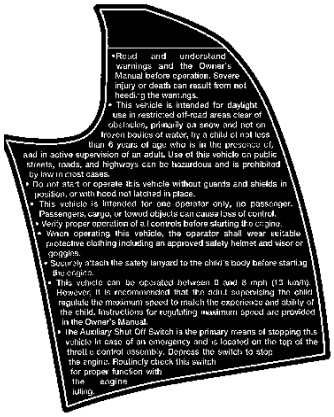
NOTE: Warning decals have been placed on the vehicle for the operator's protection. Make certain the operator understands the information on all the decals. In the event any decal becomes illegible or comes off, contact your Polaris dealer for a replacement. Any safety decal needing replacement will be provided by Polaris at no charge. The part number is printed on the decal.

CAUTION: Although your Polaris has been designed to provide operators with a safe, reliable snowmobile, much of its safety depends on the operator and parents. Improper use of this snowmobile or failure to maintain it in good operating condition can result in injury. To reduce this possibility, read the following important safety information and make certain the operators and guests are familiar with all the warnings, cautions and safe operating procedures. They must also understand the consequences and risks if they choose to ignore or neglect this information.

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SAFETY DECALS

The information contained in this decal is printed below.



- Read and understand warnings and the Owner's Manual before operation. Severe injury or death can result from not heeding the warnings.
- This vehicle is intended for daylight use in restricted off-road areas clear of obstacles, primarily on snow and not on frozen bodies of water, by a child of not less than 6 years of age who is in the presence of, and in active supervision of an adult. Use of this vehicle on public trails, streets, roads, and highways can be hazardous and is prohibited by law in most cases.
- Do not start or operate this vehicle without guards and shields in position, or with hood not latched in place.
- This vehicle is intended for one operator only, no passenger. Passengers, cargo, or towed objects can cause loss of control.
- Verify proper operation of all controls before starting the engine.
- When operating this vehicle, the operator shall wear suitable protective clothing including an approved safety helmet and visor or goggles.
- Securely attach the safety lanyard to the child's body before starting the engine.
- This vehicle can be operated between 0 and 8 mph (13 km/h). However, it is recommended that the adult supervising the child regulate the maximum speed to match the experience and ability of the child. Instructions for regulating maximum speed are provided in the Owner's Manual.
- The Auxiliary Shut Off Switch is the primary means of stopping this vehicle in case of an emergency and is located on the top of the throttle control assembly. Depress the switch to stop the engine and vehicle. Routinely check this switch for proper function with the engine idling.

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PRE OPERATION CHECK

⚠WARNING

Teach the operators to perform the following Pre-Operation Check before starting the engine each time before they ride. If they do not check their machine properly before riding, they could be seriously injured or killed.

- Check the throttle for proper operation.
- Check the throttle safety switch for proper operation.
- Check the brake for proper operation.
- Make sure the seat is locked into place.
- Make sure the track and skis are not frozen to the ground.
- An adult should check the gas and oil levels for the rider and add more, if necessary.
- Make sure the hood is latched.
- Make sure headlight and taillight are working properly.
- Make sure all three ways to stop the engine are functioning.

These checks should become automatic for your child before each ride. It is up to you, the adult, to instill in your child the importance of performing this Pre-Operation Check before they operate the snowmobile.

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PRE OPERATION CHECK

Before Starting The Engine

NOTE: It is up to you, the parent, to teach your child the proper and safe way to ride a snowmobile. You must set boundaries and adhere to them, keeping your child's safety foremost in your mind. Never allow your child to operate this machine without adult supervision.

Read and Understand Your Owner's Manual

Read and make sure the operators understand the Owner's Manual completely before allowing anyone to operate this snowmobile. It is also a good idea to read it periodically to reinforce the information. It is very important for to familiarize the operator and guests with the cautions and warnings pertaining to your machine as well as safe operating procedures. We have attempted to provide you with as much information as possible to alert you to the safety requirements of snowmobiling.

✓ Check Throttle and Brake for Proper Operation

⚠WARNING

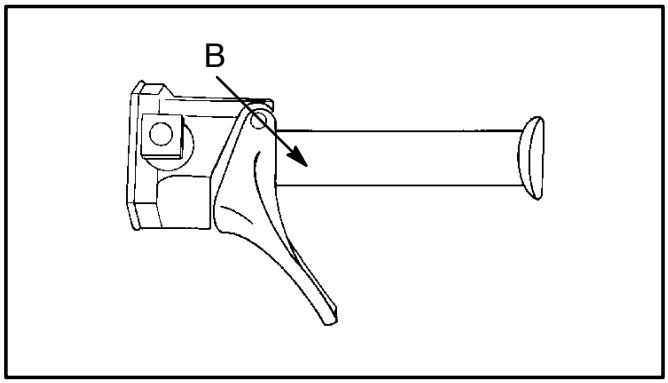
The throttle and brake are the primary controls of the snowmobile. If either should malfunction, a serious loss of control could result.

When checking the throttle, make sure the control lever will compress evenly and smoothly. When the lever is released, it should immediately return to the idle position without binding or hesitation. If the throttle does not function smoothly, do not attempt to start the engine. Have the throttle serviced before starting the engine.

The need for a properly functioning brake is vital. The brake must be checked for correct operation before starting the engine. See page A-12 for details.

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Check Throttle Safety Switch



Test the throttle safety switch system on a daily basis before the machine is used.

While seated in a normal riding position, and with the engine idling, hold the throttle lever pin stationary by exerting pressure on the pivot pin in the direction shown in the illustration (B). Apply a slight amount of throttle opening. A properly functioning switch *must* shut down the engine.

The throttle safety switch is designed to stop the engine whenever all pressure is removed from the throttle lever and the throttle cable or valve does not return to the normal closed position.

Check for Proper Operation of Steering System

Check for proper operation of the steering system by manually turning the skis completely to the right and to the left. If difficulty is encountered, check for ice and snow buildup which may be obstructing the steering linkage. Make certain all greasable components are properly lubricated.

Track Inspection

Driving for extended periods of time with marginal lubrication could severely damage the track. Driving on icy trails or driving when there is little or no snow are two examples of situations that would provide marginal lubrication and are not recommended.

⚠WARNING

Always inspect for damage before using the snowmobile. Operating the snowmobile with a damaged track will increase the possibility of additional track damage and/or failure. This could cause loss of control, resulting in severe injury or death.

NOTE: Track damage or failure caused by operation under poor lubrication conditions will void the track warranty.

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OPERATION WARNINGS

Single Rider Snowmobiles

This snowmobile is designed for a single operator.

Do Not Operate Engine With Intake Silencer Removed

CAUTION

When operating engine with intake silencer removed, damage to the engine may occur.

Stay Clear of Track

⚠WARNING

During warm-up and operation, stand clear of the rotating track. Entanglement and serious injury or death may result. Use just enough throttle to rotate the track and warm up the engine.

Do Not Operate Engine With Drive Chain Guard Removed

⚠WARNING

The drive chain guard is designed to protect the operator from metal parts in the event of a drive chain failure. Although the chance of failure is extremely remote, do not defeat the purpose of the guard by removing it. It is provided for *the safety of the child*.

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Do Not Touch the Engine After it Has Been Running

⚠WARNING

The engine and exhaust become very hot when it is running. Touching the hot engine could cause a severe burn.

Disabled Operators

⚠WARNING

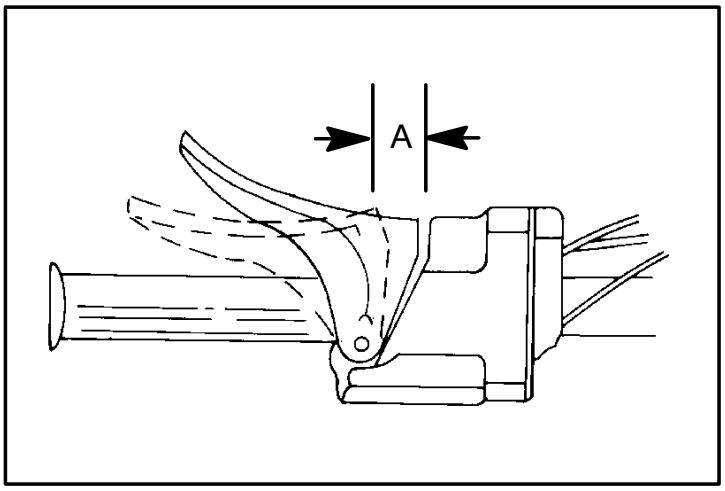
Safe operation of this rider-active vehicle requires good judgement and physical skills. Persons with cognitive or physical disabilities who operate this vehicle have an increased risk of overturns and loss of control which could result in serious injury or death.

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OPERATION WARNINGS

Brake Lever Travel

Measure the clearance between the lever and brake block. Inspection should be made with the lever firmly depressed. Distance A should be no more than 3/4″ (1.9 cm).



Excessive travel indicates a need to adjust the brake cable. Refer to the mechanical brake adjustment information on page A-46.

Check to See That the Hood is Securely Latched

The hood of the snowmobile protects the operator from moving and hot parts as well as aiding in sound emission control and various other functions. *Under no circumstances* should your snowmobile be operated with the hood open or removed.

Engine Stop Switch

Check engine stop switch for proper operation. Push down to stop engine. Pull up to release and start engine.

Tether Switch

Check tether switch for proper operation.

Remove Ignition Key

Don't tempt someone to steal or ride your snowmobile without permission by leaving the key in the ignition.

Lighting Check

Check headlight and taillight for normal operation.

Check Surroundings to Verify Clear Operating Area

It is important to make certain there is a clear area all around the snowmobile, including an area clear of bystanders. Remember that the possibility always exists of some sideways vehicle movement or of debris being thrown by the track. Teach the operator to check the operating area before riding.

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Be Seated and in Position to Control the Vehicle

Improper operator position on the snowmobile can be the source of serious injury. Operating a snowmobile does require skill and balance for proper control, and an improper position can seriously reduce the child's ability to control the snowmobile. The riding position may vary as the operator becomes more skilled; but under most conditions the proper position is to be seated, feet on the running boards, and in a comfortable position for proper throttle, brake, and steering control.

⚠WARNING

Never hold the snowmobile up or stand behind it while warming up the track. A loose track or flying debris could cause serious personal injury or death.

This snowmobile is propelled by a revolving track which must be partially exposed for proper operation. Serious injuries may be caused by operator carelessness resulting in hands, feet, hair, or clothing becoming entangled in the track. Teach your child to respect this machine and all the moving parts. Stress that being properly seated keeps the child clear of the track.

Stop Engine Before Attempting Adjustments

⚠WARNING

The snowmobile engine compartment contains moving parts. Shields and guards have been provided for safety, but it is still possible to carelessly get your hands or fingers into a moving chain or a rotating shaft. For this reason *never* attempt adjustments with the engine running. Serious personal injuries can result. The proper method is to turn off the ignition, raise the hood, make the adjustment, secure shields and guards, secure the hood, and then re-start the engine to check its operation. The same is true of track alignment. If the track must be re-aligned, it is recommended that this service be performed by your dealer.

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OPERATION WARNINGS

Always Wear Clothing Designed for Snowmobiling

Clothing designed for snowmobiling is warm, comfortable and safe.

⚠WARNING

Always make sure the operator is wearing an approved helmet and eye protection. Do not allow the child to wear loose clothing or long scarves because they can easily become entangled in moving parts. If your child has long hair, be sure it is always tied up securely and tucked into the helmet or jacket.

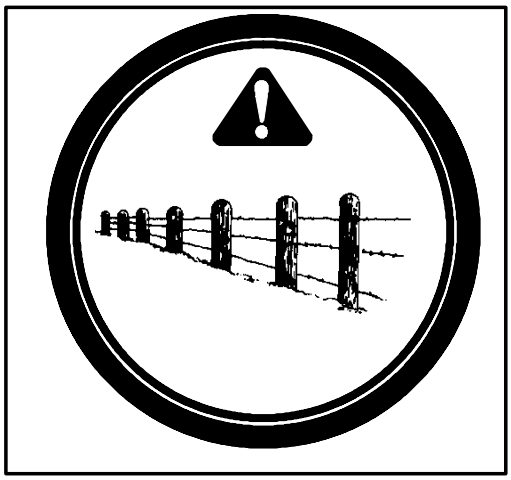
Be aware of the weather forecast and especially the wind chill. A table is provided on page A-16 for your reference. Be prepared. Be warm and comfortable.

Know the Limitations of the Machine and the Skills of the Driver

The operator should be aware that there are state and local laws governing snowmobile operation and that these laws should be followed. They have been established for the protection of all snowmobile riders. Most states offer a snowmobile safety course for children. Check your state or county agencies for this service.

This vehicle is intended for daylight use only. Check both the headlight and taillight of the machine to ensure proper operation. **IMPORTANT:** The headlight and taillight are intended only to increase the visibility of the 120 XC SP during daylight operation.

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Wire fences are a serious hazard. Teach your child to always be on the alert for fences. Single strands are especially dangerous, since there can be a great distance between posts. Guy wires on utility poles are also difficult to distinguish. Teach your child to reduce speed when traveling near poles, posts, or other obstacles.

Teach your child that the sound of the machine will make it difficult to hear the sound of approaching vehicles. Do not allow your child to operate the snowmobile on or near roads and railroad tracks.

Teach your child what it means to drive defensively. Never tailgate and always allow ample stopping distances.

Your child must be taught to always be alert and pay attention to the driving area ahead.

When teaching inexperienced operators to ride, set up a nearby predetermined course. Establish boundaries and make certain the operator(s) know and understand them. Make sure they know how to drive and control the snowmobile before you allow them to make supervised longer distance runs. Teach them proper snowmobile courtesy.

It is a good idea to predetermine some hand signals as a way to communicate with your child while giving instruction. It may be difficult for your child to hear your voice over the sound of the snowmobile and through a helmet.

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OPERATION WARNINGS

Windchill/Temperature Charts

The following information is provided as a guide to determine what temperatures are dangerous when riding your snowmobile.

