

2002 Sportsman 6x6 **PIS** Safety and Maintenance POLARIS

Read this manual carefully. It contains important safety information. This is an adult vehicleownlyad ଉନ୍ଥା ଅଧିବାର ଜନାପାର୍ଚ୍ଚାରେ ନାର୍ଯ୍ୟ ନାର୍ଯ୍ୟ ନାର୍ଯ୍ୟ ନାର୍ଯ୍ୟ କାର୍ଯ୍ୟ କାର୍ଯ୍

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

Indicates a potential hazard that could result in serious injury or death.

We've created a web site, just for YOU!!

- 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



WELCOME

Thank you for choosing Polaris, and welcome to our world-wide family of Polaris enthusiasts. Polaris proudly produces an exciting line of recreational products, including snowmobiles, all-terrain vehicles, personal watercraft, utility vehicles, and Victory motorcycles.

We believe Polaris sets the standard of excellence for all recreational vehicles manufactured in the world today. Many years of experience in engineering, design, and development have gone into making your Polaris vehicle the finest machine we've ever produced.

Follow the instructions and recommendations in this Owner's Manual for safe and enjoyable operation of your vehicle. Your Owner's Manual 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.

Your Polaris dealer knows your vehicle best and is interested in your complete satisfaction. Return to your dealership for all of your service needs during, and after, the warranty period.

Polaris also takes great pride in our PAA (Parts Apparel and Accessories) which are available on our online store www.purepolaris.com. Have your accessories and clothing delivered right to your door!

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Printed in the U.S.A.

ATTENTION!

This is an ADULT VEHICLE ONLY; not a toy. Operation is prohibited for anyone under 16 years of age. READ AND UNDERSTAND WARNINGS AND OWNER'S MANUAL BEFORE OPERATION.

A

KNOW YOUR VEHICLE BEFORE YOU BEGIN RIDING!

Read this manual thoroughly referring to the various areas which are being discussed on your machine. Operating this vehicle carries with it responsibilities for your personal safety, the safety of others, and the protection of our environment.

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SAFETY TRAINING

When you purchased this vehicle your dealer offered a hands-on safety training course covering all aspects of vehicle safety. In addition, you were provided with certain printed material which instructs you on safe operating procedures.

You should review this information on a regular basis. In the event you purchased a used Polaris vehicle from a party other than a Polaris dealer, you can obtain this safety training at no charge from any authorized Polaris dealer.

Failure to follow the warnings contained in this manual can result in **SEVERE INJURY OR DEATH.**

NOTE: Illustrations used in this manual are for general representation only. Your model may differ.

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VEHICLE IDENTIFICATION NUMBERS



Important: Record these numbers from your vehicle in the spaces provided.

- 1. Frame VIN
- 2. Engine Serial Number (Right front side of engine crankcase)

Remove the spare key and store in a safe place. Your key can be duplicated only by obtaining a key blank from Polaris and having it cut by mating it with your existing key.

The vehicle frame and engine serial numbers are important for model identification when registering your vehicle, obtaining insurance or whenever replacement parts are required. In the event your vehicle were stolen these numbers are essential to the recovery and identification of your vehicle.

Dealer Imprint

Understanding Warnings

The following two pages identify signal words and symbols that appear in this manual. Your safety is involved when these words and symbols are used. Become familiar with their meanings before reading the manual.



The safety alert symbol, on your vehicle or in this manual, alerts you to the potential for personal injury.

Indicates a potential hazard that could result in serious injury or death.

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

CAUTION

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

NOTE

"NOTE:" will alert you to important information or instructions.

Key Safety Issues

Protect Your Sport

Know all local, state/province riding laws;

Respect your vehicle;

Respect the environment; and

You will gain the respect of others.

We also advise you to strictly follow the recommended maintenance program as outlined. This preventive maintenance program is designed to ensure that all critical components on this vehicle are thoroughly inspected at various intervals.

All information in this manual is based upon the latest product data and specifications available at the time of printing. Polaris Industries Inc. reserves the right to make product changes and improvements which may affect illustrations or explanations.

No part of this manual shall be reproduced or used without the written permission of Polaris Industries Inc.

Illustrations included in this manual are general representations of parts having a similar function. Your model may differ.

THIS VEHICLE IS NOT A TOY AND CAN BE HAZARDOUS TO OPERATE. This Vehicle handles differently from other vehicles including motorcycles and cars. A collision or rollover can occur quickly, even during routine maneuvers such as turning and driving on hills or over obstacles, if you fail to take proper precautions.

Key Safety Issues

SERIOUS INJURY OR DEATH can result if you do not follow these instructions:

- Read this manual and all labels carefully and follow the operating procedures described.
- Never operate this vehicle without proper instruction. Take a training course. Beginners should receive training from a certified instructor. Contact an authorized Polaris dealer or call Polaris at 1-800-342-3764 to find out about the training courses nearest you.
- Never allow anyone under 16 years of age to operate this vehicle.
- Never permit a guest to operate this vehicle unless the guest has read this manual and all product labels, and has completed a certified training course.
- Always avoid operating this vehicle on any paved surfaces, including sidewalks, driveways, parking lots and streets.
- Never operate this vehicle on any public street, road or highway, even a dirt or gravel one.
- Never operate this vehicle without wearing an approved helmet that fits properly. You should also wear eye protection (goggles or face shield), gloves, boots, long-sleeved shirt or jacket, and long pants.
- Never consume alcohol or drugs before or while operating this vehicle.
- Never operate at excessive speeds. Always travel at a speed which is proper for the terrain, visibility and operating conditions, and your experience.
- Never attempt wheelies, jumps or other stunts.
- Always inspect your vehicle each time you use it to make sure it is in safe operating condition. Always follow the inspection and maintenance procedures and schedules described in this manual.
- Always keep both hands on the handlebars and both feet on the footrests of the vehicle during operation.
- Always go slowly and be extra careful when operating on unfamiliar terrain. Always be alert to changing terrain conditions when operating the vehicle.
- Never operate on excessively rough, slippery or loose terrain.
- Always follow proper procedures for turning as described in this manual. Practice turning at low speeds before attempting to turn at faster speeds. Do not turn at excessive speed.
- Always have the vehicle checked by an authorized Polaris dealer if it has been involved in an accident.

Key Safety Issues

- Never operate the vehicle on hills too steep for the vehicle or for your abilities. Practice on smaller hills before attempting larger hills.
- Always follow proper procedures for climbing hills as described in this manual. Check the terrain carefully before you start up any hill. Never climb hills with excessively slippery or loose surfaces. Shift your weight forward. Never open the throttle suddenly or make sudden gear changes. Never go over the top of any hill at high speed.
- Always follow proper procedures for going down hills and for braking on hills as described in this manual. Check the terrain carefully before you start down any hill. Shift your weight backward. Never go down a hill at high speed. Avoid going down a hill at an angle which would cause the vehicle to lean sharply to one side. Go straight down the hill where possible.
- Always follow proper procedures for crossing the side of a hill as described in this manual. Avoid hills with excessively slippery or loose surfaces. Shift your weight to the uphill side of the vehicle. Never attempt to turn the vehicle around on any hill until you have mastered the turning technique described in this manual on level ground. Avoid crossing the side of a steep hill if possible.
- Always use proper procedures if you stall or roll backwards when climbing a hill. To avoid stalling, maintain a steady speed when climbing a hill. If you stall or roll backwards, follow the special procedure for braking described in this manual. Dismount on the uphill side or to either side if pointed straight uphill. Turn the vehicle around and remount, following the procedure described in this manual.
- Always check for obstacles before operating in a new area. Never attempt to operate over large obstacles, such as large rocks or fallen trees. Always follow proper procedures when operating over obstacles as described in this manual.
- Always be careful of skidding or sliding. On slippery surfaces, such as ice, go slowly and be very cautious in order to reduce the chance of skidding or sliding out of control.
- Avoid operating the vehicle through deep or fast flowing water. If you cannot avoid water which exceeds the recommended maximum depth (pg. 68), go slowly, balance your weight carefully avoiding sudden movements, maintain a slow and steady forward motion, do not make sudden turns or stops, and do not make sudden throttle changes.

SAFETY Key Safety Issues

- Wet brakes may have reduced stopping ability. Test your brakes after leaving water. If necessary apply them lightly several times to let friction dry out the pads.
- Always be sure there are no obstacles or people behind you when you operate in reverse. When it is safe to proceed in reverse, go slowly. Avoid turning at sharp angles in reverse.
- Always use the size and type fires specified in this manual. Always maintain proper tire pressure as described in this manual.
- Never modify this vehicle through improper installation or use of accessories.
- Never exceed the stated load capacity for this vehicle. Cargo should be properly distributed and securely attached. Reduce speed and follow instructions in this manual for carrying cargo or pulling a trailer. Allow greater distance for braking.

FOR MORE INFORMATION ABOUT vehicle SAFETY, call the Consumer Product Safety Commission at 1-800-638-2772, or Polaris at 1-800-342-3764.

Additional Important Information...

Due to our concern for the safety of our customers and the general public, Polaris hereby strongly recommends and requests that consumers not have installed on a Polaris 6x6 any equipment which is intended to increase the speed or power of the vehicle; or make any other modifications to the vehicle for these purposes. Any modifications to the original equipment of the vehicle substantially increase the risk of bodily injury. Please be aware that these modifications may create a substantial safety hazard.

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

We also advise you to strictly follow the recommended maintenance program outlined in this manual. This preventive maintenance program is designed to ensure that all critical components on the vehicle are thoroughly inspected by your dealer at various mileage intervals.

NOTE: The addition of certain accessories including (but not limited to) mowers, blades, tires, sprayers, or large racks may change the handling characteristics of the vehicle. Be certain any accessories added to this vehicle have been approved by Polaris. Familiarize yourself with their function and affect on the vehicle.

Safe Riding Gear

Always wear clothing suited to the type of riding you are doing. Riding this vehicle requires special protective clothing which will make you feel more comfortable and reduce chances of injury.

1. Helmet

Your helmet is the most important piece of protective gear for safe riding. A helmet can prevent a serious head injury.

Select an approved helmet which meets or exceeds your state's safety standards and bears either the Department of Transportation (DOT) label, the American National Standards Institute label (ANSI Z90.1), or the Snell Memorial Foundation label.

2. Eye Protection

Do not depend on sunglasses for proper eye protection. A pair of goggles or helmet face shield offer the best protection for your eyes. They should be kept clean and be of shatterproof design (bearing the markings Z2.1 or VESC 8).



3. Gloves

Off-road style gloves with knuckle pads are the best for comfort and protection.

4. Boots

The best footwear is a pair of strong over the calf type boots with heels such as moto cross boots.

5. Clothing

To protect your body, long sleeves and pants should always be worn. Riding pants with kneepads, a jersey and shoulder pads provide the best protection.

Safety Decals and Locations

NOTE:

Warning decals have been placed on the vehicle for your protection. Read and follow the instructions on each decal carefully. 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.

The addition of certain accessories including, but not limited to: mowers, blades, tires, sprayers, or large racks may change the handling characteristics of this vehicle. Be certain any accessories added to this vehicle have been approved by Polaris. Familiarize yourself with their function and affect on the vehicle.



Safety Decals and Locations

1

DO NOT TOW FROM RACK OR BUMPER. Vehicle damage or tipover may result causing severe injury or death. Tow only from tow hooks or hitch

Maximum Front Rack Load 75 lbs.

IMPROPER TIRE PRESSURE OR OVERLOADING can cause loss of control resulting in SEVERE INJURY OR DEATH.

TIRE PRESSURE (PSI): FRONT 5 CENTER 5 REAR 5

MAXIMUM WEIGHT CAPACITY (Gross Vehicle Weight INCLUDING MACHINE, DRIVER AND CARGO IS 1965 LBS.)

Reduce speed and allow greater distance for braking when carrying cargo. Overloading or carrying tall, off-center, or unsecured loads will increase your risk of losing control. Loads should be centered, carried as low as possible in box, and firmly secured to the rack. For stability on rough or hilly terrain, reduce speed and cargo. Do not block headlight. Be careful if load extends over the side of the rack or box.

Read Owner's Manual for more detailed loading information.

