Pantone 426C

2010

POLARIS®

The Way Out.

RANGER RZR™
RANGER RZR™ EPS

Owner's Manual

for Maintenance and Safety

⚠ WARNING

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

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

⚠ WARNING

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



The text is printed on 100% recycled
with 40% post-consumer waste (PCW).

Pantone 426C

⚠WARNING

Improper vehicle use can result in SEVERE INJURY or DEATH

NEVER Operate:

- **without first viewing safety video and quick start guide.**
- **with more than one passenger.**
- **on hills steeper than 15 degrees.**
- **on public roads.**
- **on paved surfaces - pavement may seriously affect handling and control.**
- **with non-Polaris approved accessories - they may seriously affect stability.**

ALWAYS:

- **keep hands and feet inside vehicle.**
- **reduce speed and use extra caution when carrying a passenger.**
- **operate slowly in reverse - avoid sharp turns or sudden braking.**
- **make sure passenger reads and understands all safety labels.**
- **watch for branches or other hazards that could enter vehicle.**







ALWAYS USE AN APPROVED HELMET AND PROTECTIVE GEAR FOR OPERATOR AND PASSENGER

NEVER USE ON PUBLIC ROADS - NEVER USE WITH DRUGS OR ALCOHOL

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

POLARIS®
The Way Out.

**For your nearest Polaris dealer,
call 1-800-POLARIS
or visit www.polarisindustries.com**

**Polaris Sales Inc.,
2100 Hwy. 55, Medina, MN 55340
Phone 1-888-704-5290**

**Part No. 9922955 Rev 01
Printed in USA**

WELCOME

Thank you for purchasing a Polaris vehicle, and welcome to our worldwide family of Polaris owners. We proudly produce an exciting line of utility and recreational products.

- Snowmobiles
- All-terrain vehicles (ATVs)
- *RANGER* utility vehicles
- Victory motorcycles

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

For safe and enjoyable operation of your vehicle, be sure to follow the instructions and recommendations in this owner's manual. Your manual contains instructions for minor maintenance, but information about major repairs is outlined in the Polaris Service Manual and should be performed only by a Factory Certified Master Service Dealer (MSD) Technician.

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

We also take great pride in our complete line of apparel, parts and accessories, available through our online store at www.purepolaris.com. Have your accessories and clothing delivered right to your door!

POLARIS®
The Way Out.

POLARIS, POLARIS THE WAY OUT, RANGER and RANGER RZR are registered trademarks of Polaris Industries Inc.

Copyright 2010 Polaris Sales Inc. All information contained within this publication is based on the latest product information at the time of publication. Due to constant improvements in the design and quality of production components, some minor discrepancies may result between the actual vehicle and the information presented in this publication. Depictions and/or procedures in this publication are intended for reference use only. No liability can be accepted for omissions or inaccuracies. Any reprinting or reuse of the depictions and/or procedures contained within, whether whole or in part, is expressly prohibited.

Printed in U.S.A.

2010 *RANGER* RZR/RZR EPS Owner's Manual

P/N 9922955

TABLE OF CONTENTS

Introduction 4
Safety 7
Features and Controls 26
Operation 48
Emission Control Systems 66
Maintenance 67
Specifications 120
Polaris Products 122
Troubleshooting 123
Declaration of Conformity 127
Warranty 128
Maintenance Log 135
Index 138

INTRODUCTION

The following signal words and symbols appear throughout this manual and on your vehicle. Your safety is involved when these words and symbols are used. Become familiar with their meanings before reading the manual.

⚠

The safety alert symbol indicates a potential personal injury hazard.

WARNING

A WARNING indicates a hazardous situation which, if not avoided, may result in death or serious injury.

CAUTION

A CAUTION indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE

A NOTICE indicates a situation that may result in property damage.



The Prohibition Safety Sign indicates an action NOT to take in order to avoid a hazard.



The Mandatory Action Sign indicates an action that NEEDS to be taken to avoid a hazard.

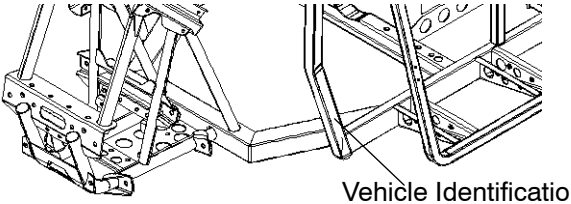
⚠ WARNING

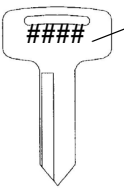
Failure to heed the warnings and safety precautions contained in this manual can result in severe injury or death. Your Polaris vehicle is not a toy and can be hazardous to operate. This vehicle handles differently than cars, trucks or other off-road vehicles. A collision or rollover can occur quickly, even during routine maneuvers like turning, or driving on hills or over obstacles, if you fail to take proper precautions.

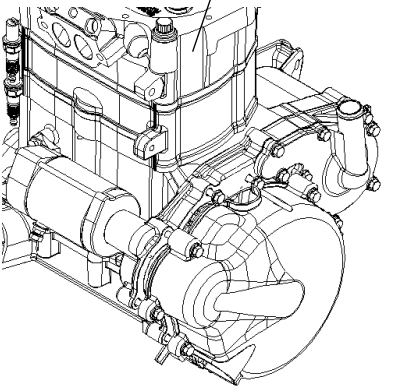
- Read this owner's manual. Understand all safety warnings, precautions and operating procedures before operating the vehicle. Keep this manual with the vehicle.
- Complete the New Operator Driving Procedures outlined on pages 54-55. Never allow a guest to operate this vehicle until the guest has completed the New Operator Driving Procedures.
- This vehicle is an ADULT VEHICLE ONLY. Operation is prohibited for anyone under 16 years of age or anyone without a valid driver's license.

INTRODUCTION
Vehicle Identification Numbers

Record your vehicle's identification numbers and key number in the spaces provided. Remove the spare key and store it in a safe place. An ignition key can be duplicated only by ordering a Polaris key blank (using your key number) and mating it with one of your existing keys. The ignition switch must be replaced if all keys are lost.







Vehicle Model Number: _____

Vehicle Identification Number: _____

Engine Serial Number: _____

Key Number _____

Equipment Modifications

Your Polaris vehicle is designed to provide safe operation when used as directed. Modifications to your vehicle may negatively impact vehicle stability. Failure of critical machine components may result from operation with any modifications, especially those that increase speed or power. This vehicle may become less stable at speeds higher than those for which it is designed. Loss of control may occur at higher speeds.

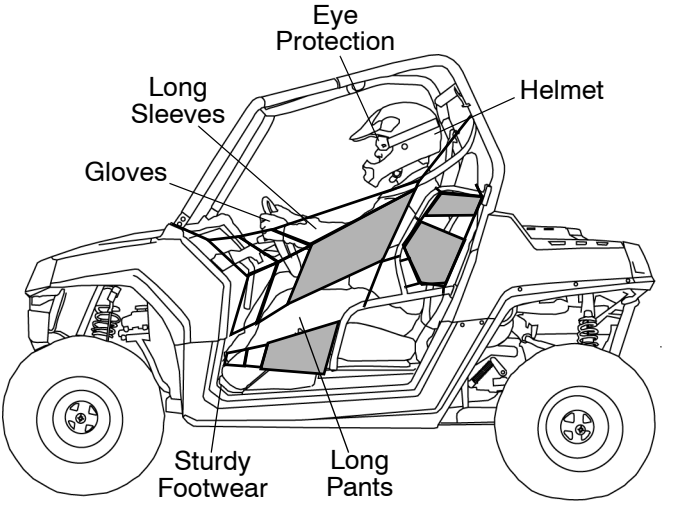
Do not install on a Polaris vehicle any equipment that may increase the speed or power of the vehicle, or make any other modifications to the vehicle for these purposes. Any modifications to the original equipment of the vehicle create a substantial safety hazard and increase the risk of bodily injury.

The warranty on your Polaris vehicle is terminated if any equipment has been added to the vehicle, or if any modifications have been made to the vehicle, that increase its speed or power.

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. Use only Polaris-approved accessories, and familiarize yourself with their function and effect on the vehicle.

SAFETY
Safe Riding Gear

Always wear appropriate clothing when riding a Polaris vehicle. Wear protective clothing for comfort and to reduce the chance of injury.

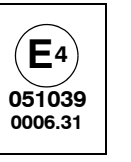


Helmet

Wearing a helmet can prevent a severe head injury. Whenever riding this Polaris vehicle, always wear a helmet that meets or exceeds established safety standards.

Approved helmets in the USA and Canada bear a U.S. Department of Transportation (DOT) label.

Approved helmets in Europe, Asia and Oceania bear the ECE 22.05 label. The ECE mark consists of a circle surrounding the letter E, followed by the distinguishing number of the country which has granted approval. The approval number and serial number will also be displayed on the label.



Safe Riding Gear

Eye Protection

Do not depend on eyeglasses or sunglasses for eye protection. Whenever riding a Polaris vehicle, always wear shatterproof goggles or use a shatterproof helmet face shield. Polaris recommends wearing approved Personal Protective Equipment (PPE) bearing markings such as VESC 8, V-8, Z87.1, or CE. Make sure protective eye wear is kept clean.

Gloves

Wear gloves for comfort and for protection from sun, cold weather and other elements.

Boots

Wear sturdy footwear. Do not ride a Polaris vehicle with bare feet.

Clothing

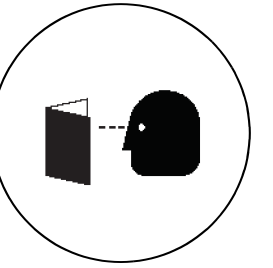
Wear long sleeves and long pants to protect arms and legs.

SAFETY
Safety Warnings

⚠ WARNING

Failure to operate this vehicle properly can result in a collision, loss of control, accident or overturn, which may result in serious injury or death. Heed all safety warnings outlined in this section of the owner's manual. See the OPERATION section of the owner's manual for proper operating procedures.

Operating Without Instruction



Operating this vehicle without proper instruction increases the risk of an accident. The operator must understand how to operate the vehicle properly in different situations and on different types of terrain. Complete the New Operator Driving Procedures outlined on pages 54-55.

All operators must read and understand the owner's manual and all warning and instruction labels before operating the vehicle. Never allow a guest to operate this vehicle until the guest has completed the New Operator Driving Procedures outlined on pages 54-55.

Age Restrictions

This vehicle is an ADULT VEHICLE ONLY. Operation is prohibited for anyone under 16 years of age or anyone without a valid driver's license. Never operate with a passenger under the age of 12. Make sure any passenger is tall enough to comfortably and safely reach the hand holds and place both feet on the floor.

Accessories

Non-approved accessories may seriously affect vehicle stability. Using accessories not approved by Polaris for use on this vehicle could cause loss of control or an accident. Never operate with accessories not approved by Polaris for use on this vehicle.

Using Alcohol or Drugs

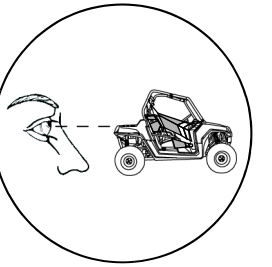


Riding in this vehicle after consuming alcohol or drugs could adversely affect operator judgment, reaction time, balance and perception.

Never consume alcohol or drugs before or while operating or riding in this vehicle.

Safety Warnings

Failure to Inspect Before Operating

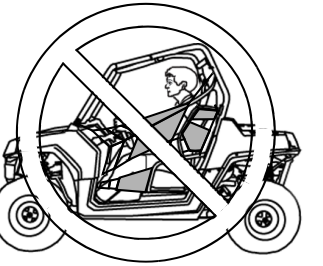


Failure to inspect and verify that the vehicle is in safe operating condition before operating increases the risk of an accident.

Always inspect the vehicle before each use to make sure it's in safe operating condition.

Always follow the inspection and maintenance procedures and schedules described in the owner's manual.

Protective Apparel



Riding in this vehicle without wearing an approved helmet and protective eyewear increases the risk of a serious injuries in the event of an accident.

Operator and passenger must always wear an approved helmet that fits properly and eye protection (goggles or face shield).

Seat Belts

Riding in this vehicle without wearing the seat belt increases the risk of serious injury in the event of an accident or sudden stop. Riders *must* wear seat belts at all times. Seat belts reduce the severity of injury in the event of a sudden stop or accident. Always make sure the seat belts are secured for both the operator and passenger before riding.

Cab Nets/Side Guards

Riding in this vehicle without using the cab nets and side guards increases the risk of serious injury or death in the event of an accident or overturn. Always use the cab nets and side guards while riding in this vehicle.

Always keep hands and feet inside the vehicle at all times.

SAFETY
Safety Warnings
Carrying a Passenger

Never carry a passenger until you have operated this vehicle for at least two hours and have completed the New Operator Driving Procedures outlined on pages 54-55.

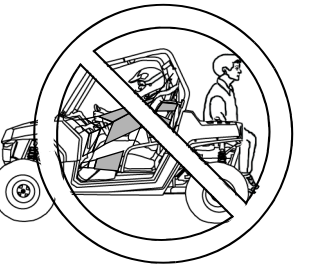
Carrying Multiple Passengers



Carrying more than one passenger in this vehicle can affect the operator's ability to steer and operate the controls, which increases the risk of loss of control and accident or overturn.

Never carry more than one passenger in this vehicle.

Passengers in the Cargo Box



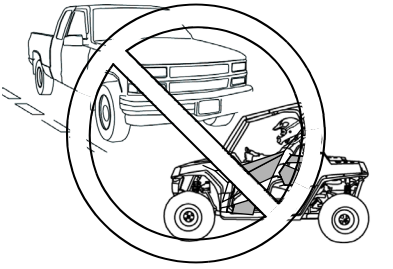
Carrying a passenger in the cargo box could result in a fall from the vehicle or contact with moving components. Never allow a passenger to ride in the cargo box. A passenger must always be seated in the passenger seat with seat belt secured.

Operating on Pavement

Operating this vehicle on paved surfaces (including sidewalks, paths, parking lots, and driveways) may seriously affect handling and control of the vehicle, and may cause the vehicle to go out of control. This vehicle's tires are designed for off-road use only, not for use on pavement.

Avoid operating the vehicle on pavement. If you must operate on a paved surface, travel slowly and do not make sudden turns or stops.

Operating on Public Roads



Operating this vehicle on public streets, roads or highways could result in a collision with another vehicle.

Never operate this vehicle on any public street, road or highway, including dirt and gravel roads.

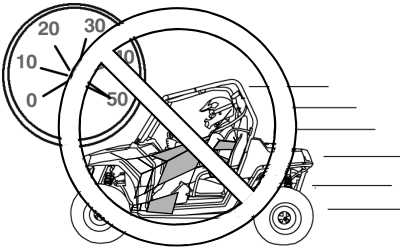
In many areas it's illegal to operate vehicles of this type on public streets, roads and highways.

Safety Warnings

Operating at Excessive Speeds

Operating this vehicle at excessive speeds increases the operator's risk of losing control.

Always operate at a speed that's appropriate for the terrain, the visibility and operating conditions, your skills and your passenger's skills.



Turning Improperly

Turning improperly could cause loss of traction, loss of control, accident or overturn. Always follow proper procedures for turning as described in the owner's manual.

Avoid sharp turns. Never turn while applying heavy throttle. Never make abrupt steering maneuvers. Practice turning at slow speeds before attempting to turn at faster speeds.

Physical Control of the Vehicle

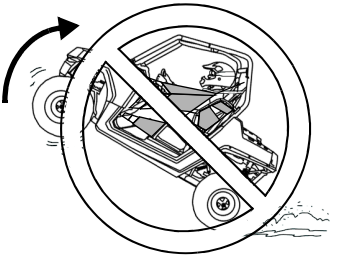
Removing hands from the steering wheel or hand holds or removing feet from the floor while riding increases the risk of loss of control and accident or overturn.

The operator should always keep both hands on the steering wheel during operation. A passenger should always be seated in the passenger seat with both feet on the floor and with both hands securely grasping the hand holds.

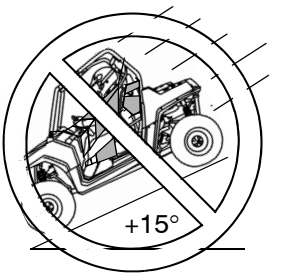
Always keep hands and feet inside the vehicle at all times.

Jumps and Stunts

Exhibition driving increases the risk of an accident or overturn. DO NOT do power slides, “donuts”, jumps or other driving stunts. Avoid exhibition driving.



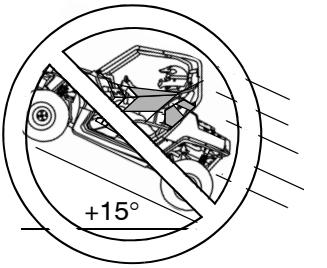
SAFETY
Safety Warnings
Descending Hills Improperly



Improperly descending a hill could cause loss of control or overturn. Always follow proper procedures for traveling down hills as described in the owner's manual.

- Always descend a hill with the transmission in forward gear. Never descend a hill with the transmission in neutral.
- Always check the terrain carefully before descending a hill.
- Never travel down a hill at high speed.
- Avoid traveling down a hill at an angle, which would cause the vehicle to lean sharply to one side. Travel straight downhill.

Improper Hill Climbing



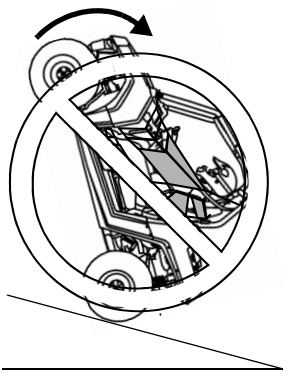
Improper hill climbing could cause loss of control or overturn. Use extreme caution when operating on hills. Always follow proper procedures for hill climbing as described in the owner's manual. See page 58.

Safety Warnings

Crossing Hillsides

Driving on a sidehill is not recommended. Improper procedure could cause loss of control or overturn. Avoid crossing the side of any hill unless absolutely necessary.

If crossing a hillside is unavoidable, always follow proper procedures as described in the owner's manual. See page 59.



Stalling While Climbing a Hill

Stalling or rolling backwards while climbing a hill could cause an overturn. Maintain a steady speed when climbing a hill.

If you lose all forward speed:

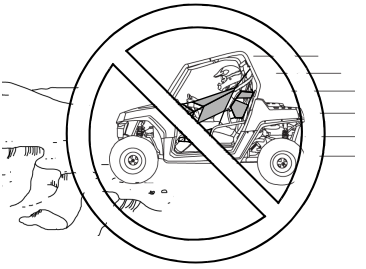
Apply the brakes gradually until the vehicle is fully stopped. Place the transmission in reverse and slowly allow the vehicle to roll straight downhill while applying light brake pressure to control speed.

Operating in Unfamiliar Terrain

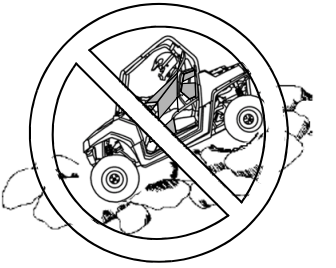
Failure to use extra caution when operating on unfamiliar terrain could result in an accident or overturn.

Unfamiliar terrain may contain hidden rocks, bumps, or holes that could cause loss of control or overturn.