WIND CHILL CHART (°F)

Estimated Wind Speed in MPH	Actual Thermometer Reading (°F)											
	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
	Equivalent Temperature (°F)											
Calm	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
5	48	37	27	16	6	-5	-15	-26	-36	-47	-57	-68
10	40	28	16	4	-9	-21	-33	-46	-58	-70	-83	-95
15	36	22	9	-5	-18	-36	-45	-58	-72	-85	-99	-112
20	32	18	4	-10	-25	-39	-53	-67	-82	-96	-110	-124
25	30	16	0	-15	-29	-44	-59	-74	-88	-104	-118	-133
30	28	13	-2	-18	-33	-48	-63	-79	-94	-109	-125	-140
35	27	11	-4	-20	-35	-49	-67	-82	-98	-113	-129	-145
40	26	10	-6	-21	-37	-53	-69	-85	-100	-116	-132	-148
Wind Speeds Greater Than 40 MPH Have Little Added Effect	Little Danger (For Properly Clothed Person)				Increasing Danger			Great Danger				
					Danger From Freezing of Exposed Flesh							

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WIND CHILL CHART (°C)

Esti-mated Wind Speed in KPH	Actual Thermometer Reading (°C)									
	5	0	-5	-10	-15	-20	-25	-30	-35	-40
	Equivalent Temperature (°C)									
0	5	0	-5	-10	-15	-20	-25	-30	-35	-40
10	1	-4	-11	-16	-22	-27	-33	-38	-45	-50
20	-4	-9	-17	-23	-29	-36	-42	-48	-54	-61
30	-7	-13	-21	-28	-35	-42	-48	-55	-63	-69
40	-9	-16	-24	-32	-39	-47	-53	-61	-69	-76
50	-11	-18	-26	-34	-41	-49	-57	-64	-73	-80
60	-12	-19	-27	-35	-43	-51	-59	-66	-75	-82
70	-13	-20	-28	-36	-44	-52	-60	-68	-76	-84
Wind Speeds Greater Than 70 KPH Have Little Added Effect	Little Danger (For Properly Clothed Person)			Increasing Danger			Great Danger			
				Danger From Freezing of Exposed Flesh						

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OPERATION WARNINGS

Cold Weather Drive-away

Whenever the machine has been parked for some length of time, especially overnight, always shake loose the skis and track for the operator before attempting to put the machine into motion. The throttle will require some pressure to move the machine. Teach the operator not to be afraid of applying pressure to the throttle but at the same time, teach them not to be too forceful with the throttle which could cause the machine to lurch forward.

Powder Snow Operation

This snowmobile is designed to operate best on snow. Maneuverability is attained by the steering, skis, and the shifting of the driver's body weight. Maximum control will be attained by shifting body weight. Maneuverability will change for lighter operators.

If the machine becomes stuck in snow, free the running board area and step down the snow in front of the machine so that when the throttle is opened the machine will be able to climb out. The operator can then get back on the machine and continue. It is best to encourage the operator to stay on established riding areas to avoid the possibility of getting stuck.

Do not operate for prolonged periods with marginal lubrication between track slide rail.

CAUTION

It is essential that this machine be operated under conditions with adequate snow cover, as snow provides the only lubrication for the track. Failure to do so will result in excessive wear and damage to the slide rail and track.

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Snow and ice buildup in the underhood area can interfere with the steering.

⚠WARNING

Before allowing your child to drive the machine, be sure that ice and snow are not interfering with the steering. Manually turn the skis to the left and right. If difficulty is encountered, check for ice and snow buildup which may be obstructing the steering linkage.

Hard Packed Snow

⚠WARNING

Steering and braking control are substantially reduced when operating on on hard surfaces, hard-packed snow, or icy surfaces.

Teach your child to reduce speed as required to maintain control in all driving conditions. If necessary, maximum speed may be regulated by using the procedure outlined on page A-31.

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OPERATION WARNINGS

Ice

It is dangerous to operate on ice or under slippery conditions. If ice or slippery conditions are unavoidable, use extreme caution and operate at speeds no faster than a walk. Never attempt an abrupt change of direction on a slippery surface. The chance of "spin-out" increases under these conditions. Being able to turn a snowmobile depends primarily on the skis being in snow. On hard surfaces, such as ice, the ability to turn is reduced and the machine will not turn very well. In this situation it may be best to dismount and move either the front or rear of the machine to point it in the proper direction.

Teach your child to respect the unknown. Children must be taught that they are not to venture out on their own in unapproved territory. They must learn that they must never ride a snowmobile on a frozen body of water. You and the driver of the machine should know and understand that severe injury or death can result if the snowmobile and its occupant break through the ice.

Hilly Terrain

⚠WARNING

Traveling on hilly terrain is not recommended. It takes some maneuvering of body weight that a child may not be capable of, which will leave the child at risk. If traveling on hilly terrain is unavoidable, teach your child to exercise extreme caution as well as the proper operating procedure as outlined below.

Riding Uphill

Riding uphill requires extreme caution and should be attempted only by experienced operators. The operator should assume a standing position with body weight kept low and forward, accelerating before the start of the climb and then releasing throttle pressure enough to prevent track slippage.

When reaching the crest of the hill, the operator must slow down and be prepared to react to obstacles, sharp drops, or other people or vehicles which may be on the other side of the hill.

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Riding Downhill

When riding downhill, the operator must keep the speed at a minimum. It is important to apply just enough throttle to keep the clutch engaged while descending the hill. This will allow use of the engine's compression to help slow the machine, and keep the snowmobile from rolling freely downhill.

⚠WARNING

Teach your child to never stand or get off the machine on the downhill side of the machine. Serious injury or death could result.

Responsible Driving

It is up to you, the parent, to teach your child the proper and safe way to ride a snowmobile. You must set boundaries and adhere to them, keeping your child's safety foremost in your mind. Never allow your child to operate this machine without adult supervision.

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PRESERVATION OF THE ENVIRONMENT

Teach your child to drive their snowmobile with consideration for the protection and preservation of the environment.

Noise Level

One of the most publicized subjects with regard to snowmobiles is noise. The Society of Automotive Engineers (SAE), which is the standard-setting body for snowmobiles, has recommended that snowmobiles conform to prescribed sound levels. This Polaris snowmobile has been engineered to conform to these SAE standards.

In order to be meaningful, all regulations require the cooperation of the snowmobile owner. Muffling systems, designed to reduce noise levels, should not be altered or removed. Snowmobile drivers must be aware that they have a public responsibility to operate their snowmobiles with concern for others. As a snowmobile operator you may not realize the sound of your snowmobile may annoy non-snowmobilers. We are attempting to do our part through the manufacture of quieter machines, and we also ask your help in the effort to further reduce the impact of noise.

Air Pollution

As a part of Polaris' plan for the snowmobile's compatibility within the environment, our engineers are investigating ways to reduce emission levels of engines. We expect our efforts to lead to the reduction of potential air pollution.

The four-stroke engine used in this snowmobile produces less exhaust emissions and reduces noise, as well.

In addition to technological research, we also suggest that governmental agencies, manufacturers, distributors, dealers, ecologists, and other interested parties work together to develop data on environmental topics. We will continue to participate in this type of study so that someday we may find the answers to these difficult issues.

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PRESERVATION OF THE ENVIRONMENT

Environmental Protection

As part of the continuing environmental education campaign, we are encouraging state and provincial governments across the snowbelt to adopt rigorous safety training programs which also encourage protection of our environment, wildlife and vegetation. Snowmobile clubs and other organizations are working together to protect our environment. It is very important that we encourage them as well as become actively involved ourselves. Teach your child the following:

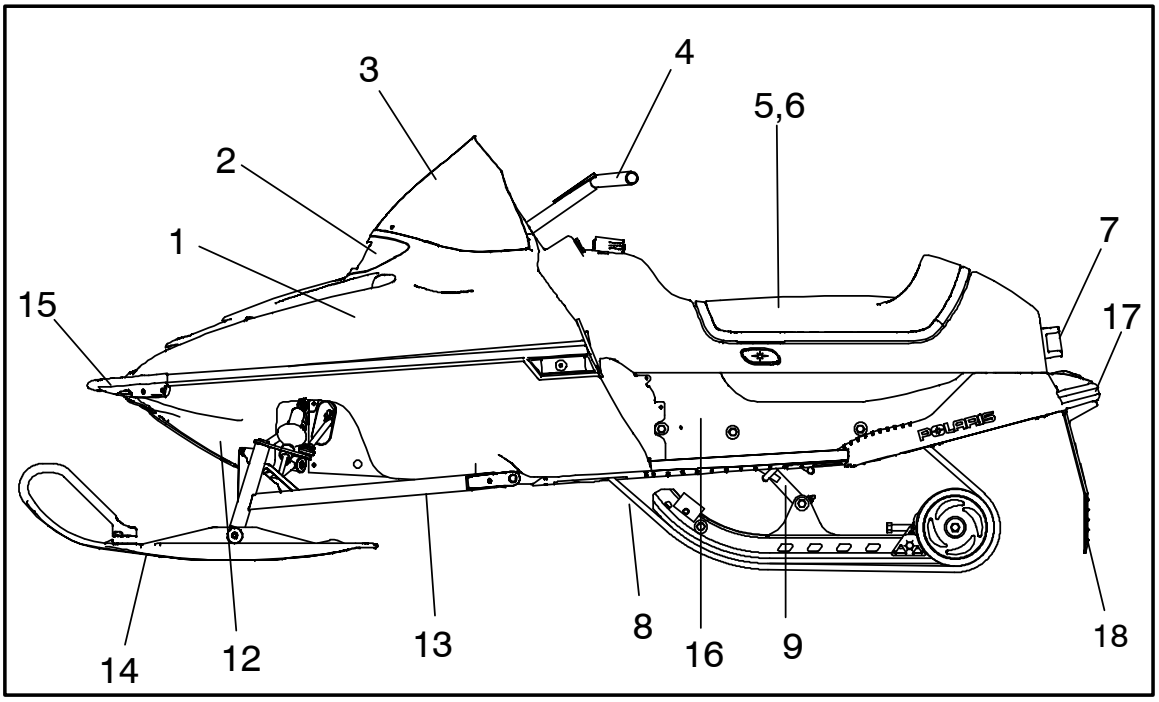
Respect your snowmobile;
respect your environment;
and you will earn
the respect of everyone.

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IDENTIFICATION AND SPECIFICATIONS

Vehicle Nomenclature

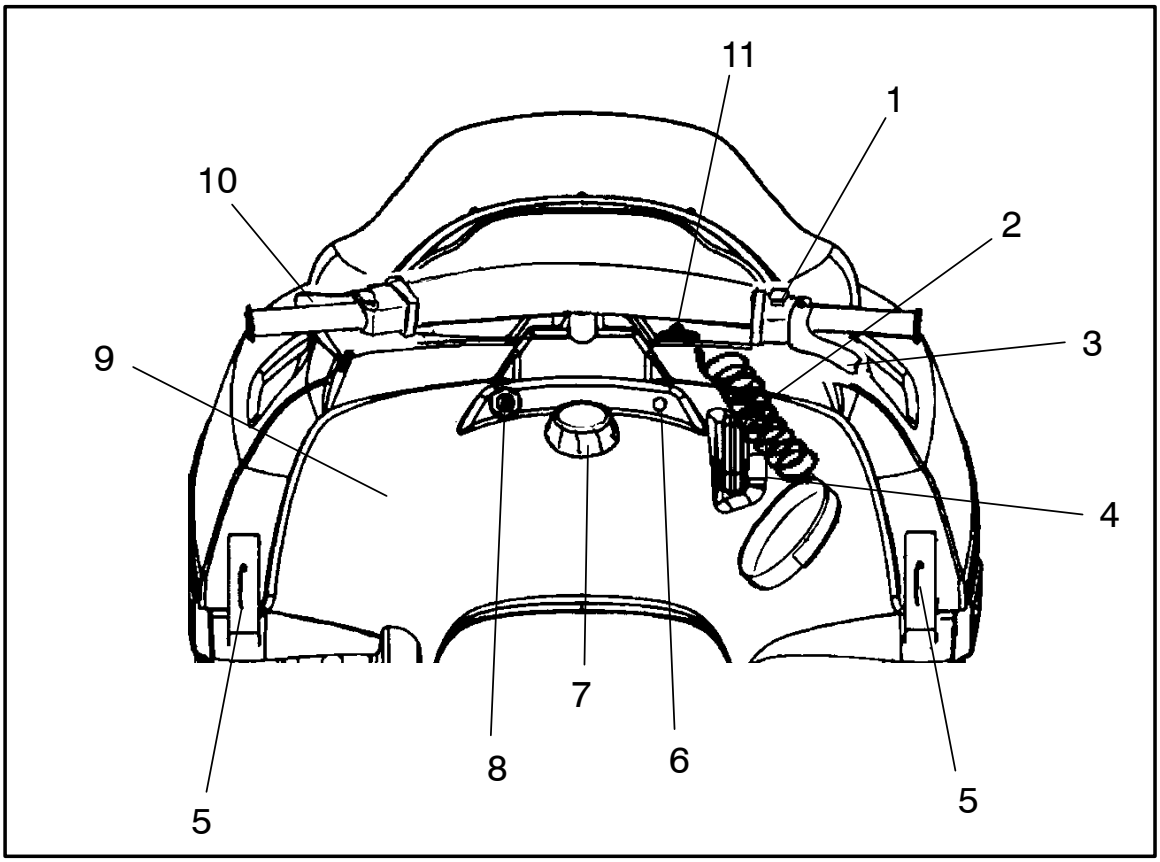
Refer to the illustrations on the following pages.



1. Hood
2. Headlight
3. Windshield
4. Handlebar
5. Seat
6. Storage (under seat)
7. Taillight
8. Track
9. Rear Suspension
12. Nosepan
13. Trailing Arm
14. Skis
15. Front Bumper
16. Vehicle I.D. Number (Right Side)
17. Rear Bumper
18. Snow Flap

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Controls and Instruments



1. Stop Switch (Push/Pull). Operation found on page A-33.
2. Tether Strap
3. Throttle Control
4. Recoil Starter Handle
5. Hood Hold-Down
6. Choke Button
7. Gas Cap
8. Ignition Switch
9. Console
10. Brake Lever
11. Tether Switch

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ENGINE BREAK-IN

Engine Break-In

The break-in period for your new snowmobile is defined as the first ten hours of operation, or the time it takes to use the first two tanks full of gasoline. No single action on your part is as important as a proper break-in period. Careful treatment of a new engine will result in more efficient performance and longer life for the engine. Perform the following procedures carefully.

1. Drive slowly at first. Select an area which is open and will allow room to familiarize yourself with vehicle operation and handling.
2. Vary the throttle positions. Do not operate at sustained idle.
3. Perform regular checks on fluid levels, controls and all important areas on the vehicle, as outlined in the maintenance section.
4. Break in the oil. Change the oil after the first 20 hours of operation.