SAFETY Safety Decals and Locations



Safety Decals and Locations

3

Improper vehicle use can result in SEVERE INJURY or DEATH. NEVER:

- Operate on public roads. A collision can occur with another vehicle.
- Carry passengers. Passengers affect balance and steering and increase risk of losing control.
- USE ALCOHOL or DRUGS before or while operating this vehicle.
- Operate at speeds too fast for your skills or the conditions.
- Operate this vehicle on HILLS steeper than 15 degrees 15°.
- To prevent flipover on hilly terrain, use throttle and brakes gradually. ALWAYS:
- Use an approved HELMET AND PROTECTIVE GEAR.
- Avoid paved surfaces. Pavement may seriously affect handling and control.
- Use proper RIDING TECHNIQUES to avoid vehicle overturns on hills and rough terrain and in turns.
- Use OVERRIDE for reverse speed limiter with caution. To prevent loss of control, never activate override button with open throttle.
- REVERSE operation can be dangerous, even at low speeds. Steering becomes difficult. To prevent flipover, avoid sharp turns.
 PARKING BRAKE may relax when used for more than 5 minutes.
 When parking on grades, leave shift in forward.

LOCATE AND READ OWNER'S MANUAL. FOLLOW ALL INSTRUCTIONS AND WARNINGS. IF OWNER'S MANUAL IS MISSING, CONTACT A POLARIS DEALER FOR A REPLACEMENT.

Safety Decals and Locations



Safety Decals and Locations



ETC -

This vehicle is equipped with a Polaris Electronic Throttle Control (ETC) to reduce the risk of a stuck or "frozen" throttle. Please refer to your Owner's Manual for details.

6





AWD Models

8 ALL WHEEL DRIVE SWITCH Do not push switch to engage AWD if the rear wheels are spinning. This may cause severe wheels are spinning. This may cause severe wheels are spinning. This may cause severe shaft and clutch damage. See your Owner's Manual.

9

Safety Decals and Locations



AWARNING

Moving parts hazard under belt-clutch guard. To prevent serious injury, do not operate vehicle with guard removed.

Do not modify engine or clutch. Doing so can cause part failure, possible imbalance, and excessive engine RPM which can result in serious injury or death.

NO STEP

7078689

Safety Decals and Locations

TRAILER MAX WEIGHT: 1225 LBS. (557 KG) ON LEVEL GROUND 850 LBS. (368 KG) UP TO 15 GRADE

HITCH MAX. VERTICAL WEIGHT: 35 LBS. (16 KG) 7078261

(On Hitch)

ATTENTION Specific Operation of this vehicle without • carburetor jetting and the filter element will severely adjustments are required depending on damage the engine. temperature and altitude. See your Clean air filter often, more Owner's Manual. frequent cleaning required in dusty conditions Factory setting: Operation of this vehicle without 40° to 80° F. at 0-3000 feet engine breather filter(s) can (5° to 27° C. at 0-900 meters). cause engine damage. Consult owner's manual for details. 7079902

Operator Safety

A WARNING

POTENTIAL HAZARD

Operating this vehicle without proper instruction.

WHAT CAN HAPPEN

The risk of an accident is greatly increased if the operator does not know how to operate the vehicle properly in different situations and on different types of terrain.

HOW TO AVOID THE HAZARD

Beginning and inexperienced operators should complete the certified training course offered by Polaris Industries Inc. They should then regularly practice the skills learned in the course and the operating techniques described in the Owner's Manual.

For more information about the training course, contact an authorized Polaris dealer or call Polaris at 1-800-342-3764.

WARNING

POTENTIAL HAZARD

Failure to follow the age recommendations for this vehicle.

WHAT CAN HAPPEN

Use by children of vehicles that are not recommended for their age can lead to severe injury or death of the child.

Even though a child may be within the age group for which some vehicles are recommended, he or she may not have the skills, abilities, or judgment needed to operate the vehicle safely and may be involved in a serious accident.

HOW TO AVOID THE HAZARD

No one under 16 should operate a Polaris wheeled vehicle.

Operator Safety

A WARNING

POTENTIAL HAZARD

Carrying a passenger on this vehicle.

WHAT CAN HAPPEN

Greatly reduces your ability to balance and control this vehicle.

Could cause an accident, resulting in harm to you and/or your passenger.

HOW TO AVOID THE HAZARD

Never carry a passenger. The operator requires the space of the entire seat to shift position as needed during operation. The seat is not for carrying passengers.

WARNING

POTENTIAL HAZARD

Operating this vehicle on paved surfaces.

WHAT CAN HAPPEN

This vehicle's tires are designed for off-road use only; not for use on pavement. Paved surfaces may seriously affect handling and control of the vehicle, and may cause the vehicle to go out of control.

HOW TO AVOID THE HAZARD

Always avoid paved surfaces, including sidewalks, driveways, parking lots and streets.

▲ 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.

Operator Safety

A WARNING

POTENTIAL HAZARD

Operating this vehicle on public streets, roads or highways.

WHAT CAN HAPPEN

You can collide with another vehicle.

HOW TO AVOID THE HAZARD

Never operate this vehicle on any public street, road or highway, even a dirt or gravel one.

In many states it is illegal to operate vehicles of this type on public streets, roads and highways.

WARNING

POTENTIAL HAZARD

Operating this vehicle without wearing an approved helmet, eye protection and protective clothing.

WHAT CAN HAPPEN

Operating without an approved helmet increases your chances of a severe head injury or death in the event of an accident.

Operating without eye protection can result in an accident and increases your chances of a severe injury in the event of an accident.

HOW TO AVOID THE HAZARD

Always wear an approved helmet which fits properly.

You should also wear:

- eye protection (goggles or face shield);
- gloves;
- boots;
- long-sleeved shirt or jacket; and
- long pants.

Operator Safety

POTENTIAL HAZARD

Stalling, rolling backwards or improperly dismounting while climbing a hill.

WHAT CAN HAPPEN

Could result in vehicle overturning.

HOW TO AVOID THE HAZARD

Maintain steady speed when climbing a hill.

If you lose all forward speed:

Keep weight uphill.

Apply the brakes.

Lock parking brake after you are stopped.

If you begin rolling backwards:

Keep weight uphill; never apply engine power.

Never apply the rear brake while rolling backwards.

Apply the service brake, gradually.

When fully stopped, apply auxiliary brake as well, and then lock parking brake.

Dismount on uphill side, or to either side if pointed straight uphill.

Turn the vehicle around and remount, following the procedure described in the Owner's Manual. See page 67. In the event of an accident, have a qualified service dealer check the complete machine including, but not limited to brakes, throttle and steering for possible damage.

Operator Safety

POTENTIAL HAZARD

Operating this vehicle at excessive speeds.

WHAT CAN HAPPEN

Increases your chances of losing control of the vehicle, which can result in an accident.

HOW TO AVOID THE HAZARD

Always travel at a speed which is proper for the terrain, visibility and operating conditions; and your experience.

WARNING

POTENTIAL HAZARD

Improperly operating in reverse.

WHAT CAN HAPPEN

You could hit an obstacle or person behind you, resulting in serious injury.

HOW TO AVOID THE HAZARD

When you select reverse gear, make sure there are no obstacles or people behind you. When it is safe to proceed, go slowly.



Operator Safety

WARNING

POTENTIAL HAZARD

Failure to inspect the vehicle before operating.

Failure to properly maintain the vehicle.

WHAT CAN HAPPEN

Increases the possibility of an accident or equipment damage.

HOW TO AVOID THE HAZARD

Always inspect your 6x6 each time you use it to make sure it is in safe operating condition.

Always follow the inspection and maintenance procedures and schedules described in the Owner's Manual.

▲ WARNING

POTENTIAL HAZARD

Removing hands from handlebars or feet from footrests during operation.

WHAT CAN HAPPEN

Removing even one hand or foot can reduce your ability to control the vehicle or could cause you to lose your balance and fall off the vehicle. If you remove a foot from the footrest, your foot or leg may come into contact with the rear wheels, which could injure you or cause an accident.

HOW TO AVOID THE HAZARD

Always keep both hands on the handlebars and both feet on the footrests of your 6x6 during operation.

Operator Safety

A WARNING

POTENTIAL HAZARD

Skidding or sliding.

WHAT CAN HAPPEN

You may lose control of the vehicle.

You may also regain traction unexpectedly, which may cause the vehicle to overturn.

HOW TO AVOID THE HAZARD

On slippery surfaces, such as ice, go slowly and be very cautious in order to reduce the chance of skidding or sliding out of control.

A WARNING

POTENTIAL HAZARD

Failure to use extra care when operating this vehicle on unfamiliar terrain.

WHAT CAN HAPPEN

You can come upon hidden rocks, bumps, or holes, without enough time to react.

Could result in the vehicle overturning or going out of control.

HOW TO AVOID THE HAZARD

Go slowly and be extra careful when operating on unfamiliar terrain.

Always be alert to changing terrain conditions when operating the vehicle.

Operator Safety



POTENTIAL HAZARD

Failure to use extra care when operating on excessively rough, slippery or loose terrain.

WHAT CAN HAPPEN

Could cause loss of traction or vehicle control, which could result in an accident, including an overturn.

HOW TO AVOID THE HAZARD

Do not operate on excessively rough, slippery or loose terrain until you have learned and practiced the skills necessary to control the vehicle on such terrain.

Always be especially cautious on these kinds of terrain.

Operator Safety

WARNING

POTENTIAL HAZARD

Turning improperly.

WHAT CAN HAPPEN

Vehicle could go out of control, causing a collision or overturn.

HOW TO AVOID THE HAZARD

Always follow proper procedures for turning as described in the Owner's Manual. See page 61.

Practice turning at low speeds before attempting to turn at faster speeds.

Do not turn at excessive speed.

WARNING

POTENTIAL HAZARD

Operating on excessively steep hills.

WHAT CAN HAPPEN

The vehicle can overturn more easily on extremely steep hills than on level surfaces or small hills.

HOW TO AVOID THE HAZARD

Never operate the 6x6 on hills too steep for the vehicle or for your abilities.

Practice on smaller hills before attempting large hills.

Never operate vehicle on hills steeper than 15°.

Operator Safety



Could cause loss of control or cause vehicle to overturn.

HOW TO AVOID THE HAZARD

Always follow proper procedures for climbing hills as described in the Owner's Manual. See pages 62 through 67.

Always check the terrain carefully before you start up any hill.

Never climb hills with excessively slippery or loose surfaces.

Shift your weight forward.

Never open the throttle suddenly. The vehicle could flip over backwards.

Never go over the top of any hill at high speed. An obstacle, a sharp drop, or another vehicle or person could be on the other side of the hill.

SAFETY Operator Safety



POTENTIAL HAZARD

Going down a hill improperly.

WHAT CAN HAPPEN

Could cause loss of control or cause vehicle to overturn.

HOW TO AVOID THE HAZARD

Always follow proper procedures for going down hills as described in the Owner's Manual. See page 65. **NOTE:** A special technique is required when braking as you go downhill.

Always check the terrain carefully before you start down any hill.

Shift your weight backward.

Never go down a hill at high speed.

Avoid going down a hill at an angle which would cause the vehicle to lean sharply to one side. Go straight down the hill where possible.

Operator Safety



POTENTIAL HAZARD

Improperly crossing hills or turning on hills.

WHAT CAN HAPPEN

Could cause loss of control or cause vehicle to overturn.

HOW TO AVOID THE HAZARD

Never attempt to turn the vehicle around on any hill until you have mastered the turning technique as described in the Owner's Manual on level ground. See pages 62 and 67. Be very careful when turning on any hill.

Avoid crossing the side of a steep hill if possible.

When crossing the side of a hill:

Always follow proper procedures as described in the Owner's Manual.

Avoid hills with excessively slippery or loose surfaces.

Shift your weight to the uphill side of the vehicle.

Operator Safety

A WARNING

POTENTIAL HAZARD

Improperly operating over obstacles.

WHAT CAN HAPPEN

Could cause loss of control or a collision. Could cause vehicle to overturn.

HOW TO AVOID THE HAZARD

Before operating in a new area, check for obstacles.

Use extreme caution when riding over large obstacles, such as large rocks or fallen trees.

If you cannot avoid obstacles, always follow proper procedures as described in the Owner's Manual on page 71.

A WARNING

POTENTIAL HAZARD

Overloading this vehicle or carrying or towing cargo improperly.

WHAT CAN HAPPEN

Could cause changes in vehicle handling which could lead to an accident.

HOW TO AVOID THE HAZARD

Never exceed the stated load capacity for this vehicle.

Cargo should be properly distributed and securely attached.

Reduce speed when carrying cargo or pulling a trailer. Allow greater distance for braking.

Always follow the instructions in the Owner's Manual for carrying cargo or pulling a trailer. See pages 54 and 59.


Operator Safety

A WARNING

POTENTIAL HAZARD

Operating this vehicle through deep or fast flowing water.

WHAT CAN HAPPEN

Tires may float, causing loss of traction and loss of control, which could lead to an accident.

HOW TO AVOID THE HAZARD

Never operate this vehicle in fast flowing water or in water deeper than that specified in your Owner's Manual. See page 68.