Travel slowly and use extra caution when operating on unfamiliar terrain. Always be alert to changing terrain conditions.



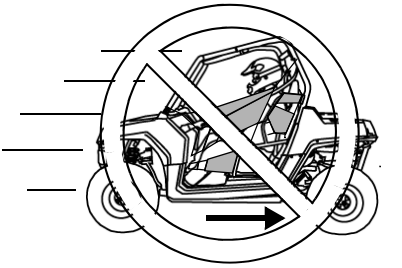
SAFETY
Safety Warnings
Operating on Slippery Terrain



Operating on excessively rough, slippery or loose terrain could cause loss of traction, loss of control, accident or overturn.

Do not operate on excessively rough, slippery or loose terrain. Always use extra caution on rough, slippery or loose terrain.

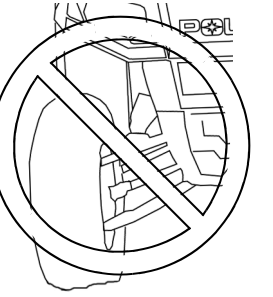
Operating Improperly in Reverse



Improperly operating in reverse could result in a collision with an obstacle or person. Always follow proper operating procedures as outlined in this manual. See page 62.

Before shifting into reverse gear, always check for obstacles or people behind the vehicle. When it's safe to proceed, back slowly.

Improper Tire Maintenance



Operating this vehicle with improper tires or with improper or uneven tire pressure could cause loss of control, accident or overturn.

Always use the size and type of tires specified for your vehicle. Always maintain proper tire pressure as described in the owner's manual and on safety labels.

Safety Warnings

Operating Over Obstacles

Improperly operating over obstacles could cause loss of control or overturn.

Before operating in a new area, check for obstacles. Never attempt to operate over large obstacles such as rocks or fallen trees. Always follow the proper procedures outlined in this manual when operating over obstacles.



Skidding or Sliding

Skidding or sliding can cause loss of control or overturn (if tires regain traction unexpectedly). Always follow proper procedures for operating on slippery surfaces as described in the owner's manual.

When operating on slippery surfaces such as ice or loose gravel, reduce speed and use extra caution to reduce the chance of skidding or sliding.

Do not operate on excessively slippery surfaces.

Operating Through Water

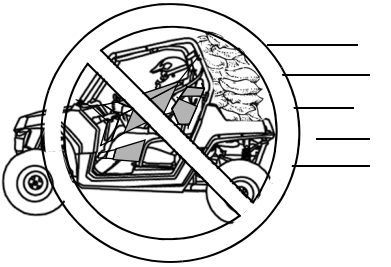
Operating through deep or fast-flowing water can cause loss of traction, loss of control, overturn or accident. Never operate in fast-flowing water or in water that exceeds the recommended maximum depth.



Always follow proper procedures for operating in water as described in the owner's manual.

Wet brakes may have reduced stopping ability. After leaving water, test the brakes. Apply them lightly several times while driving slowly. The friction will help dry out the pads.

SAFETY
Safety Warnings
Improper Cargo Loading



Overloading the vehicle or carrying/ towing cargo improperly may cause changes in stability and handling, which could cause loss of control or an accident.

- Always follow the instructions in the owner's manual for carrying cargo or pulling a trailer.
- 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 a greater distance for braking.

Operating on Frozen Bodies of Water



Operating on frozen bodies of water can result in the vehicle and/or riders falling through the ice. Never operate this vehicle on a frozen body of water.

Operating a Damaged Vehicle

Operating a damaged vehicle can result in an accident with serious injury or death. After any overturn or accident, have a qualified service dealer inspect the entire vehicle for possible damage, including (but not limited to) brakes, throttle and steering systems.

Safety Warnings

Handling Gasoline

Gasoline is highly flammable and is explosive under certain conditions. Always exercise extreme caution whenever handling gasoline.

- Always stop the engine when refueling.
- Always refuel outdoors or in a well ventilated area.
- Remove flammable material containers from the box before filling.
- Do not smoke or allow open flames or sparks in or near the refueling area or where gasoline is stored.
- Never refuel while a person is in the vehicle.
- Do not over fill the tank. Do not fill the tank neck.
- If gasoline spills on your skin or clothing, immediately wash it off with soap and water and change clothing.

Refueling

Always turn off the engine before refueling. Make sure the refueling area is well ventilated and free of any source of flame or sparks. Gasoline is extremely flammable.

Remove flammable material containers from the box before filling.

Exposure to Exhaust

Engine exhaust fumes are poisonous and can cause loss of consciousness or death in a short time. Never start the engine or let it run in an enclosed area.

Operate this vehicle only outdoors or in well-ventilated areas.

Hot Exhaust Systems

Exhaust system components are very hot during and after use of the vehicle. Hot components can cause burns and fire. Do not touch hot exhaust system components. Always keep combustible materials away from the exhaust system. Use caution when traveling through tall grass, especially dry grass.

Unauthorized Use of the Vehicle

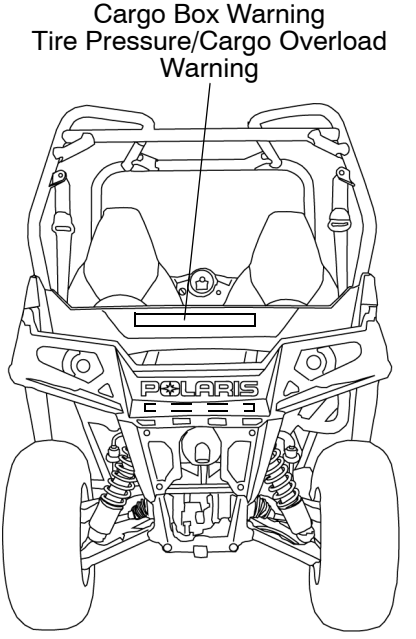
Leaving the keys in the ignition can lead to unauthorized use of the vehicle, which could result in an accident or overturn. Always remove the ignition key when the vehicle is not in use.

FOR MORE INFORMATION ABOUT SAFETY
call Polaris at 1-800-342-3764.

SAFETY
Safety Labels and Locations

Warning labels have been placed on the vehicle for your protection. Read and follow the instructions of the labels on the vehicle carefully. If any of the labels depicted in this manual differ from the labels on your vehicle, always read and follow the instructions of the *labels on the vehicle*.

If an informational or graphic label becomes illegible or comes off, contact your Polaris dealer to purchase a replacement. Replacement *safety* labels are provided by Polaris at no charge. The part number is printed on the label.



Safety Labels and Locations

Cargo Box Warning

WARNING

- Passengers can be thrown off. This can cause serious injury or death.
- Never carry passengers in cargo box.
- Maximum 4X4 Box Load is 300 lbs. (136.4 kg)

Tire Pressure/Cargo Overload Warning

WARNING

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

TIRE PRESSURE IN PSI (KPa):

4X4 - FRONT 8 (55.2) REAR 8 (55.2)

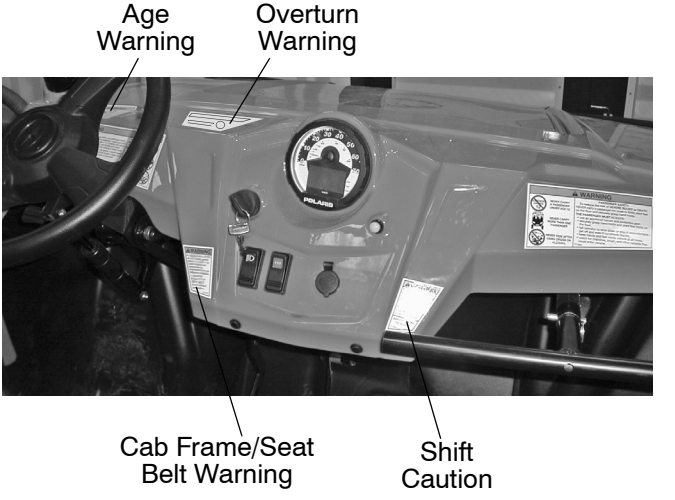
MAXIMUM WEIGHT CAPACITY INCLUDING DRIVER, PASSENGER, CARGO AND ACCESSORIES: 4X4 is 740 LBS. (336.4 kg)

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 and carried as low as possible in box. For stability on rough or hilly terrain, reduce speed and cargo. Be careful if load extends over the side of the box.

Read Owner's Manual for more detailed loading information.

7175103

SAFETY
Safety Labels and Locations



Cab Frame/Seat Belt Warning

WARNING

- ALWAYS WEAR YOUR SEAT BELT and make sure passenger wears seat belt.
- ALWAYS SECURE CAB NETS.
- VEHICLE OVERTURN could cause severe injury or death. The cab frame is not designed or intended to provide rollover protection.

7175100

Safety Labels and Locations

Shift Caution

CAUTION

To avoid transmission damage, shift only when vehicle is stationary and at idle. When vehicle is stopped, place shift in the parked position.

APPLY BRAKE TO START

7174843

Age Warning

WARNING

Operating this vehicle if you are under the age of 16 increases your chance of severe injury or death.

NEVER operate this vehicle if you are under age 16 or without a valid driver's license.



7175101

Overturn Warning

WARNING

Improper operation can cause this vehicle to overturn and lead to serious injury or death.

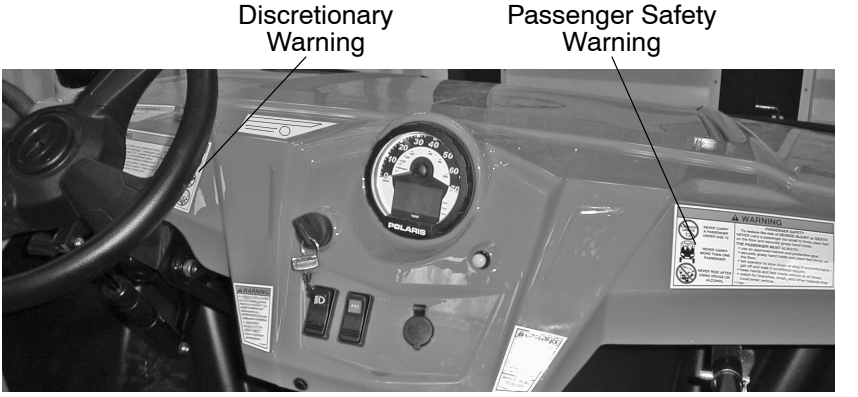
This vehicle handles differently than cars, trucks or other off-road vehicles. In order to avoid overturns:



- avoid sharp turns.
- never turn while applying heavy throttle.
- never make abrupt steering maneuvers.
- operate at speeds appropriate for your skills, the conditions and the terrain.
- DO NOT do power slides, "donuts", jumps or other driving stunts.

7175105

SAFETY
Safety Labels and Locations



Passenger Safety Warning



WARNING

NEVER CARRY A PASSENGER UNDER AGE 12

NEVER CARRY MORE THAN ONE PASSENGER

NEVER RIDE AFTER USING DRUGS OR ALCOHOL

To reduce the risk of SEVERE INJURY or DEATH, NEVER carry a passenger under age 12 or too small to firmly plant feet on the floor and securely grasp hand holds.

THE PASSENGER MUST ALWAYS:

- wear seat belt.
- use an approved helmet and protective gear.
- securely grasp hand holds and plant feet firmly on the floor.
- tell operator to slow down or stop if uncomfortable - get off and walk if conditions require.
- keep hands and feet inside vehicle at all times.
- watch for branches, brush, and other hazards that could enter vehicle.

7175102

Safety Labels and Locations

Discretionary Warning

WARNING

Improper vehicle use can result in SEVERE INJURY or DEATH

NEVER operate:

- without first viewing safety video and quick start guide.
- with more than one passenger.
- on hills steeper than 15 degrees.
- on public roads.
- on paved surfaces - pavement may seriously affect handling and control.
- with non-Polaris approved accessories - they may seriously affect stability.

ALWAYS:

- keep hands and feet inside vehicle.
- reduce speed and use extra caution when carrying a passenger.
- operate slowly in reverse - avoid sharp turns or sudden braking.
- make sure passenger reads and understands all safety labels.
- watch for branches or other hazards that could enter vehicle.

ALWAYS USE AN APPROVED HELMET AND PROTECTIVE GEAR FOR OPERATOR AND PASSENGER

NEVER USE ON PUBLIC ROADS

NEVER USE WITH DRUGS OR ALCOHOL

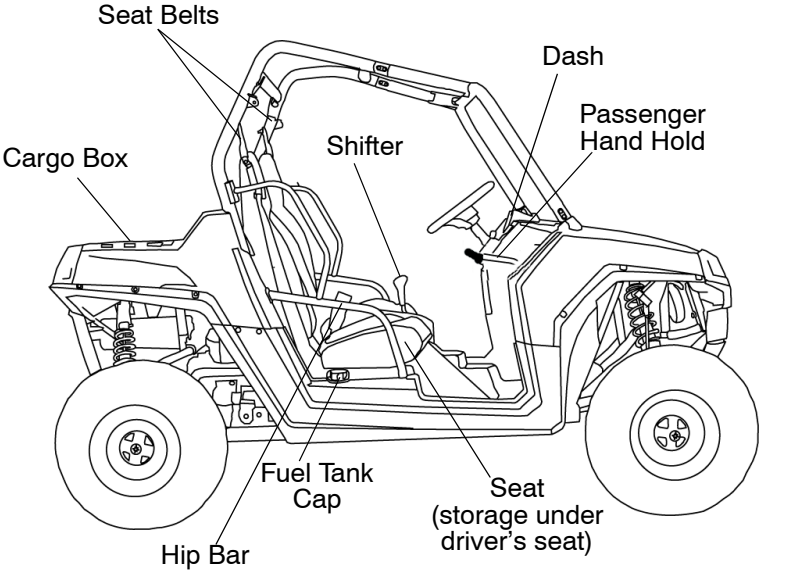
LOCATE AND READ OWNER'S MANUAL. FOLLOW ALL INSTRUCTIONS AND WARNINGS. IF OWNER'S MANUAL IS MISSING, CONTACT A POLARIS DEALER FOR A REPLACEMENT.

7175104



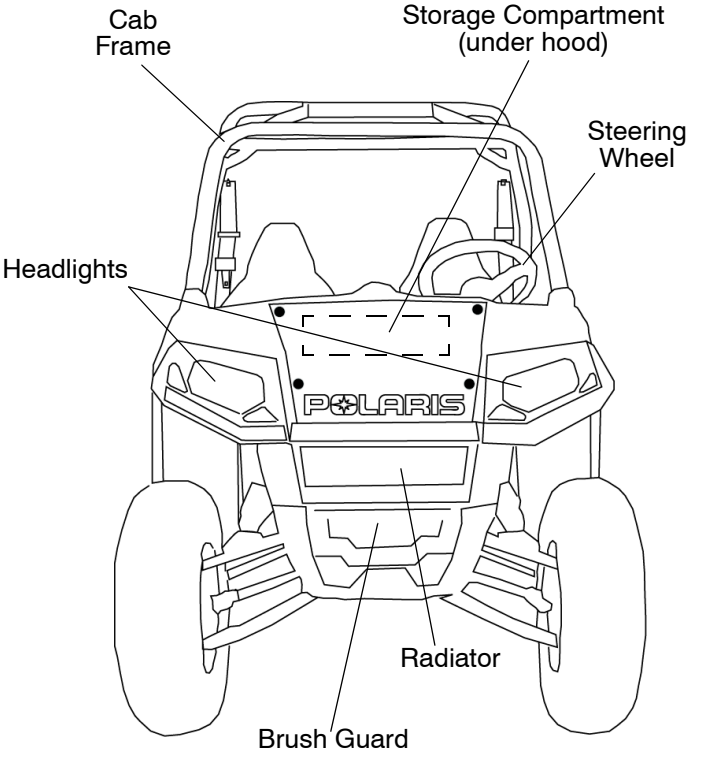
FEATURES AND CONTROLS
Component Locations

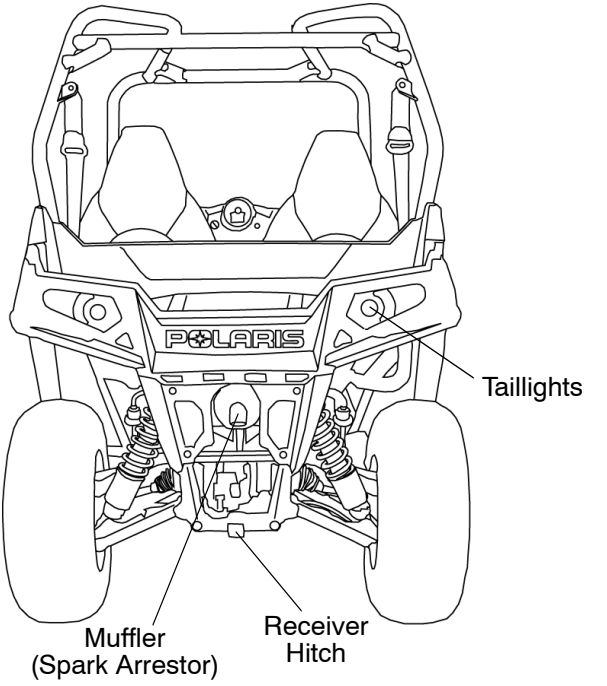
Your vehicle is equipped with upper and lower cab nets and side guards on both sides of the vehicle. Cab nets and side guards must be used by both operator and passenger at all times. Promptly replace worn or damaged cab nets with new cab nets, available from your authorized Polaris dealer. The vehicle illustrated below is shown without cab nets only to allow component identification. Always use the cab nets and side guards.





Component Locations





Trailer Receiver Hitch Bracket

This vehicle is equipped with a receiver hitch bracket for a trailer hitch. Trailer towing equipment is not supplied with this vehicle.

To avoid injury and property damage, always heed the warnings and towing capacities outlined on pages 64-65.

Rear Service Panel

The rear service panel is located behind the seats on the frame of the vehicle. Remove the seats to access the service panel. Remove the service panel to access serviceable engine components and clutches.

Seats

Before operating the vehicle, always push down on both seat backs to ensure the latches are secure.

Seat Adjustments

Loosen (do not remove) the four screws located on the seat bottom. Slide the seat forward or rearward to the desired position. Tighten the screws to 4 ft. lbs. (5.4 Nm). Do not overtighten.

Seat Removal

1. Pull up on the seat latch lever located under the rear edge of the seat.
2. Tilt the seat forward.
3. Lift the seat upward to remove it from the vehicle.
4. Reverse this procedure to reinstall the seat. Make sure the seat tabs at the front edge of the seat slide under the seat retainer bar.
5. Press down firmly at the rear of the seat to engage the rear latch.

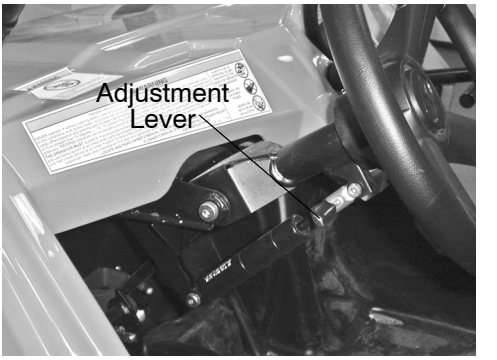


FEATURES AND CONTROLS

Steering Wheel

The steering wheel can be tilted upward or downward for rider preference.