CAUTION

- Never mix brands of oil. Serious chemical reactions can cause oil passage blockage, resulting in severe engine damage and voiding of engine warranty. The only oil recommended for this system is Polaris Premium 4 All Season Synthetic oil. This oil has been specially formulated for all temperatures and has extreme cold flow characteristics.
- Do not operate at prolonged full throttle for the first three hours of operation. Vary the throttle openings and machine speeds. This will reduce friction on all close fitting machined parts and allow them to break in slowly without damage.
- Avoid operating on ice or hard-packed surfaces, roads, etc. The absence of lubrication and cooling by snow will lead to overheating of the slide rail and track resulting in premature wear and failure. Reduce speeds and frequently drive into fresh snow to allow adequate cooling and lubrication of the slide rail and track surfaces.
- Drive with extra caution during the break-in period. Perform regular checks on fluid levels, lines, and all important areas of the machine.

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With a basic understanding of how the snowmobile works, and with close attention paid to maintenance tips, you will be ready to ride. Keep in mind these recommendations as well as those covered throughout this manual.

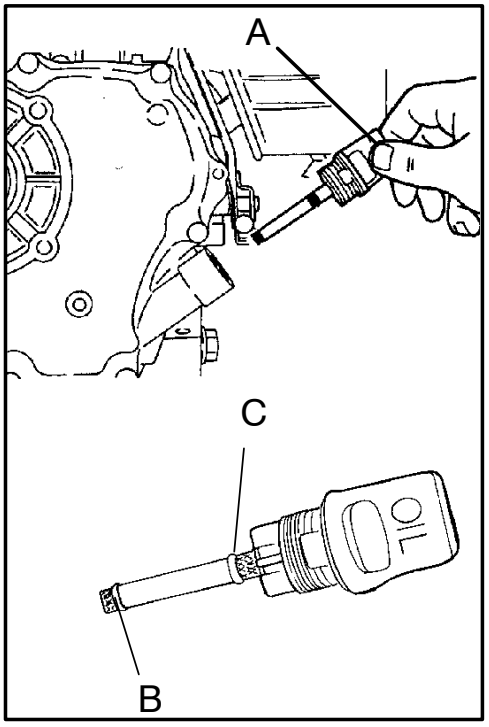
CAUTION

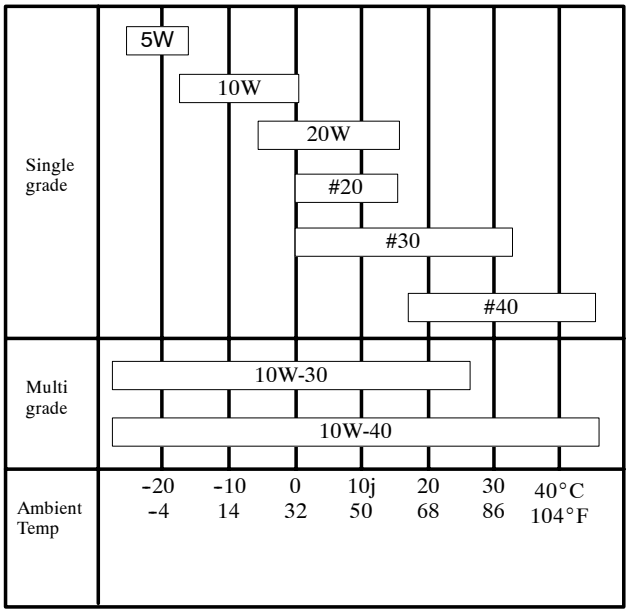
Use only Polaris Premium 4 All Season synthetic oil. Never substitute or mix oil brands. Serious engine damage and voiding of warranty can result.

Checking Engine Oil

Before checking or refilling engine oil, be sure the engine is located on a stable, level surface and stopped.

- Do not thread the gauge into the oil filler (A) to check oil level.
- If the oil level is below the lower level line (B) on the dipstick, you must add oil to the upper level (C) of the dipstick. Use the table to determine the proper oil.
- Change the oil if it is contaminated.
- Use class SE, SF (API classification) or higher grade oil.
- If multi-grade oil is used, oil consumption will increase when the ambient temperature is high.





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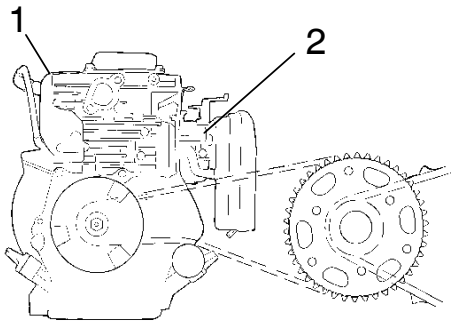
OPERATION

Carburetion

Proper carburetor adjustment is critical, since a mixture too lean (too much air, too little fuel) will result in overheating of the combustion chamber causing pre-ignition of the fuel. This results in piston burning, bearing failure, or complete engine failure. A lean mixture can be the result of fuel line restrictions, foreign matter in the carburetor, etc.

A mixture too rich (too much fuel, too little air) is also unfavorable because it can foul plugs and cause generally poor engine performance.

All carburetors have been pre-set at the factory for adequate fuel supply. Higher altitude operation may require different adjustment and settings.



1. Engine
2. Carburetor

Remember, correct setup provides engine RPM within its given power band at full throttle settings and also provides maximum efficiency and operation at all other throttle openings. Your dealer has the training and tools required to perform any adjustments for you.

CAUTION

Carburetor adjustments must be performed by your dealer, since mistakes can result in possible operator safety hazards as well as serious engine damage.

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⚠WARNING

Gasoline is extremely flammable and explosive under certain conditions. Improper handling can result in severe injury or death.

- Always stop the engine and refuel outdoors or in a well ventilated area.
- Do not smoke or allow open flames or sparks in or near the area where refueling is performed or where gasoline is stored.
- Do not overfill the tank. Do not fill the tank neck.
- If you get gasoline in your eyes or if you swallow gasoline, see your doctor immediately.
- If you spill gasoline on your skin or clothing, immediately wash it off with soap and water and change clothing.
- Never start the engine or let it run in an enclosed area. Gasoline powered engine exhaust fumes are poisonous and can cause loss of consciousness and death in a short time.

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⚠WARNING

The engine exhaust from this product contains chemicals known to cause cancer, birth defects or other reproductive harm.

Fuel

The fuel used in the Polaris engine is as important to engine life and performance as the lubricant used.

Most Polaris engines are designed to run on 87 octane non-oxygenated or 89 octane oxygenated pump gasoline. There is a great deal of variability in the quality of the 87 octane gasoline available across the country. We encourage the use of premium fuel when possible.

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NOTE: It is up to you, the parent, to teach your child the proper and safe way to ride a snowmobile. You must set boundaries and adhere to them, keeping your child's safety foremost in your mind. Never allow your child to operate this machine without adult supervision.

Speed/Performance Regulation

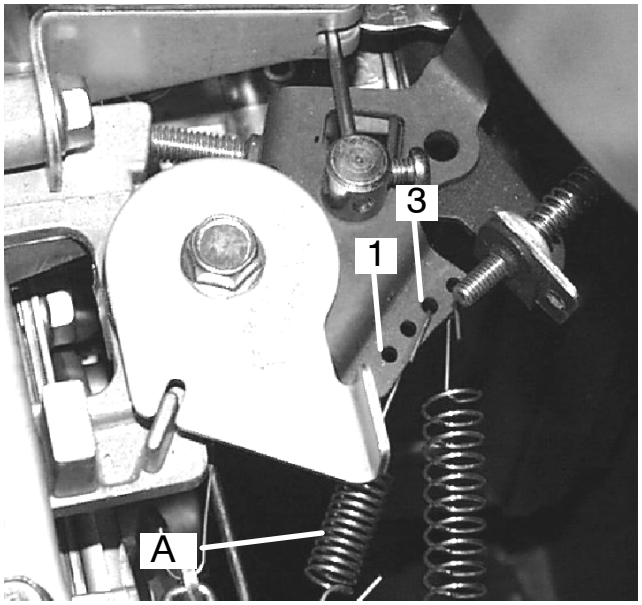
Under certain circumstances it may be necessary for an adult to regulate the speed and acceleration potential of the snowmobile. Moving the governor lever spring is the adjustment used to control performance. Use the following procedure to set the performance level.

CAUTION

Always wait for the engine to cool down if it has been running. Touching a hot engine can cause serious burns.

1. For maximum performance, move governor spring (A) to hole #3.

2. For minimum performance move governor spring to hole #1.



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OPERATION

Pre-Starting

Before starting the engine, always refer to all safety warnings pertaining to snowmobile operation. Never start the snowmobile without checking all components to be sure of proper operation. See Operation Warnings beginning on page A-31.

Important safety items include, but are not limited to:

- Throttle system
- Brake system
- Steering system

These systems must be checked each time before starting the engine. Incorrect adjustments, damage, or excessive wear due to neglect could result in personal injury and/or damage to the snowmobile.

Starting a Cold Engine

1. Turn key to “On”.
2. Pull engine stop switch (shut-off switch) up to “run” position.
3. Pull the choke lever outward to “Full On” position.
4. Grasp starter handle and pull slowly until recoil engages; then pull to start.

CAUTION

Do not pull the starter rope to its full extended position or allow it to snap back into the housing as damage can result. The recoil starter rope is full length. Be sure onlookers are standing clear while pulling the recoil starter.

NOTE: Do not depress throttle until engine starts.

5. After engine starts, the choke lever should be pushed in to the “Off” position. If the engine slows or wants to stop, intermittent choking to the “Half On” position may be helpful.

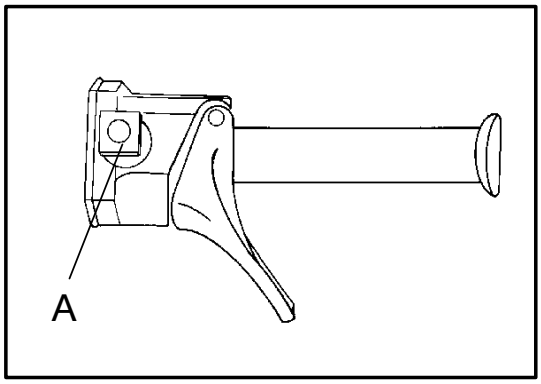
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Starting a Warm Engine

1. Turn key to “On”.
2. Pull engine stop switch (shut-off switch) up to “run” position.
3. Grasp starter handle and pull slowly until recoil engages; then pull to start.

Engine Stop Switch

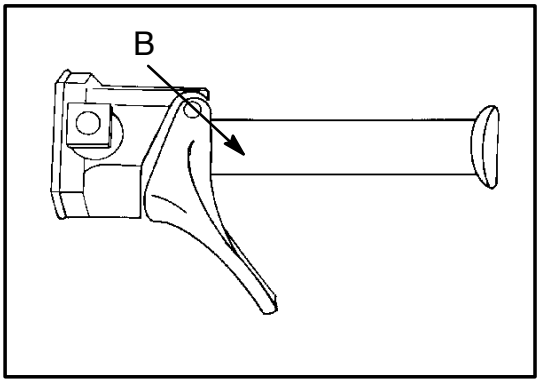
To stop the engine in an emergency, push down on the stop switch (A). This will ground out the ignition and bring the engine to a quick stop. To re-start the engine, the switch must be pulled up to the “On” position.



Check Throttle Safety Switch

Test the throttle safety switch system on a daily basis before the machine is used.

While seated in a normal riding position, and with the engine idling, hold the throttle lever pin stationary by exerting pressure on the pivot pin in the direction shown in the illustration (B). Apply a slight amount of throttle opening. A properly functioning switch *must* shut down the engine.



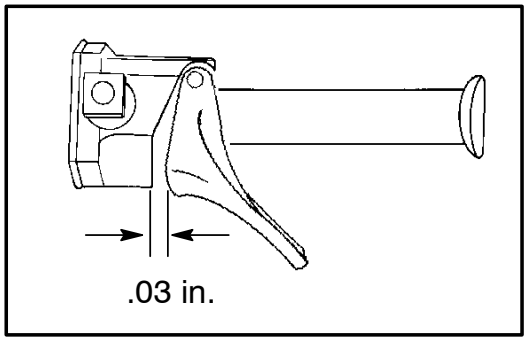
The throttle safety switch is designed to stop the engine whenever all pressure is removed from the throttle lever and the throttle cable or valves do not return to the normal closed position.

⚠WARNING

If the throttle lever does not work properly, do not start the engine.

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4. If the throttle lever operates properly, turn the ignition switch on and go through normal starting procedures.
5. If the engine does not start, take the snowmobile to an authorized Polaris dealer for service.



If excessive play develops in the throttle cable, the safety switch may be activated, preventing the engine from starting. Contact your dealer.

If the engine does not start, and throttle safety switch malfunction is suspected, return the machine to an authorized Polaris dealer for service. If an emergency exists and it is necessary to start the engine, the throttle safety switch and engine stop switch may be disconnected from the wire harness.

⚠WARNING

With the throttle safety switch and engine stop switch disconnected, the ignition key switch must be used to shut off the engine. *Do not* continue to operate the machine with the throttle safety switch disconnected. Return the machine to an authorized Polaris dealer for service as soon as possible.

Emergency Stopping Procedures

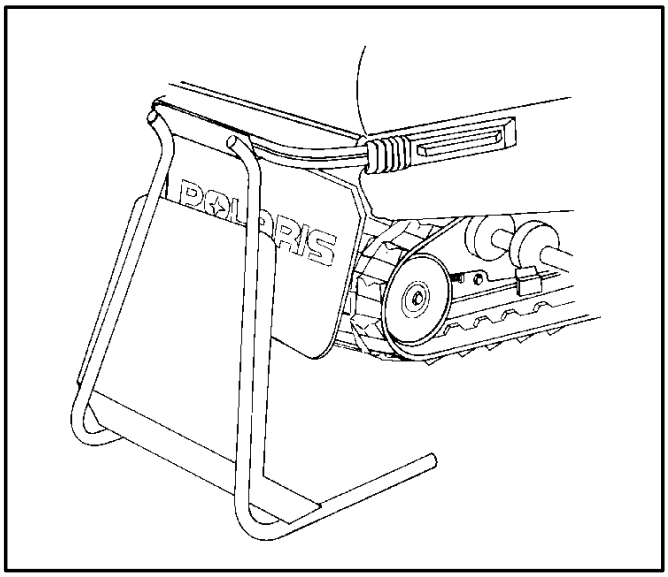
The following chart lists methods for stopping the engine in the event of an emergency.