Remember that wet brakes may have reduced stopping ability. Test your brakes after leaving water. If necessary, apply them several times to let friction dry out the pads.

WARNING

POTENTIAL HAZARD

Attempting jumps and other stunts.

WHAT CAN HAPPEN

Increases the chance of an accident, including an overturn.

HOW TO AVOID THE HAZARD

Never attempt stunts such as jumps. Don't try to show off.

SAFETY

Operator Safety

A WARNING

POTENTIAL HAZARD

Operating this vehicle with improper tires, or with improper or uneven tire pressure.

WHAT CAN HAPPEN

Use of improper tires on this vehicle, or operation of this vehicle with improper or uneven tire pressure, may cause loss of control, and increases the risk of an accident.

HOW TO AVOID THE HAZARD

Always use the size and type tires specified in the Owner's Manual for this vehicle. See page 96.

Always maintain proper tire pressure as described in the Owner's Manual. See page 96.

A WARNING

POTENTIAL HAZARD

Operating this vehicle with improper modifications.

WHAT CAN HAPPEN

35

Improper installation of accessories or modification of this vehicle may cause changes in handling which in some situations could lead to an accident.

HOW TO AVOID THE HAZARD

Never modify this vehicle through improper installation or use of accessories. All parts and accessories added to this vehicle should be genuine Polaris Industries Inc. or equivalent components designed for use on this vehicle; and should be installed and used according to instructions. If you have questions, consult an authorized Polaris dealer.



Operator Safety

A WARNING

POTENTIAL HAZARD

Riding on frozen lakes and rivers.

WHAT CAN HAPPEN

Severe injury or death can result if the vehicle and/or the operator break through the ice.

HOW TO AVOID THE HAZARD

Never ride your 6x6 on a frozen body of water before you are sure the ice is thick enough and sound enough to support the machine and its operator, as well as the force that is created by a moving vehicle.

WARNING

POTENTIAL HAZARD

Operating this vehicle after consuming alcohol or drugs.

WHAT CAN HAPPEN

Could seriously affect your judgment.

Could cause you to react more slowly.

Could affect your balance and perception.

Could result in an accident.

HOW TO AVOID THE HAZARD

Never consume alcohol or drugs before or while driving this vehicle.

CONTROLS AND FEATURES Controls

Sportsman 6x6 Vehicle Nomenclature

- 1. Service Brake Lever
- 2. Middle Axle Auxiliary Brake
- 3. Throttle Lever
- 4. Bed Dump Latch Release(s)
- 5. Gearbox Shift Lever

- 6. Floor Boards
- 7. Back Rest
- 8. Bed
- 9. Front Rack



Controls Engine Electrical Switches



Activating the override button while throttle is open can cause loss of control resulting in severe injury or death.

1. Override Switch (Reverse Speed Limiter)

This vehicle is equipped with a reverse speed limiter system. To obtain additional power while backing up, depress the override button.

NOTE: The override switch also allows activation of All Wheel Drive (AWD) in reverse, if AWD switch is on.

2. Main Switch

To start the engine, slide the stop switch (3) to the center "run" position and turn the main key switch clockwise past the "on" position. Release the key when the engine starts.

This switch must be turned clockwise to the "on" position to start the engine.

3. Engine Stop Switch

The engine will not start or run when the switch is in its "off" position. Its purpose is to provide the operator with a quick means of engine shutdown in case of stuck throttle or other emergency. **NOTE:** Both the main switch and the emergency engine stop switch shut off all electrical power to the entire vehicle including lights. To stop the engine, slide the stop switch right or left to the "off" position.

CONTROLS AND FEATURES Controls

Throttle Lever

Engine speed and vehicle movement are controlled by pressing the throttle lever. The throttle lever (1) is spring loaded and engine speed returns to idle when the lever is released. This vehicle is equipped with a Polaris Electronic Throttle Control (ETC) which is designed to reduce the risk of



a frozen or stuck throttle. In the event the throttle should stick in an open position, engine RPM will diminish and power to the rear wheels will cease.

Choke Knob (2)

Refer to the engine starting procedure on pages 52 - 53 for correct choke and throttle settings during starting.

The Electronic Throttle Control (ETC) limits engine power in the event of a throttle system malfunction and is provided for your safety. Do not attempt to modify the ETC system or replace it with any after market throttle mechanisms.

Do not start or operate this vehicle with sticking or improperly operating throttle controls. A stuck or improperly operating throttle could cause an accident resulting in severe injury or death.

Always contact your dealer for service repairs whenever throttle problems arise.

Failure to check or maintain proper operation of the throttle system can result in the throttle lever sticking during riding and cause an accident.

Always check the lever for free movement and return before starting the engine and occasionally during riding.

Controls

Front and Rear Brakes

The master cylinders, which are located on the left and right handlebars, should be checked before each ride. The fluid level can be seen through an indicator window (3) on the top of the master cylinder. This "eye" will appear dark when the fluid level is full. When fluid needs to be added, the eye will be clear. **NOTE:** When checking the fluid level, the handle bars should be



turned so until the top of the reservoir is level. If the fluid level is low add DOT 3 (PN 2870990) only.

Once a bottle of brake fluid is opened, use what is necessary and discard the rest. Do not store or use a partial bottle of brake fluid. Brake fluid is hygroscopic, meaning it rapidly absorbs moisture from the air. This causes the boiling temperature of the brake fluid to drop, which can lead to early brake fade and the possibility of serious injury.

The service brakes are applied by squeezing the left side brake lever toward the handlebar. These brakes are hydraulically activated disc type brakes which are activated by one lever only.

Always test brake lever travel and reservoir fluid level before riding. When squeezed, the lever should feel firm. Any sponginess would indicate a possible fluid leak or low master cylinder fluid level which must be corrected before riding. Contact your dealer for proper diagnosis and repairs.

Improperly operating the vehicle with a spongy brake lever can result in loss of braking. Loss of braking could cause an accident.

Never operate the vehicle with a spongy feeling brake lever.

Controls

Brakes/Rear Auxiliary Brake

The braking system is controlled by two levers located on the handlebars directly in front of the handgrips.

1. Service Brakes (front wheel and transmission) - Left Handlebar Lever

This lever controls braking action to all six wheels. It is the normal service brake system to use for braking.

2. Auxiliary Brakes - Right Handlebar Lever

This lever controls the auxiliary brake for the rear axles. It is to be used for additional braking effect, or in the event of failure of the normal service brake

system.



Controls

Parking Brake

Setting the Parking Brake

- 1. Squeeze the left hand brake lever two or three times and hold it.
- 2. Rotate the park brake lock (3) into the notches on the master cylinder body. Release the brake lever.
- 3. To release the parking brake lock, squeeze the brake lever. It will return to its released position.

The parking brake will slowly relax or lose holding power if left unattended for more than five minutes. Do not depend on parking brake to hold vehicle for more than five minutes.



Always check to be sure that the parking brake has been disengaged before operating the vehicle. An accident could result if the parking brake is left on while the vehicle is operated.

The parking brake may relax when left on for a long period of time. This could cause an accident.

Do not leave the vehicle on a hill depending on the parking brake for more than five minutes.

Always block the downhill side of the wheels if leaving the vehicle on a hill or park the vehicle in a side hill position.

Controls

Engine Fuel and Oil System



The fuel tank filler cap (1) is located directly behind the handlebar. Its capacity is 4.25 U.S. gallons (16 l) with 1/2 gallon (1.9 l) in reserve. Use either leaded or unleaded gasoline with a minimum pump octane number of 87 (R+ M)/2 octane.

The fuel tank supply valve (2) located on the left side of the vehicle has three positions:

OFF: For vehicle storage and whenever transporting.

ON: For normal operation.

RES: For reserve supply in the event of main supply exhaustion.

NOTE: There is about a 7 to 10 mile (11.2 to 16 km) range on reserve gas. Always refill the gas tank as soon as possible after having used the reserve supply.

Always remember to take the fuel valve off "RES" after refueling your machine.



Controls

Engine Fuel and Oil System

Gasoline is highly flammable and explosive under certain conditions.

- Always exercise extreme caution whenever handling gasoline.
- Always refuel with the engine stopped and 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 over fill the tank. Do not fill the tank neck.
- If you should get 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.
- Shut off fuel valve whenever the vehicle is stored or parked.

NOTE: The taillight is on whenever the main switch (key) is in the on position. Turn the key off to prevent battery drain.

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

CONTROLS AND FEATURES Controls

Transmission Gear Selector Operation

The transmission gear selector is located on the right side of the vehicle directly above and forward of the engine recoil starter. The transmission selector lever has four positions: high forward; reverse; neutral; and low forward.

Use of low forward gear is recommended in heavy pulling situations to extend belt life.

To change gears, stop the vehicle and with the engine



idling, move the lever to the desired gear. Do not attempt to shift gears with engine speed above idle or while the vehicle is moving.

Always place the transmission in gear with the parking brake locked whenever the vehicle is left unattended.

Maintaining shift linkage adjustment is important to assure proper transmission function. Should you experience any shifting problem see your dealer.

- 1. Do not attempt to shift the transmission while the vehicle is moving or while operating on hilly terrain.
- 2. Always place the transmission in gear with the parking brake applied whenever the vehicle is left unattended.

Controls

Recoil Starter

If the battery is weak and cannot start the engine, use of the recoil starter located on the right side of the machine will allow vehicle operation until repairs can be made.

- 1. Be certain the parking brake is set. See page 42.
- 2. Grasp the recoil starter tightly and pull slightly until the starter mechanism engages.
- 3. Pull the rope abruptly to start the engine.



CAUTION

Do not extend the starter rope so far that it stops This will cause damage to the recoil assembly.

Make sure the manual start handle is fully seated on the recoil housing, especially when travelling in wet areas. If it is not sealed properly, water may enter the recoil housing and damage components.

Features

Light Switches and Indicator Lights



- 1. Main switch
- 2. Handlebar light switch and headlight Hi-Lo beam control **NOTE:** Will not light unless main switch is on.
- 3. Headlight Hi beam indicator (Blue)
- 4. Transmission reverse indicator (Yellow)
- 5. Transmission neutral indicator (Green)
- 6. All Wheel Drive indicator (Red)
- 7. Engine hi temp warning indicator (Red) **NOTE:** Will light only if engine overheats.

With engine running, verify function of indicator lights each time vehicle is used.

This vehicle is not equipped with highway approved lighting. This vehicle is designed for off-road use only and must not be ridden on streets or highways. Use caution and drive at reduced speeds in conditions of reduced visibility such as fog, rain and darkness.

Features

All Wheel Drive System



The Polaris 6x6 is equipped with a unique Polaris exclusive AWD (All Wheel Drive) system which is activated by a switch on the right handlebar. When the switch is "off" the 6x6 is in rear wheel drive at all times. When the switch is "on" the 6x6 is in AWD and the front wheels will automatically engage anytime the rear wheels lose traction. When the rear wheels regain traction, the front wheels will automatically disengage. **NOTE:** The override switch also allows activation of AWD in reverse, if AWD switch is on.

Features

A red AWD light on the switch indicates when the vehicle is in AWD. There is no limit to the length of time the vehicle may remain in AWD.

The AWD switch may be turned on or off while the vehicle is moving. If the switch is turned off when the front hubs are driving they will not release until the rear wheels regain traction.

Do not switch on AWD if the rear wheels are spinning. This may cause severe drive shaft and clutch damage. Engage the AWD switch before getting into conditions where front wheel drive may be needed. If the rear wheels are spinning, release the throttle before turning the AWD switch on.

Disengaging Wheel Hubs

When backing uphill while in AWD and then going forward downhill, one or both hubs may remain engaged. If one or both hubs remain engaged they can be disengaged by stopping, shifting to and moving in reverse. Then proceed in forward again.

If both hubs were engaged and only one released during operation, loss of control could result. If you experience hub engaging symptoms, use the above disengaging technique before proceeding. Failure to disengage front hubs as directed above could result in severe injury or death.

If the hubs remain engaged after following these instructions return the vehicle to your dealer for service.

You can tell if only one front hub is engaged if the handlebars pull to one side. If both front wheel hubs are engaged, steering effort increases but remains balanced from left to right, and vehicle speed is somewhat restricted.

Vehicle Break-in Period

The break-in period for your new Polaris 6x6 is defined as the first ten hours of operation or the time it takes to use the first two tanks 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.

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

- 1. Fill fuel tank with either unleaded or leaded fuel which has a minimum pump octane number of 87=(R+M)/2.
- 2. Check oil reservoir level indicated on dipstick. Add oil if necessary.