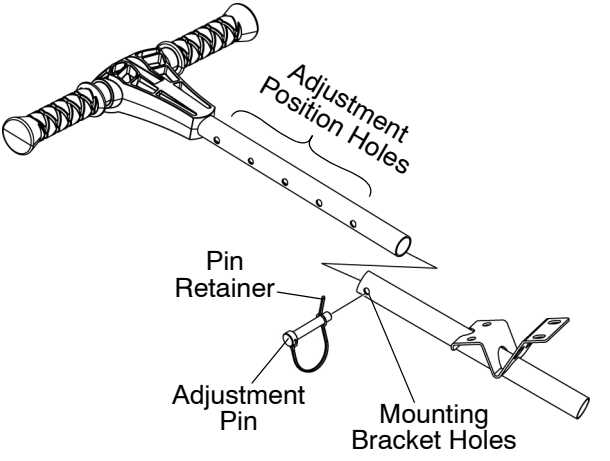
Lift and hold the steering wheel adjustment lever while moving the steering wheel upward or downward. Release the lever when the steering wheel is at the desired position.



Passenger Hand Hold

Always adjust the hand hold to a comfortable position for your passenger before operating. Make sure the adjustment pin and retainer are securely installed after making adjustments.

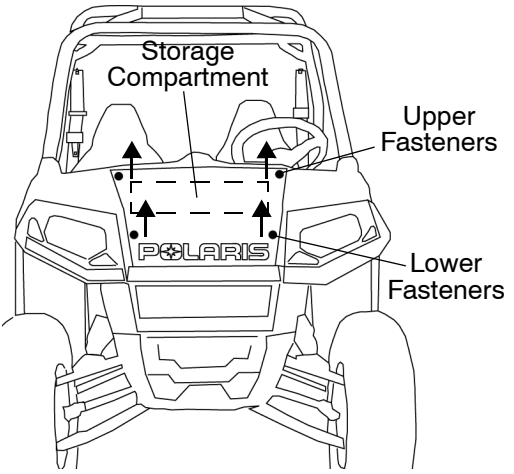
1. Remove the retainer from the end of the adjustment pin.
2. Remove the pin from the post.
3. Slide the post inward or outward to the desired position.
4. Reinstall the pin through the mounting bracket hole, through both post adjustment holes, and through the remaining bracket hole.
5. Reinstall the retainer to the pin.



Hood

Remove the hood to access the front storage compartment, the radiator and the coolant overflow bottle.

1. If your model is equipped with removable fasteners at the upper hood edge, remove the fasteners.
2. Grasp the upper hood edge and pull upward to disengage the hood from the vehicle.
3. Continue pulling the hood upward to disengage the lower hood fasteners.
4. Lift the hood away from the vehicle.



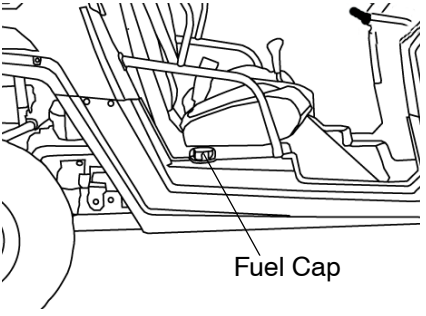
Storage Compartments

Remove the hood to access the front storage compartment. Remove the driver's seat to access the under-seat storage compartment. See page 29.

Fuel Cap

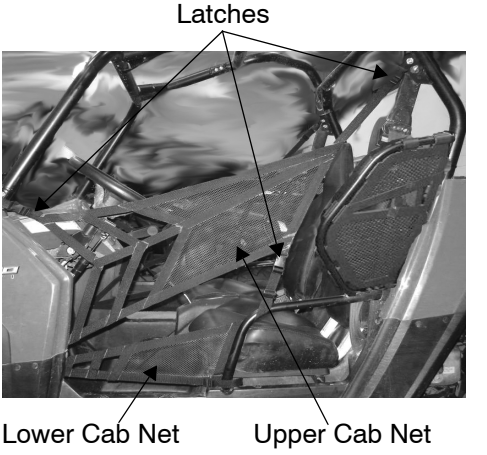
The fuel tank filler cap is located on the right-hand side of the vehicle near the passenger seat. When refueling, always use either leaded or unleaded gasoline with a minimum pump octane number of 87 R+M/2 octane. *Do not use fuel with ethanol content greater than 10 percent, such as E-85 fuel.*

Remove flammable material containers from the box before filling.



FEATURES AND CONTROLS
Cab Nets/Side Guards

Riding in this vehicle without using the cab nets and side guards increases the risk of serious injury or death in the event of an accident or overturn. Cab nets and side guards must be used by both operator and passenger at all times. Make sure all latches are secure before operating the vehicle.



Always inspect cab nets for tightness, wear and damage before each use of the vehicle. Use the strap adjusters to tighten any loose straps. Promptly replace worn or damaged cab nets with new cab nets, available from your authorized Polaris dealer.

Upper Cab Net Interference (Driver)

The upper cab net on the driver's side may interfere with vehicle operation for some operators due to operator body type, driving style or riding apparel. Each operator must check for upper cab net interference before operating the vehicle.

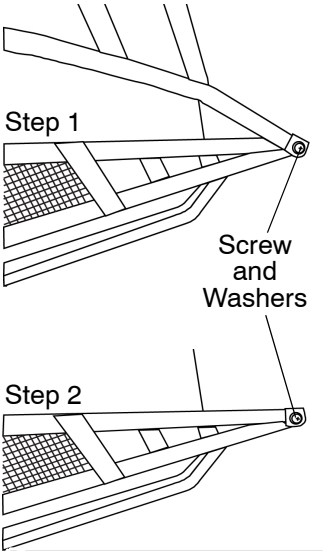
1. Complete the New Operator Driving Procedures outlined on pages 54-55.
2. Test for upper cab net interference by making slow speed turns to the left and right. If the net interferes with operation, it should be removed from the vehicle *for this operator only.* All other cab nets must remain on the vehicle during operation. See page 33.

Cab Nets/Side Guards

Upper Cab Net Removal (Driver)

The upper cab net on the driver's side may be removed *only if it interferes with operation of the vehicle*. All other cab nets and side guards must remain installed.

1. Using a T-25 torx bit and 7/16" open end wrench, remove the mounting screw and washers securing the upper and lower cab nets to the floor of the vehicle on the driver's side.
2. Reinstall the lower net with the screw and all washers. Tighten the screw securely.
3. Unclip the latches that secure the upper net to the chassis and lower net. See the photo on the previous page.
4. Loop the free upper latch of the lower cab net through the gap at the front of the side guard and secure the latch, adjusting strap length as needed. Tighten the strap.
5. Reverse all steps to reinstall the upper cab net. *Always reinstall the upper cab net for any other operator of the vehicle.*



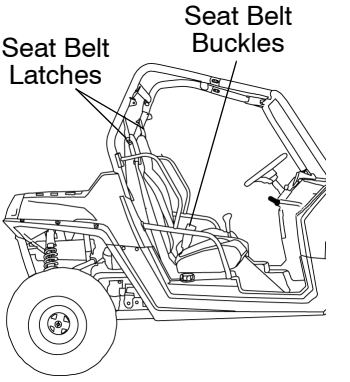

Loop strap through gap

FEATURES AND CONTROLS
Seat Belts

This Polaris vehicle is equipped with three-point lap and diagonal seat belts for the operator and passenger. Always make sure the seat belts are secured for both the operator and passenger before riding.

To wear the seat belt properly, follow this procedure:

1. Pull the seat belt latch downward and across your chest toward the buckle at the inner edge of the seat. The belt should fit snugly across your hips and diagonally across your chest. Make sure the belt is not twisted.
2. Push the latch plate into the buckle until it clicks.
3. Release the strap, it will self-tighten.
4. Press the red release latch on the buckle to release the seat belt.



Seat Belts

Seat Belt Inspection

Inspect all seat belts for proper operation before each use of the vehicle.

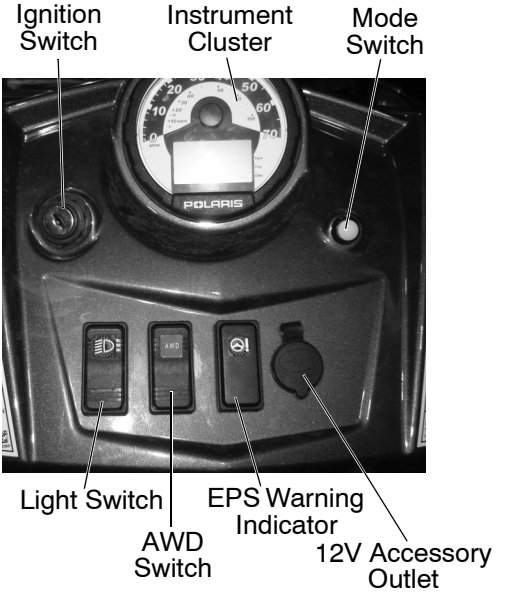
1. Push the latch plate into the buckle until it clicks. The latch plate must slide smoothly into the buckle. A click indicates that it's securely latched.
2. Push the red release latch in the middle of the buckle to make sure it releases freely.
3. Pull each seat belt completely out and inspect the full length for any damage, including cuts, wear, fraying or stiffness. If any damage is found, or if the seat belt does not operate properly, have the seat belt system checked and/or replaced by an authorized Polaris dealer.
4. To clean dirt or debris from the seat belts, sponge the straps with mild soap and water. Do not use bleach, dye or household detergents.

FEATURES AND CONTROLS

Switches

Mode Switch

The yellow switch located near the instrument gauge is used to toggle through mode options available such as odometer, trip meter, hour meter and tachometer. See page 43 for operation of the modes.

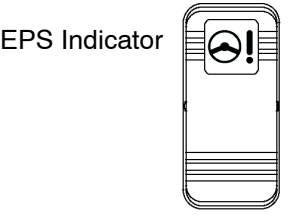


Auxiliary Outlet

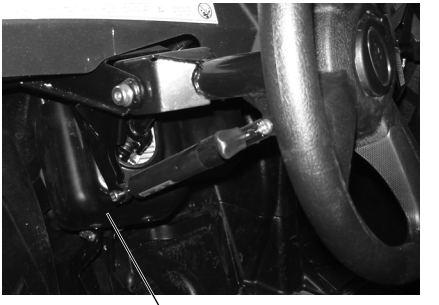
The 12-volt accessory plug receptacle has spade connections on the back that may be used to power an auxiliary light or other optional accessories or lights. The connections are under the dash.

Electronic Power Steering (EPS)

The EPS warning indicator briefly illuminates when the key is turned to the ON position. If the light remains on after starting the engine, the EPS system is inoperative. See your authorized Polaris dealer for service.



Electronic power steering (if equipped) engages when the ignition key is turned to the ON position. EPS remains engaged whether the vehicle is moving or idle.



Switches

Ignition Switch

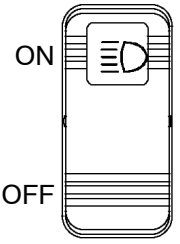
The ignition switch is a three-position, key-operated switch. Use the ignition switch to start the engine. See page 52 for starting procedures.

The key can be removed from the switch when it is in the OFF position.

OFF	The engine is off. Electrical circuits are off, except accessory 12V.
ON	Electrical circuits are on. Electrical equipment can be used.
START	Turn the key to the START position to engage the electric starter. The key returns to the ON position when released.

Light Switch

Use the headlight switch to turn the lights on and off. The ignition switch must be in the ON position to operate the headlights.



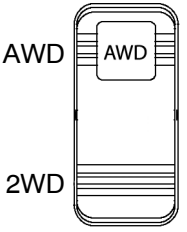
All Wheel Drive (AWD) Switch

The AWD Switch has two positions:

- All Wheel Drive (AWD)
- Two Wheel Drive (2WD).

Press the top of the rocker switch to engage All Wheel Drive. Press the bottom of the switch to operate in two wheel drive.

See page 40 for AWD operating instructions.



FEATURES AND CONTROLS
Gear Selector

P: Park

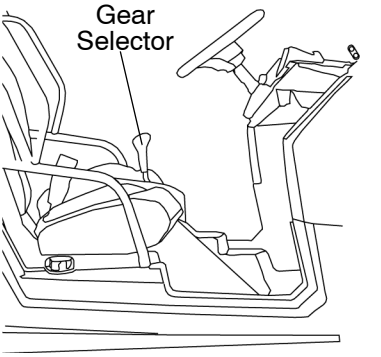
R: Reverse

N: Neutral

L: Low Gear

H: High Gear

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.



Tip: Maintaining shift linkage adjustment is important to assure proper transmission function. See your dealer if you experience any shifting problems.

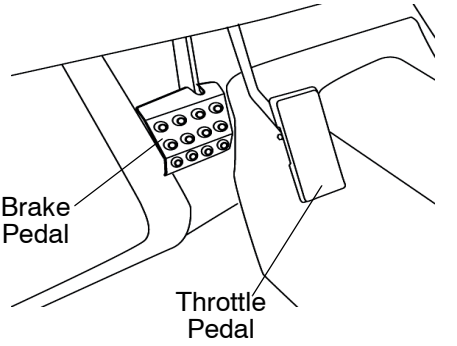
NOTICE: Do not attempt to shift the transmission while the vehicle is moving or damage to the transmission could result. Always shift when the vehicle is stationary and the engine is at idle.

Using Low Range and High Range

Condition	Range to Use
Operating at speeds less than 7 MPH (11 km/h)	Low
Operating in rough terrain or over obstacles	Low
Loading the vehicle onto a trailer	Low
Towing heavy loads	Low
Operating at speeds greater than 7 MPH (11 km/h)	High

Brake Pedal

Depress the brake pedal to slow or stop the vehicle. Apply the brakes while starting the engine.

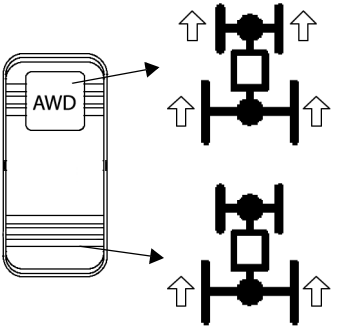


Throttle Pedal

Push the pedal down to increase engine speed. Spring pressure returns the pedal to the rest position when released. Always check that the throttle pedal returns normally before starting the engine. Make sure there's adequate throttle pedal freeplay. See page 96 for throttle pedal adjustment procedures.

FEATURES AND CONTROLS
All Wheel Drive (AWD) System

The All Wheel Drive system is controlled by the AWD switch. When the switch is on 2X4, the vehicle is in two-wheel drive at all times. When the switch is on AWD, the vehicle is in all wheel drive and the AWD indicator light will be on.



When in AWD, the demand drive unit will automatically engage any time the rear wheels lose traction. When the rear wheels regain traction, the demand drive unit will automatically disengage.

There is no limit to the length of time the vehicle may remain in AWD.

Engaging AWD

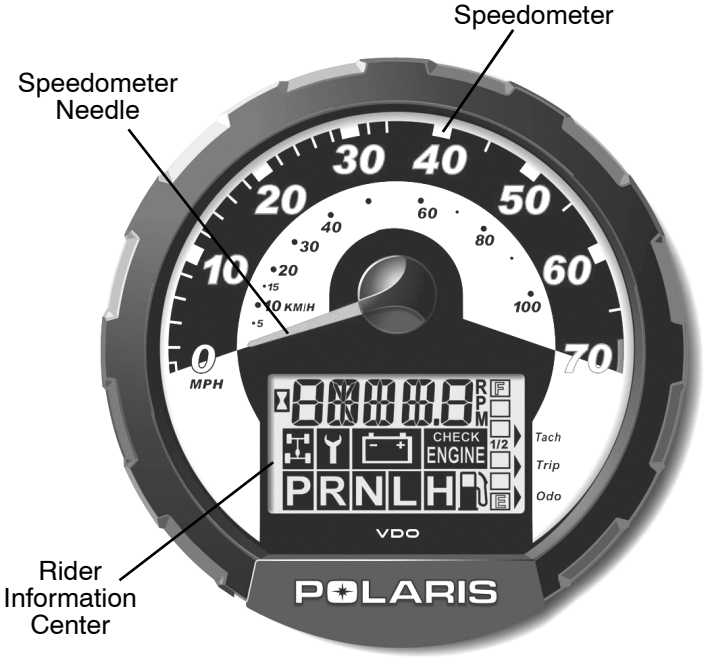
The AWD switch may be turned on or off while the vehicle is moving. Initially, the vehicle's electronic system will not enable the AWD until the engine RPM is below 3100. Once enabled, the AWD remains enabled until the AWD switch is turned off. If the switch is turned off while the demand drive unit is moving, it will not disengage until the rear wheels regain traction.

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 switching to AWD.

NOTICE: Switching to AWD while the rear wheels are spinning or slipping may cause severe drive shaft and gearcase damage. Always switch to AWD while the rear wheels have traction or are at rest.

Instrument Cluster

Your vehicle is equipped with an instrument cluster that senses vehicle speed from the transmission. The instrument cluster measures distance in miles as well as time, hours of operation and engine RPM. In addition to showing vehicle speed, the speedometer needle flashes when the fuel level is low.



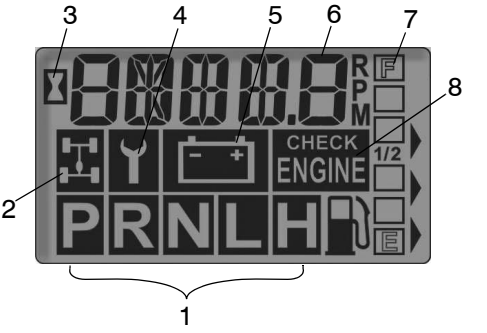
FEATURES AND CONTROLS

Instrument Cluster

Rider Information Center

The rider information center is located in the instrument cluster. All segments will light up for 2.5 seconds at start-up.

Tip: If the instrument cluster fails to illuminate, a battery over-voltage may have occurred and the instrument cluster may have shut off to protect the electronic speedometer. If this occurs, take the vehicle to your Polaris dealer for proper diagnosis.



1. **Gear Indicator** - This indicator displays gear shifter position.

   P = Park
   R = Reverse
   N = Neutral
   L = Low Gear
   H = High Gear

2. **AWD Indicator** - This indicator illuminates when the AWD switch is in the AWD position.
3. **Engine Hour Display Indicator**
4. **Service Interval/Diagnostic Mode Indicator**
5. **Low Battery and Over Voltage** - This warning usually indicates that the vehicle is operating at an RPM too low to keep the battery charged. It may also occur when the engine is at idle and high electrical load (lights, cooling fan, accessories) is applied. Drive at a higher RPM or recharge the battery to clear the warning.
6. **Odometer/Tachometer/Tripmeter/ Hour Meter**
7. **Fuel Gauge** - The segments of the fuel gauge show the level of fuel in the fuel tank. When the last segment clears, a low fuel warning is activated. All segments will flash, FUEL will display in the LCD, and the speedometer needle will blink. Refuel immediately.
8. **Check Engine Warning Indicator** - This indicator serves two purposes. The word HOT displays if the engine overheats. It also appears if an EFI-related fault occurs. Do not operate the vehicle if this warning appears. Serious engine damage could result.

Instrument Cluster

Rider Information Center

Standard Modes

Use the yellow mode switch located near the instrument gauge to toggle through the mode options. See page 36.