SYSTEM	WHAT IT DOES	THROTTLE CONDITION
Engine Stop Switch	Interrupts ignition circuit	All
Ignition Switch	Interrupts ignition circuit	All
Tether Switch	Interrupts ignition circuit	All
Choke	Floods engine	1/2 throttle or less
Brake	Slows drive shaft	All
Throttle Safety Switch	Interrupts ignition circuit	All

Refer to page A-33 for more information on the engine kill switch and throttle safety switches.

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Daily Storage



Whenever the machine is placed in overnight or daily storage the following steps must be taken:

- Park the snowmobile on a level surface and support it at the rear so the track is suspended approximately 4″ (20 cm) from the ground.
- Remove the key and cover the machine using the Polaris cover available for your model. See your dealer for more information.

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OPERATION

Pre-ride Warm-Up

The following steps must be taken to ensure proper warm-up of the engine, drive train and track.

With the snowmobile securely supported by the rear bumper, and with a minimum clearance of 4″ (10 cm) from the ground, use the following procedure.

⚠WARNING

Be sure the rear support is stable. Stand clear of the front of the machine and the moving track. Never hold the snowmobile up or stand behind it while performing this procedure. Do not use too much throttle during warm up or when track is free-hanging. A loose track or flying debris could cause serious personal injury or death.

1. Start the engine and allow it to warm up two to three minutes.

2. Engage the drive system abruptly and allow it to rotate the track several revolutions. **NOTE:** The outside temperature will determine the amount of track warm-up required.

3. Shut off the engine and remove the rear support.

4. Grasp the skis by their front loops and move from side to side. This will loosen frozen snow from the ski bottoms, allowing the machine to move forward more easily.

5. The engine, drive system and track are now properly warmed up and the machine can be driven following normal safety practices.

NOTE: It is up to you, the parent, to teach your child the proper and safe way to ride a snowmobile. You must set boundaries and adhere to them, keeping your child's safety foremost in your mind. Never allow your child to operate this machine without adult supervision.

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Polaris Recommended Maintenance Program

This Polaris snowmobile has been engineered and manufactured by skilled Polaris personnel to the highest degree of performance and reliability possible. In order to maintain this high degree of performance and reliability this machine must be given regular service and maintenance inspections.

Uninterrupted snowmobiling will be important to the operator(s) in your family. To assure trouble-free enjoyment, the Polaris Owner Maintenance Program has been developed. If the recommended regular maintenance and service checks are followed, you will be doing your part in keeping this snowmobile in excellent operating condition at all times.

The recommended maintenance schedule on this snowmobile calls for a service and maintenance inspection at 50 hours, at 100 hours, and at 150 hours. These inspections should be performed by a qualified service technician. *All necessary replacement parts and labor incurred, with the exception of authorized warranty repairs, become the responsibility of the registered owner.*

If during the course of the warranty period parts failures occur as a result of owner neglect in performing the recommended periodic maintenance, the cost of such repairs shall be borne by the owner. Please consider the recommended maintenance program illustrated on the following pages as a preventative maintenance program designed to maintain the performance and reliability of your snowmobile in the years to follow.

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MAINTENANCE

Careful periodic maintenance will help keep your vehicle in the safest, most reliable condition. Inspection, adjustment and lubrication of important components are explained on the following chart and maintenance pages of this manual.

For continued maximum machine performance and component life, it is recommended that maintenance checks be performed at indicated intervals.

Service and adjustments are critical. If you are not familiar with safe service and adjustment procedures, have a qualified dealer perform these operations.

NOTE: The following chart is a guide based on average riding conditions. You may need to increase frequency based on riding conditions. Inspection may reveal the need for replacement parts. Always use genuine Polaris parts available from your Polaris dealer.

ITEM	WEEKLY OR BEFORE EX-TENDED PERIOD OF OP-ERATION	50 HOURS	100 HOURS	150 HOURS	SEE PAGE
Oil the drive chain	Every 10 Hours				A-49
Check track tension, tighten if necessary	Every 10 Hours				A-55
Grease the clutch	Every 15 Hours				A-49
Change Oil	At 20 Hours	X	X	X	A-50
Check brake operation and ad-justment	Daily				A-46, A-47
Test engine stop switch (auxiliary shut-off switch)	Daily				A-33
Test throttle safety switch	Daily				A-33
Test tether switch	Daily				R-12
Test throttle lever operation	Daily				A-8
Test speed limiter	Daily				A-31
Check operation of headlight and taillight	Daily				A-12
Clean dust & chaff from engine	Daily				

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ITEM	WEEKLY OR BEFORE EX-TENDED PERIOD OF OP-ERATION	50 HOURS	100 HOURS	150 HOURS	SEE PAGE
Check ski skags, replace when worn to 1/2 original diameter	Daily				A-65
Inspect fuel lines, replace if bad	Daily				A-43
Check engine oil level	Daily				A-50
Check track alignment	X				A-57
Check drive chain tension	X				A-48
Check and tighten any loose suspension mounting bolts	X				A-66
Tighten ski saddle and spindle bolts, if loose	X				A-63
Check front & rear limiter strap condition, tighten loose bolts	X				A-67
Check hi-fax thickness, replace when worn (Dealer)	X				A-61
Tighten rear idler wheel bolts, if loose	X				A-57
Check spark plug condition	X				A-42
Check for brake cable wear and adjustment	X				A-47
Throttle Cable Pivot Slug		X	X	X	A-46
Lubricate steering post support bracket and pivot (aerosol)		X	X	X	A-51
Grease ski spindles		X	X	X	A-51
Lubricate ski bushings to spindle area		X	X	X	A-51
Grease lower steering post piv-ot		X	X	X	A-66
Grease rear suspension pivot shafts		X	X	X	A-66 A-67
Lubricate throttle cable			X	X	A-45
Lubricate choke slide and cable			X	X	A-45
Inspect exhaust pipe for cracks or damage		X	X	X	A-45

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Present this section of your manual to your dealer each time your snowmobile is serviced. This will provide you and future owners with an accurate log of maintenance and services performed on the unit.

50 Hour Initial Maintenance Inspection

Authorized Polaris Servicing Dealer_____

Servicing Technician_____

Date_____ Mileage_____

100 Hour Maintenance Inspection

Authorized Polaris Servicing Dealer_____

Servicing Technician_____

Date_____ Mileage_____

150 Hour Maintenance Inspection

Authorized Polaris Servicing Dealer_____

Servicing Technician_____

Date_____ Mileage_____

Additional Services Performed

Authorized Polaris Servicing Dealer_____

Servicing Technician_____

Date_____ Mileage_____

Type of Service_____

Additional Services Performed

Authorized Polaris Servicing Dealer_____

Servicing Technician_____

Date_____ Mileage_____

Type of Service_____

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Spark Plug Selection

Original equipment parts or their equivalent should always be used. However, the heat range of spark plugs is of utmost importance. A spark plug with a heat range which is too high will cause engine damage. A spark plug with a heat range which is too low will cause excessive fouling and malfunction.

In selecting a spark plug heat range for production, a manufacturer is forced to assume that the engine is going to operated under extreme heavy duty conditions. This protects the engine from internal damage in the event that the purchaser actually does operate the engine in this manner. This selection however, could cause the customer who normally operates the engine under medium or light duty to have spark plug failure. Refer to your Owner's Manual Supplement for the specific spark plug to be used in your machine.

CAUTION

A plug with a heat range which is too high will *always* cause engine damage if the engine is operated in conditions more severe than that for which the spark plug was intended.

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MAINTENANCE

Spark Plug Selection

A new engine can cause temporary spark plug fouling even though the heat range is proper, due to the preservative which has been added during assembly of the engine to combat rust and corrosion. Avoid prolonged idle speeds, as plug fouling and carbonization will result.

- Use recommended spark plugs
- Proper electrode gap is .025,/0.635mm
- Spark plug torque is 18 ft. lbs. (2.5 kg/m) for used plugs and 11 ft. lbs. (1.52 kg/m) for new plugs
- Always carry spare spark plugs

NOTE: Incorrect fuel mixture can often cause a spark plug to appear to be too dark or too light in color. Before changing spark plug heat ranges, be sure the correct main jet is installed in the carburetor(s).

The spark plug and its condition is indicative of engine operation. The spark plug firing end condition should be read after the engine is warmed up and the vehicle is driven at higher speeds. Immediately check the spark plug for correct color.

Normal

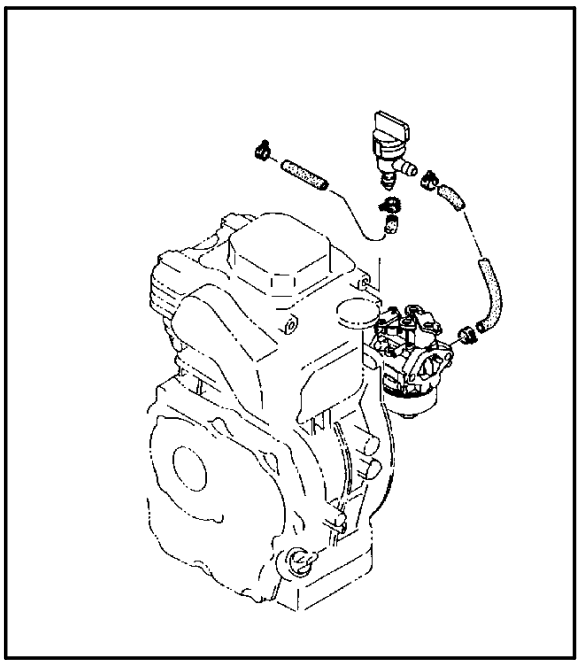
The insulator tip is gray, tan, or light brown. There will be a few combustion deposits. The electrodes are not burned or eroded. This indicates the proper type and heat range for the engine and the service.

NOTE: The tip should not be white. A white insulator tip indicates overheating, caused by use of an improper spark plug or incorrect carburetion adjustments.

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Wet Fouled

The insulator tip is black. There may be a carbon layer over the entire nose. Generally, the electrodes are not worn. Causes could be excessive idling, idle too low or too rich, or weak ignition output.



Fuel Valve/Fuel Lines

The fuel valve and the fuel lines should be inspected regularly. Special attention should be given to the system's fuel line condition after periods of storage. Normal deterioration from weather and fuel compounds can occur.

General Carburetor Information

The number size stamped in the end of the main jet indicates the jet size which was installed at the time of manufacture.

The installed main jet is not necessarily correct for your elevation.

It is the Polaris dealer's responsibility to ensure that the correct main jets are installed in each machine for your area of operation.

CAUTION

Carburetor adjustments should be performed only by a knowledgeable service technician at a Polaris servicing dealer using the proper tools, procedures and specifications.

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MAINTENANCE

Carburetor Adjustments

Proper carburetor adjustments include the following:

- Carburetor component changes for specific altitude and ambient temperatures;
- Choke adjustment;
- Air screw settings, if applicable;
- Idle RPM adjustments;
- Throttle safety switch checks and servicing;
- Throttle block to throttle flipper clearance adjustment

CAUTION

Using lower than the recommended octane fuels or operating with obstructed fuel systems will lead to costly engine damage, which is not covered under warranty.

For fuel recommendations, see page A-29.

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Exhaust System

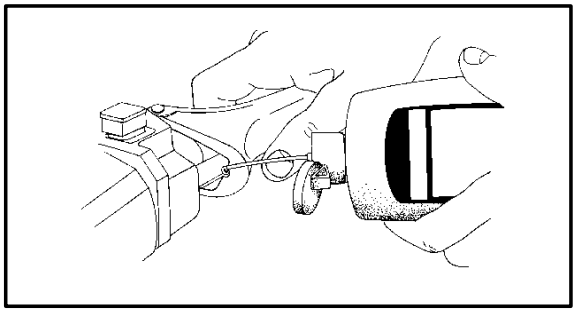
At approximately 50 hours it is a good idea to check the exhaust system for wear or damage. To inspect, allow engine and exhaust system to cool completely. Open the hood and inspect the muffler and pipes for cracks or damage. Check for weak or missing retaining springs or damper/support grommets.

⚠ CAUTION

Exhaust system temperatures can exceed 900° F (500° C). Serious burns may occur if this inspection is performed without allowing adequate time for the exhaust system to cool. Never perform this procedure with the engine running.

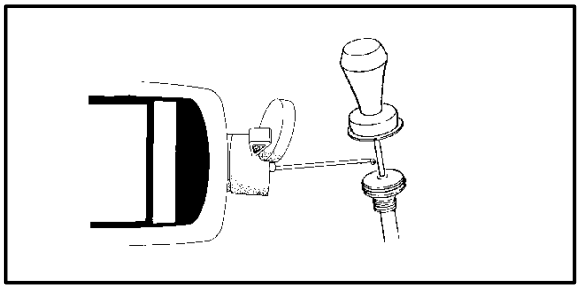
Throttle Cable Lubrication

With the engine off, lubricate the throttle cable occasionally. Turn the handlebars to the left and lubricate liberally as shown, using LBS1, WD-40, etc.



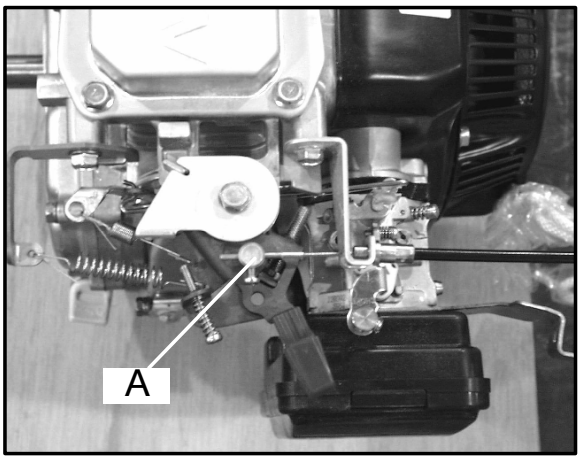
Choke and Cable Lubrication

Lubricate the choke slide and cables occasionally as shown. Operate the choke intermittently before turning the machine off. This draws moisture out of the choke plunger area and reduces the possibility of the choke becoming frozen.



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Throttle Cable Pivot Slug



Lubricate the throttle cable pivot slug (A) every 50 hours or twice a year using and aerosol lubricant.