- 3. Drive slowly at first. Select an area which is open and will give you room to familiarize yourself with vehicle operation and handling.
- 4. Vary the throttle positions. Do not operate at sustained idle.

Do not operate at full throttle or high speeds for extended periods during the first three hours of use. Excessive heat can build up and cause damage to close fitted engine parts.

- 5. Perform regular checks on fluid levels, controls and all important areas on the vehicle as outlined earlier on the daily pre-ride inspection checklist found on page 12.
- 6. Pull only light loads.
- 7. Break in oil and filter. Change at 20 hours or 200 miles.

Daily Pre-Ride Inspection

Inspect your 6x6 each time before riding to ensure it is in proper working order. If proper inspection is not done, severe injury or death could result.

A WARNING

If a proper inspection is not performed serious injury or death can result.

Always inspect your 6x6 before riding following the checklist carefully.

Before riding your vehicle, inspect all operating controls and parts.

Item/Inspection Procedure

- Tires check condition and pressures
- Fuel and oil tanks fill both tanks to their proper levels
- All brakes check operation, adjustment and fluid level (includes auxiliary brake)
- Throttle check for free operation and closing
- Headlight/Taillight/Brakelight check operation of all indicator lights and switches
- Engine stop switch check for proper function
- Wheels check for tightness of wheel nuts and axle nuts; check that axle nuts are secured by cotter pins
- Drive chain condition and slack; refer to drive chain adjustment
- Air cleaner element check for dirt; clean or replace
- Steering check for free operation noting any unusual looseness in any area
- Loose parts visually inspect vehicle for any damaged or loose nuts/bolts or fasteners
- Operators helmet, goggles and clothing
- Engine coolant check for proper level at the recovery bottle.
- Check condition and operation of the dump box/bed latch mechanism.

Starting a Cold Engine

- 1. Place the transmission in neutral and reset the parking brake.
- 2. Turn the fuel tank valve to ON.
- 3. Sit on the vehicle.
- 4. Pull the choke button (A) all the way out.
- 5. Set the engine stop switch to "run".
- 6. Turn the ignition key past the "ON" position to engage the starter.



NOTE: the choke is on "FULL" when the knob is pulled out all the way. The choke is "OFF" when the knob is pushed in. This is a variable choke and can be adjusted gradually, depending on how much choke is needed for starting.

- 7. Do not press the throttle while starting the engine.
- 8. Activate the starter for a maximum of five seconds, releasing the key or button when the vehicle starts. If engine does not start, release the starter and wait five seconds; then activate the starter for another five seconds. Repeat this procedure until engine starts.

NOTE: Do not press the throttle while starting the engine.

After the Engine Starts

- 1. If the engine slows or stops, pushing the choke button in half way will allow proper engine warm up.
- 2. Vary the engine RPM slightly with the throttle to aid in warm up until the engine idles smoothly. Then push the choke button all the way in.

CAUTION

Proper engine warm up is essential each time before driving to avoid engine damage.

Carbon monoxide exhaust gas is poisonous! Always start the vehicle outdoors. Never run the engine in an enclosed area.

Starting a Warm Engine

Warm engines do not normally require the use of the choke since the spark plug can easily become wet fouled.

- 1. Place the transmission in neutral and push the vehicle to a level surface.
- 2. Lock the parking brake.
- 3. Turn the fuel tank valve to ON.
- 4. Sit on the vehicle.
- 5. If the engine has cooled to a point where it does not readily start, intermittent use of the choke button pulled half way out is permitted.
- 6. If the engine is over-choked by mistake when warm, depress the throttle lever fully while cranking to aid in starting.
- 7. Release the throttle lever immediately after the engine starts. If the engine does not start and all conditions are favorable, change the spark plug.

Carrying Loads

Your 6x6 has been designed to carry or tow a certain amount of load. Always read and understand the load distribution warnings listed on the warning labels. Never exceed the following weights.

Maximum Capacities (Level Ground)	Front Rack Cargo	Cargo Bed
Sportsman 6x6 - 875 lbs. (397 kg)	75 lbs. (34 kg)	800 lbs. (363 kg)

Improper loading of the front rack can obstruct the headlight beam, reducing night visibility. Do not obstruct the headlight beam with cargo.

Maximum Towing Capacities (Level Ground)

Maximum towed load weight - 1250 lbs. (568 kg) on level ground only; 850 lbs. (386 kg) up to 15° grade. Maximum vertical hitch weight - 30 lbs (14 kg).

Use of low forward is recommended in heavy pulling situations to extend belt life.

Maximum grade while trailer towing - 15° ; do not tow any trailer on a grade steeper than 15° .

Carrying Loads

Overloading the vehicle or carrying or towing cargo improperly can be dangerous.

Improper loading can drastically alter 6x6 handling and braking stability.

- Never exceed the stated load capacity for this vehicle.
- Do not obstruct the headlight when loading the front rack.
- Cargo should be properly distributed and carried as low and forward in the cargo bed as possible.
- Reduce speed and allow greater distance for braking.
- Heavy loads can cause braking and control problems.
- Use extreme caution when applying brakes with a loaded vehicle. Generally avoid terrain or situations which may require backing downhill.
- Always attach the tow load to the hitch point designated for your vehicle.
- Vehicle should never exceed 10 mph (16 kph) while towing a load on a level grass surface. Vehicle speed should never exceed 5 mph (8 kph) when towing loads in rough terrain, while cornering, or while ascending or descending a hill.

Carrying Loads

Dumping the Cargo Bed

- 1. Select a level site to dump the cargo bed. Do not attempt to dump or unload the vehicle while parked on an incline.
- 2. Set the parking brake.
- 3. Dismount the vehicle.
- 4. Pull the cargo bed release mechanism lever forward and lift the front of the cargo bed to dump.

Never carry passengers on the bed.

If the weight distribution on the bed is located toward the rear of the bed and the release lever is pulled forward, the bed will want to dump on its own. Never operate the dump lever without checking the position of the load. This will prevent unexpected dumping of the cargo bed.

In the event of an accident have a qualified service dealer check the complete machine including, but not limited to, brakes, throttle, and steering for possible damage.

NOISE EMISSION CONTROL SYSTEM REGULATION

TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED!

U.S. Federal law prohibits the following acts or the causing thereof:

(1) The removal or rendering inoperative by any person other than for purposes of maintenance, repair, or replacement of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use or

(2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

"AMONG THOSE ACTS PRESUMED TO CONSTITUTE TAMPERING ARE THE ACTS LISTED BELOW."

- 1. Removal or alteration or the puncturing of the muffler or any engine component which conducts removal of engine exhaust gases.
- 2. Removal or alteration or the puncturing of any part of the engine air induction system.
- 3. Replacement of any vehicle parts with parts not in compliance with federal regulations.
- 4. Lack of proper maintenance.

Remember, exhaust system components are very hot during and after use of the vehicle.

- Do not touch hot exhaust system components. Serious burns can result.
- Be especially careful when traveling through tall grass. The potential for fire exists.

USFS Approved Spark Arrestor

The muffler on this vehicle was tested and approved in accordance with the USFS Forest Service Standard 5100-1A.

Daily Pre-Ride Inspection

Inspect your 6x6 each time before riding to ensure it is in proper working order. If proper inspection is not done, severe injury or death could result.

WARNING

If a proper inspection is not performed serious injury or death can result.

Always inspect your 6x6 before riding following the checklist carefully.

Before riding your vehicle, inspect all operating controls and parts.

Item/Inspection Procedure

- Tires check condition and pressures
- Fuel and oil tanks fill both tanks to their proper levels
- All brakes check operation, adjustment and fluid level (includes auxiliary brake)
- Throttle check for free operation and closing
- Headlight/Taillight/Brakelight check operation of all indicator lights and switches
- Engine stop switch check for proper function
- Wheels check for tightness of wheel nuts and axle nuts; check that axle nuts are secured by cotter pins
- Drive chain condition and slack; refer to drive chain adjustment
- Air cleaner element check for dirt; clean or replace
- Steering check for free operation noting any unusual looseness in any area
- Loose parts visually inspect vehicle for any damaged or loose nuts/bolts or fasteners
- Operators helmet, goggles and clothing
- Engine coolant check for proper level at the recovery bottle.
- Check condition and operation of the dump box/bed latch mechanism.

Riding Safely

Load Distribution



- 1. Always load the cargo bed placing the load as far forward as possible.
- 2. Always operate the vehicle with extreme care whenever hauling or towing loads as balance, handling, and control may be affected.
- 3. Slow down and *drive in low range* only.
- 4. The cargo bed dump latch must be securely latched before loading and operating. Unintentional bed tilting will result if weight is placed in the rear of the bed and the latch is not secured.

Never operate this vehicle with the cargo bed in the raised position. The cargo bed could close unexpectedly while driving, severely injuring the driver. The rear tires will catch the rear of the bed, damaging the vehicle and creating hazardous driving conditions.

Riding Safely



- 1. Sit upright with both feet on the footrests and both hands on the handlebars.
- 2. After starting the engine and allowing it to warm up, shift the transmission into gear.
- 3. Check your surroundings and determine your path of travel.
- 4. Release the parking brake.
- 5. Slowly depress the throttle with your right thumb and begin driving. Vehicle speed is controlled by the amount of throttle opening and PVT shifting is done automatically.
- 6. Drive slowly, practice maneuvering and using the throttle and brakes on level surfaces.

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

RIDING Riding Safely Making Turns



Practice making turns at slow speeds.

Polaris 6x6s are equipped with solid rear axles which drives all rear wheels equally at all times. This means that the wheel on the outside of the turn must travel a greater distance than the inside wheel when turning and the inside tire must slip traction slightly. To turn, steer in the direction of the turn leaning your upper body to the inside of the turn while supporting your weight on the outer footrest. This technique alters the balance of traction between the rear wheels allowing the turn to be made smoothly. The same learning technique should be used for turning in reverse.

Avoid turning at sharp angles in reverse as tipover and serious injury may result.

Riding Safely

Sidehilling



Sidehilling your 6x6 is one of the most dangerous types of riding and should be avoided if possible. In the event you do enter into a situation where sidehilling is necessary, always:

- 1. Slow down.
- 2. Lean into the hill transferring your upper body weight toward the hill while keeping your feet on the footrests.
- 3. Steer slightly into the hill to maintain vehicle directions.

If vehicle begins to tip, quickly turn the front wheel downhill, if possible, or dismount on the uphill side **immediately!**

Improperly crossing hills or turning on hills can be dangerous! Loss of vehicle control or overturning of the vehicle could occur.

- Avoid crossing the side of a steep hill if possible.
- Use extreme care when operating your 6x6 in hilly terrain.

RIDING Riding Safely Riding On Slippery Surfaces



Whenever riding on slippery surfaces such as wet trails or loose gravel, or during cold freezing weather, special attention must be paid to prevent vehicle turnover. Always:

- 1. Slow down when entering slippery areas.
- 2. Maintain a high level of alertness, reading the trail and avoiding quick, sharp turns which can cause skids.
- 3. Correct a skid by turning the handlebars in the direction of the skid and shifting your body weight forward.
- 4. Driving with Demand 6 Drive (All Wheel Drive) engaged can assist in controlling the vehicle in slippery areas.

Before riding your vehicle on a frozen body of water be sure that the ice is thick enough to support the machine and its operator, as well as the force that is created by a moving vehicle. Severe injury or death can result if the vehicle and/or its operator break through the ice.

Never engage Demand Drive while wheels are spinning as severe damage to drive train may occur.

Riding Safely

Riding On Slippery Surfaces

Failure to exercise care when operating on slippery surfaces can be dangerous.

Loss of tire traction and vehicle control can result in an accident, including an overturn.

- Never apply brakes during a skid. Complete loss of control can result.
- Do not operate on excessively slippery surfaces if possible.
- Always reduce speed and use additional caution.

RIDING Riding Safely Traveling Downhill



Whenever descending a hill always:

- 1. Drive directly downhill.
- 2. Transfer your weight to the rear of the vehicle.
- 3. Slow down.
- 4. Apply the brakes slightly to aid in slowing.

Loss of vehicle control due to excessive speed can occur. Loss of control may result in serious injury or death.

Riding Safely Traveling Uphill



Whenever traveling uphill always travel straight uphill and:

- 1. Avoid steep hills.
- 2. Keep both feet on the footrests.
- 3. Transfer your weight forward.
- 4. Proceed at a steady rate of speed and throttle opening.
- 5. Remain alert and be prepared to take emergency action. This may include quick dismounting of the vehicle.

AWARNING

Braking and handling are greatly affected whenever operating in hilly terrain.

Loss of vehicle control or overturning of the vehicle could occur.