Odometer Mode

The odometer records the miles traveled by the vehicle.

Trip Meter Mode

The trip meter records the miles traveled by the vehicle on each trip if it's reset before each trip. To reset the trip meter, select the trip meter mode. Press and hold the mode switch until the total changes to 0.

Tip: In the Rider Information Center, the trip meter display contains a decimal point, but the odometer displays without a decimal point.

Hour Meter Mode

This mode logs the total hours the engine has been in operation.

Tachometer Mode

The engine RPM is displayed digitally.

Tip: Small fluctuations in the RPM from day to day may be normal because of changes in humidity, temperature and elevation.

FEATURES AND CONTROLS
Instrument Cluster
Rider Information Center
Diagnostic Mode

The wrench icon will display when the gauge is in the diagnostic mode. To exit the diagnostic mode, turn the key switch off and on. Any movement of the tires will also cause the gauge to exit the diagnostic mode.

To enter the diagnostics mode:

1. Turn the key switch off and wait 10 seconds.
2. Place the transmission in neutral.
3. Hold the mode switch and turn the key switch on. Release the switch as soon as the display is activated.
4. Use the mode switch to toggle through the diagnostic screens.

Battery Voltage Screen

View this screen to check battery voltage level.

Tachometer Screen

View the tachometer to check engine speed.

Instrument Cluster

Rider Information Center

Diagnostic Mode

AWD Diagnostic Screen

The gauge indicates whether or not current is flowing through the AWD coil (only on models with switchable AWD). This screen is for informational purposes only. Please see your dealer for all major repairs.

Gear Circuit Diagnostic Screen

This screen displays the resistance value (in ohms) being read at the gear switch input of the gauge. This screen is for informational purposes only. Please see your dealer for all major repairs.

Programmable Service Interval

When the hours of engine operation equal the programmed service interval setting, the wrench icon will flash for 5 seconds each time the engine is started. When this feature is enabled, it provides a convenient reminder to perform routine maintenance.

The service interval is programmed at 50 hours at the factory. To enable or disable the service interval:

1. Enter the diagnostic mode. Toggle to the service interval screen.
2. Press and hold the mode switch for about seven (7) seconds, until either ON or OFF appears in the Rider Information Center, depending on your preference.

To reset the service interval:

1. Enter the diagnostic mode. Toggle to the service interval screen.
2. Press and hold the mode switch for 2-3 seconds, until the wrench icon flashes. Release the switch.
3. Press and release the mode switch once to advance the setting by one hour. Press and *hold* the mode switch to advance the hours quickly.

Tip: If you scroll past the intended number, press and hold the switch until the hours cycle back to zero.

4. When the desired setting is displayed, wait until the wrench icon stops flashing. The new service interval is now programmed.

FEATURES AND CONTROLS

Instrument Cluster

Rider Information Center

Diagnostic Mode

Miles/Kilometers Toggle

The display in the tripmeter and odometer can be changed to display either standard or metric units of measurement.

1. Enter the diagnostic mode.
2. Toggle to the screen that displays either kilometers (KM) or miles (MP).
3. Press and hold the mode switch until the letters flash, then press and release the switch once. When the display stops flashing, the mode has been set.

Downloading Codes

The EFI diagnostic mode is for informational purposes only. Please see your Polaris dealer for all major repairs.

See page 47 for Blink Codes and Failure Descriptions. Use the following procedure to download blink codes (failure codes) from the EFI module.

1. Place the transmission in PARK.
2. Stop the engine.
3. Turn the key switch to the ON position.
4. Turn the key switch off and on three times in less than five seconds, then leave the switch on. Any blink code numbers stored in the EFI module will display, one at a time, on the screen. The number “61” and the word “END” displays after all codes have been transmitted.

Instrument Cluster

Rider Information Center

Downloading Codes

Blink Code	Failure Description
--	No RPM Signal
21	Loss of Synchronization
45	Barometric Pressure Sensor: Circuit Low Input
46	Barometric Pressure Sensor: Circuit High Input
22	TPS: Open or Short Circuit to Ground
22	TPS: Short Circuit to Battery
23	RAM Error: Defective ECU
42	Engine Temp Sensor Circuit: Short to Ground
42	Engine Temp Sensor Circuit: Open or Short to Battery
51	Injector 1: Open Load
51	Injector 1: Short Circuit to Ground
51	Injector 1: Short Circuit to Battery
52	Injector 2: Open Load
52	Injector 2: Short Circuit to Ground
52	Injector 2: Short Circuit to Battery
54	Engine Temp Lamp: Open Load
54	Engine Temp Lamp: Short Circuit to Ground
54	Engine Temp Lamp: Short Circuit to Battery
55	Diag Lamp: Open Load
55	Diag Lamp: Short Circuit to Ground
55	Diag Lamp: Short Circuit to Battery
56	Pump Relay: Open Load
56	Pump Relay: Short Circuit to Ground
56	Pump Relay: Short Circuit to Battery
58	Cooling Fan: Open Load
58	Cooling Fan: Short Circuit to Ground
58	Cooling Fan: Short Circuit to Battery
41	Intake Air Temp Sensor: Open or Short Circuit to +Sensor Voltage
41	Intake Air Temp Sensor: Short Circuit to Ground
61	END

OPERATION

⚠ WARNING

Failure to operate the vehicle properly can result in a collision, loss of control, accident or overturn, which may result in serious injury or death. Read and understand all safety warnings outlined in the safety section of this owner's manual.

Vehicle Break-in Period

The break-in period for your new Polaris vehicle is the first 25 hours of operation, or the time it takes to use the first two tanks full of gasoline. No single action on your part is as important as a proper break-in period. Careful treatment of a new engine and drive components will result in more efficient performance and longer life for these components. Perform the following procedures carefully.

NOTICE: Excessive heat build-up during the first three hours of operation will damage close-fitted engine parts and drive components. Do not operate at full throttle or high speeds during the first three hours of use.

Use of any oils other than those recommended by Polaris may cause serious engine damage. We recommend the use of Polaris Premium 4 Synthetic Oil for your 4-cycle engine.

Vehicle Break-in Period

Engine and Drivetrain Break-in

1. Fill the fuel tank with gasoline. See page 31. Always exercise extreme caution whenever handling gasoline.
2. Check the oil level. See page 75. Add the recommended oil as needed to maintain the oil level in the safe operating range.
3. Complete the New Operator Driving Procedures outlined on pages 54-55.
4. Avoid aggressive use of the brakes. See Brake System Break-in on page 49.
5. Vary throttle positions. Do not operate at sustained idle.
6. Perform regular checks on fluid levels, controls and areas outlined on the daily pre-ride inspection checklist. See page 50.
7. Pull only light loads.
8. During the break-in period, change both the oil and the filter at 25 hours or one month.

Brake System Break-in

Apply only moderate braking force for the first 50 stops. Aggressive or overly forceful braking when the brake system is new could damage brake pads and rotors.

PVT Break-in (Clutches/Belt)

A proper break-in of the clutches and drive belt will ensure a longer life and better performance. Break in the clutches and belt by operating at slower speeds during the break-in period as recommended. Pull only light loads. Avoid aggressive acceleration and high speed operation during the break-in period.

OPERATION
Pre-Ride Inspection

Failure to inspect and verify that the vehicle is in safe operating condition before operating increases the risk of an accident. Always inspect the vehicle before each use to make sure it's in safe operating condition.

Item	Remarks	Page
Brake system/pedal travel	Ensure proper operation	39 97
Brake fluid	Ensure proper level	98
Front suspension	Inspect, lubricate if necessary	72
Rear suspension	Inspect, lubricate if necessary	72
Steering	Ensure free operation	99
Tires	Inspect condition and pressure	21 103
Wheels/fasteners	Inspect, ensure fastener tightness	103
Frame nuts, bolts, fasteners	Inspect, ensure tightness	-
Fuel and oil	Ensure proper levels	42 75
Coolant level	Ensure proper level	89 90
Coolant hoses	Inspect for leaks	-
Throttle	Ensure proper operation	95
Indicator lights/switches	Ensure proper operation	37
Air filter, pre-filter	Inspect, clean	93
Headlamp	Check operation, apply Polaris dielectric grease when lamp is replaced	105
Brake light/tail lamp	Check operation, apply Polaris dielectric grease when lamp is replaced	107
Seat Latches	Push down on both seat backs to ensure the latches are secure	29
Seat Belts	Check length of belt for damage, check latches for proper operation	34
Cab Nets	Check for wear or damage, ensure proper installation	32

Safe Operation Practices

1. Complete the recommended safety training before operating this vehicle.
2. Do not allow anyone under 16 years of age or without a valid driver's license to operate this vehicle.
3. Never operate with a passenger under the age of 12. Never carry more than one passenger in this vehicle. Never allow a passenger to ride in the cargo box.
4. Engine exhaust fumes are poisonous. Never start the engine or let it run in an enclosed area.
5. Never operate with accessories not approved by Polaris for use on this vehicle.
6. Operate this vehicle off-road only. Never operate the vehicle on pavement or on any public street, road or highway, including dirt and gravel roads.
7. Drive in a manner appropriate for your skills and operating conditions. Never operate at excessive speeds. Never attempt wheelies, jumps, or other stunts. Keep both hands on the steering wheel during operation.
8. Never consume alcohol or drugs before or while operating this vehicle.
9. Always use the size and type of tires specified for your vehicle. Always maintain proper tire pressure.
10. Never operate a damaged vehicle. After any overturn or accident, have a qualified service dealer inspect the entire machine for possible damage.
11. Never operate the vehicle on a frozen body of water.
12. Do not touch hot exhaust system components. Always keep combustible materials away from the exhaust system.
13. Always remove the ignition key when the vehicle is not in use to prevent unauthorized use.

OPERATION

Starting the Engine

1. Position the vehicle on a level surface outdoors or in a well-ventilated area.
2. Sit in the driver's seat and fasten the seat belt. Secure the cab nets.
3. Place the transmission in PARK.
4. Apply the brakes. Do not press the throttle pedal while starting the engine.
5. Turn the ignition key past the ON/RUN position to START. Engage the starter for a maximum of five seconds. Release the key when the engine starts.
6. If the engine does not start within five seconds, return the ignition switch to the OFF position and wait five seconds. Repeat steps 5 and 6 until the engine starts.
7. Vary the engine RPM slightly with the throttle to aid in warm up until the engine idles smoothly.

NOTICE: Operating the vehicle immediately after starting could cause engine damage. Allow the engine to warm up for several minutes before operating the vehicle.

Stopping the Engine

1. Release the throttle pedal completely and brake to a complete stop.
2. Place the transmission in PARK.
3. Turn the engine off.

Braking

1. Release the throttle pedal completely. (When the throttle pedal is released completely and engine speed slows to near idle, the vehicle has no engine braking.)
2. Press on the brake pedal evenly and firmly. Practice starting and stopping (using the brakes) until you're familiar with the controls.

Parking the Vehicle

1. Stop the vehicle on a level surface. When parking inside a garage or other structure, be sure that the structure is well ventilated and that the vehicle is not close to any source of flame or sparks, including any appliance with pilot lights.
2. Place the transmission in PARK.
3. Turn the engine off.
4. Remove the ignition key to prevent unauthorized use.

Know Your Riding Area/Tread Lightly

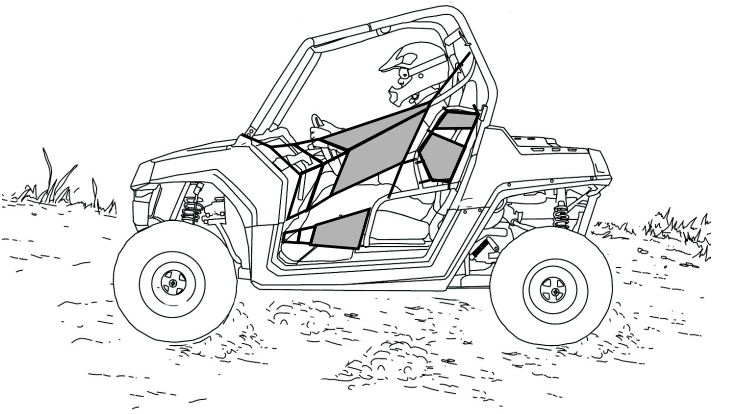
Familiarize yourself with all laws and regulations concerning the operation of this vehicle in your area. Respect the environment in which you ride your vehicle. Find out where the designated riding areas are by contacting your Polaris dealer, a local riding club, or local officials.

Help keep our trails open for recreational vehicle use. As an off-road enthusiast, you represent the sport and can set a good example (or a poor example) for others to follow. Tread lightly. Operate with respect for the terrain, avoid littering, and always stay on the designated trails.

Trail Etiquette

Always practice good etiquette when riding. Allow a safe distance between your vehicle and other vehicles operating in the same area. Communicate to oncoming operators by signaling the number of vehicles in your group. When stopping, move your vehicle to the edge of the trail as far as possible to allow others to pass safely.

OPERATION
New Operator Driving Procedures

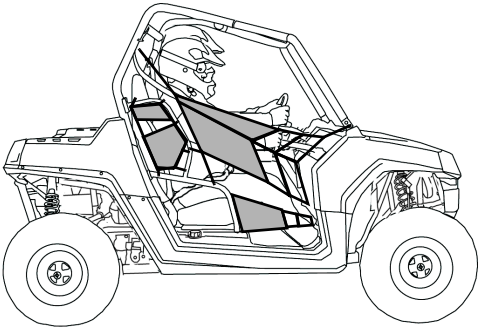


1. Read and understand the owner's manual and all warning and instruction labels before operating this vehicle.
2. Perform the pre-ride inspection. See page 50.
3. Wear an approved helmet that fits properly and eye protection (goggles or face shield).
4. Do not carry a passenger until you have at least two hours of driving experience with this vehicle.
5. Do not tow or carry cargo during this period.
6. Select an open area that allows room to familiarize yourself with vehicle operation and handling.
7. Sit in the driver's seat and fasten the seat belt.
8. Always use the cab nets and side guards while riding in this vehicle.
9. Place the transmission in PARK.
10. Start the engine.

New Operator Driving Procedures

11. Apply the brakes and shift into low gear.
12. Check your surroundings and determine your path of travel.
13. Keeping both hands on the steering wheel, slowly release the brakes and depress the throttle with your right foot to begin driving.
14. Drive slowly at first. On level surfaces, practice starting, stopping, turning, maneuvering, using the throttle and brakes and driving in reverse. Learn how the vehicle handles when making both left and right turns at a slow speed.
15. Check for upper cab net interference. See page 33.
16. Increase speed only after mastering all maneuvers at a slow speed.
17. After you become skilled at making turns and begin to operate at faster speeds, follow these precautions:
    - Avoid sharp turns.
    - Never turn while applying heavy throttle.
    - Never make abrupt steering maneuvers.
    - Operate at speeds appropriate for your skills, the conditions and the terrain.
    - DO NOT do power slides, “donuts”, jumps or other driving stunts.

OPERATION
Driving with a Passenger



1. Complete the New Operator Driving Procedures outlined on pages 54-55.
2. Perform the pre-ride inspection. See page 50.
3. Make sure the passenger is at least 12 years of age and is tall enough to comfortably and safely sit in the passenger seat with the seat belt secured, put both feet on the floor and grasp the hand holds.
4. Make sure the passenger is wearing appropriate riding gear, including an approved helmet and eye protection. See page 8.
5. Make sure the passenger secures the seat belt.
6. Make sure all cab nets and side guards are properly secured.
7. Allow a passenger to ride only in the passenger seat.
8. Do not carry more than one passenger. Additional passengers can affect the operator's ability to steer and operate the controls.
9. Slow down. Always travel at a speed appropriate for your skills, your passenger's skills, and operating conditions. Avoid unexpected or aggressive maneuvers that could cause discomfort or injury to a passenger.
10. Vehicle handling may change with a passenger and/or cargo on board. Allow more time and distance for braking.
11. Always follow all operating guidelines as outlined on safety labels and in this manual.

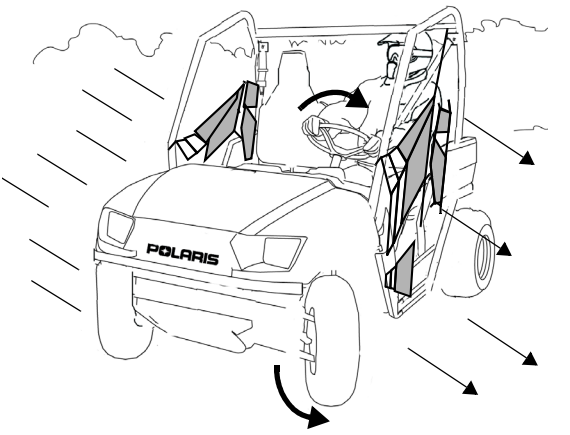
Driving on Slippery Surfaces

⚠ WARNING

Skidding or sliding can cause loss of control or overturn (if tires regain traction unexpectedly). When operating on slippery surfaces such as ice or loose gravel, reduce speed and use extra caution to reduce the chance of skidding or sliding out of control. Do not operate on excessively slippery surfaces.

When driving on slippery surfaces such as wet trails, loose gravel, or ice, be alert for the possibility of skidding and sliding.

Follow these precautions when encountering slippery conditions:



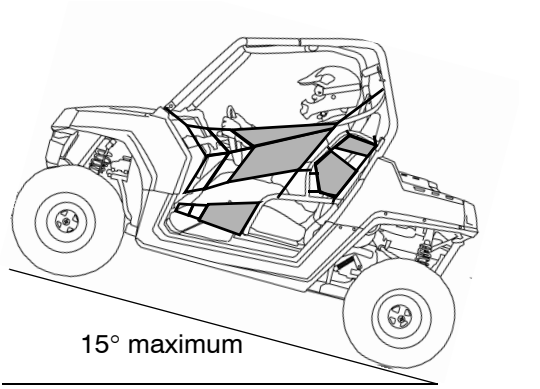
1. Slow down before entering slippery areas.
2. Maintain a high level of alertness, reading the trail and avoiding quick, sharp turns, which can cause skids.
3. Engage all-wheel drive before wheels begin to lose traction.

NOTICE: Severe damage to the drive train may occur if the AWD is engaged while the wheels are spinning. Always allow the wheels to stop spinning before engaging AWD.

4. Correct a skid by turning the steering wheel in the direction of the skid. *Never apply the brakes during a skid.*

OPERATION
Driving Uphill

Whenever traveling uphill, follow these precautions:



1. Always check the terrain carefully before ascending a hill.
2. Avoid steep hills (15° maximum). If ascending a steeper grade is unavoidable, engage all-wheel drive before ascending.
3. Drive straight uphill.
4. Never climb hills with excessively slippery or loose surfaces.
5. Proceed at a steady rate of speed and throttle opening. Never open the throttle suddenly.
6. Avoid unnecessary changes in speed or direction.
7. Never go over the crest of a hill at high speed. An obstacle, a sharp drop, or another vehicle or person could be on the other side of the hill.
8. If the vehicle stalls while climbing a hill, apply the brakes. Place the transmission in reverse and slowly allow the vehicle to roll straight downhill while applying light brake pressure to control speed.

Driving on a Sidehill (Sidehilling)

Driving on a sidehill is not recommended. Improper procedure could cause loss of control or overturn. Avoid crossing the side of any hill unless absolutely necessary.