Brake Adjustment

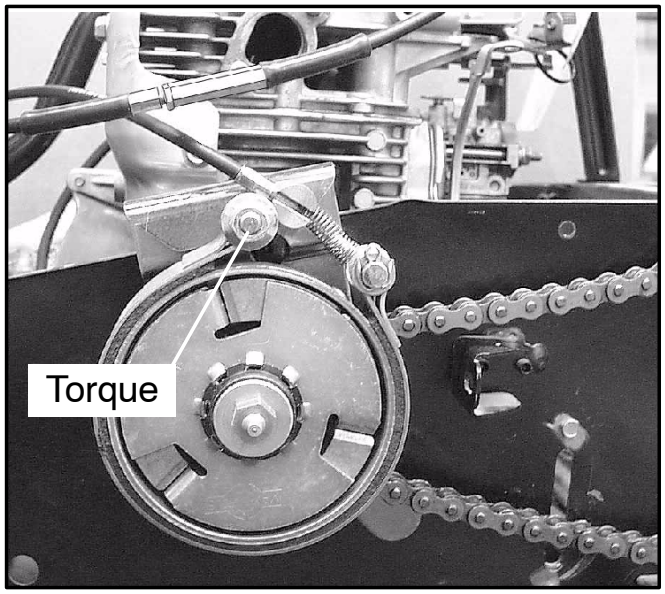
If excessive brake lever to brake block clearance is evident, the brake cable should be adjusted. If proper adjustment cannot be achieved by using the following methods, check the brake band for excessive wear. Your snowmobile dealer can install a new brake band when necessary.

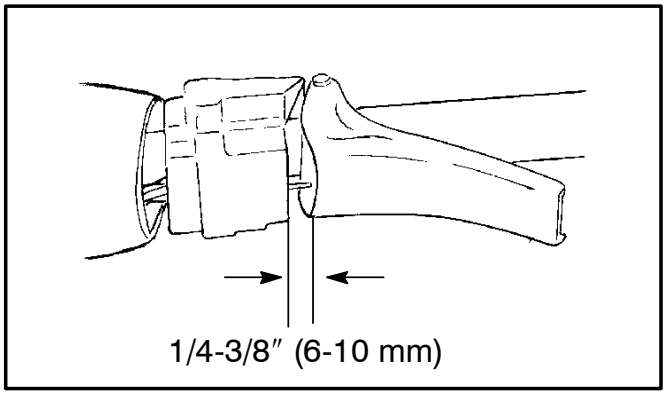
⚠WARNING

Improper brake adjustment could result in brake failure which could result in severe injury or death.

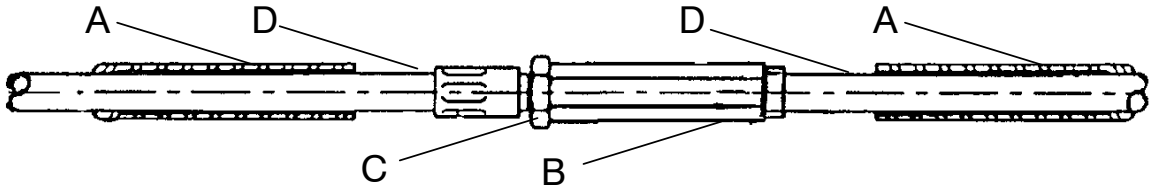
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Cable and Brake Adjustment





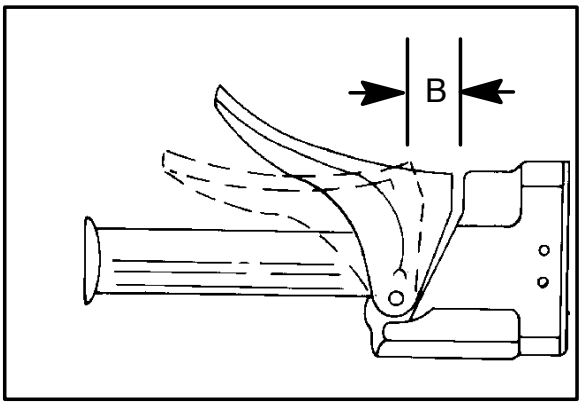
1. Slide the two rubber protector covers (A) back to expose the cable adjuster.
2. Using an 8mm wrench to hold the barrel nut (B), loosen the jam nut (C) with a 10mm wrench.
3. With your left hand, grasp the cables (D) as close to the adjuster as possible. Use your right hand to rotate the barrel nut until you have reached the proper brake lever adjustment.
4. Check the actuator linkage to ensure there is adequate freedom of movement for positive brake operation and that all floating parts move freely and that all parts are mounted securely. Tighten hardware as required.
5. Tighten the adjuster jam nut and slide the rubber protectors back onto the adjuster.
6. The brake band is adjusted correctly when there is 1/4” - 3/8” (6-10mm) brake lever free play, and clearance between the brake lever and block with the lever fully depressed is no more than 3/4” (1.9cm). Torque the band bolt nut to 6 ft. lbs. (83 kg 2-m)



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MAINTENANCE

Brake Lever Travel



Measure the clearance between the lever and brake block. Inspection should be made with the lever firmly depressed. Distance B should be no more than 3/4″ (1.9 cm)

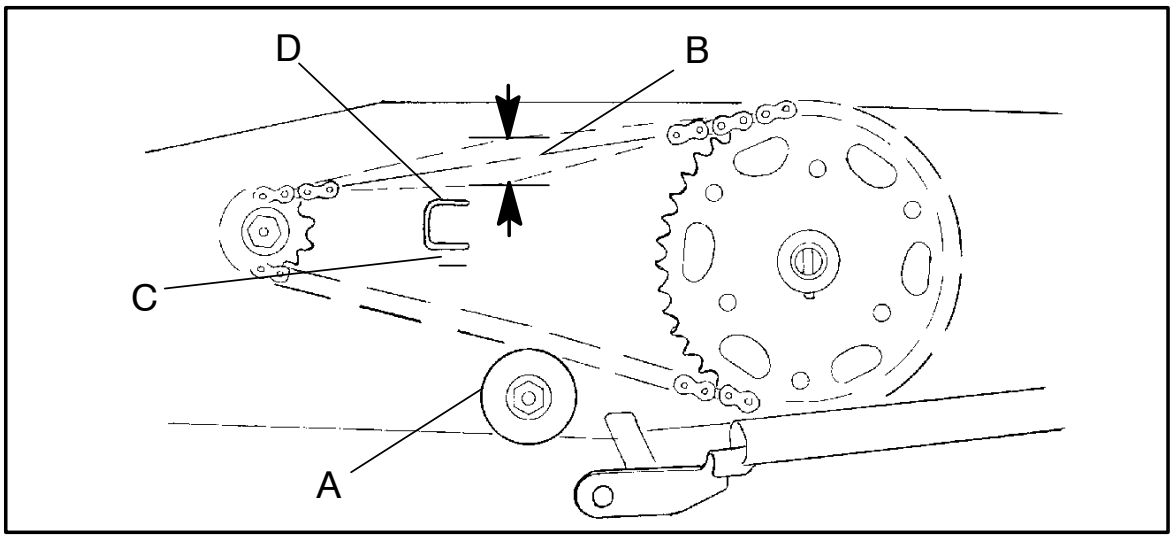
Excessive travel indicates a need to adjust the brake cable adjuster. Refer to the mechanical brake adjustment information on page A-47.

Chain Tensioner

Inspect the chain. The chain should have 1″ of deflection as shown. If not, loosen the nut on the chain tensioner (A) and raise until 1″ (B) of deflection is attained. Tighten nut to 15-18 ft. lbs.

When the chain comes within 1/8″ (C) of the muffler mount bracket (D) on the chassis, the chain has stretched and must be replaced.

Inspect the sprockets as they also become worn and often need replacement when the chain is replaced.



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Lubrication Points

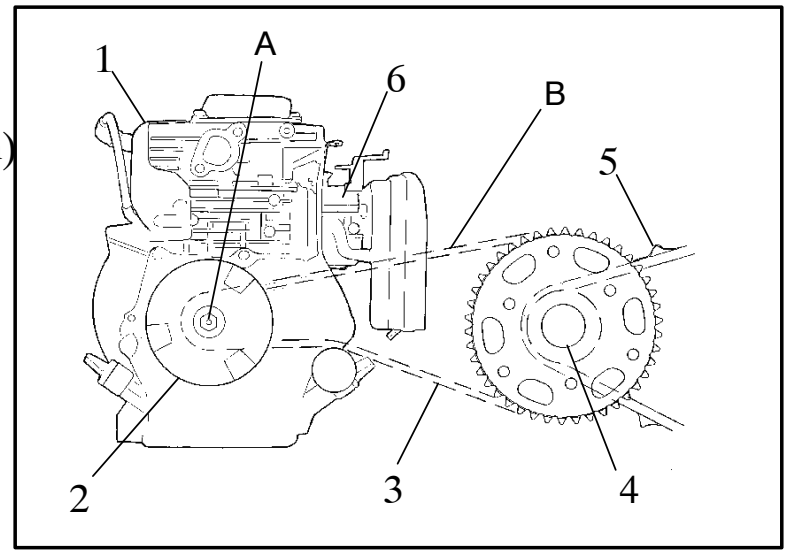
NOTE: Driveline noise is normal and inherent in a chain drive system such as this machine uses.

To ensure long life of the snowmobile's driveline, lubricate as follows:

A Lubricate Point A every 15 hours of operation with a small amount of Polaris Premium All Season Grease.

B Lubricate Point B every 10 hours of operation with aerosol chain lube or SAE 30 oil.

1. Engine
2. Torque Converter (Centrifugal Clutch)
3. Chain
4. Drive Shaft
5. Track
6. Carburetor

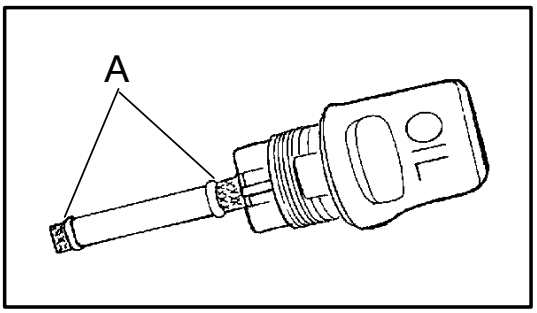


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MAINTENANCE

Oil Level

Maintain the oil level between the safe marks (A) on the dipstick.



Oil Change

Change the oil after the initial 20 hours of operation and again after each 50 hours.

Cleaning Your Snowmobile

Keeping your snowmobile clean will not only improve its appearance but it can also extend the life of various components. With a few precautions, your sled can be cleaned much like an automobile.

Washing

If a high pressure type car wash system is used, extreme care must be taken to avoid water damage to the hood, console, nosepan, decals, and warning labels. Many expensive repair bills can result from using high pressure detergent systems.

NOTE: If a high pressure car wash is used, grease all zerk fittings immediately after washing. Also run the vehicle to evaporate any water that might have entered the engine or exhaust system.

The best and safest way to clean your sled is with a garden hose and a pail of mild soap and water. Use a professional type washing mitten, cleaning the upper body first and the lower parts last. Rinse with water frequently and dry with a chamois to prevent water spots. **NOTE:** If warning labels are damaged, contact your a Polaris dealer for free replacement.

Waxing

Your snowmobile can be waxed with any high quality brand of automotive paste wax. Avoid the use of harsh cleaners since they can scratch the body finish.

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Controls and Linkage

All bushings, spindle shafts, and tie rod ends should be coated with a light coat of oil or grease. Throttle and brake controls and cables should be lubricated with LBS1, WD-40, etc. Force a small amount of lubricant down the cable.

Bearings

To prevent corrosion which will destroy the bearings, always grease drive shaft clutch side bearings with a high quality bearing grease.

Electrical Connections

Separate electrical connector blocks and clean corrosive build up from connectors. Lubricate or pack connector blocks with Nyogel™ grease (PN 2871329) and re-connect. Replace worn or frayed electrical wire and connectors. Be sure wiring harness is properly secured away from sharp edges, steering linkage, moving parts, and hot exhaust.

Front Suspension

To minimize fatigue on the front shocks and springs during extended storage, it is recommended that the front end of the machine be safely blocked off the ground to remove tension from the shocks and springs.

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MAINTENANCE

Engine

Proper off-season preparation of the engine and fuel system is vital to the prevention of rust and corrosion formation on precision engine parts during storage.

Without proper storage, jet restriction can cause lean conditions and very poor slow speed driving quality.

When preparing your snowmobile for off-season storage, we recommend that you add fuel conditioner/stabilizer or Premium Carbon Clean (PN2871326) to the fuel tank. Follow the instructions on the can. Run the engine for five minutes to get additives through the entire fuel system. Then top off the tank with fresh fuel.

NOTE: This procedure is performed best when the front of the machine is elevated and the engine is tilted rearward.

Storage

Off season or extended storage of your snowmobile requires you to take preventative measures to aid against deterioration and to prolong the useful life of many components.

Your snowmobile should be stored in a dry garage or shed, out of direct sunlight, and covered with a fabric snowmobile cover. Plastic tarp can cause condensation to form and may damage some snowmobile components.

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Carburetor Protection During Off-Season Storage

When preparing your snowmobile for off-season storage we recommend that you add a fuel conditioner/stabilizer or Premium Carbon Clean (2871326) to the fuel tank. Follow the instructions on the can. Run the engine for five minutes to get additives through the entire fuel system. Then top off with fresh fuel and turn the fuel valve to "off."

If stabilizer is not used, make sure the fuel valve is "off" and drain the carburetor. Catch fuel in a container or shop cloth.

Remove the spark plug and pour approximately 5cc of engine oil into cylinder. Slowly pull the recoil starter so the engine turns over two or three times. Reinstall plug securely. Position piston at bottom dead center (BDC). Observe all fire safety rules when draining carburetor. See gasoline warnings on page A-29.

Slowly pull the recoil starter handle until resistance is felt. Leave it in that position. Clean the engine thoroughly with an oiled cloth.

If stabilizer is not used, turn the fuel valve to "off." Remove the strainer cup, place the strainer over a container, and open the strainer cock to discharge fuel from the fuel tank. Remove the carburetor float chamber bolt from the bottom and discharge fuel from the carburetor. Replace bolt.

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MAINTENANCE

Transporting the Snowmobile

Whenever the snowmobile is transported the following measures should be taken:

1. Turn the fuel valve to “Off”.
2. Be certain the fuel cap and oil cap are installed correctly.
3. Always tie the snowmobile to the transporting unit securely using suitable straps.