- Avoid climbing steep hills (15° maximum).
- Use extreme care when operating your vehicle in hilly terrain.

Riding Safely

Turning Around On A Hill



If the vehicle stalls while climbing a hill, never back it down the hill! One maneuver which can be used when it is necessary to turn around while climbing a hill is the K-turn.

- 1. Stop and lock the parking brake while maintaining body weight uphill.
- 2. Leave transmission in forward and shut off engine.
- 3. Dismount on left or uphill side of vehicle.
- 4. Staying uphill of vehicle, turn handlebars full right (facing front of vehicle).
- 5. While holding service brake, release parking brake lock and slowly allow vehicle to roll around to your right until it is pointing across the hill or slightly downward.
- 6. Lock the parking brake and remount vehicle from the uphill side, maintaining body weight uphill.
- 7. Restart engine with transmission still in forward, and proceed slowly, controlling speed with the service brake, until vehicle is on reasonably level ground.

Avoid climbing steep hills.

Loss of vehicle control or overturning of vehicle could occur.

• Use extreme care when operating your 6x6 in hilly terrain.

Riding Safely

Crossing Streams



Your Polaris 6X6 can operate through water up to maximum recommended depths reaching the footrests. Before fording streams always:

- 1. Determine water depths and current.
- 2. Choose a crossing where both banks have gradual inclines.
- 3. Proceed slowly, avoiding rocks and obstacles if possible.
- 4. After crossing, dry the brakes by applying light pressure to the lever until braking action is normal.
- Avoid operating the 6X6 through deep or fast flowing water. If you cannot avoid water which exceeds the recommended maximum depth, go slowly, balance your weight carefully, avoid sudden movements, maintain a slow and steady forward motion. Do not make sudden turns or stops and do not make sudden throttle changes.

If your 6X6 becomes immersed, take it to your dealer before starting the engine. Major engine damage can result if the machine is not thoroughly inspected.

RIDING Riding Safely Backing Up



Backing Up

- 1. When backing up, always avoid backing downhill.
- 2. Back slowly.
- 3. When in reverse, apply the brakes lightly for stopping.
- 4. Avoid turning at sharp angles in reverse.
- 5. Never open the throttle suddenly while backing.
- 6. Never activate override button while throttle is open. Loss of control may result.

NOTE: This vehicle is equipped with a reverse speed limiter. The override button should be used with caution as rearward vehicle speed is greatly increased. Do not operate at wide open throttle. Only open the throttle enough to maintain a desired speed. Opening the throttle more than required may cause excessive fuel to build in the exhaust, resulting in engine popping and/or engine damage.

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

Riding Safely

Backing Up

AWARNING

Backing your 6x6 can be dangerous!

You could hit an obstacle or person behind you; or the vehicle could tip over on a steep incline causing severe injury or death.

Always back slowly avoiding excessive speed and do not use the reverse speed override switch system unless additional power is required for vehicle movement.

Avoid backing on steep inclines.

Avoid turning at sharp angles in reverse.

RIDING Riding Safely Trail Obstacles



Keep Alert!

Look ahead and learn to read the trail as you ride. Stay on the right side of the trail, if possible, and be constantly alert for hazards such as logs, rocks and low hanging branches.

Hidden or unseen hazards on the trail can be dangerous.

Personal injury or the vehicle overturning can occur from unseen obstacles.

• Keep alert and constantly look for obstacles on the trail.

RIDING

Riding Safely Parking On An Incline



Whenever the Vehicle is Parked

- 1. Place the transmission in gear.
- 2. Set the parking brake.
- 3. Avoid parking on an incline. If it is necessary to park on an incline, always block the rear wheels on the down hill side as shown above.
- 4. Shut off fuel supply.

AWARNING

Always check to be sure that the parking brake has been disengaged before operating the vehicle. An accident could result if the parking brake is left on while the vehicle is operated.

The parking brake may relax when left on for a long period of time. This could cause an accident.

Do not leave the vehicle on a hill depending on the park brake for more than five minutes.

Always block the downhill side of the wheels if leaving the vehicle on a hill or park the vehicle in a side hill position.

Tool Kit

To help you perform routine maintenance, a tool kit is provided in the storage compartment under the seat. Items included in the kit are:

- screwdriver
- open end wrench (8-10 mm)
- open end wrench (12-14 mm)
- box end wrench
- tire pressure gauge
- spark plug wrench and handle
- torx wrench (rack removal)

Periodic Maintenance Schedule

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

Maintenance intervals are based upon average riding conditions and a vehicle speed of approximately 10 miles per hour. Vehicles subjected to severe use, such as operation in wet or dusty areas, should be inspected and serviced more frequently. If you are not familiar with safe service and adjustment procedures, have a qualified dealer perform these operations.

Inspect, clean, lubricate, adjust or replace parts as necessary. **NOTE:** Inspection may reveal the need for replacement parts. Always use genuine Polaris parts.

Due to the nature of the adjustments marked with a ■, it is recommended that service be performed by an authorized Polaris dealer.

• More often under severe use, such as dirty or wet conditions

NOTE: Inspection may reveal the need for replacement parts. Always use genuine Polaris parts available from your Polaris dealer.

	Item	Hours or Odometer	Frequency	Remarks
	Headlamp Inspection	Pre-ride	Pre-ride	Check operation daily; apply Polaris di- electric grease to connector when re- placed
	Tail lamp inspection	Pre-ride	Pre-ride	Check operation daily; apply Polaris di- electric grease to socket when replaced
	Tires - Air Pressure	Pre-ride	Pre-ride	Inspect daily, pre-ride inspection item
	Brake System	Pre-ride	Pre-ride	Pre-ride inspection item
	Wheels	Pre-ride	Pre-ride	Pre-ride inspection item
	Frame nuts, bolts, fasteners	Pre-ride	Pre-ride	Pre-ride inspection item
	Fuel and Oil Tanks	Pre-ride	Pre-ride	Fill to proper level
•	Air Box Sediment Tube	Daily	Daily	Drain deposits whenever visible
•	Air Filter - Pre-Cleaner	Daily	Daily	Inspect-Clean
	Coolant/Level Inspection	Daily	Daily	Replace engine coolant every two years
	Air Filter - Main Element	Weekly	Weekly	Inspect-Replace if necessary

Periodic Maintenance Schedule (Cont.)

Due to the nature of the adjustments marked with a \blacksquare , it is recommended that service be performed by an authorized Polaris dealer.

More often under severe use, such as dirty or wet conditions

NOTE: Inspection may reveal the need for replacement parts. Always use genuine Polaris parts available from your Polaris dealer.

	Item	Hours or Odometer	Frequency	Remarks
	Brake pad wear	10 hrs/100 miles	Monthly	Inspect periodically
•	Engine breather filter	20 hrs	Monthly	Inspect-replace annually and as need- ed
	Battery	20 hrs	Monthly	Check Terminals/clean/check fluid level
•	Transmission Oil Level	25 hrs	Monthly	Inspect monthly; change annually
•	General Lubrication	50 hrs	3 months	Lubricate all fittings, pivots, cables, etc.
	Throttle Cable/ETC Switch	50 hrs	6 months	Inspect-adjust, lubricate, replace if nec- essary; pre-ride inspection item
	Choke (Enricher) Cable	50 hrs	6 months	Inspect-adjust, lubricate, replace if nec- essary
	Carburetor Float Bowl	50 hrs	6 months	Drain bowl periodically and prior to storage
•	Engine Oil - Level/Change	100 hrs/1000 miles	6 months	Check Level Daily; Break in Service at 1 month. Change oil more often in cold weather use
	Oil Filter	100 hrs/1000 miles	6 months	Replace with oil change
	Coolant strength/pressure test system	100 hrs	6 months	Inspect strength seasonally; pressure test system annually
	Engine breather hose	100 hrs	6 months	Inspect
•	Rear Suspension	50 hrs	6 months	Inspect, tighten fasteners
•	Drive Chains	50 hrs	6 months	Inspect daily, adjust and lubricate if needed
	Drive Belt	50 hrs	6 months	Inspect-adjust, replace if necessary
•	Front hubs/fluid check	50 hrs	6 months	Check monthly
	Shift linkage	50 hrs	6 months	Inspect, lubricate, adjust
	Steering	50 hrs	6 months	Inspect daily, lubricate
•	Rear Axle/Center Axle	50 hrs	6 months	Inspect bearings
	Front Suspension	50 hrs	6 months	Inspect-lubricate, tighten fasteners

Periodic Maintenance Schedule

	Item	Hours or Odometer	Frequency	Remarks
	Valve Clearance	100 hrs	12 months	Inspect/Adjust
	Fuel System	100 hours	12 months	Check for leaks at tank cap, lines, fuel valve, filter, pump and carburetor. Replace lines every two years.
	Fuel Filter	100 hrs	12 months	Replace annually
	Radiator	100 hrs	12 months	Inspect/clean external surface
	Cooling System hoses	100 hrs	12 months	Inspect
	Engine Mounts	100 hrs	12 months	Inspect
	Spark arrestor	100 hrs	12 months	Clean out
	Spark Plug	100 hrs	12 months	Inspect-replace if necessary
•	Front hubs/fluid change	100 hrs	12 months	
	Clutches (drive and driven)	100 hrs	12 months	Inspect, clean
	Shift selector box	200 hrs	24 months	Change lubricant every two years
	Brake fluid	200 hrs	24 months	Change every two years
	Headlight Aim	As required	As required	Adjust if necessary
	Toe adjustment	As required	As required	Periodic inspection, adjust when parts are replaced
	Recoil housing	As required	As required	Drain moisture out after riding in water
	Idle Speed	As Required	As Required	Adjust

Lubrication Recommendations

ltem	Lube Rec.	Method	Frequency*
Brake Fluid	DOT 3 Only	Maintain proper level. See page 40.	As required; change every two years or 200 hours
Drive Chains	O-Ring chain lube or SAE 80/90	Lubricate as often as re- quired (before each ride in wet conditions).	As required
Gear Selector	10 W Non-detergent Oil	Maintain oil level at the center of the shift rail. Do not overfill.	Change every 2 years or 200 hours.
Transmission Oil	Polaris Premium Synthetic gearcase lube	Fill to bottom of the filler hole.	Change annually or at 100 hours
Front Prop Shaft U-joints	Grease+	Locate Fittings and Grease	Every 3 months or 50 hours
Front Drive Axle (U Joint) (AWD Models)	Grease+	Locate grease fitting and grease with grease gun.	Every 3 months or 50 hours



Lubrication Recommendations



Demand 6 Hubs - All Wheel Drive	Premium Hub Lube	Remove set screw in hubs. Ro- tate wheels to 4:00 position. If lu- bricant is not visible add more. Reinstall set screw.	Annually or at 100 hrs
Ball Joint	Grease**	Locate zerk on back side of struts and grease with grease gun.	Every 3 months or at 50 hrs
Front A Arm Pivot Shaft	Grease**	Locate zerk on pivot shaft and grease with grease gun.	Every 3 months or at 50 hrs
Steering Post Bushings	Grease**	Locate fitting on steering post and grease with grease gun.	Every 3 months or at 50 hrs

Lubrication Recommendations



Front Drive Axle U Joints	Grease +	Locate grease fitting and grease with grease gun.	Every 3 months or 50 hrs
Rear Axle Bearing	Grease**	Locate fitting on eccentric and grease with grease gun.	Every 3 months or 50 hrs
Swing Arm Bushings	Grease**	Locate fitting on swing arm and grease with grease gun.	Monthly or at 20 hrs
Middle Axle Bearings	Grease*	Locate fitting on eccentric and grease with grease gun.	Every 3 months or 50 hrs
Center Swing Arm Housing	Grease*	Locate fitting on swing arm housing and grease with grease gun.	Every 3 months or 50 hrs
Rear Strut	Grease*	Locate fitting on rear strut and grease with grease gun.	Every 3 months or 50 hrs

* More often under severe use, such as wet or dusty conditions

- ** Grease conforming to NLGI No. 2, such as Conoco Superlube M or Mobilegrease Special
- + Use Polaris Premium U-Joint Lube

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NOTE: Hours are based on 10 mph average.

Lubrication Recommendations

Transmission Lubrication

The transmission fill plug (1) is located on the right side of the machine behind the propshaft shield or footwell.

The transmission lubricant level should be checked every six months or 1000 miles (1600 km), whichever comes first. Transmission oil should be changed annually. With the 6X6 on a level surface, remove fill plug (2) and check the lubricant level. Lubricant level is correct when it reaches the bottom of the filler hole. The correct transmission lubricant to use is Polaris Premium Synthetic Gearcase Lubricant (PN 2871478).