If crossing a hill is *unavoidable*, follow these precautions:

1. Engage all-wheel drive.
2. Drive slowly and use extreme caution.
3. If the vehicle begins to overturn, or if it feels as if it may overturn, *immediately* turn downhill.
4. Avoid obstacles and changes in terrain that may lower or raise one side of the vehicle or cause the vehicle to slide.
5. If the vehicle begins to slide downhill, immediately turn downhill to stop the slide, or stop the vehicle and maneuver slowly and carefully until the vehicle can be driven straight downhill.

Driving Downhill

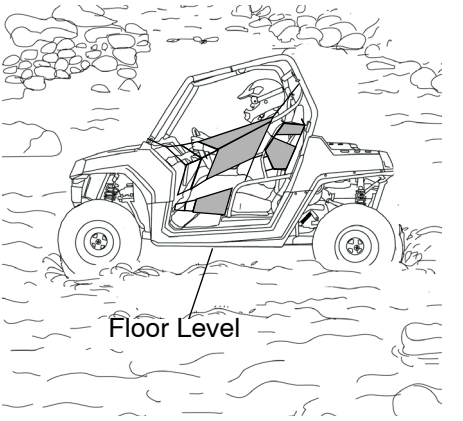
Whenever descending a hill, follow these precautions:

1. Avoid steep hills (15° maximum).
2. Slow down. Never travel down a hill at high speed.
3. Always check the terrain carefully before descending a hill.
4. Always descend a hill with the transmission in forward gear. *Never descend a hill with the transmission in neutral*.
5. Avoid traveling down a hill at an angle, which would cause the vehicle to lean sharply to one side. Travel straight downhill.
6. Apply the brakes *lightly* to aid in slowing.

OPERATION
Driving Through Water

Your vehicle can operate through water with a maximum recommended depth equal to floor level. Follow these precautions when operating through water:

1. Determine water depth and current before entering water.
2. Choose a crossing where the water level is lowest and where both banks have gradual inclines. Never operate in water that exceeds the maximum recommended depth.



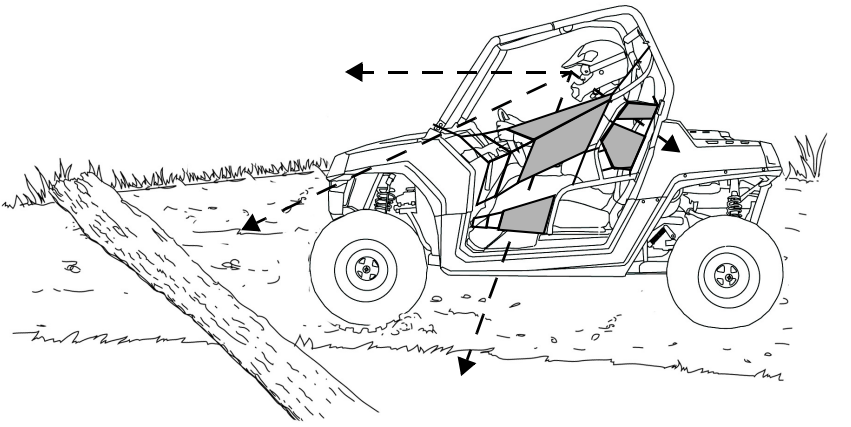
WARNING! The large tires on your vehicle may cause the vehicle to float in deep or fast-flowing water, which could result in loss of traction, loss of control, overturn or accident.

3. Wet brakes may have reduced stopping ability. After leaving water, test the brakes. Apply them lightly several times while driving slowly. The friction will help dry out the pads.

NOTICE: Major engine damage can result if the vehicle is not thoroughly inspected after operation in water. Perform the services outlined in the maintenance chart. See page 67. Give special attention to engine oil, transmission oil, demand drive fluid, rear gearcase oil, and all grease fittings.

If your vehicle becomes immersed or is operated in water that exceeds the floor level, take it to your dealer for service *before starting the engine.* If it's impossible to bring the vehicle to your dealer before starting the engine, perform the service outlined on page 107, and take the vehicle to your dealer at the first opportunity.

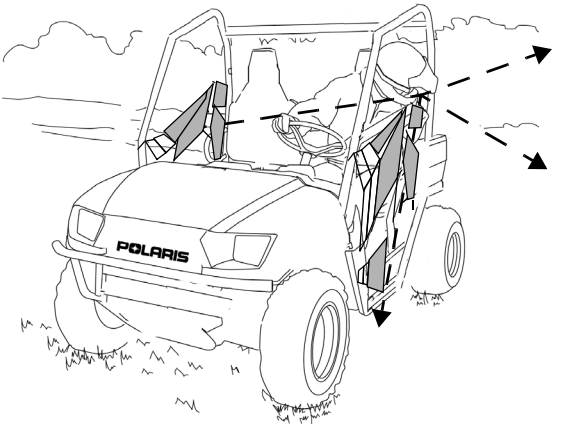
Driving Over Obstacles



Follow these precautions when operating over obstacles:

1. Always check for obstacles before operating in a new area.
2. Look ahead and learn to read the terrain. Be constantly alert for hazards such as logs, rocks and low hanging branches.
3. Travel slowly and use extra caution when operating on unfamiliar terrain. Not all obstacles are immediately visible.
4. Avoid operating over large obstacles such as rocks and fallen trees. If unavoidable, use extreme caution and operate slowly.
5. Always have a passenger dismount and move away from the vehicle before operating over an obstacle that could cause an overturn.

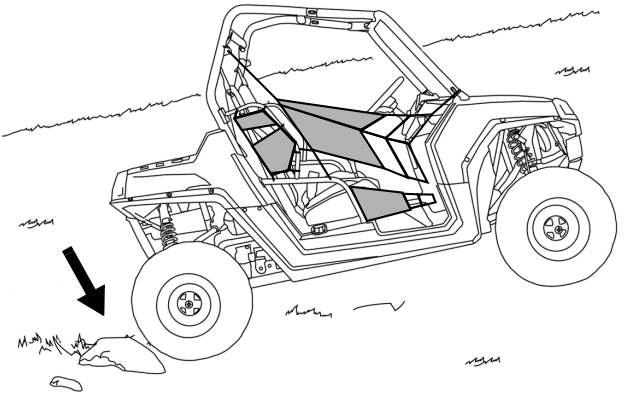
OPERATION
Driving in Reverse



Follow these precautions when operating in reverse:

1. Always check for obstacles or people behind the vehicle.
2. Apply the throttle *lightly*. Never open the throttle suddenly.
3. Back slowly.
4. Apply the brakes *lightly* for stopping.
5. Avoid making sharp turns.

Parking on an Incline



A rolling vehicle can result in serious injury. Avoid parking on an incline. If parking on an incline is *unavoidable*, follow these precautions:

1. Place the transmission in PARK.
2. Turn the engine off.
3. Block the rear wheels on the downhill side, or park the vehicle in a sidehill position instead.

OPERATION
Hauling Cargo

⚠ WARNING

Overloading the vehicle or carrying or towing cargo improperly can alter vehicle handling and may cause loss of control or brake instability. Always follow these precautions when hauling cargo:

Never exceed the stated load capacity for this vehicle.

REDUCE SPEED AND ALLOW GREATER DISTANCES FOR BRAKING WHEN HAULING CARGO.

NEVER EXCEED THE MAXIMUM WEIGHT CAPACITY of the vehicle. When determining the weight you are adding to the vehicle, include the weight of the operator, passenger, accessories, loads in the rack or box and the load on the trailer tongue. The combined weight of these items must not exceed the maximum weight capacity.

Always load the cargo box with the load as far forward and as low as possible.

When operating over rough or hilly terrain, reduce speed and cargo to maintain stable driving conditions.

Always operate the vehicle with extreme care when hauling or towing loads. Slow down and drive in the lowest gear available.

SECURE ALL LOADS BEFORE OPERATING. Unsecured loads can create unstable operating conditions, which could result in loss of control of the vehicle.

OPERATE ONLY WITH STABLE AND SAFELY ARRANGED LOADS. When handling off-centered loads that cannot be centered, securely fasten the load and operate with extra caution. Always attach the tow load to the hitch point designated for your vehicle.

HEAVY LOADS CAN CAUSE BRAKING AND CONTROL PROBLEMS. Use extreme caution when applying brakes with a loaded vehicle. Avoid terrain or situations that may require backing downhill.

USE EXTREME CAUTION when operating with loads that extend over the rack sides. Stability and maneuverability may be adversely affected, causing the vehicle to overturn.

DO NOT TRAVEL FASTER THAN THE RECOMMENDED SPEEDS. 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 a passenger in the cargo box could result in a fall from the vehicle or contact with moving components. Never allow a passenger to ride in the cargo box. A passenger must always be seated in the passenger seat with seat belt secured.



Hauling Cargo

Your Polaris vehicle has been designed to carry or tow specific capacities. Reduce speed and allow a greater distance for braking when carrying cargo.

Loads should be centered and carried as low as possible in the box. For stability on rough or hilly terrain, reduce both speed and cargo. Exercise caution if the cargo load extends over the side of the box.

Always read and understand the load distribution warnings listed on warning labels and in this manual. Never exceed the maximum capacities specified for your vehicle. See page 120.

Belt Life

To extend belt life, use low gear when hauling or towing heavy cargo.

Towing Loads

⚠ WARNING

Towing improperly can alter vehicle handling and may cause loss of control or brake instability.

Always follow these precautions when towing:

1. Never load more than 150 lbs. (68.1 kg) tongue weight on the towing bracket.
2. Do not operate the vehicle faster than 10 mph (16 km/h) when towing. Towing a trailer increases braking distance.
3. Do not tow more than the recommended weight for the vehicle.
4. Attach a trailer to the trailer hitch bracket only. Do not attach a trailer to any other location, which could result in loss of control of the vehicle.
5. The total load (operator, passenger, accessories, cargo and weight on hitch) must not exceed the maximum weight capacity of the vehicle.

Total Towed Load Weight (Level Ground)	Total Towed Load Weight (15° grade)	Total Hitch Vertical Weight	Maximum Towing Speed
1500 lbs. (681 kg)	850 lbs. (386 kg)	150 lbs. (68.1 kg)	10 mph (16 kph)

EMISSION CONTROL SYSTEMS

Noise Emission Control System

Do not modify the engine, intake or exhaust components, as doing so may affect compliance with U.S.A. EPA noise control requirements (40 CFR 205) and local noise level requirements.

Operation on Public Lands in the U.S.A.

Your Polaris vehicle has a spark arrestor that was tested and qualified to be in accordance with the USFS standard 5100-1C. Federal law requires that this spark arrestor be installed and functional when the vehicle is operated on public lands.

Operation of off-road vehicles on public lands in the U.S.A. is regulated by 43 CFR 420. Violations are subject to monetary penalties. Federal regulations can be viewed online at www.gpoaccess.gov/ecfr/.

Crankcase Emission Control System

This engine is equipped with a closed crankcase system. Blow-by gases are forced back to the combustion chamber by the intake system. All exhaust gases exit through the exhaust system.

Exhaust Emission Control System

Exhaust emissions are controlled by engine design. An electronic fuel injection (EFI) system controls fuel delivery. The engine and EFI components are set at the factory for optimal performance and are not adjustable.

The emissions label is located on the lower frame behind the driver's seat.

Electromagnetic Interference

This spark ignition system complies with Canadian ICES-002.

This vehicle complies with the EMC requirements of European directives 97/24/EC and 2004/108/EC.

Periodic Maintenance Chart

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

Inspect, clean, lubricate, adjust and replace parts as necessary. When inspection reveals the need for replacement parts, use genuine Polaris parts available from your Polaris dealer.

Record maintenance and service in the Maintenance Log beginning on page 135.

Service and adjustments are important for proper vehicle operation. If you're not familiar with safe service and adjustment procedures, have a qualified dealer perform these operations.

Maintenance intervals in the following chart are based upon average riding conditions and an average vehicle speed of approximately ten (10) miles per hour. Vehicles subjected to severe use must be inspected and serviced more frequently.

Severe Use Definition

- Frequent immersion in mud, water or sand
- Racing or race-style high RPM use
- Prolonged low speed, heavy load operation
- Extended idle
- Short trip cold weather operation

Pay special attention to the oil level. A rise in oil level during cold weather can indicate contaminants collecting in the oil sump or crankcase. Change oil immediately if the oil level begins to rise. Monitor the oil level, and if it continues to rise, discontinue use and determine the cause or see your dealer.

MAINTENANCE
Periodic Maintenance Chart
Maintenance Chart Key

▶ Perform these operations more often for vehicles subjected to severe use.

E Emission-related service (Failure to conduct this maintenance will not void the emissions warranty but may affect emissions.)

■ Have an authorized Polaris dealer perform these services.

WARNING! Improperly performing the procedures marked with a ■ could result in component failure and lead to serious injury or death. Have an authorized Polaris dealer perform these services.

Periodic Maintenance Chart

Perform all services at whichever maintenance interval is reached first.

	Item	Maintenance Interval (whichever comes first)			Remarks
		Hours	Calendar	Miles (Km)	
■	Steering	-	Pre-Ride	-	Make adjustments as need ed. See Pre-Ride Checklist on page 50.
▶	Front suspension	-	Pre-Ride	-	
▶	Rear suspension	-	Pre-Ride	-	
	Tires	-	Pre-Ride	-	
▶	Brake fluid level	-	Pre-Ride	-	
▶	Brake pedal travel				
	Brake system	-	Pre-Ride	-	
	Wheels/fasteners	-	Pre-Ride	-	
	Frame fasteners	-	Pre-Ride	-	
▶	Engine oil level	-	Pre-Ride	-	
▶ E	Air filter, pre-filter	-	Daily	-	Inspect; clean often; replace as needed
	Coolant (if applicable)	-	Daily	-	Check level daily, change coolant every 2 years
	Headlamp/tail lamp	-	Daily	-	Check operation; apply dielectric grease if replacing
▶ E	Air filter, main element	-	Weekly	-	Inspect; replace as needed
▶ ■	Brake pad wear	10 H	Monthly	100 (160)	Inspect periodically
	Battery	25 H	Monthly	250 (400)	Check terminals; clean; test
▶	Demand drive fluid	25 H	Monthly	250 (400)	Inspect level; change yearly
▶	Rear gearcase oil	25 H	Monthly	250 (400)	Inspect level; change yearly
▶	Main gearcase oil	25 H	Monthly	250 (400)	Inspect level; change yearly
▶	Transfer case oil	25 H	Monthly	250 (400)	Inspect level; change yearly

▶ Perform these procedures more often for vehicles subjected to severe use.
E Emission-Related Service
■ Have an authorized Polaris dealer perform these services.

MAINTENANCE
Periodic Maintenance Chart

Item		Maintenance Interval (whichever comes first)			Remarks
		Hours	Calendar	Miles (Km)	
▶ E	Engine breather filter (if equipped)	25 H	Monthly	150 (250)	Inspect; replace if necessary
▶	Engine oil change (break-in)	25 H	1 M	-	Perform a break-in oil and filter change at one month
■ E	Throttle cable/ ETC switch	50 H	6 M	300 (500)	Inspect; adjust; lubricate; replace if necessary
E	Throttle body air intake ducts/flange	50 H	6 M	300 (500)	Inspect duct for proper sealing/air leaks
▶	General lubrication	50 H	3 M	500 (800)	Lubricate all fittings, pivots, cables, etc.
	Shift Linkage	50 H	6 M	500 (800)	Inspect, lubricate, adjust
■	Steering	50 H	6 M	500 (800)	Lubricate
▶	Front Suspension	50 H	6 M	500 (800)	Lubricate
▶	Rear Suspension	50 H	6 M	500 (800)	Lubricate
	Cooling system (if applicable)	50 H	6 M	500 (800)	Inspect coolant strength seasonally; pressure test system yearly
■ E	Fuel system	100 H	12 M	600 (1000)	Check for leaks at tank cap, lines, filter, pump, throttle body; replace lines every two years
▶ E	Spark plug	100 H	12M	600 (1000)	Inspect; replace as needed
▶	Engine oil change	100 H	6 M	1000 (1600)	Perform a break-in oil change at one month
▶	Oil filter change	100 H	6 M	1000 (1600)	Replace with oil change

▶ Perform these procedures more often for vehicles subjected to severe use.
E Emission-Related Service
■ Have an authorized Polaris dealer perform these services.

Periodic Maintenance Chart

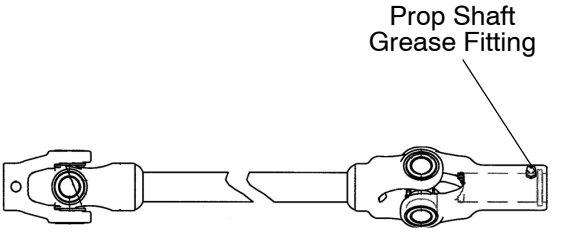
	Item	Maintenance Interval (whichever comes first)			Remarks
		Hours	Calendar	Miles (Km)	
▶	Radiator (if equipped)	100 H	12 M	1000 (1600)	Inspect; clean external surfaces
▶	Cooling Hoses	100 H	12 M	1000 (1600)	Inspect for leaks
▶	Engine mounts	100 H	12 M	1000 (1600)	Inspect
	Exhaust muffler/ pipe	100 H	12 M	1000 (1600)	Inspect
■	Ignition timing	100 H	12 M	1000 (1600)	Inspect
▶	Wiring	100 H	12 M	1000 (1600)	Inspect for wear, routing, security; apply dielectric grease to connectors subjected to water, mud, etc.
■	Clutches (drive and driven)	100 H	12 M	1000 (1600)	Inspect; clean; replace worn parts
	Drive belt	100 H	12 M	1000 (1600)	Inspect; replace as needed
■	Front wheel bearings	100 H	12 M	1000 (1600)	Inspect; replace as needed
■	Brake fluid	200 H	24 M	2000 (3200)	Change every two years
	Spark arrestor	300 H	36 M	3000 (4800)	Clean out
	Idle speed	-			Adjust as needed
■	Toe adjustment	-			Inspect periodically; adjust when parts are replaced
	Headlight aim	-			Adjust as needed

▶ Perform these procedures more often for vehicles subjected to severe use.
E Emission-Related Service
■ Have an authorized Polaris dealer perform these services

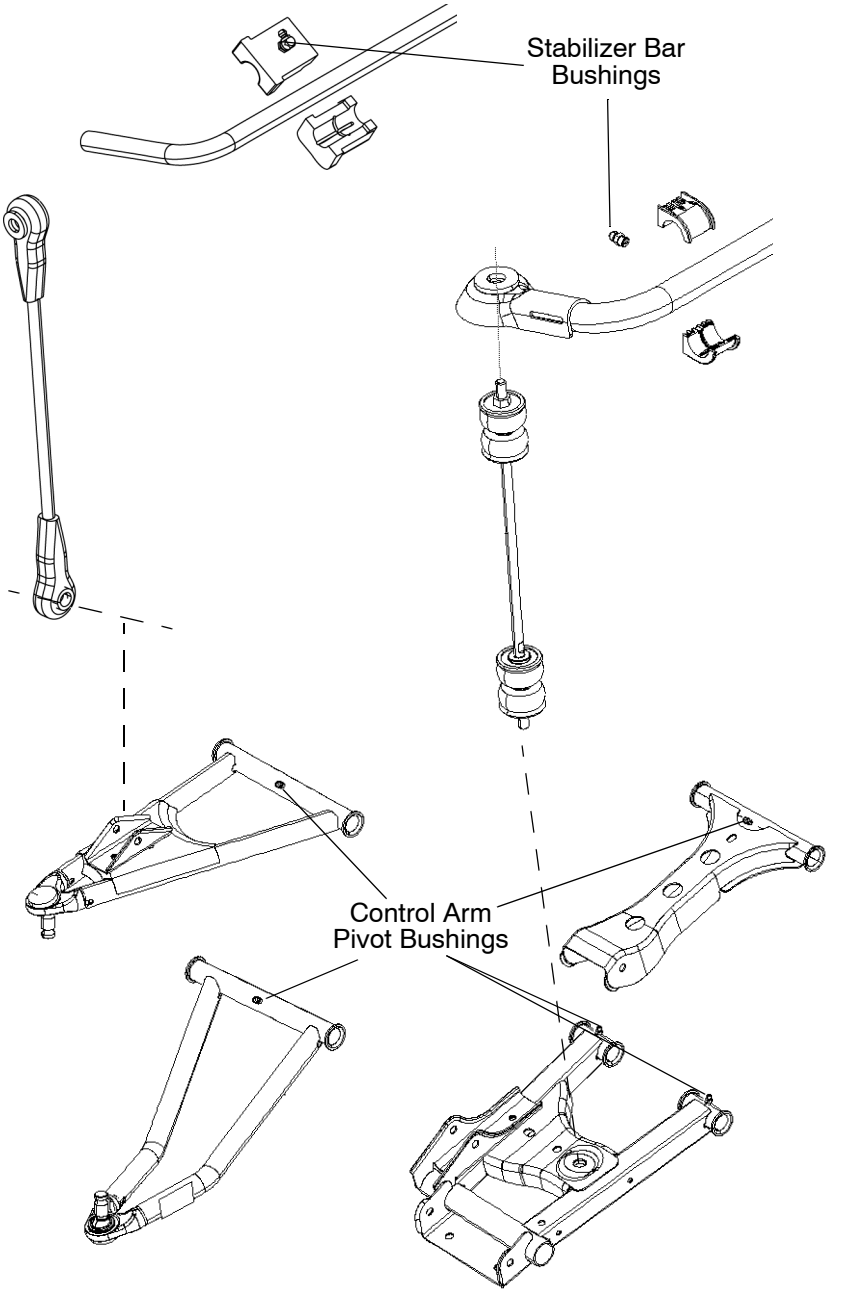
MAINTENANCE
Lubrication Recommendations

Check and lubricate all components at the intervals outlined in the Periodic Maintenance Chart beginning on page 67, or more often under severe use, such as wet or dusty conditions. Items not listed in the chart should be lubricated at the general lubrication interval.