NOTE: Transportation to and from a Polaris dealer is the responsibility of the snowmobile owner. Any expenses involved will not be reimbursed.

Fall Tune-Up

To obtain maximum performance and use from your snowmobile, we encourage you to arrange for a fall service tune-up with your Polaris dealer. He has an experienced and trained service technician who is interested in keeping your machine in peak operating condition.

Towing

Do not use this snowmobile to tow.

If a situation arises requiring the snowmobile to be towed by another snowmobile, attach the tow rope to the spindles, not to the ski toe loops.

For Your Protection

For your added protection it is a good idea to carry the following items in your snowmobile when traveling farther than a five-minute walk from home.

- Extra Spark Plugs
- First Aid Kit
- Winter Survival Kit
- Extra Gloves
- This Owner’s Manual

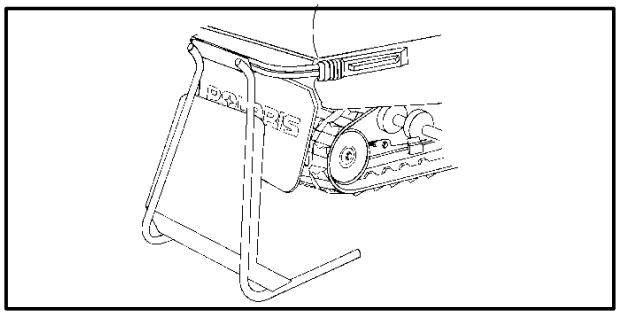
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⚠WARNING

Your snowmobile is propelled by a revolving track which must be partially exposed for proper operation. Serious injuries may be caused by operator carelessness resulting in hands, feet, or clothing becoming entangled in the track. Be alert. Remember, being properly seated keeps you clear of the track.

Track and Suspension

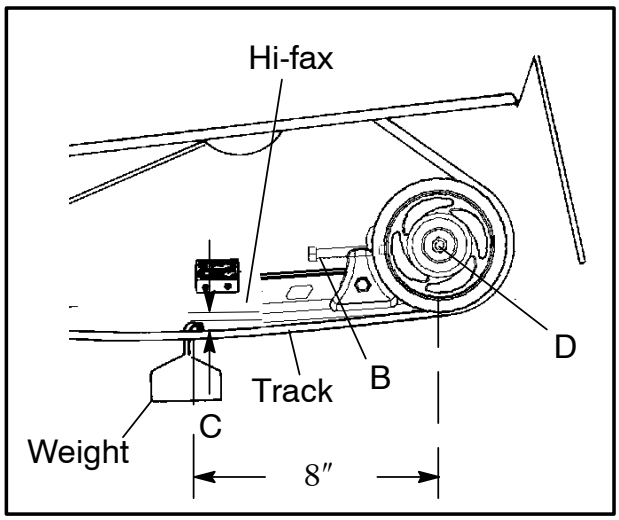
Under normal conditions moderate track tension should be maintained during summer storage. The rear of the machine should be supported off the ground to allow free hanging of the track.



Track Tension

Track adjustment is critical for proper handling. Always maintain correct tension and alignment.

Tension adjustments should be made only after the track is warmed up and limber.



1. Turn the machine off.

2. Lift the rear of the machine and safely support it off the ground.

3. Hang a 10 pound weight 8 inches from the center of the rear idler wheel. The deflection at this point with this amount of weight should measure 3/4″ between the bottom of hi-fax and the inside of the track.

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NOTE: Measure at the point where the weight is hanging.

4. Check for specified slack between the wear surface of the track clip and the plastic hi-fax (C).

If the track needs adjustment:

5. Loosen rear idler shaft bolt (D).

6. Tighten or loosen the track adjusting screws (B) as necessary to provide equal adjustment on both sides of the track.

7. Repeat measurement on the other side of the track. **NOTE:** Check more frequently when machine is new.

8. Start machine and slowly rotate the track at least five revolutions, let the track stop rotating by itself (do not apply brakes).

9. Check track alignment (side to side) by comparing the distance from the guide clip to Hi-fax on both sides. Readjust until centered.

10. Tighten Idler Shaft Bolt (D)

11. Readjust the toe block to proper spacing and tighten.

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Track Alignment

A periodic check should be made to see that the track is centered and running evenly on the slide rails. Misalignment will cause excessive wear to the track and slide rail.

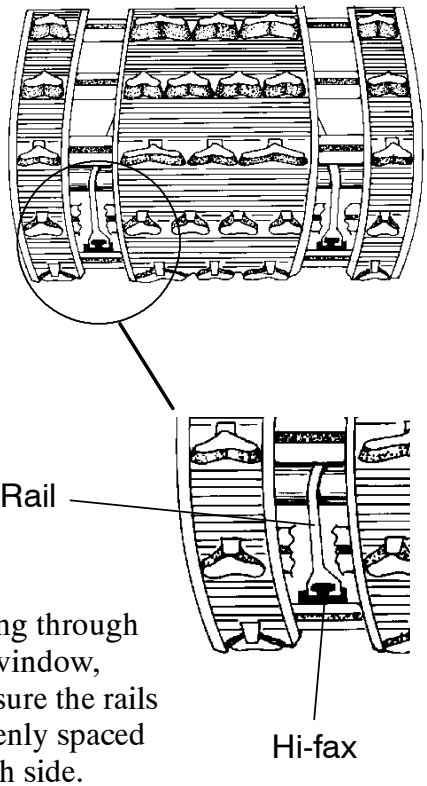
⚠WARNING

When performing the following checks and adjustments, stay clear of all moving parts to avoid serious personal injury.

Before checking track tension, make certain the track contains no objects that could be thrown out while the track is rotating. Keep clear of track. This includes but is not limited to hands, tools, feet and clothing. Make certain no one is standing close to the machine while the track is rotating.

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1. Safely support the rear of the machine with the track off the ground using a jackstand.
2. Start the engine and apply a small amount of throttle until the track turns *slowly* at least five complete revolutions. Stop the engine.
3. Inspect track alignment by looking through the track windows to make sure the rails are evenly spaced on each side. If the track runs to the left, loosen left idler wheel mounting bolt and tighten the left track adjusting bolt. If the track runs to the right, loosen right idler wheel mounting bolt and tighten the right track adjusting bolt.

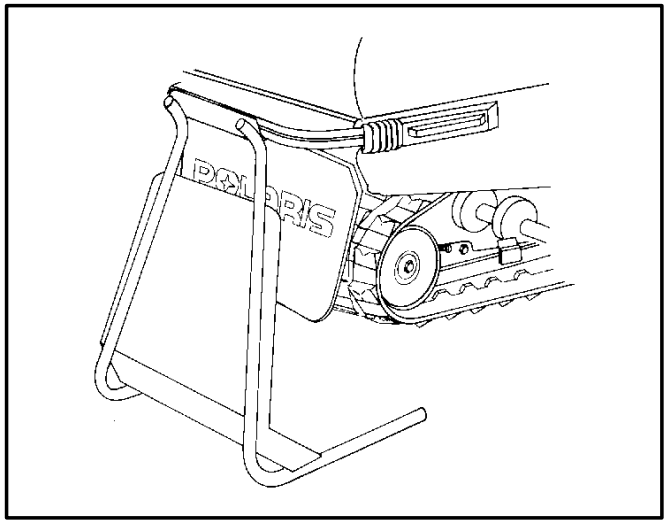


Looking through track window, make sure the rails are evenly spaced on each side.

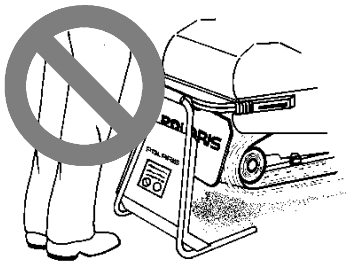
4. After adjustments are complete, be sure to tighten locknuts and idler shaft bolts. Torque to 35-40 ft. lbs. (4.8-5.5 kg/m).
5. Repeat step 2 to verify proper alignment.

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Track Warm Up



When storing your snowmobile outside overnight, it is recommended that the track be warmed up prior to driving the snowmobile. This reduces drive clutch wear. To warm up the track, safely support the rear of the snowmobile off the ground, start the engine and *abruptly* engage the clutch. Allow the track to turn for a short time. Release the throttle, apply the brakes and shut the engine off prior to lowering it to the ground.



⚠WARNING

Never hold the snowmobile up or stand behind it while warming up the track. A loose track or flying debris could cause serious personal injury or death.

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MAINTENANCE

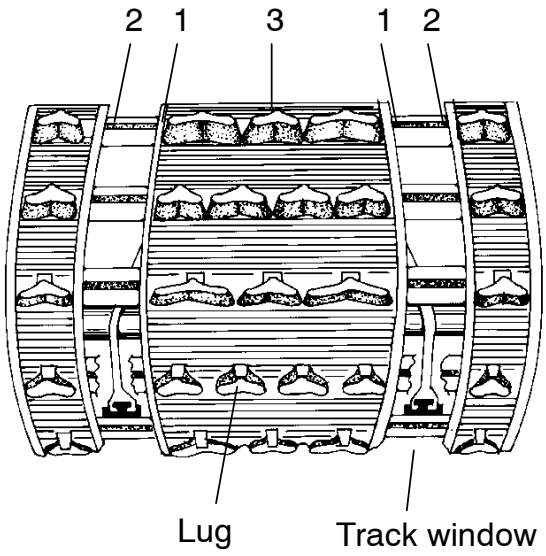
Track Inspection

⚠WARNING

Never make this maintenance check with the engine running, as serious personal injury can result.

Using a hoist or jackstand, safely lift and support the rear of the snowmobile off the ground. Rotate the track by hand to check for any possible damage.

To inspect track rods, carefully examine the track along the entire length of each rod, bending the track and inspecting for breakage. The three most common places where breakage occurs are shown in the illustration.



Check the track clips and tighten if loose.

If any rod damage is found, the track should be replaced.

⚠WARNING

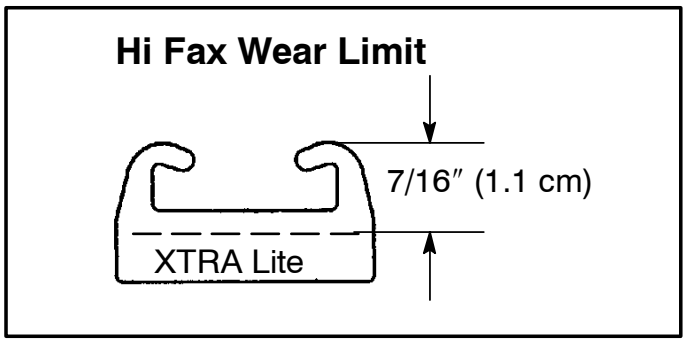
Serious personal injury or death may occur. Broken track rods are a serious hazard, since they can cause a rotating track to come off the machine. Never operate or rotate a torn or damaged track under power.

NOTE: The 120 XC SP track has molded in track clips. It is common for a thin layer of rubber to detach from clip area and peel off during initial use.

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Hi-Fax Replacement

The 120 XC SP uses XTRA Lite style Hi-Fax. When any area of the Hi-Fax is worn to 7/16″ (1.1 cm), it should be replaced. This will save wear on other vital components.



The slide rail is designed to operate in conditions with adequate snow cover to provide sufficient lubrication. Excessive wear may be due to improper alignment, improper track adjustment or machine operation on surfaces without snow. Take the machine to your dealer for Hi-fax replacement.

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MAINTENANCE

Track Lubrication

Track failure, loss of vehicle control and braking ability can result from extended use of this vehicle on surfaces providing marginal lubrication between hi-fax and track guide clips. Examples of marginal lubrication would include lakes without snow cover, icy trails and no-snow conditions.

The slide rail is designed to operate in conditions with adequate snow cover in order to provide sufficient lubrication. Excessive wear indicates insufficient lubrication. New hi-fax can cause faster heat build up in limited lubrication than used hi-fax, resulting in excessive wear.

CAUTION

Track damage or failure caused by operation on ice or poor lubrication conditions may void the track warranty.

Steering System

⚠WARNING

Improper alignment or adjustment may cause loss of steering control, resulting in serious injury or death. Do not attempt to change the ski alignment. Contact your Polaris dealer.

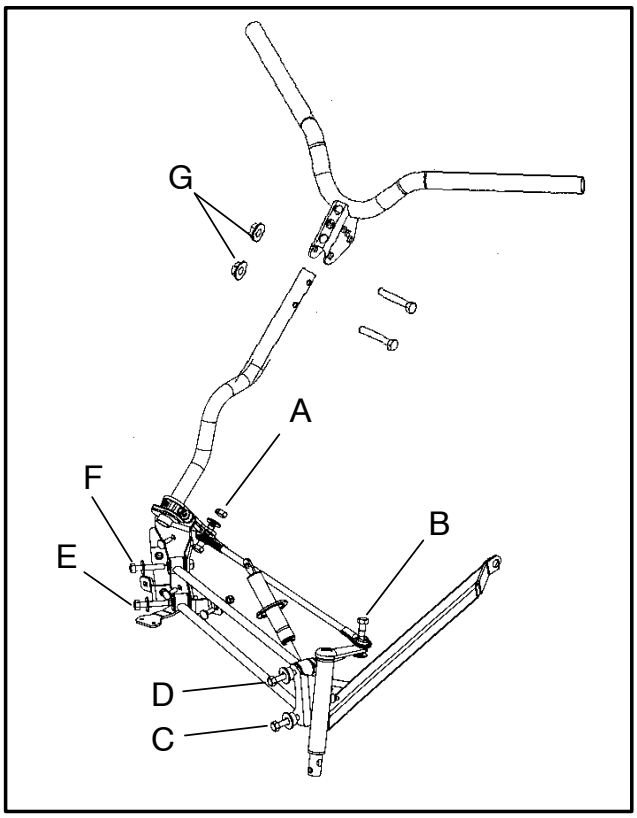
The steering systems on Polaris snowmobiles can be adjusted with ski toe alignment. Improper toe alignment can cause erratic steering. Consult your dealer if a need for adjustment should become necessary.