Transmission Oil Changing Procedure

- 1. Remove propshaft shield from the right side of the vehicle.
- 2. Remove fill plug.
- 3. Remove transmission drain plug located on the bottom left hand side and drain the oil. Catch and discard used oil properly.
- 4. Clean and reinstall the drain plug.
- 5. Add Polaris Premium Synthetic Gearcase Lubricant (PN 2871478 12 oz. bottle) until oil reaches the bottom of the filler hole.
- 6. Check for leaks.
- 7. Reinstall propshaft shield or footwell and screws removed in step 1.

Lubrication Recommendations

Front Gearcase Lubrication

The front gearcase fill plug (3) is located as shown.

The front gearcase lubricant level should be checked every six months or 1000 miles (1600 km), whichever comes first. Front gearcase oil should be changed annually. With the 6X6 on a level surface, remove fill plug and check the lubricant level. Lubricant should be kept at the bottom of fill plug thread. The correct gearcase lubricant to use is GL5 80-90 Weight Gear Lube.



Gearcase Oil Changing Procedure

- 1. Remove fill plug.
- 2. Remove gearcase drain plug located on the bottom right hand side and drain the oil.
- 3. Clean and reinstall the drain plug and tighten securely (14 ft. lbs/1.93 kgm).
- 4. Add GL 80-90 Weight Gear Lube to the bottom thread on the fill hole.
- 5. Reinstall filler plug.
- 6. Check for leaks.

Lubrication Recommendations

Premium 4 Synthetic Lubricant

Polaris Premium 4 All Season Synthetic engine oil has been specially formulated for use in Polaris 4 cycle engines. It is a fully synthetic, high performance, multi-viscosity oil designed to provide the ultimate in lubrication performance and protection.

Premium 4 possesses unsurpassed film strength over the widest possible temperature range. It resists viscosity and frictional breakdown in ambient temperatures from -40° F to 120° F. Its exceptional frictional properties result in more efficient operation, more power output and lower fuel consumption.

Although Polaris Premium 4 is the only oil recommended for use in this engine, use of any API certified "SH" oil is allowable. Oil may need to be changed more frequently if Polaris Premium 4 is not used. You will also need to follow the manufacturers recommendations for ambient temperature operation.

Oil System

The oil tank is located on the left side of the vehicle. To check the oil:

1. Set machine on a level surface.



- 2. Start the engine and let it idle for 20-30 seconds.
- 3. Stop the engine, remove dipstick and wipe dry with a clean cloth.
- 4. Screw in the dipstick completely, remove it and read the oil level. **NOTE:** The dipstick must be screwed in to keep the angle and depth of stick consistent.
- 5. Remove dipstick and check to see that the oil level is between the full and add marks. Add oil as indicated by the level on the dipstick. Do not overfill. If oil level rises above the full mark, water and/or fuel may be collecting in the tank and oil should be changed.

CAUTION

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

Lubrication Recommendations

Oil and Filter Change

Oil may be hot. Do not allow hot oil to come into contact with skin as serious burns may result.

The recommended oil change interval is 100 hours, 1000 miles, or every six months, whichever comes first. Suggested break in oil change is at 20 hours, 200 miles, or one month, whichever comes first. Severe use requires more frequent service. Severe use includes continuous duty in dusty or wet conditions and cold weather riding. Severe use cold weather riding is all riding below 10°F, and riding between 10°F and 30° F when most trips are slow speed. Be sure to change the oil filter whenever changing oil (Polaris PN 3084963)

- 1. Place vehicle on a level surface.
- 2. Clean area around drain plug at the bottom of the oil tank.
- 3. Place a drain pan beneath the oil tank and remove the drain plug.
- 4. Allow oil to drain completely.
- Install a new sealing washer (PN 5850135) on oil drain plug. NOTE: The sealing surfaces on the drain plug and the oil tank should be clean and free of burrs, nicks or scratches.
- Reinstall drain plug and torque to 14-17 ft. lbs. (1.93-2.35 kg/m)
- Disconnect the lower oil delivery hose. Remove the fitting (C) from the oil tank. Clean the fitting screen. Reinstall the fitting screen, torquing to 14-17 ft. lbs. Reattach oil line. If banjo fitting (D) is used, torque to 14-17 ft. lbs. If hose clamp (E) is used, tighten securely.



Lubrication Recommendations

- 8. Place shop towels beneath oil filter. Using an oil filter wrench, turn filter counterclockwise to remove.
- 9. Using a clean dry cloth, clean filter sealing surface on crankcase.
- 10. Lubricate the O-Ring on the new filter with a film of new engine oil. Check to make sure the O-Ring is in good condition. Also make sure the O-ring from the old filter is not still on the engine.
- 11. Install new filter and tighten by hand 1/2 to 3/4 turn after gasket contact.
- Approximately 1 cup of engine oil will remain in the crankcase. To drain, remove drain plug found on lower right side of crankcase.
 NOTE: The sealing surfaces on the drain plug and crankcase should be clean and free of burrs, nicks or scratches.
- 13. Reinstall drain plug.
- 14. Remove dipstick and add 2 quarts (1.9 l) of Polaris Premium 4 synthetic oil. Reinstall dipstick. **NOTE:** If sump is not drained, add about 1 3/4 quarts initially.
- 15. Place gear selector in neutral and set parking brake.
- 16. Start engine and let it idle for one to two minutes. Stop engine and inspect for leaks.
- 17. Re-check oil level on the dipstick and add oil as necessary to bring the level to the upper mark on the dipstick.
- 18. Dispose of used filter and oil properly.

Periodic Maintenance Record

Use the following chart to record periodic maintenance work:

Maintenance Interval Performed	Servicing Date	Servicing Dealer or Person	Remarks
First 5 Hrs.			
25 Hrs.			
50 Hrs.			
75 Hrs.			
100 Hrs.			

Engine Cooling System

Radiator Coolant Level Inspection

NOTE: This procedure is only required if the cooling system has been drained for maintenance and/or repair. However, if the recovery bottle has run dry, the level in the radiator should be inspected and coolant added if necessary.



Never remove the pressure cap when the engine is warm or hot. Escaping steam can cause severe burns. The engine must be cool before removing the pressure cap.

To access the radiator pressure cap:

Remove the four screw securing front rack. Remove front cover by placing your fingers under the front of the cover and pulling upward.

NOTE: Use of a non-standard pressure cap will not allow the recovery system to function properly. If the cap should need replacement contact your dealer for the correct replacement part.

To insure that the coolant maintains its ability to protect the engine, it is recommended that the system be completely drained every two years and a fresh mixture of antifreeze and water be added. Polaris recommends the use of Polaris Premium 60/40 anti-freeze/coolant or a 50/50 mixture of high quality aluminum compatible anti-freeze/coolant and distilled water.

NOTE: Polaris Premium 60/40 is already premixed and ready to use. Do not dilute with water.

NOTE: Always follow the manufacturer's mixing recommendations for the freeze protection required in your area.

Using a funnel, slowly add coolant as necessary through the radiator filler neck.

Engine Cooling System

Coolant Level

The recovery bottle, located on the left side of the machine, must be maintained between the minimum and maximum levels indicated on the recovery bottle.

The engine coolant level is controlled or maintained by the recovery system. The recovery system components are the recovery bottle, radiator filler neck, radiator pressure cap and connecting hose.



As coolant operating temperature increases, the expanding (heated) excess

coolant is forced out of the engine past the pressure cap and into the recovery bottle. As engine coolant temperature decreases the contracting (cooled) coolant is drawn back up from the bottle past the pressure cap and into the radiator.

NOTE: Some coolant level drop on new machines is normal as the system is purging itself of trapped air. Observe coolant levels and maintain as recommended by adding coolant to the recovery bottle. Polaris recommends the use of Polaris Premium 60/40 anti-freeze/coolant or a 50/50 mixture of high quality aluminum compatible anti-freeze/coolant and distilled water.

NOTE: Polaris Premium 60/40 is already premixed and ready to use. Do not dilute with water.

NOTE: Always follow the manufacturer's mixing recommendations for the freeze protection required in your area.

To access the recovery bottle on Gen IV machines it is necessary to remove the left side panel as described on page 102.

Filter Systems

Air Filter Service

It is recommended that the air filter be replaced yearly. When riding in extremely dusty conditions replacement will be required more often.

- 1. Remove seat.
- 2. Remove spring clamps securing the airbox lid and remove lid.
- 3. Loosen clamp and remove filter.
- 4. Remove fabric type pre-filter from main filter. Wash pre-filter in soapy water and dry it.
- 5. Reinstall pre-filter over main filter. Replace main filter as required.
- 6. Reinstall filter into air box and tighten clamp. Do not over tighten clamp or filter damage may occur.

Operation of your 6X6 without a breather filter can cause engine damage.



Filter Systems

Air Box Drain

Periodically check the air box drain tube located on the bottom rear of the air box and empty if necessary.

Breather Filter and Hoses:

Operation of your vehicle without a breather filter can cause engine damage.

- Remove the clamps and pull the filter out of the hoses. NOTE: It will <u>not</u> be necessary to remove the lower hose from the engine.
- 2. Inspect filter for debris. Blow through gently in direction of arrow on filter to check for clogging. Replace as needed.
- Check hoses for cracks, deterioration, abrasion, or leaks. Replace as needed.



4. Reinstall filter and clamps with arrow pointing toward engine. NOTE: The breather filter is intended to be used with airbox pre-filter in place. Without the pre-filter, the breather filter can clog quickly. Never operate your vehicle without the pre-filter. NOTE: Inspect the filter monthly or every 20 hours of operation, whichever comes first. Replace filter as needed.

Adjustments

AWARNING

Do not attempt to adjust the tie rod for toe alignment. Severe injury or death can result from improper adjustment. Contact your Polaris dealer. He/she has the training and tools to make these adjustments.

Toe Alignment

You can check the toe alignment of the vehicle using the following method. The recommended toe alignment is 1/8'' to 1/4'' toe out. If you discover improper adjustment have your dealer correct it.

- Set handlebars in a straight ahead position and hold them in this position. NOTE: The steering frog can be used as an indicator of whether the handlebars are straight. The frog should always point straight back from the steering post.
- 2. Place stands in front of the machine, perpendicular to the rear tires.
- 3. Tie an elastic string around the stands, making sure string just touches side surface of the rear tires on each side of machine and goes around the stands in front of the machine.
- 4. Measure from string to rim at front and rear of front rim. Rear rim measurement should be 1/16'' 1/8'' (.2 to .3 cm) more than front rim measurement.



Adjustments

Steering Inspection

The steering assembly of the machine should be checked periodically for loose nuts and bolts. If loose nuts and bolts are found, have your dealer tighten them before riding your vehicle.

Camber and Caster

The camber and caster are non-adjustable.

Handlebar Adjustment

Your 6x6 has handlebars which can be adjusted for your personal fit.

- 1. Remove handlebar cover and loosen the four bolts.
- 2. Adjust handlebar to desired height. Be sure handlebars do not hit gas tank or any other part of machine when turned fully to left or right.



3. Torque handlebar adjuster block bolts to 10 to 12 ft. lbs.

Improper adjustment of the handlebars or incorrect torquing of the adjuster block tightening bolts can cause limited steering or loosening of the handlebars, resulting in loss of control and possible serious personal injury or death.

Optional Suspension Springs

Although your Polaris 6x6 suspension has the capability of providing you with the best ride possible, the following accessory springs are available to better suit your individual riding preference. **NOTE:** Optional springs may be a different color than standard springs. Owner may paint springs to desired color using Polaris touch up paint, available through your dealer.

SOFT -		─── > FIRM		
Sportsman 6x6 - Front Strut Spring	7041375-067 OPTION 64/113 lb/in	7041450-195 STANDARD 101 lb/in	N/A	

Adjustments

Front Brake

Front Wheel and Middle Axle Brake

The front and middle axle brakes are hydraulic disc type brakes which are activated by the brake lever being moved toward the handlebar. These brakes are self-adjusting and require no adjustment.

The following checks are recommended to keep the brake system in good operating condition. How often they need checking depends upon the type of driving that has been done.

Always keep brake fluid at an adequate level (see page 40). Normal functioning of the diaphragm is to extend into the reservoir as fluid level drops. If the fluid level is low and the diaphragm is not extended, a leak is indicated and the diaphragm should be replaced. Always fill the reservoir as indicated whenever the cover is loosened or removed to insure proper diaphragm operation. Use Polaris DOT 3 brake fluid (PN 2870990).





- Check brake system for fluid leaks.
- Check brake for excessive travel or spongy feel.
- Check friction pads for wear, damage and looseness.
- Check security and surface condition of the disc.
- Pads should be changed when worn to 3/64" (.1 cm), or about the thickness of a dime.