Item	Lube	Method
Engine Oil	Polaris Premium 4 Synthetic 0W40	Add to proper level on dipstick. See page 75.
Brake Fluid	DOT 4	Maintain level between fill lines. See page 98.
Transmission Oil (Main Gearcase)	Premium AGL Synthetic Gearcase Lube	See page 80.
Transmission Oil (Transfer Case)	Premium AGL Synthetic Gearcase Lube	See page 78.
Demand Drive Fluid (Front Gearcase)	Demand Drive LT Premium Fluid	See page 82.
Rear Gearcase Oil	Premium ATV Angle Drive Fluid	See page 83.
Prop Shaft	Polaris Premium U-Joint Lube	Locate fittings and grease.
Control Arm Pivot Bushings, Front/Rear	Polaris Premium all Season Grease or grease conforming to NLGI No. 2	Locate fittings and grease.
Stabilizer Bar Bushings, Front/Rear	Polaris Premium all Season Grease or grease conforming to NLGI No. 2	Locate fittings and grease.



Lubrication Recommendations



MAINTENANCE
Engine Oil

Always check and change the engine oil at the intervals outlined in the Periodic Maintenance Chart beginning on page 67. Always change the oil filter whenever changing oil.

WARNING! Vehicle operation with insufficient, deteriorated, or contaminated engine oil will cause accelerated wear and may result in engine seizure, accident, and injury. Always perform the maintenance procedures as outlined in the Periodic Maintenance Chart.

Premium 4 Synthetic Oil

Polaris Premium 4 All Season Synthetic engine oil has been specially formulated for use in Polaris 4-cycle engines. It's a fully synthetic, high performance, multi-viscosity oil designed to provide the ultimate in lubrication performance and protection. See page 122 for the part numbers of Polaris products.

Premium 4 possesses unsurpassed film strength over the widest possible temperature range. It resists viscosity and frictional breakdown in ambient temperatures from -40° to +120° F. (-40° to +49° C.). Its exceptional frictional properties result in more efficient operation, more power output and lower fuel consumption.

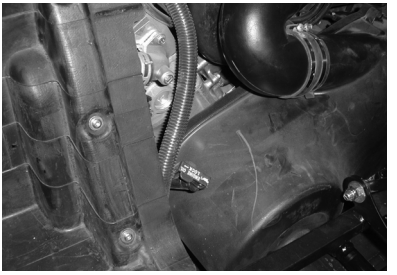
Although Polaris Premium 4 is the only oil recommended for use in this engine, use of any API certified "SH" oil is allowable as long as it's 0W-40. Oil may need to be changed more frequently if Polaris Premium 4 is not used. Follow the manufacturer's recommendations for ambient temperature operation.

NOTICE: Mixing brands or using a non-recommended oil may cause serious engine damage. We recommend the use of Polaris Premium 4 All Season synthetic oil or API certified "SH" oil, 0W-40. Never substitute or mix oil brands. Use only 0W-40.

Engine Oil

Always check and change the oil at the intervals outlined in the Periodic Maintenance Chart beginning on page 67. Always use the recommended engine oil.

Oil Check

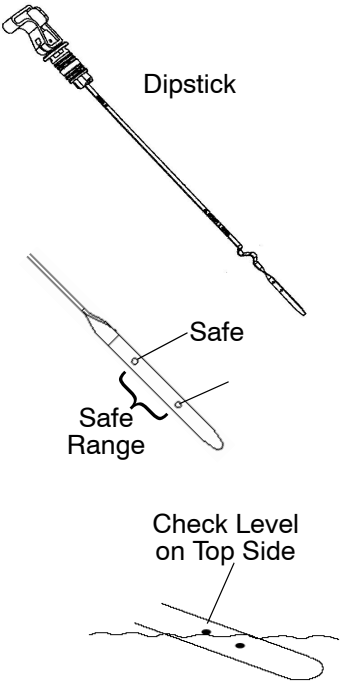


The oil dipstick and fill tube is located on the engine, behind the passenger seat.

1. Position the vehicle on a level surface.
2. Place the transmission in PARK.
3. Remove both seats. Remove the rear service panel. See page 29.
4. Lift the lever lock to remove the dipstick. Wipe it dry with a clean cloth.
5. Reinstall the dipstick completely, but do not lock it. The dipstick must be inserted completely in to keep the angle and depth of the stick consistent.
6. Remove the dipstick and check the oil level. Maintain the oil level in the safe range. Do not overfill.

Tip: Due to the dipstick entry angle into the crankcase, the oil level will read higher on the bottom side of the dipstick. Always read the level on the upper surface of the dipstick.

7. Reinstall the dipstick. Seat the lever lock.

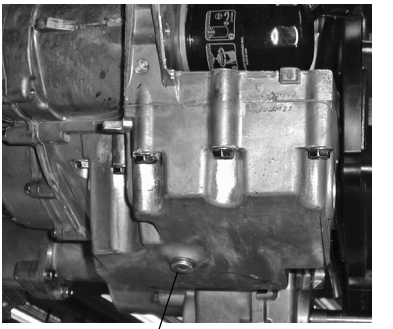


MAINTENANCE
Engine Oil
Oil and Filter Change

Always change the oil and filter at the intervals outlined in the Periodic Maintenance Chart beginning on page 67. Always change the oil filter whenever changing oil.

The engine drain plug is located on the bottom of the crankcase.

1. Position the vehicle on a level surface. Place the transmission in PARK. Apply the brakes.
2. Start the engine. Allow it to idle for two to three minutes. Stop the engine.
3. Clean the area around the drain plug.



CAUTION! Hot oil can cause burns to skin. Do not allow hot oil to contact skin.

4. Place a drain pan beneath engine crankcase and remove the drain plug.
5. Allow the oil to drain completely.
6. Reinstall the sealing washer on the drain plug.

Tip: The sealing surfaces on drain plug and crankcase should be clean and free of burrs, nicks or scratches.

7. Reinstall the drain plug. Torque to 16 ft. lbs. (22 Nm).

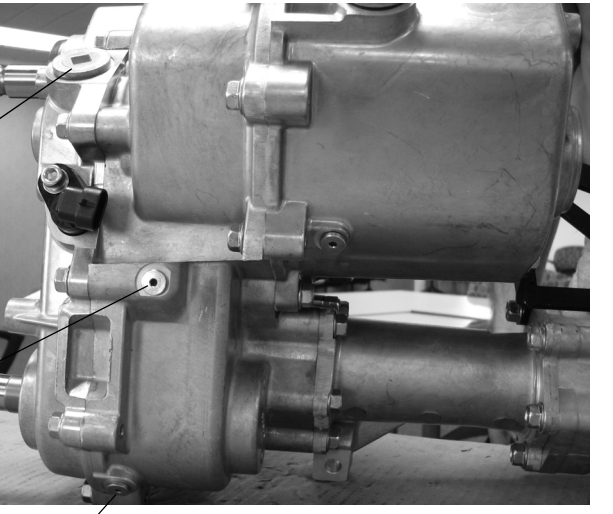
Engine Oil

Oil and Filter Change

8. Using a cap-style oil filter wrench, turn the filter counter-clockwise to remove it.
9. Using a clean dry cloth, clean the filter sealing surface on the crankcase.
10. Lubricate the o-ring on the new filter with a film of fresh engine oil. Check to make sure the o-ring is in good condition.
11. Install the new filter and turn by hand until the filter gasket contacts the sealing surface, then turn and additional 1/2 turn.
12. Remove the dipstick and fill the sump with two quarts (1.9 l) of recommended oil.
13. Place the transmission in PARK. Apply the brakes.
14. Start the engine. Allow it to idle for one to two minutes.
15. Stop the engine. Inspect for leaks.
16. Re-check the oil level on the dipstick and add oil as necessary to bring the level to the upper mark on the dipstick.
17. Dispose of used filter and oil properly.

MAINTENANCE
Gearcases
Transfer Case

Always check and change the fluid at the intervals outlined in the Periodic Maintenance Chart beginning on page 67. Refer to the Gearcase Specifications Chart on page 84 for recommended lubricants, capacities and torque specifications.



Fluid Check

The fill plug and level check plug are located on the left side of the transfer case. The fluid level is sufficient when fluid flows out of the check plug hole at step 4.

1. Position the vehicle on a level surface.
2. Remove the fill plug.
3. Remove the level check plug.
4. Add the recommended fluid to the fill plug hole until it begins to flow out of the check plug hole.
5. Reinstall the level check plug. Torque to specification.
6. Reinstall the fill plug. Torque to specification.

Gearcases

Transfer Case

Fluid Change

The drain plug is located on the bottom of the transfer case. Access the drain plug through the drain hole in the skid plate.

1. Remove the fill plug.
2. Place a drain pan under the drain plug.
3. Remove the drain plug. Allow the fluid to drain completely.
4. Clean the drain plug.
5. Reinstall the drain plug with a new o-ring. Torque to specification.
6. Remove the level check plug.
7. Add the recommended fluid to the fill plug hole until it begins to flow out of the check plug hole.
8. Reinstall the level check plug. Torque to specification.
9. Reinstall the fill plug. Torque to specification.
10. Check for leaks. Discard used fluid properly.

MAINTENANCE

Gearcases

Transmission (Main Gearcase)

Always check and change the fluid at the intervals outlined in the Periodic Maintenance Chart beginning on page 67. Refer to the Gearcase Specifications Chart on page 84 for recommended lubricants, capacities and torque specifications.

Fluid Check

The fill plug is located on the left side of the gearcase. Maintain the fluid level at the bottom of the fill plug hole.

1. Position the vehicle on a level surface.
2. Remove the fill plug.
3. Check the fluid level.
4. Add the recommended fluid as needed.
5. Reinstall the fill plug. Torque to specification.



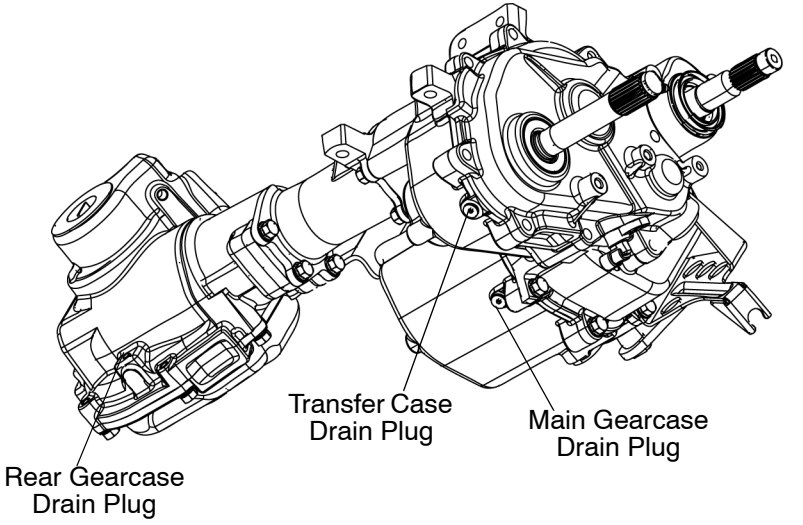
Gearcases

Transmission (Main Gearcase)

Fluid Change

The drain plug is located on the bottom of the gearcase. Access the drain plug through the drain hole in the skid plate.

1. Remove the fill plug.
2. Place a drain pan under the drain plug.
3. Remove the drain plug. Allow the fluid to drain completely.
4. Clean the drain plug.
5. Reinstall the drain plug with a new o-ring. Torque to specification.
6. Add the recommended fluid to the fill hole. Maintain the fluid level at the bottom of the fill plug hole. Do not overfill.
7. Reinstall the fill plug. Torque to specification.
8. Check for leaks. Discard used fluid properly.



MAINTENANCE

Gearcases

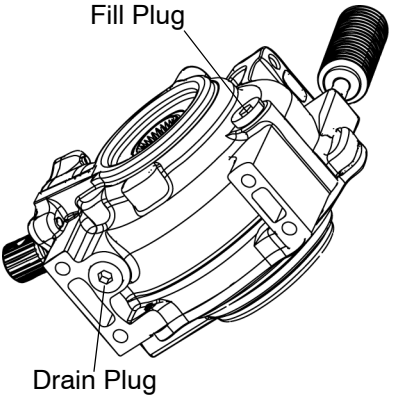
Demand Drive Unit (Front Gearcase)

Always check and change the fluid at the intervals outlined in the Periodic Maintenance Chart beginning on page 67. Refer to the Gearcase Specifications Chart on page 84 for recommended lubricants, capacities and torque specifications.

Fluid Check

The fill plug is located on the bottom right side of the demand drive unit. Maintain the fluid level even with the bottom thread of the fill plug hole.

1. Position the vehicle on a level surface.
2. Remove the fill plug. Check the fluid level.
3. Add the recommended fluid as needed.
4. Reinstall the fill plug. Torque to specification.



Fluid Change

The drain plug is located on the bottom of the gearcase.

1. Remove the fill plug.
2. Place a drain pan under the drain plug.
3. Remove the drain plug. Allow the fluid to drain completely.
4. Clean the drain plug. If the o-ring is damaged, install a new o-ring.
5. Reinstall the drain plug. Torque to specification.
6. Add the recommended fluid. Maintain the fluid level even with the bottom thread of the fill plug hole.
7. Reinstall the fill plug. Torque to specification.
8. Check for leaks. Discard used fluid properly.

Gearcases

Rear Gearcase

Always check and change the fluid at the intervals outlined in the Periodic Maintenance Chart beginning on page 67. Refer to the Gearcase Specifications Chart on page 84 for recommended lubricants, capacities and torque specifications.

Fluid Check

The fill plug is located on the right side of the rear gearcase. Maintain the fluid level even with the bottom thread of the fill plug hole.

1. Position the vehicle on a level surface.
2. Remove the fill plug. Check the fluid level.
3. Add the recommended fluid as needed.
4. Reinstall the fill plug. Torque to specification.



Fluid Change

The drain plug is located on the bottom right side of the rear gearcase.

1. Remove the fill plug.
2. Place a drain pan under the drain plug. Remove the drain plug.
3. Allow the fluid to drain completely.
4. Clean the drain plug. Reinstall the drain plug with a new o-ring. Torque to specification.
5. Add the recommended fluid. Maintain the fluid level even with the bottom thread of the fill plug hole.
6. Reinstall the fill plug. Torque to specification.
7. Check for leaks. Discard used fluid properly.

MAINTENANCE
Gearcases
Gearcase Specification Chart

Use of other fluids may result in improper operation of components. See page 122 for the part numbers of Polaris products.

Gearcase	Lubricant	Capacity	Fill Plug Torque	Drain Plug/ Level Check Plug Torque
Transmission (Main Gearcase)	Premium AGL Synthetic Gearcase Fluid	24 oz. (710 ml)	40-50 ft. lbs. (54-68 Nm)	30-45 in. lbs. (3-5 Nm)
Transmission (Transfer Case)	Premium AGL Synthetic Gearcase Fluid	14 oz. (414 ml)	40-50 ft. lbs. (54-68 Nm)	30-45 in. lbs. (3-5 Nm)
Demand Drive Unit (Front Gearcase)	Demand Drive LT Premium Fluid	6.75 oz. (200 ml)	8-10 ft. lbs. (11-13.6 Nm)	11 ft. lbs. (15 Nm)
Rear Gearcase	Premium ATV Angle Drive Fluid	26 oz. (769 ml)	40-50 ft. lbs. (54-68 Nm)	30-45 in. lbs. (3-5 Nm)

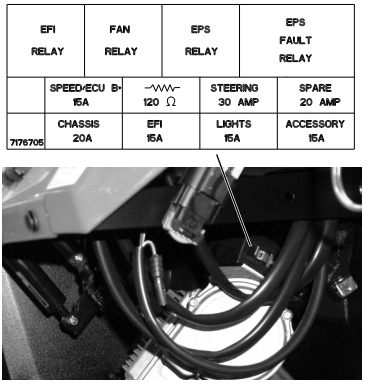
Fuses

If the engine stops or will not start, if the power steering stops working (if equipped), or if you experience other electrical failures, a fuse may need replacement. Locate and correct any short circuits that may have caused the blown fuse, then replace the fuse.

The fuse box is located above the power steering unit. One spare 20 amp fuse is provided in the fuse box.

1. Remove the fuse box cover.
2. Remove the suspect fuse from the fuse panel. If the fuse is blown, install a new fuse with the same amperage rating.
3. Reinstall the fuse box cover.

Tip: The 120 ohm resistor (if equipped) is used by your Polaris dealer for power steering diagnostics.