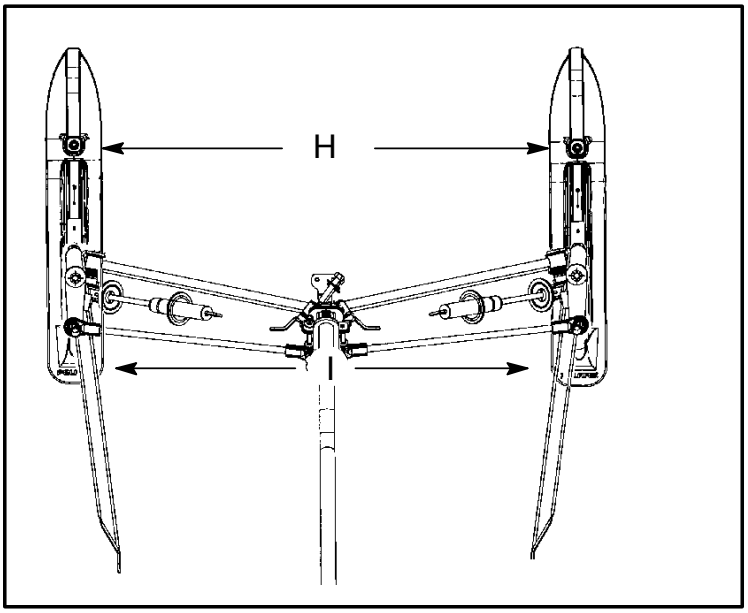
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Steering Inspection and Adjustment

The steering assembly of the machine should be checked periodically for loose nuts and bolts. See A,B,C,D,E, F, and G in illustration at right.

With handlebars in straight ahead position and measuring from the straight edge of the skis, the measurement between the skis at point H should be 1/8 inches greater than point I, as shown on the following page. **NOTE:** This measurement should be taken with the vehicle weight compressing the suspension. If the skis are misaligned, we recommend that your dealer make the necessary adjustments.



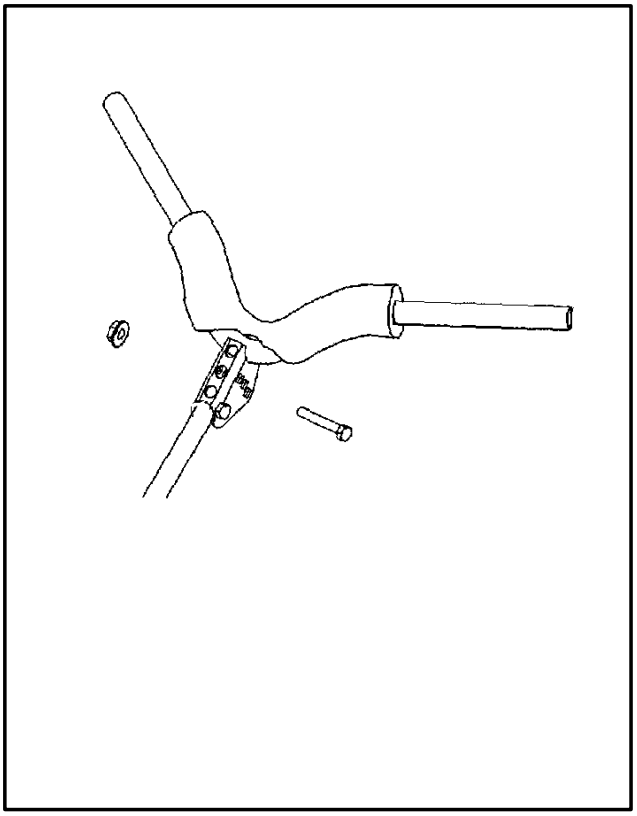


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MAINTENANCE

Handlebar Adjustment

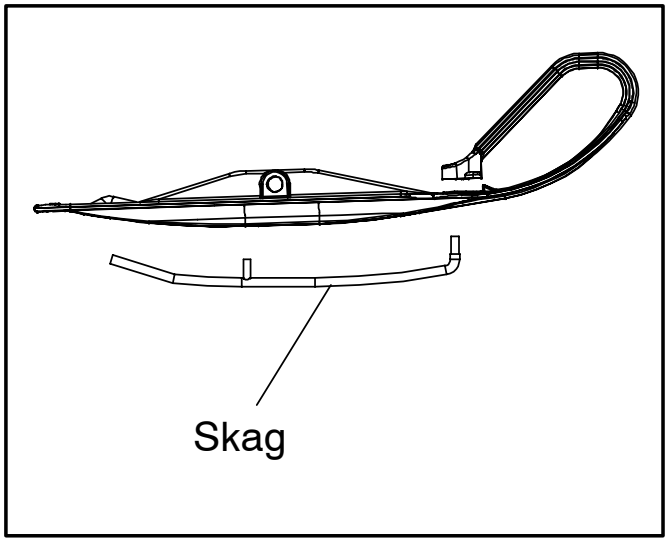
- Slide the handlebar pad upward to access the adjuster bolts. If additional room is required, unzip one of the handlebar pad zippers and roll the pad to the side.
- To adjust, remove the upper flange nut and carriage bolt.
- Loosen the lower flange nut only enough so the bracket can move freely.
- Position the handlebar to the desired height and re-install the upper carriage bolt and flange nut.
- Torque the flange nuts to 15-17 ft. lbs.
- Reinstall the handlebar pad.



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Ski Skags

The skag is a replaceable bar attached to the underside of the ski. The purpose of the skag is to assist in turning the snowmobile and to prevent the wearing away of the ski caused by contact with roads and other bare terrain. We recommend that skags be checked once a week to maintain positive steering characteristics. Skags must be replaced when worn to half their original diameter.



NOTE: See dealer track studding and skag chart for recommended skags.

⚠WARNING

Worn skis and/or skags will adversely affect handling.

Loss of vehicle control may cause serious injury or death.

Skag Replacement

1. Raise and support the front of the machine so the skis are approximately 6″ (15.2 cm) from the ground.
2. Remove the attaching nuts and pry the skag downward.
3. Remove the forward portion of the skag.

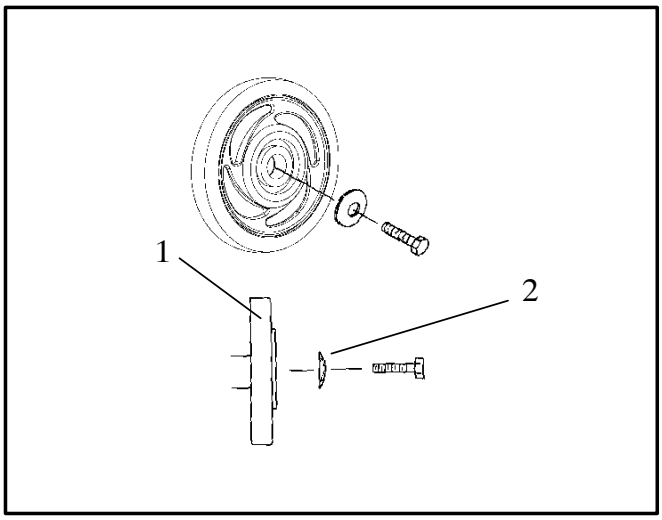
Reverse this procedure for new skag installation.

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MAINTENANCE

NOTE:

If rear idler wheel (1) assembly washers are removed, be sure they are reinstalled with the domed side of the washer facing out (2) as shown.



Suspension Lubrication

To maintain rider comfort and to retard wear of the pivot shafts, the suspension pivot shafts should be lubricated with Polaris Premium All Season Grease, PN 2871066, several times during the season and again before summer storage each year. The riding characteristics of the snowmobile will be affected by lack of lubrication of these shafts.

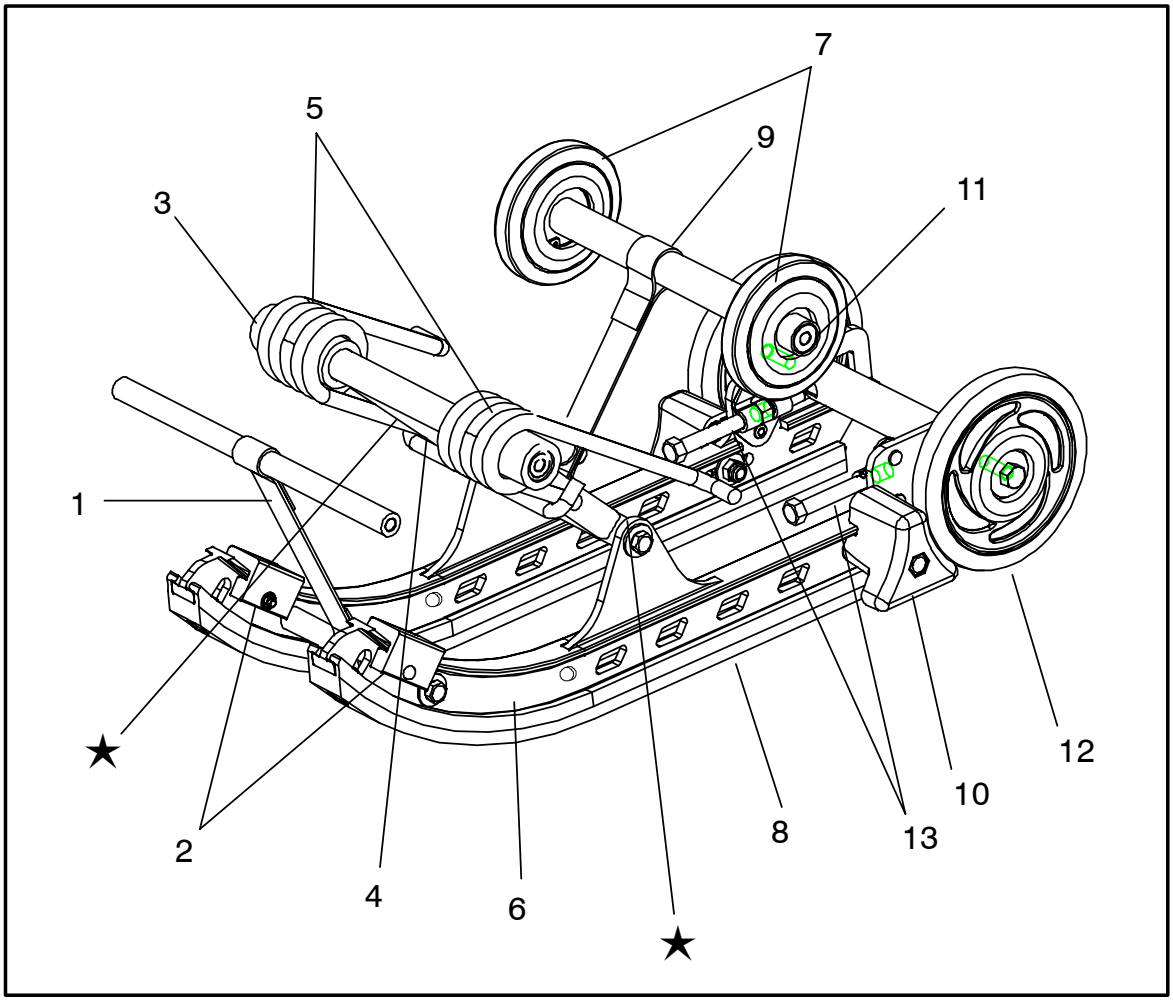
NOTE: A grease gun kit complete with grease and adaptors is available to lubricate all fittings on Polaris snowmobiles. Order PN 2871312.

IMPORTANT: Make it a weekly practice to check for loose bolts and nuts on the suspension system. If any loose bolts are found on the rail be certain to clean the threads and apply Loctite 262 before tightening.

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Suspension Components

Suspension Lubrication points are indicated by a ★.



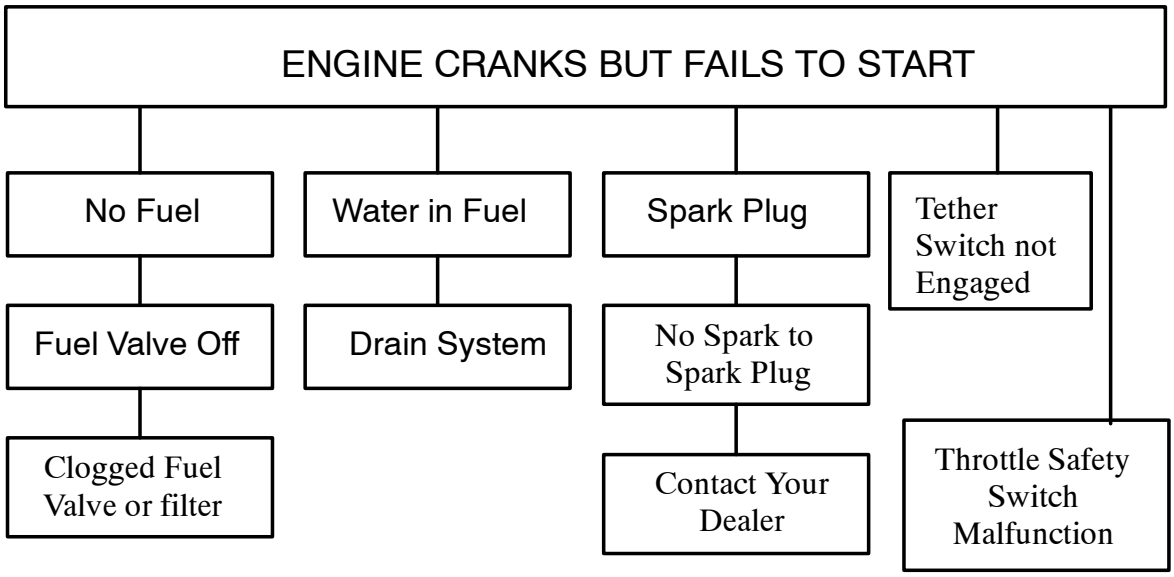
1. Front Limiter Strap
2. Rail Bumper
3. Torsion Spring Sleeves
4. Torque Arm
5. Torsion Spring
6. Rail
7. Carrier Wheel
8. Hi-fax
9. Rear Limiter Strap
10. Toe Guard
11. Spacer
12. Idler Wheel
13. Adjuster Bolts