Adjustments

Rear Brake

The transmission brake is a hydraulic disc type brake which is activated by the same lever which activates the front brake system. The transmission brake system is self adjusting and requires no maintenance other than periodic checks of the pads for wear.

Wear Line

- Pads should be changed when worn to 3/64" (.1 cm) which is about the thickness of a dime.
- Inspect the brake disc spline and pad wear surface for excessive wear.



Adjustments

Throttle Cable Free Play Adjustment

Throttle cable free play is adjusted at the handlebar.

- 1. Slide the bolts off inline cable adjuster sleeve. Loosen adjuster locknut.
- 2. Turn adjuster until 1/16" to 1/8" freeplay is achieved at thumb lever. Flip throttle lever several times to confirm adjustment.
- 3. Tighten locknut and slide boots over cable adjuster until they touch at the middle point of adjuster.



Adjustments

Wheel Removal Procedure

- 1. Stop the engine, place the transmission in gear and lock the parking brake.
- 2. Loosen the wheel nuts slightly.
- 3. Elevate the side of the vehicle by placing a suitable stand under the footrest frame.
- 4. Remove the wheel nuts and remove the wheel.

Wheel Installation

- 1. With the transmission in gear and the parking brake locked, place the wheel in the correct position on the wheel hub. Be sure the valve stem is toward the outside and rotation arrows on the tire point toward forward rotation.
- 2. Attach the wheel nuts and finger tighten them.
- 3. Lower the vehicle to the ground.
- 4. Securely tighten the wheel nuts to the following torque:



- Torque center and rear wheel nuts to 50 ft. lbs. (6.9 kg/m).
- Torque front wheel nuts to 20 ft. lbs. (2.1 kg/m).

If wheels are improperly installed it could affect vehicle handling and tire wear. Make sure the tapered end of the rear wheel nut goes into the taper on the wheel.

Adjustments

Tire Inspection

ACAUTION

Maintain proper tire pressure according to charts below. Improper tire inflation may affect vehicle maneuverability.

When replacing a tire always use original equipment size and type.

The use of non-standard size or type tires may affect vehicle handling.

Tire Tread Depth

Always replace tires when tread depth is worn to 1/8'' (.3 cm) or less.



Operating your 6x6 with worn tires will increase the possibility of the vehicle skidding easily with possible loss of control.

Worn tires can cause an accident.

Always replace tires when the tread depth measures 1/8'' (.3 cm) or less.

Adjustments

Tire Specifications

Tire Specifications Sportsman 6x6
Front - 25 x 8.00 -12 Inflation Pressure - 5 PSI
Center - 25 x 11.00 - 10 Inflation Pressure - 5 PSI
Rear - 25 x 11.00 - 10 Inflation Pressure - 5 PSI
Cargo Bed Load Capacity 800 lbs. (363 kg)
Front Rack Load Capacity 75 lbs. (34 kg)
Gross Vehicle Weight 1970 lbs. (894 kg) including vehicle, driver and cargo. Vehicle weighs 895 lbs. (406 kg).

The following items should be checked occasionally for tightness; or if they have been loosened for maintenance service.

Axle and Wheel Nut Torque Specifications

Item	Specification	
Front Spindle Nut(s)	100 In. Lbs.	
Front Wheel Nuts	20 Ft. Lbs.	
Center and Rear Axle Nut(s)	80 Ft. Lbs.	
Center and Rear Wheel Nuts	50 Ft. Lbs.	

Front Wheel Hub Tightening

Front wheel bearing tightness and spindle nut retention are critical component operations. Service work must be performed by your authorized Polaris dealer.

Adjustments

Front Drive Chain Adjustment

Never adjust or operate the vehicle with the drive chain slack out of the 3/16''-3/8'' (.48 cm - .95 cm) specification. Severe damage to the transmission and drive components can result.

Check the amount of chain slack by moving the vehicle slightly forward to gain slack at the top side of the front chain. Then pull up and down on the chain. At this point the chain should have 3/16''-3/8'' (.48 cm - .95 cm) deflection. If the chain needs adjustment, use the following procedure.

Adjustment Procedure

- 1. Loosen chain guide.
- 2. Loosen two eccentric locking bolts.
- 3. Loosen caliper mount bolts.
- 4. Insert a pin punch through the sprocket hub and into the eccentric axle housing.
- 5. Roll the vehicle ahead or back to adjust chain slack to the proper dimension.





- 6. Tighten caliper mount bolts 10-12 ft. lbs. (1.4 1.7 kg/m).
- 7. Tighten the eccentric locking bolts to 45 ft. lbs. (6.2 kg/m).
- 8. Confirm correct tension by rolling the 6x6 forward, checking chain tension in several places around the chain.
- 9. Reinstall chain guard.

NOTE: Reposition chain guide to allow 1/8'' (.3 cm) clearance between sprocket and guide.

Adjustments

Rear Axle Drive Chain Adjustment

All procedures used in adjusting the front chain apply to the rear chain adjustment. Total slack for the rear chain, however, should be adjusted to 1/4''-1/2'' (.6-1.3 cm).



Adjustments

Carburetor/Engine Idle RPM Adjustment

Recommended engine idle RPM is 1200 +/- 200. If the engine idle speed is not satisfactory, and all other conditions are favorable, the carburetor can be adjusted as follows:

If the engine idle speed is not satisfactory, and all other conditions are favorable, the carburetor can be adjusted as follows:

1. Warm up the engine by running the vehicle approximately five minutes.



- 2. Place the transmission in gear with the parking brake applied.
- 3. Adjust the carburetor idle screw in or out until the desired idle RPM is reached. Turning the screw in (clockwise) will raise RPM. Turning the screw out (counterclockwise) will lower RPM.

Adjustments

Carburetor Adjustments

If the vehicle is to be operated at various altitudes and temperatures, certain adjustments can be made to improve its operation and driveability. Above 6000 feet (1800 m) the engine air/fuel mixture becomes overly rich. An engine loses approximately 3% of its power for each 1000 foot (304.8 m) increase in elevation. Although this power cannot be regained, changes to the carburetor and drive system can be made to allow efficient operation. These changes include:

- 1. Carburetor re-jetting to compensate for atmospheric pressure and oxygen loss.
- 2. Transmission convertor modification to adjust for engine horsepower loss. Contact your dealer.

Contact your dealer for altitude adjustments. They have the training and special tools required to perform all necessary modifications for you.

Pilot screws are sealed with metal plugs and are serviceable only by dealers.

2002 Sportsn	nan 6x6	AMBIENT TEMPERATURE		
		Below 40°F Below 5°C	Above 40°F Above 5°C	
Altitude Meters	0-1800 (0-6000)	147.5	142.5	
(Feet)	Over 1800 (Over 6000)	140	135	

Jetting Chart

Adjustments

Side Panel Removal

- Side panel removal may 1. be difficult until the locking tabs and receivers have been snapped and unsnapped a few times.
- 2. Remove seat. Grasp rear of side panel near rear cab. With a quick and firm motion, pull the panel forward and outward to disengage the two rear tabs.
- Place hand on top of 3. side panel behind the fuel tank. With a quick and firm motion, push down on the side panel to disengage the top rear two tabs. Then pull up on side panel to disengage front upper and lower tab.
- To reinstall side panel, 4. align panel tabs with slots on front cab. Push panel upward and forward until tabs lock. Bend rear of side panel and insert the two tabs into the rear cab.







slots. Push upward and forward until tabs lock.

Spark Plugs

- Use NGK BKR5ES spark plugs.
- Proper electrode gap is .025" (.06 cm).
- Spark plug torque is 17 ft. lbs.(2.3 kg/m) for a used spark plug, 11 ft. lbs (1.52 kg/m) for a new spark plug.

Spark plug 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.

1. Normal

The insulator tip is gray, tan or light brown. There will be 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.

2. Wet Fouled

The insulator tip is black. A damp oil film covers the firing end. There may be a carbon layer over the entire nose. Generally, the electrodes are not worn. General causes are excessive oil, use of non-recommended injection oil, improper use of the choke, or incorrect carburetion adjustments.

Spark Plug Removal and Replacement

Never attempt to remove a spark plug while the engine is warm. The exhaust system or engine could burn you causing severe injury.

The spark plug is removed by using the special wrench provided in the tool pouch under the seat. Reach under the right hand fender and then back for access. Remove the spark plug cap and then the spark plug by rotating counterclockwise.

Reverse the procedure for spark plug installation. Torque to 17 ft. lbs. (2.3 kg/m). Never deviate from the recommended spark plug as engine damage can occur.

Spark Arrestor

AWARNING

- Because exhaust system temperatures can reach 1000°F, do not perform this operation immediately after the engine has been run because the exhaust system becomes very hot.
- Because of the increased fire hazard, make sure that there are no combustible materials in the area when purging the spark arrestor.
- Wear eye protection.
- Do not stand behind or in front of the vehicle while purging the carbon from the spark arrestor.
- Never run the engine in an enclosed area. The exhaust contains poisonous carbon monoxide gas.
- Do not go under the machine while it is inclined.

Failure to heed these warnings could result in serious personal injury or death.

Spark Arrestor (Cont.)

The exhaust pipe must be periodically purged of accumulated carbon as follows:

- 1. Remove the cleanout plug (A) located on the bottom of the muffler as shown above.
- 2. Place the transmission in neutral and start the engine. Purge accumulated carbon from the system by momentarily revving the engine several times.



- 3. If some carbon is expelled, cover the exhaust outlet and rap on the pipe around the cleanout plug while revving the engine several more times.
- 4. If particles are still suspected to be in the muffler, back the machine onto an incline so the rear of the machine is one foot higher than the front. Set the parking brake and block the wheels. Make sure the machine is in neutral and repeat steps 2 and 3.
- 5. If particles are still suspected to be in the muffler, drive the machine onto the incline so the front of the machine is one foot higher than the rear. Set the parking brake and block the wheels. Make sure the machine is in neutral and repeat steps 2 and 3.
- 6. Repeat steps 2 through 5 until no more particles are expelled when the engine is revved.
- 7. Stop the engine and allow the arrestor to cool.
- 8. Reinstall the arrestor plug.
Recoil Housing

Drain the recoil housing after operating the vehicle in very wet conditions. This should also be done before storing the vehicle. The drain screw is located at the bottom of the recoil housing. Remove the screw with a 10mm wrench. Reinstall screw once housing has been drained.

Water will enter the recoil housing if the starter handle is disengaged from the rope guide when under water.



After travelling in wet areas the recoil housing and starter should always be drained completely by removing the recoil.

Do not open the crankcase drain unless the engine has ingested water. On 4-cycle engines, some engine oil will be lost if crankcase drain is opened.

PVT System

The PVT system rotates at high speeds, creating large amounts of force on clutch components. Extensive engineering and testing has been conducted to insure the safety of this product. However, as the owner you have the following responsibilities to make sure this system remains safe:

- Do not modify any component of the PVT system. Doing so may reduce its strength so that a failure may occur at high speeds. This system has been precision balanced. Any modification will cause the system to be out of balance, creating vibration and additional loads on components.
- Routine maintenance is the responsibility of the owner. Always follow recommended maintenance procedures. See your dealer!
- This PVT system is intended for use on Polaris products only.
- The PVT housing must be securely in place during operation.

Failure to comply with this warning can result in severe injury or death.

Battery

Whenever removing the battery, disconnect the negative (black) cable first. When reinstalling the battery, connect the negative (black) cable last or an explosive situation could result causing serious injury or death.

Battery electrolyte is poisonous. It contains sulfuric acid. Serious burns can result from contact with skin, eyes or clothing. Antidote:

External: Flush with water.

Internal: Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg, or vegetable oil. Call physician immediately.

Eyes: Flush with water for 15 minutes and get prompt medical attention.

Batteries produce explosive gases. Keep sparks, flame, cigarettes, etc. away. Ventilate when charging or using in an enclosed space. Always shield eyes when working near batteries. KEEP OUT OF REACH OF CHILDREN.

Replenishing the Battery Fluid

A poorly maintained battery will deteriorate rapidly. Check the battery fluid level often. The fluid level should be kept between the upper and lower level marks.

To refill use only distilled water. Tap water contains minerals which are harmful to a battery.



Battery

Battery Removal

- 1. Disconnect hold down straps holding the electrical box and battery in position and remove battery cover.
- 2. Remove the battery vent tube from the battery.
- 3. Disconnect the black (negative) battery cable first.
- 4. Disconnect the red (positive) battery cable next.
- 5. Lift the battery out of the ATV, being careful not to tip it sideways and spill electrolyte.