Fuse	Feature Supported
15A	Accessories, 12V Power Receptacle
15A	Electronic Fuel Injection
15A	Engine Control Module
15A	Lights
20A	Main Fuse - Ignition, Instrument Cluster
30A	Power Steering (if equipped)

Spark Plugs

Spark Plug Gap/Torque

Electrode Gap	New Plug Torque	Used Plug Torque
.035" (.9 mm)	18 ft. lbs. (24 Nm)	18 ft. lbs. (24 Nm)

NOTICE: Using non-recommended spark plugs can result in serious engine damage. Always use Polaris-recommended spark plugs. Refer to the specifications section beginning on page 120.

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. See page 86.

CAUTION! A hot exhaust system and engine can cause burns. Wear protective gloves when removing a spark plug for inspection.

MAINTENANCE

Spark Plugs

Spark Plug Condition

Normal Plug

The normal 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.

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

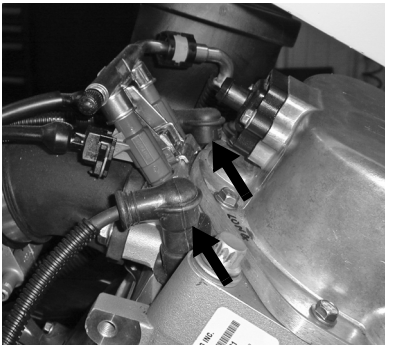
Wet Fouled Plug

The wet fouled 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 of fouling are excessive oil, use of non-recommended injection oil or incorrect throttle body adjustments.

Spark Plug Removal and Replacement

1. Remove both seats.
2. Remove the rear service panel. See page 29.
3. Remove the spark plug cap.
4. Using the spark plug wrench provided in the tool kit, remove the plug by rotating it counter-clockwise.
5. Reverse the procedure for spark plug installation. Torque to specification. See page 85.

Spark Plugs



Cooling System

Operation

The engine coolant level is controlled or maintained by the recovery system. The recovery system components are the overflow 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 radiator, past the pressure cap, and into the overflow bottle. As engine coolant temperature decreases, the contracting (cooled) coolant is drawn back up from the tank, past the pressure cap, and into the radiator.

Tip: Some coolant level drop on new vehicles is normal as the system is purging itself of trapped air. Observe coolant levels and maintain as recommended by adding coolant to the overflow bottle.

Adding or Changing Coolant

To ensure that the coolant maintains its ability to protect the engine, we recommend that the system be completely drained every two years and a fresh mixture of antifreeze and water 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. Polaris Premium 60/40 is already premixed and ready to use. Do not dilute with water. See page 122 for the part numbers of Polaris products.

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

Any time the cooling system has been drained for maintenance or repair, replace the coolant. If the recovery bottle has run dry, the level in the radiator should be inspected. Add coolant as needed.

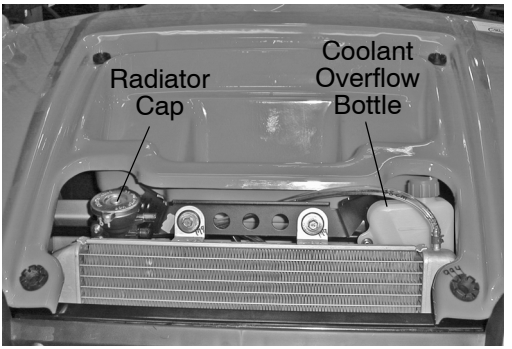
MAINTENANCE
Cooling System
Radiator and Cooling Fan

Always check and clean the screen and radiator fins at the intervals outlined in the Periodic Maintenance Chart beginning on page 67. Do not obstruct or deflect air flow through the radiator by installing unauthorized accessories in front of the radiator or behind the cooling fan. Interference with the radiator air flow can lead to overheating and consequent engine damage.

NOTICE: Washing the vehicle with a high-pressure hose could damage the radiator fins and impair the radiator's effectiveness. Using a high-pressure system is not recommended.

Cooling System

Coolant Level



Always check and change the coolant at the intervals outlined in the Periodic Maintenance Chart beginning on page 67. Maintain the coolant level between the minimum and maximum marks on the bottle (when the fluid is cool).

1. Position the vehicle on a level surface.
2. Remove the hood. See page 31.
3. View the coolant level in the overflow bottle.
4. If the coolant level is below the safe operating range, remove the cap and use a funnel to add coolant through the opening. Reinstall the cap.

Tip: If coolant must be added often, or if the overflow bottle runs completely dry, there may be a leak in the system. Have the cooling system inspected by your Polaris dealer.

MAINTENANCE
Cooling System
Radiator Coolant Level

Always check and clean the screen and radiator fins at the intervals outlined in the Periodic Maintenance Chart beginning on page 67. Do not obstruct or deflect air flow through the radiator by installing unauthorized accessories in front of the radiator or behind the cooling fan. Interference with the radiator air flow can lead to overheating and consequentially, engine damage.

CAUTION! Escaping steam can cause burns. Never remove the pressure cap while the engine is warm or hot. Always allow the engine to cool before removing the pressure cap.

This procedure is required only if the cooling system has been drained for maintenance and/or repair. But if the overflow bottle has run dry, the level in the radiator should also be inspected.

1. Remove the hood. See page 31.
2. Slowly remove the radiator cap.
3. View the coolant level through the opening.
4. Use a funnel and slowly add coolant as needed.

Tip: Use of a non-standard pressure cap will not allow the recovery system to function properly. See your dealer for the correct replacement part.

Polaris Variable Transmission (PVT) System

⚠ WARNING

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

Do not modify any component of the PVT system. Doing so may reduce its strength so that a failure may occur at a high speed. The PVT system has been precision balanced. Any modification will cause the system to be out of balance, creating vibration and additional loads on components.

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

- Always follow all recommended maintenance procedures. See your dealer as outlined in the owner's manual.
- This PVT system is intended for use on Polaris products only. Do not install it in any other product.
- Always make sure the PVT housing is securely in place during operation.

Belt slip is responsible for creating excessive heat that destroys belts, wears clutch components and causes outer clutch covers to fail. Switch to low range while operating at slower speeds to extend the life of the PVT components (belt, cover, etc.).

MAINTENANCE
Polaris Variable Transmission (PVT) System
PVT Drying

Before washing the vehicle, locate the PVT outlet duct under the right rear wheel well. Avoid spraying water directly toward the duct when washing the vehicle from the rear. See page 114.

There may be some instances when water is accidently ingested into the PVT system. Use the following instructions to dry it out before operating.

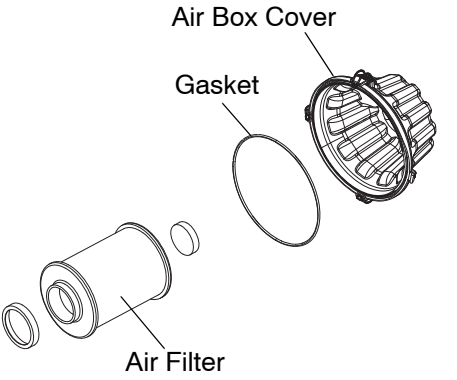
1. Remove the seats. See page 29.
2. Loosen the lower screws that secure the clutch cover.
3. Allow the water to drain.
4. Tighten the screws.
5. Place the transmission in PARK. Apply the brakes.
6. Start the engine.
7. Apply varying throttle for 10-15 seconds to expel the moisture and air-dry the belt and clutches. Do not hold the throttle wide open for more than 10 seconds.
8. Allow the engine RPM to settle to idle speed. Apply the brakes. Shift the transmission to the lowest available range.
9. Test for belt slippage. If the belt slips, repeat the process.
10. Take the vehicle to your dealer for service as soon as possible.

Filter Systems

Air Filter

Always change the air filter at the intervals outlined in the Periodic Maintenance Chart beginning on page 67.

1. Access the air box from behind the left rear wheel.
2. Remove the air box cover and inspect the gasket. It should adhere tightly to the cover around the entire edge.
3. Remove the air filter.
4. Install a new filter if needed. Do not attempt to clean the air filter. Apply a small amount of general purpose grease to the sealing edges of the filter before installing.



5. Inspect the air box for oil or water deposits. If present, drain them into a suitable container.

MAINTENANCE
Spark Arrestor

⚠ WARNING

Failure to heed the following warnings while servicing the spark arrestor could result in serious injury or death.

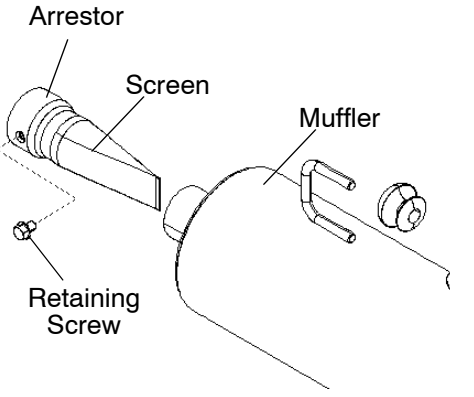
Do not perform clean-out immediately after the engine has been run, as the exhaust system becomes very hot. Serious burns could result from contact with the exhaust components. Allow components to cool sufficiently before proceeding.

Wear eye protection and gloves.

Never run the engine in an enclosed area. Exhaust contains poisonous carbon monoxide gas that can cause loss of consciousness or death in a very short time.

Periodically clean the spark arrestor to remove accumulated carbon.

1. Remove the retaining screw and remove the arrestor from the end of the muffler.
2. Use a non-synthetic brush to clean the arrestor screen. A synthetic brush may melt if components are warm. If necessary, blow debris from the screen with compressed air.
3. Inspect the screen for wear and damage. Replace a worn or damaged screen.
4. Reinstall the arrestor. Torque screws to 5-7 ft. lbs. (7-9 Nm).



Throttle System

⚠ WARNING

Failure to check or maintain proper operation of the throttle system can result in an accident and lead to serious injury or death if the throttle pedal sticks during operation.

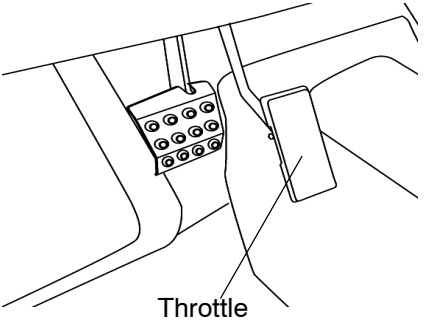
Never start or operate this vehicle if it has a sticking or improperly operating throttle pedal.

Immediately contact your dealer for service if throttle problems arise.

Always check the pedal for free movement and return before starting the engine and occasionally during operation.

Throttle Freeplay

If the throttle pedal has excessive play due to cable stretch or mis-adjustment, it will cause a delay in throttle response, especially at low engine speed. The throttle may also not open fully. If the throttle pedal has no freeplay, the throttle may be hard to control, and the idle speed may be erratic.



Check the throttle pedal freeplay at the intervals outlined in the Periodic Maintenance Chart beginning on page 67. Adjust the freeplay if necessary.

Throttle Freeplay Inspection

1. Place the transmission in PARK.
2. Apply the brakes. Start the engine. Allow it to warm up thoroughly.
3. Measure the distance the throttle pedal moves before the engine begins to pick up speed. Freeplay should be 1/16 to 1/8 inches (1.5-3 mm).

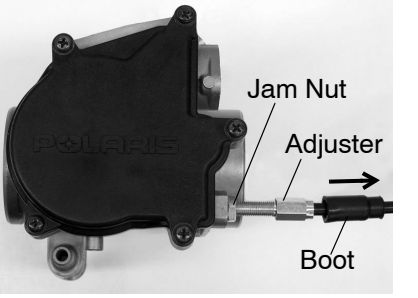
MAINTENANCE
Throttle System
Throttle Body/Idle RPM

Idle RPM is preset by the manufacturer. If the engine idle speed is not satisfactory, please see your Polaris dealer for adjustment.

Throttle Freeplay Adjustment

1. Remove both seats. Remove the rear service panel. See page 29.
2. Locate the throttle cable adjuster at the throttle body.
3. Slide the cable adjuster boot off the cable adjuster.
4. Using a 10 mm open-end wrench, loosen the adjustment jam nut.
5. Using an 8 mm open-end wrench, move the cable adjuster until 1/16" to 1/8" (1.5-3 mm) of freeplay is achieved at the throttle pedal. See page 95. While adjusting, lightly flip the throttle pedal up and down.
6. Tighten the jam nut.
7. Apply a small amount of grease to the inside of the boot and slide it over the cable adjuster to its original position.





Brakes

The front and rear brakes are hydraulic disc type brakes activated by the brake pedal. See page 39.

Always check brake pedal travel and the brake fluid reservoir level before each use of the vehicle. When applied, the brake pedal should feel firm. Any sponginess would indicate a possible fluid leak or low brake fluid level, which must be corrected before riding. See page 98 for brake fluid information.

If you discover any irregularities in brake system operation, including excessive pedal travel, contact your dealer for proper diagnosis and repairs.

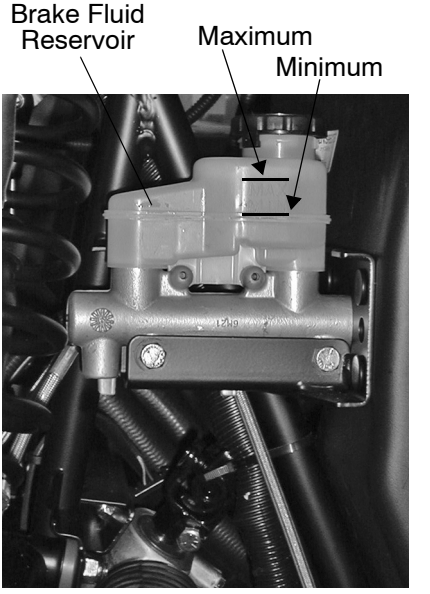
WARNING! Operating the vehicle with a spongy brake pedal can result in loss of braking, which could cause an accident resulting in severe injury or death. Never operate the vehicle with a spongy-feeling brake pedal.

MAINTENANCE
Brakes
Brake Fluid

Inspect the level of the brake fluid before each operation. If the fluid level is low add DOT 4 brake fluid only. See page 122 for the part numbers of Polaris products.

WARNING! After opening a bottle of brake fluid, always discard any unused portion. Never store or use a partial bottle. Brake fluid is hygroscopic, meaning it rapidly absorbs moisture from the air. The moisture causes the boiling temperature of the brake fluid to drop, which can lead to early brake fade and the possibility of accident or severe injury.

Change the brake fluid every two years and any time the fluid becomes contaminated, the fluid level is below the minimum, or if the type and brand of the fluid in the reservoir are unknown. Access the brake fluid reservoir through the left front wheel well.

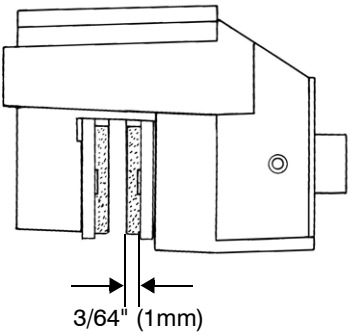


1. Position the vehicle on a level surface.
2. Place the transmission in PARK.
3. View the brake fluid level in the reservoir. The level should be between the maximum and minimum level lines.
4. If the fluid level is lower than the lower level line, add brake fluid to the upper line.
5. Apply the brake forcefully for a few seconds and check for fluid leakage around the fittings.

Brakes

Brake Inspection

1. Check the brake system for fluid leaks.
2. Check the brake pedal for excessive travel or a spongy feel.
3. Check the friction pads for wear, damage and looseness.
4. Inspect the brake pad wear surface for excessive wear.
5. Change pads when worn to 3/64" (1 mm).



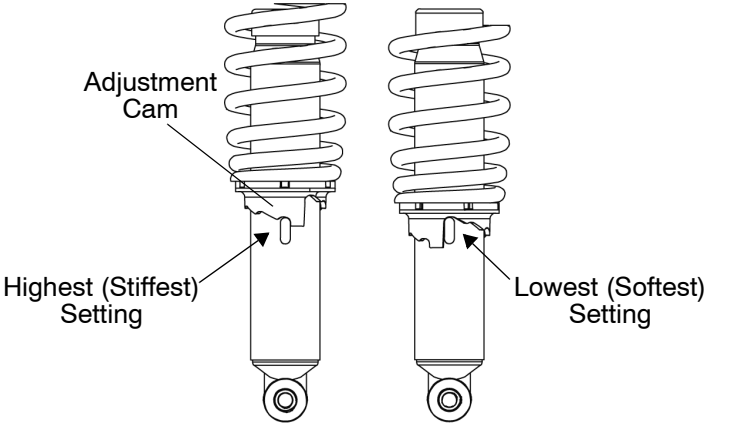
Steering Wheel Inspection

Check the steering wheel for specified freeplay and smooth operation at the intervals outlined in the Periodic Maintenance Chart beginning on page 67.

1. Position the vehicle on level ground.
2. Lightly turn the steering wheel left and right.
3. There should be 0.8"-1.0" (20-25 mm) of freeplay.
4. If there is excessive freeplay or strange noises, or the steering feels rough or "catchy," have the steering system inspected by an authorized Polaris dealer.

MAINTENANCE
Suspension Settings (RZR only)

The front and rear suspensions are preload adjustable, with five settings on each axle.



The suspensions are set on the lowest (softest) setting at the factory. This setting is appropriate for nearly all riding conditions. Since the vehicle is equipped with full skid plates, suspension adjustment is not necessary.

If desired, the suspension may be adjusted to maintain vehicle clearance height when carrying loads. Please see your Polaris dealer for the tool required to make suspension adjustments. Elevate the vehicle slightly for easier adjustment.

Always heed the following rules if you make adjustments to this suspension.

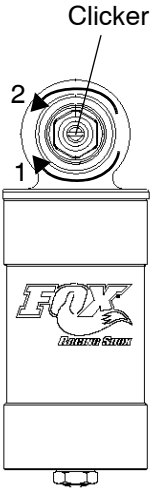
- Always return the suspension to the lowest (softest) setting after the load is removed from the vehicle. The increased suspension height will negatively impact vehicle stability when operating without a load.
- Always apply the same adjustment setting to *all four wheels*.
- Never operate the vehicle on the highest (stiffest) or second highest preload settings without a total combined payload in the vehicle of 450 lbs. (204 kg) or more. Payload includes the driver, passenger, Polaris-approved accessories and cargo. Never exceed the stated load capacity for this vehicle. See page 120.

Suspension Settings (RZR S)

Front/Rear Shock Compression

Use a flat-blade screwdriver to make damping adjustments. The compression damping clicker is located on top of the shock reservoir, under the rear fender. When the adjuster screw is turned clockwise until it stops, the damping is in the fully closed position.

1. Turn the clicker clockwise (1) to increase compression damping.
2. Turn the clicker counter-clockwise (2) to decrease compression damping.



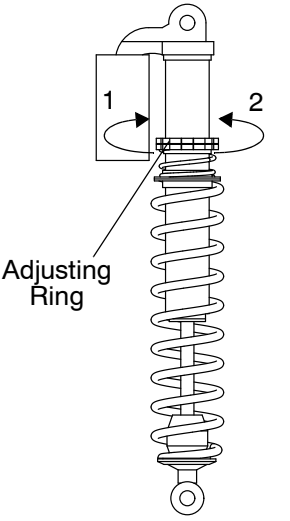
Setting	Compression Damping
Softest	20 clicks from closed
Factory	10 clicks from closed
Firmest	2 clicks from closed

MAINTENANCE
Suspension Settings (RZR S)
Front/Rear Spring Preload

1. Raise and safely support the front or rear of the vehicle off the ground to allow the suspension that will be adjusted to fully extend.
2. Loosen the jam nut and back it away from the adjusting ring.
3. Turn the adjusting ring to the left (1) to increase preload for a stiffer ride. Turn the adjusting ring to the right (2) to decrease preload for a softer ride.