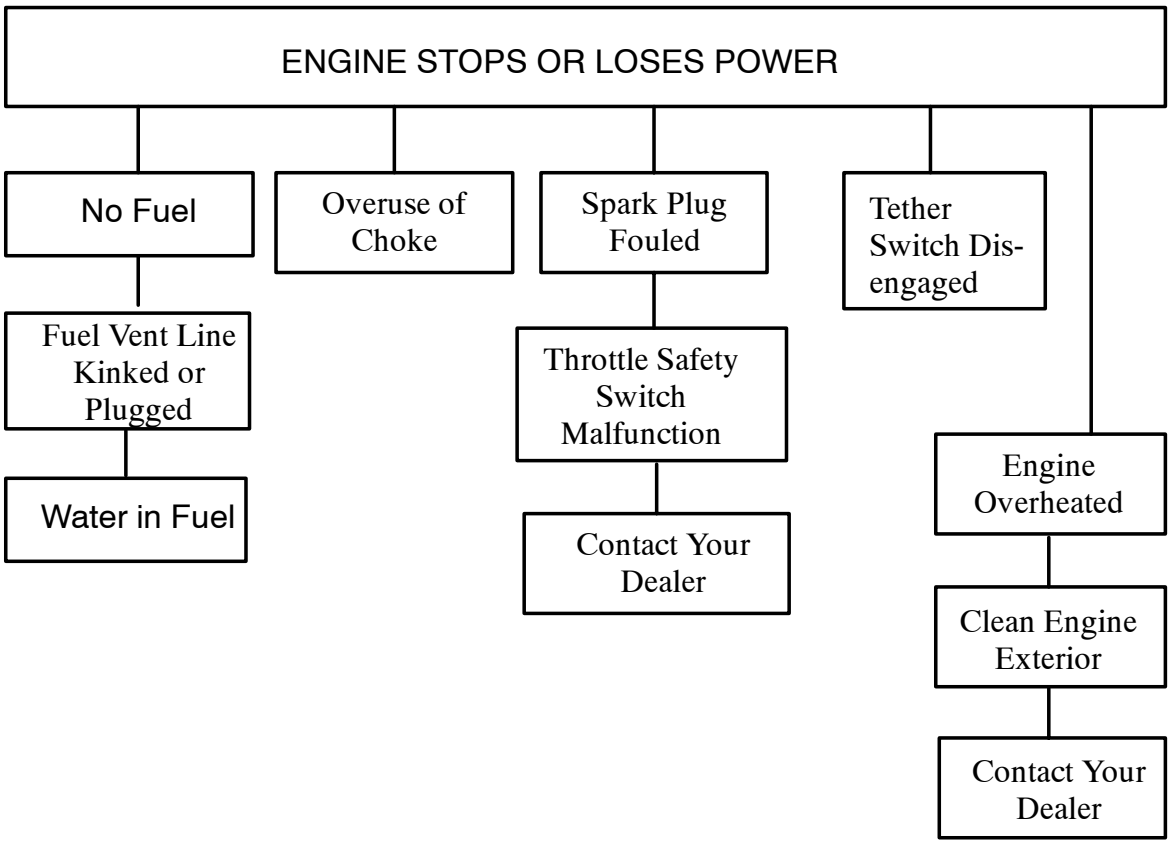
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TROUBLESHOOTING

Engine Troubleshooting

The following information is provided to help you identify probable causes for questions you may have about the operation of your snowmobile. See your Polaris dealer with any additional questions you may have.





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Maintenance Items and Accessories

The tools and maintenance items mentioned in this book are available at your Polaris dealer as well as a long line of other Polaris accessories.

Paint Codes

Color Description	Polaris "P" No.	Raw Material No.
Indy Red	P293	8520297
Indy Black	P067	8520246

Paints can be ordered direct from Midwest Industrial Coatings (612) 942-1836. Mix as directed.

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SPECIFICATIONS

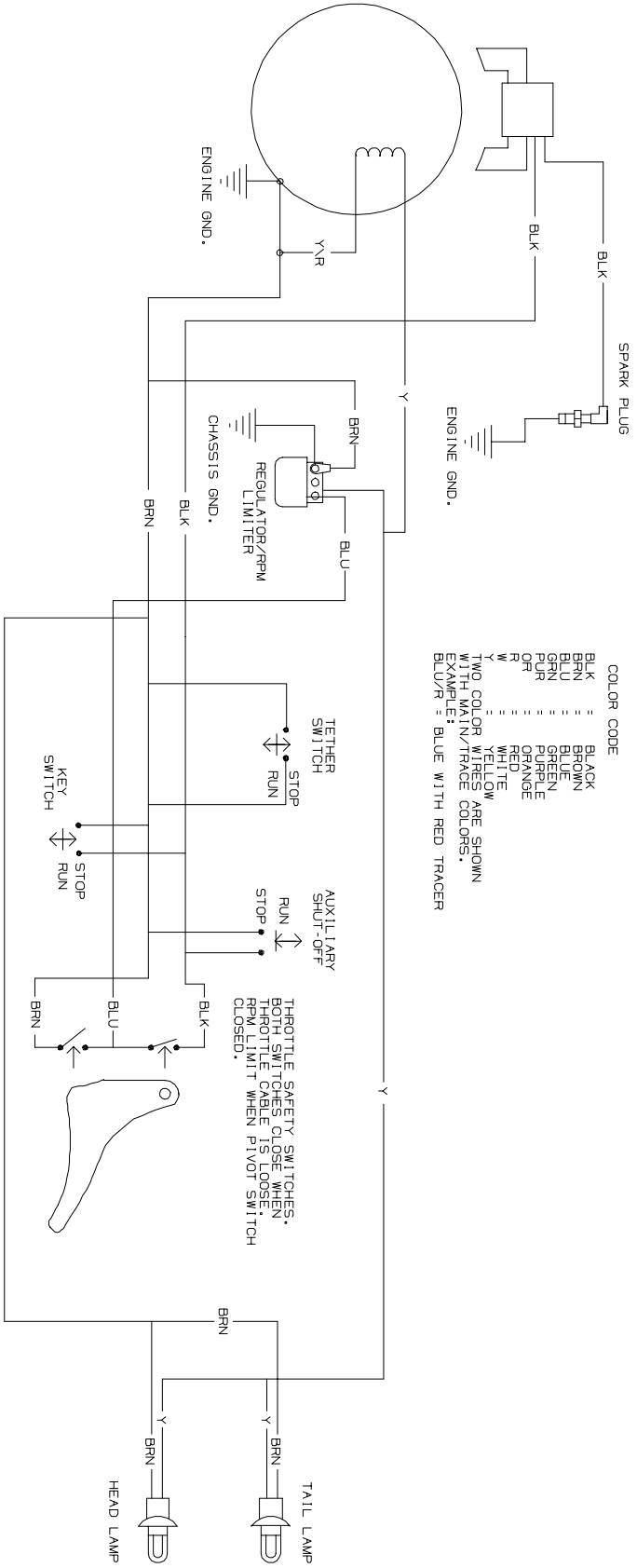
Specifications - 120 XC SP			
Rider Seating	1	Pilot Jet	50
Dry Weight (lbs.)±4 lbs	140	Air Screw	1.5
Fuel Tank Capacity (Gal)	.5	Ignition Type	Transistor
Height, in.	31	Spark Plug Type	BR6ES
Length, in.	74	Brake Type	Mechanical Band
Ski Center Distance, in.	30	Clutch Center Distance	11.75
Width, in.	34	Clutch Type	Centrifugal
Engine	Fuji 4 Stroke 4 hp	Track Length, in.	68.04
Alternator Output	12V 50 W	Track Width, in.	10
Bore x Stroke (mm)	60 x 43	Drive Chain Length	74 Pitch
Displacement (ccs)	121	Front Suspension	30 IFS
Cylinders	1	Rear Suspension	Single Arm, Torsion
Main Jet	72.5	Headlight	35W - Halogen

CLUTCHING CHART

Altitude		Shift Weight	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	58g	Red	10-42 74P Borg Warner
	900-1800 (3000-6000)	58g	Red	10-42 74P Borg Warner
	1800-2700 (6000-9000)	58g	Red	10-42 74P Borg Warner
	2700-3700 (9000-12000)	58g	Red	10-42 74P Borg Warner

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2001 120 XC SP



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SERVICE AND WARRANTY

Polaris Anti-Theft System

The Polaris anti-theft system monitoring program (PATS) is designed to aid owners of registered snowmobiles in recovery of their machines, if stolen.

Administration

1. Polaris snowmobile owner reports theft.

   A. In addition to notifying the proper law enforcement officials, the owner must call the Polaris warranty department in the United States and Canada.

      US #763-542-0500

      Canada #204-925-7100

   B. Owners must provide their name, address, telephone number and model and serial number of stolen machines.

2. Polaris warranty will provide all dealerships with a monthly updated list of all stolen units, to further monitor thefts.
3. Polaris warranty will aid in notification of recovered units to their proper owner.

Obtaining Service and Warranty Assistance

Read carefully and understand the service data and the Polaris Warranty contained in this manual. Contact your Polaris dealer in matters pertaining to replacement parts, service or warranty. He is constantly kept up to date on changes, modifications and tips on snowmobile maintenance, which may supersede information contained in this manual. He is familiar with our policies and procedures and will be happy to assist you.

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SERVICE AND WARRANTY

When writing about parts, service or warranty, always include the following information:

1. Serial number
2. Model number
3. Dealer name
4. Date of purchase
5. Details of trouble experienced
6. Length of time and conditions of operation
7. Indicate previous correspondence

Use the following space to record the model and serial numbers of your machine and engine.

Machine Model No._____

Machine Serial No._____

Engine Model No._____

Engine Serial No._____

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WARRANTY

LIMITED WARRANTY

Polaris Industries Inc., 2100 Highway 55, Medina, Minnesota 55430, gives a ONE YEAR LIMITED WARRANTY on all components of the Polaris snowmobile against defects in material or workmanship. This warranty covers the parts and labor charges for repair or replacement of defective parts which are covered by this warranty. This warranty begins on the date of purchase. This warranty is transferrable to another consumer during the warranty period through a Polaris dealer. There is a charge of $35.00 payable to Polaris Industries Inc.

REGISTRATION

At the time of sale, the Warranty Registration Form must be completed by your dealer and submitted to Polaris within ten days. Upon receipt of this registration, Polaris will record the registration for warranty. No verification of registration will be sent to the purchaser as the copy of the Warranty Registration Form will be the warranty entitlement. If you have not signed the original registration and received the "customer copy", please contact your dealer immediately. NO WARRANTY COVERAGE WILL BE ALLOWED UNLESS YOUR SNOWMOBILE IS REGISTERED WITH POLARIS.

Initial dealer preparation and set-up of your snowmobile is very important in ensuring trouble-free operation. Purchasing a machine in the crate or without proper dealer set-up will void your warranty coverage.

WARRANTY COVERAGE AND EXCLUSIONS:

LIMITATIONS OF WARRANTIES AND REMEDIES

The warranty excludes any failures that are not caused by a defect in material or workmanship. This warranty does not cover accidental damage, normal wear and tear, abuse or improper handling. This warranty also does not cover any snowmobile that has been altered structurally, neglected, improperly maintained, used for racing, or used for purposes other than for which it was manufactured, or for any damages which occur during trailer transit or as a result of unauthorized service or the use of unauthorized parts. In addition, this warranty does not cover physical damage to paint or finish, stress cracks, tearing or puncturing of upholstery material, corrosion, or defects in parts, components or snowmobile due to fire, explosions or any other cause beyond Polaris' control.

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This warranty does not cover the use of unauthorized lubricants, chemicals, or fuels that are not compatible with the snowmobile.

The exclusive remedy for breach of this warranty shall be, at Polaris' exclusive option, repair or replacement of any defective materials, or components or products. THE REMEDIES SET FORTH IN THIS WARRANTY ARE THE ONLY REMEDIES AVAILABLE TO ANY PERSON FOR BREACH OF THIS WARRANTY. POLARIS SHALL HAVE NO LIABILITY TO ANY PERSON FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY DESCRIPTION, WHETHER ARISING OUT OF EXPRESS OR IMPLIED WARRANTY OR ANY OTHER CONTRACT, NEGLIGENCE, OR OTHER TORT OR OTHERWISE. Some states do not permit the exclusion or limitation of incidental or consequential damages or implied warranties, so the above limitations or exclusions may not apply to you if inconsistent with controlling state law.

ALL IMPLIED WARRANTIES (INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) ARE LIMITED IN DURATION TO THE ABOVE ONE YEAR WARRANTY PERIOD. POLARIS FURTHER DISCLAIMS ALL EXPRESS WARRANTIES NOT STATED IN THIS WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you if inconsistent with controlling state law.

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WARRANTY

HOW TO OBTAIN WARRANTY SERVICE

If your snowmobile requires warranty service, you must take it to a Polaris dealer authorized to repair Polaris snowmobiles. When requesting warranty service you must present your copy of the Warranty Registration form to the dealer. (THE COST OF TRANSPORTATION TO AND FROM THE DEALER IS YOUR RESPONSIBILITY). Polaris suggests that you use your original selling dealer; however, you may use any Polaris Servicing Dealer to perform warranty service.

Please work with your dealer to resolve any warranty issues. Should your dealer require any additional assistance they will contact the appropriate person at Polaris.

This warranty also gives you specific legal rights, and you may also have other rights which vary from state to state.

If any of the above terms are void because of state or federal law, all other warranty terms will remain in effect.

Engine Oil

1. Always use Polaris engine oil.

2. Never substitute or mix oil brands as serious engine damage and voiding of warranty can result.

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Polaris Extended Service Contract

Polaris now is offering an extended engine service contract which provides the following benefits:

- Additional engine protection beyond the original twelve month warranty.
- Backed by the strength of Polaris - no third party involvement.
- Repairs use only genuine top quality Polaris parts.
- Peace of mind. The Polaris Extended Service Contract is honored by all authorized Polaris snowmobile dealers in North America. However, where possible we urge you to contact the selling dealer. There are no cards for you to carry as repair authorization for your dealer is only a phone call away.
- Because the extended service contract is transferable for a $35.00 fee, the snowmobile's resale value is increased.
- The Polaris Extended Service Contract is very affordable and can be financed with the Polaris Star Card.

Conditions:

- The Polaris Extended Service Contract must be purchased within 90 days from the date of the unit's registration.
- Each repair visit it subject to a $50.00 deductible.
- The Extended Service Contract applies to the first 5000 miles or two calendar years from date of registration, whichever comes first. Tampering with the odometer shall void the Extended Service Contract. No extensions to coverage under the Extended Service Contract will be given.
- Snowmobiles used in commercial purposes or for racing are excluded from coverage.

Polaris acknowledges the following products mentioned in this manual:
Loctite, Registered Trademark of the Loctite Corporation
STA-BIL, Registered Trademark of Gold Eagle
FOX, Registered Trademark of Fox Shox
Hi-Fax, Trademark of Himont Advanced Materials

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