If electrolyte spills, immediately wash it off with a solution of one tablespoon baking soda and one cup water to prevent damage to the ATV.

Battery Installation and Connections

To avoid the possibility of explosion, always connect battery cables in the order specified. Red (positive) cable first; black (negative) cable last. An exploding battery can cause serious injury or death.

Battery terminals and connections should be kept free of corrosion.

If cleaning is necessary, remove the corrosion with a stiff wire brush. Wash with a solution of one tablespoon baking soda and one cup water. Rinse well with tap water and dry off with clean rags. Coat the terminals with dielectric grease or petroleum jelly.

Be careful not to allow cleaning solution or tap water into the battery.

Battery

- 1. Set the battery in its holder.
- 2. Install the battery vent tube. It must be free from obstructions and securely installed. If not, battery gases could accumulate and cause an explosion. The tube should be routed away from the frame and body to prevent corrosion. Avoid skin contact with electrolyte, severe burns could result.
- 3. First connect and tighten the red (positive) cable.
- 4. Second connect and tighten the black (negative) cable.
- 5. Reinstall battery cover and attach the hold down strap.
- 6. Verify that cables are properly routed.

NOTE:

- When your ATV is placed in storage for three months or more, the battery should be removed, charged to proper level, and stored in a cool dry place.
- Before reusing, take the battery to your dealer for testing and recharging.
- Power plug leads may need to be bent down so that the battery cover may be installed.
- When installing a new battery, make certain it is fully charged prior to it's initial use. Using a new battery that has not been fully charged can damage the battery resulting in a shorter life of the battery. It can also hinder vehicle performance.

Indicates a potential hazard that could result in serious injury or death.

Lights - Adjustment - Replacement

Headlight Lamp Replacement

Due to the nature of these vehicles and where they are ridden, headlight and taillight lenses become dirty. Frequent washing is necessary to maintain lighting quality. Poor lighting while riding can result in severe injury or death



- 1. Using a small flat blade screwdriver, push in on the lock tab through the two small openings at the front of the headlight pod.
- 2. Lift the pod lightly while depressing the tabs.
- 3. Remove the screw in the back of the headlight pod
- 4. Lift pod cover up. Disconnect speedometer harnesses from speedometer. Unplug indicator light harness and remove pod cover.
- 5. Unplug headlamp from wiring harness.
- 6. Remove boot and locking collar from back of lamp housing.
- 7. Grasp base of lamp and lift it out.
- 8. Reverse previous steps to replace lamp and reassemble pod. Make sure tab on lamp locates properly in housing.

Lights - Adjustment - Replacement

High Beam Headlight Adjustment

The headlight beam can be adjusted to any position desired by turning the adjusting knob located on the bottom right side of the headlight pod.

- 1. Place the vehicle on a level surface with the headlight approximately 25' (7.6 m) from a wall.
- 2. Measure the distance from the floor to the center of the headlight and make a mark on the wall at the same height.
- 3. Start the engine and turn the headlight switch to high beam.
- 4. Observe headlight aim. The most intense part of the headlight beam should be aimed 2" (5.1 cm) below the mark placed on the wall in step 2. NOTE: Rider weight must be included on the seat.
- 5. Adjust beam to desired position by turning the adjustment knob.

Lights - Adjustment - Replacement

Headlight Housing Replacement

- 1. Remove Phillips screws from bottom of headlight pod at each front corner. **NOTE:** To aid in accessing these screws, it may be helpful to turn handlebars to left or right and use a short, stubby screwdriver. Removal of the front rack and cover may also allow easier access.
- 2. Remove three Phillips screws at back of headlight pod.
- 3. Lift pod cover up. Disconnect speedometer harnesses from speedometer. Unplug indicator light harness and remove pod cover.
- 4. Unplug headlamp from wiring harness.
- 5. Remove O-Ring from headlight pivot pins.
- 6. Pull headlight housing up to release from locking tabs.
- 7. Lift adjusting knob up to remove from locking tabs.
- 8. Carefully pull assembly up and out of pod.
- 9. Reverse steps to install new housing and reassemble pod.
- 10. Adjust headlight aim by turning adjusting knob.





Lights - Adjustment - Replacement

Taillight/Brakelight Lamp Replacement

If the taillight/brakelight does not work the lamp may need to be replaced.

- 1. Remove the taillight assembly by removing the two screws securing it to the vehicle.
- 2. Twist the lamp harness 1/4 turn to release the lock. Pull the lamp harness out of the back of the assembly.
- 3. Remove the lamp from the harness and replace it with the recommended lamp.
- 4. Test the taillight/brakelight to see that it's working.
- 5. Replace the lamp harness into the back of the taillight assembly, twisting 1/4 turn to lock in place.
- 6. Reinstall the taillight assembly to the vehicle.

Indicator Lamp Replacement

- 1. Follow steps 1 3 of Headlight Housing Replacement on previous page.
- 2. Unplug light from harness.
- 3. Using a screwdriver, turn the light 1/4 turn counter clockwise.
- 4. Install new light and use a screwdriver to seat it into place, 1/4 turn clockwise.
- 5. Reassemble pod.





Cleaning and Storage

Cleaning the 6x6

Keeping your 6x6 clean will not only improve its appearance but it can also extend the life of various components. With a few precautions, your 6x6 can be cleaned much like an automobile.

Washing the 6x6

If a high pressure type car wash system is used, extreme care must be taken to avoid water damage to the drive chain, wheel bearings, transmission seals, body panels, brakes and warning labels. Many expensive repair bills can result from using high pressure detergent systems.

The best and safest way to clean your 6x6 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.

Waxing the 6x6

Your 6x6 can be waxed with any quality brand automotive paste wax. Avoid the use of harsh cleaners since they can scratch the body finish.

Cleaning and Storage

Storage of the 6x6

If your 6x6 is to be placed in extended or off season storage, the following steps should be taken to preserve its condition.

- 1. Perform all necessary repairs and thoroughly clean the vehicle.
- 2. Turn the fuel valve to "off" and drain the carburetor.
- 3. Remove the spark plug and pour approximately one ounce of Premium 4 oil into the cylinder. Operate the starter for a few seconds and reinstall the spark plug.



- 4. Remove the battery. Store it in a cool, dry place out of the sun.
- 5. Lubricate suspension pivot points, lower steering post and rear axle fittings.
- 6. Drain the recoil housing.
- 7. Block the vehicle so all tires are suspended off the ground.
- 8. Cover the vehicle with a canvas cover. Do not use plastic or coated materials since they do not allow ventilation of the vehicle.

Cleaning and Storage

Transporting the 6x6

Whenever the 6x6 is to be 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 vehicle to the transporting unit securely using suitable straps and/or rope.
- 4. Always place the transmission in gear and lock the parking brake.

Accessories

Polaris has a wide variety of accessories for your 6x6. Contact your Polaris dealer for a complete list.

SPECIFICATIONS

Height
Width
Length 105"
Wheel Base
Seat Height
Ground Clearance
Weight
Front Susp MacPherson Strut 6.7" Travel
Rear Susp (Swing Arm with Scissor Stabilizer) 7.5" Travel
Front Tire
Center Tire
Rear Tire
Front Brake Fixed Disc Hydraulic
Floating Caliper
Rear Brake Fixed Disc Hydraulic
Floating Caliper
Auxiliary Brake Fixed Disc Hydraulic
Fuel Canadity 4.25 U.S. Col
Fuel Capacity
Linght 12V 60W
Tailiaht 12V 00W
Talligni 12V SW
Exnausi USFS Approved
Ffont Kack
Hildin
1001 Kil
Gross venicle weight
Load Canacity 75 Lbs. Front
800 Lbs. Cargo Bed
Transmission PVT
Gear Box
Drive Chain 520 - O Ring
Turn Radius (Unloaded)
Final Drive Sprocket
$\frac{20}{20} = \frac{1}{100}$

SPECIFICATIONS Engine Specifications

	2002 Sportsman 6x6
Engine	EH50PLE-06
Displacement	
Type 4	Cycle, Single Cylinder
Cooling	Liquid
Bore x Stroke	92 x 75 mm
Lube	Dry Sump
Starting	Electric/Manual
Ignition	CDI
Spark Plug	BKR5E (NGK)
Alternator	250W
Comp. Ratio	10.2:1 Full Stroke
Timing	30° @ 3500
Carburetion	1/BST34 (CV Type)
Main Jet	142.5
Pilot Jet	
Jet Needle	4HB41-3
Needle Jet	Q-4(829)
Pilot Screw	· · · · · · · · · · · · · · · · · · 3
Polaris Industries Inc. reserves the right to make	a changes in design and

Polaris Industries Inc. reserves the right to make changes in design and specifications and/or to make additions or improvements to its products without notice.

WIRING DIAGRAM



TROUBLESHOOTING

Clutch Drive Belt & Cover Related Issues: Diagnosis		
Possible Causes	Solutions/What to do	
Loading the 6x6 into a pick- up or tall trailer when in high range.	Shift transmission to low range during loading of the 6x6 to prevent belt burning.	
Starting out going up a steep incline.	When starting out on an incline, use low range, or dismount the 6x6 after first applying the park brake and per- form the "K" turn as described on page 67 of this manual.	
Driving at low RPM or low ground speed (at approxi- mately 3-7 MPH).	Drive at higher speed or use Low Range. The use of Low Range is high- ly recommended for cooler PVT oper- ating temperatures and longer compo- nent life.	
Insufficient warm-up of 6x6s exposed to low ambi- ent temperatures.	Warm engine at least 5 min., then with transmission in neutral, advance throttle to approx. 1/8 throttle in short bursts, 5 to 7 times. The belt will be- come more flexible and prevent belt burning.	
Slow and easy clutch en- gagement.	Fast, effective use of the throttle for efficient engagement.	
Towing/Pushing at low RPM/low ground speed.	Use Low Range only.	
Plowing snow, dirt, etc./util- ity use.	Use Low Range only.	

TROUBLESHOOTING

Possible Causes	Solutions/What to do	
Stuck in mud or snow.	Shift the transmission to Low Range, carefully use fast, aggressive throttle application to engage clutch. WARN- ING: Excessive throttle may cause loss of control and vehicle overturn.	
Climbing over large objects from a stopped position.	Shift the transmission to Low Range, carefully use fast, brief, aggressive throttle application to engage clutch. WARNING: Excessive throttle may cause loss of control and vehicle over- turn.	
Belt slippage from water or snow ingestion into the PVT system.	Shift the transmission to neutral. Using the throttle, vary the engine rpm from idle to full throttle. Repeat several times as required. During this proce- dure, the throttle should not be held at the full position for more than 10 sec- onds. Clutch seals should be inspected for damage if repeated leaking occurs.	
Clutch malfunction.	For inspection of clutch components, please contact your Polaris dealer.	
Poor engine performance.	Fouled plugs, foreign material in gas tank, fuel lines, or carburetor. Contact you dealer for further service informa- tion.	
GENERAL RANGE OPERATION GUIDELINES:		
Low Range	Heavy pulling, basic operational speeds less than 7 MPH, riding through rough terrain (swamps, moun- tains, etc.), low ground speeds.	
High Range	High ground speeds, speeds above 7 MPH.	

TROUBLESHOOTING

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



WARRANTY

LIMITED WARRANTY

Polaris Industries Inc., 1225 Highway 169 North, Minneapolis, Minnesota 55441-5078, gives a SIX MONTH LIMITED WARRANTY on all components of the Polaris Light Utility Vehicle against defects in material or workmanship. Polaris also gives a one year limited warranty on the final drive chain for failure due to defects. 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. THE PURCHASER MUST COMPLETE A SAFETY TRAINING COURSE PROVIDED BY THE DEALER IN ORDER TO HAVE VALID WARRANTY ON THE VEHICLE. 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 VEHICLE IS REGISTERED WITH POLARIS.

Initial dealer preparation and set-up of your vehicle 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 Polaris limited 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 vehicle 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 the vehicle due to fire, explosions or any other cause beyond Polaris' control.

WARRANTY

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

HOW TO OBTAIN WARRANTY SERVICE

If your vehicle requires warranty service, you must take it to a Polaris Servicing Dealer. 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 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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Always use an approved helmet and protective gear

Never use on public roads

Never carry passengers

Never use with drugs or alcohol

NEVER operate:

- without proper training or instruction
- at speeds too fast for your skills or the conditions
- on public roads a collision can occur with another vehicle
- with a passenger passengers affect balance and steering and increase risk of losing control.

ALWAYS:

- use proper riding techniques to avoid vehicle overturns on hills and rough terrain and in turns
- avoid paved surfaces pavement may seriously affect handling and control.

Improper ATV use can result in SEVERE INJURY or DEATH



Part No. 9916797

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