WARNING! Uneven adjustment may cause poor handling of the vehicle, which could result in an accident. Always adjust both the left and right spring preloads equally or have your Polaris dealer perform the adjustments.

4. Tighten the jam nut firmly against the adjuster ring.



Tires

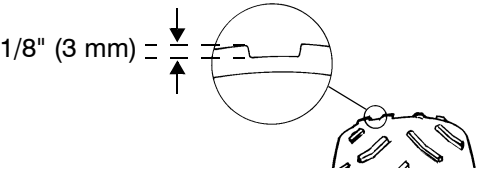
⚠ WARNING

Operating your vehicle with worn tires will increase the possibility of skidding, loss of control and an accident, which could result in serious injury or death. Always replace tires when the tread depth measures 1/8" (3 mm) or less.

Improper tire inflation or the use of non-standard size or type of tires may adversely affect vehicle handling, which could result in vehicle damage or personal injury. Always maintain proper tire pressure. When replacing tires, always use original equipment size and type.

Tire Tread Depth

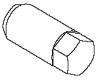
Always replace tires when tread depth is worn to 1/8" (3 mm) or less.



Axle and Wheel Nut Torque Specifications

Inspect the following items occasionally for tightness, and if they've been loosened for maintenance service. *Do not lubricate the stud or the lug nut.*





90 ft. lbs.
(122 Nm)

Cast Aluminum





27 ft. lbs.
(37 Nm)

Steel

Wheel Type	Nut Type	Location	Nut Torque
Cast Aluminum	Lug Nut	Front and Rear	90 ft. lbs. (122 Nm)
Steel	2-Piece Flange Nut	Front and Rear	27 ft. lbs. (37 Nm)
Any	Hub Retaining Nut	Front and Rear	80 ft. lbs. (108 Nm)

MAINTENANCE

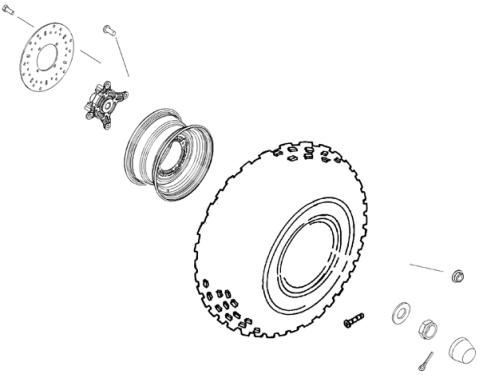
Tires

Wheel Removal

1. Position the vehicle on a level surface.
2. Place the transmission in PARK. Stop the engine.
3. Loosen the wheel nuts slightly.
4. Elevate the side of the vehicle by placing a suitable stand under the frame.
5. Remove the wheel nuts and washers. Remove the wheel.

Wheel Installation

1. Place the transmission in PARK.
2. 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.



WARNING! Improperly installed wheels can adversely affect tire wear and vehicle handling, which can result in serious injury or death. Always ensure that all nuts are torqued to specification. Do not service axle nuts that have a cotter pin installed. See your Polaris dealer.

3. Attach the wheel nuts and washers and finger tighten.
4. Carefully lower the vehicle to the ground.
5. Torque the wheel nuts to specification. See page 103.

Lights

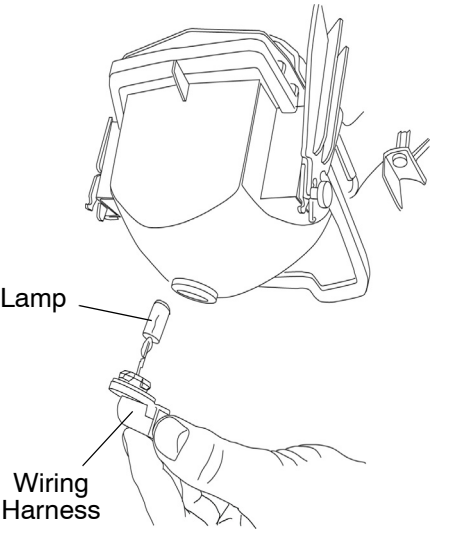
Poor lighting while driving can result in severe injury or death. Headlight and taillight lenses become dirty during normal operation. Wash the headlights frequently to maintain lighting quality.

When servicing a halogen lamp, don't touch the lamp with bare fingers. Oil from your skin leaves a residue, causing a hot spot that will shorten the life of the lamp.

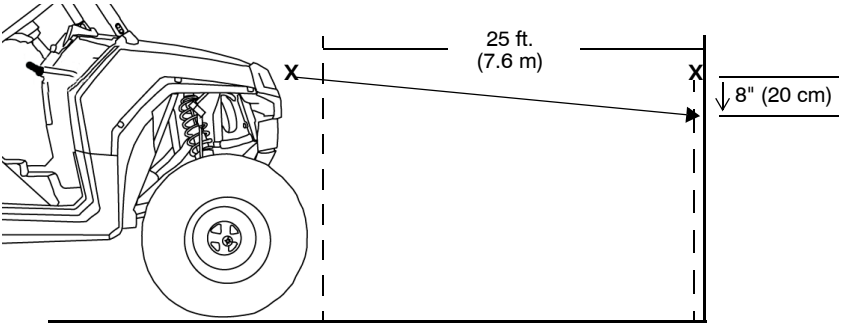
Headlight Lamp Replacement

Do not service the headlamps until they've cooled sufficiently.

1. Unplug the headlamp from the wiring harness. Be sure to pull on the connector, not on the wiring.
2. Turn the lamp counterclockwise to remove it.
3. Install the new lamp. Make sure the tab on the lamp locates properly in the housing.
4. Reinstall the harness assembly into the headlight assembly.



MAINTENANCE
Lights
Headlight Beam Adjustment



1. Place the vehicle on a level surface with the headlight approximately 25 ft. (7.6 m) from a wall. Place the transmission in PARK.
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. Apply the brakes. Start the engine. Turn on the headlights.
4. Observe the headlight aim. The most intense part of the headlight beam should be aimed 8" (20 cm) below the mark placed on the wall in step 2. Include the weight of a rider on the seat while performing this step.
5. If adjustment is necessary, turn the headlight adjustment screw to adjust the beam.
6. Repeat steps 4-5 until the beam is properly adjusted.

Lights

Brake Lights

When the brake pedal is depressed, the brake light comes on. Check the brake light before each ride.

1. Turn the ignition switch to the ON position.
2. Apply the brakes. The brake light should come on after about 10 mm (0.4 in.) of pedal travel. If the light doesn't come on, check the bulb.

Vehicle Immersion

NOTICE: If your vehicle becomes immersed, major engine damage can result if the machine is not thoroughly inspected. Take the vehicle to your dealer before starting the engine.

If it's impossible to take your vehicle to a dealer before starting it, follow the steps outlined below.

1. Move the vehicle to dry land.
2. Check the air box. If water is present, dry the air box and replace the filter with a new filter. Thoroughly dry the air pre-filter. See page 93.
3. Remove the spark plugs.
4. Turn the engine over several times.
5. Dry the spark plugs and reinstall them, or install new plugs.
6. Attempt to start the engine. If necessary, repeat the drying procedure.
7. Take the vehicle to your dealer for service as soon as possible, whether you succeed in starting it or not.
8. If water has been ingested into the PVT follow the procedure on page 92 for drying.

MAINTENANCE
Battery

⚠WARNING

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.

Your vehicle may have either a sealed battery, which requires little maintenance, or a conventional battery. A sealed battery can be identified by its flat covers on the top of the battery. A conventional battery has six filler caps on the top of the battery.

Always keep battery terminals and connections 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 shop towels. Coat the terminals with dielectric grease or petroleum jelly. Be careful not to allow cleaning solution or tap water into a conventional battery.

Battery

⚠ WARNING

Improperly connecting or disconnecting battery cables can result in an explosion and cause serious injury or death. When removing the battery, always disconnect the negative (black) cable first. When reinstalling the battery, always connect the negative (black) cable last.

Battery Removal



1. Remove the driver's seat. See page 29.
2. On conventional batteries, remove the battery vent tube.
3. Disconnect the black (negative) battery cable first.
4. Disconnect the red (positive) battery cable last.
5. Lift the battery out of the vehicle. Be careful not to tip a conventional battery sideways, which could spill electrolyte.

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

MAINTENANCE
Battery
Battery Installation

Using a new battery that has not been fully charged can damage the battery and result in a shorter life. It can also hinder vehicle performance. Follow the battery charging instructions on page 112 before installing the battery.

1. Ensure that the battery is fully charged.
2. Place the battery in the battery holder.
3. On conventional batteries, install the battery vent tube (sealed batteries do not have a vent tube). The vent tube must be free of obstructions and securely installed. Route the tube away from the frame and vehicle body to prevent contact with electrolyte.

WARNING! Battery gases could accumulate in an improperly installed vent tube and cause an explosion, resulting in serious injury or death. Always ensure that the vent tube is free of obstructions and is securely installed as recommended.

4. Coat the terminals with dielectric grease or petroleum jelly.
5. Connect and tighten the red (positive) cable first.
6. Connect and tighten the black (negative) cable last.
7. Verify that cables are properly routed.
8. Reinstall the driver's seat.

Battery

Battery Storage

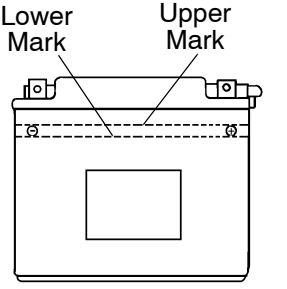
Whenever the vehicle is not used for a period of three months or more, remove the battery from the vehicle, ensure that it's fully charged, and store it out of the sun in a cool, dry place. Check battery voltage each month during storage and recharge as needed to maintain a full charge. See page 112.

Tip: Battery charge can be maintained by using a Polaris Battery Tender charger or by charging about once a month to make up for normal self-discharge. Battery Tender can be left connected during the storage period, and will automatically charge the battery if the voltage drops below a pre-determined point. See page 122 for the part numbers of Polaris products.

Battery Fluid (Conventional Battery)

A poorly maintained battery will deteriorate rapidly. Check the battery fluid level often. Maintain the fluid level between the upper and lower level marks.

Add only distilled water. Tap water contains minerals that are harmful to a battery.



MAINTENANCE
Battery
Battery Charging (Conventional Battery)

1. Remove the battery from the vehicle to prevent damage from leaking or spilled electrolyte during charging. See page 109.
2. Charge the battery with a charging output no larger than 1/10 of the battery's amp/hr rating. Charge as needed to raise the specific gravity to 1.270 or greater.
3. Reinstall the battery. See page 110. Make sure the positive terminal is toward the front of the vehicle.

Battery Charging (Sealed Battery)

The following battery charging instructions apply only to the installation of a sealed battery. Read all instructions before proceeding with the installation of this battery.

The sealed battery is already filled with electrolyte and has been sealed and *fully charged* at the factory. *Never* pry the sealing strip off or add any other fluid to this battery.

The single most important thing about maintaining a sealed battery is to keep it fully charged. Since the battery is sealed and the sealing strip cannot be removed, you must use a voltmeter or multimeter to measure DC voltage.

WARNING! An overheated battery may explode, causing severe injury or death. Always watch charging times carefully. Stop charging if the battery becomes very warm to the touch. Allow it to cool before resuming charging.

For a refresh charge, follow all instructions carefully.

1. Check the battery voltage with a voltmeter or multimeter. A fully charged battery will register 12.8 V or higher.
2. If the voltage is less than 12.8 volts, recharge the battery at 1.2 amps or less until battery voltage is 12.8 or greater.

Tip: When using an automatic charger, refer to the charger manufacturer's instructions for recharging. When using a constant current charger, use the guidelines on the next page for recharging.

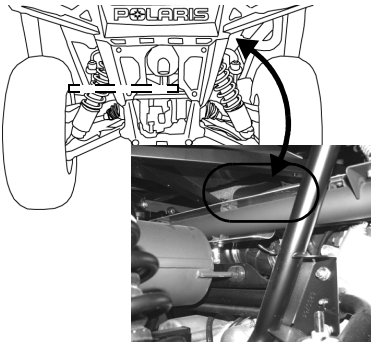
Battery

Battery Charging (Sealed Battery)

Always verify battery condition before and 1-2 hours after the end of charging.

State of Charge	Voltage	Action	Charge Time (Using constant current charger @ standard amps specified on top of battery)
100%	12.8-13.0 volts	None, check at 3 mos. from date of manufacture	None required
75%-100%	12.5-12.8 volts	May need slight charge, if no charge given, check in 3 months	3-6 hours
50%-75%	12.0-12.5 volts	Needs charge	5-11 hours
25%-50%	11.5-12.0 volts	Needs charge	At least 13 hours, verify state of charge
0%-25%	11.5 volts or less	Needs charge with desulfating charger	At least 20 hours

MAINTENANCE
Cleaning and Storage
Washing the Vehicle



Keeping your Polaris vehicle clean will not only improve its appearance but it can also extend the life of various components.

Before washing the vehicle, locate the PVT outlet duct under the right rear wheel well. Avoid spraying water directly toward the duct when washing the vehicle from the rear.

NOTICE: Water in the PVT system could cause the drive belt to become wet and slip in the clutches. Always avoid spraying water directly toward the PVT outlet duct when washing the vehicle from the rear.

High water pressure may damage components. Polaris recommends washing the vehicle by hand or with a garden hose, using mild soap.

Certain products, including insect repellents and chemicals, will damage plastic surfaces. Do not allow these types of products to contact the vehicle.

The best and safest way to clean your Polaris vehicle is with a garden hose and a pail of mild soap and water.

1. Use a professional-type washing cloth, cleaning the upper body first and the lower parts last.
2. Rinse with clean water frequently.
3. Dry surfaces with a chamois to prevent water spots.

Washing Tips

- Avoid the use of harsh cleaners, which can scratch the finish.
- Do not use a power washer to clean the vehicle.
- Do not use medium to heavy duty compounds on the finish.
- Always use clean cloths and pads for cleaning and polishing. Old or reused cloths and pads may contain dirt particles that will scratch the finish.

Cleaning and Storage

Washing the Vehicle

If a high pressure water system is used for cleaning (not recommended), exercise extreme caution. The water may damage components and could remove paint and labels. Avoid directing the water stream at the following items:

- Wheel bearings
- Radiator
- Transmission seals
- Brakes
- Cab and body panels
- Labels and decals
- Electrical components and wiring

If warning and safety labels are damaged, contact your Polaris dealer for free replacement.

Grease all zerk fittings immediately after washing. Allow the engine to run for a while to evaporate any water that may have entered the engine or exhaust system.

Polishing the Vehicle

Polaris recommends the use of common household aerosol furniture polish for polishing the finish on your Polaris vehicle. Follow the instructions on the container.

Polishing Tips

- Avoid the use of automotive products, some of which can scratch the finish of your vehicle.
- Always use clean cloths and pads for cleaning and polishing. Old or reused cloths and pads may contain dirt particles that will scratch the finish.

MAINTENANCE
Cleaning and Storage
Chrome Wheel Care (if equipped)

Proper maintenance will protect chrome wheels from corrosion, preserve wheel life and ensure a “like new” appearance for many years.

Tip: Chrome wheels exposed to road salt (or salt in the air in coastal areas) are more susceptible to corrosion if not properly cleaned. Clean chrome wheels more often if they're exposed to salt or other corrosive elements.

1. Wash chrome wheels frequently. Use a mild detergent. Never use abrasive cleaners on plated or painted surfaces.
2. Rinse well with clear water. Soap, detergents, salt, dirt, mud and other elements can cause corrosion.
3. Polish the clean chrome wheels periodically. Use an automotive grade chrome polish.
4. Routinely and liberally apply a weather resistant wax to each polished chrome wheel. Choose a product suitable for chrome finishes. Read and follow the product labels and instructions.

Removing Corrosion

If light rust is found on the chrome finish, use steel wool (#0000-OTT grade) to remove it. Gently rub the affected areas with the steel wool until the corrosion has been removed. Clean and polish the wheel as outlined above.

Cleaning and Storage

Storage Tips

NOTICE: Starting the engine during the storage period will disturb the protective film created by fogging and damage could occur. Never start the engine during the storage period.

Clean the Exterior

Make any necessary repairs and clean the vehicle as recommended. See page 114.

Stabilize the Fuel

1. Fill the fuel tank.
2. Add Polaris Carbon Clean Fuel Treatment or Polaris Fuel Stabilizer. Follow the instructions on the container for the recommended amount. Carbon Clean removes water from fuel systems, stabilizes fuel and removes carbon deposits from pistons, rings, valves and exhaust systems.
3. Allow the engine to run for 15-20 minutes to allow the stabilizer to disperse through the entire fuel delivery system.

Oil and Filter

Change the oil and filter. See page 76.

Air Filter / Air Box

Inspect and clean or replace the pre-filter and air filter. See page 93. Clean the air box. Drain the sediment tube.

Fluid Levels

Inspect the fluid levels. Add or change fluids as recommended in the Periodic Maintenance Chart beginning on page 67.

- Demand drive fluid (front gearcase)
- Rear gearcase fluid
- Transmission fluid
- Brake fluid (change every two years and any time the fluid looks dark or contaminated)
- Coolant (test strength/fill)

MAINTENANCE
Cleaning and Storage
Storage Tips
Inspect and Lubricate

Inspect all cables and lubricate all areas of the vehicle as recommended in the Periodic Maintenance Chart beginning on page 67.

Fog the Engine

1. Treat the fuel system with Polaris Carbon Clean. Follow the instructions on the container. Start the engine. Allow it to idle for several minutes so the Carbon Clean reaches the injectors. Stop the engine.
2. Remove the spark plugs and add 2-3 tablespoons of Premium 4 Synthetic 0W40 engine oil. To access the plug holes, use a section of clear 1/4" hose and a small plastic squeeze bottle filled with the premeasured amount of oil. *Do this carefully! If you miss the plug holes, oil will drain from the spark plug cavities into the hole at the front of the cylinder head, and appear to be an oil leak.*
3. Reinstall the spark plugs. Torque to specification. See page 86.
4. Apply dielectric grease to the inside of each spark plug cap. *Do not reinstall the caps onto the plugs at this step*.
5. Turn the engine over several times. Oil will be forced in and around the piston rings and ring lands, coating the cylinder with a protective film of fresh oil.
6. If Polaris fuel system additive is not used, fuel tank, fuel lines, and injectors should be completely drained of gasoline.
7. Reinstall the spark plug caps to the spark plugs.

Battery Maintenance

See pages 111-113 for storage and charging procedures.

Storage Area/Covers

Be sure the storage area is well ventilated. Cover the vehicle with a genuine Polaris cover. Do not use plastic or coated materials. They do not allow enough ventilation to prevent condensation, and may promote corrosion and oxidation.

Cleaning and Storage

Removal from Storage

1. Check the battery electrolyte level and charge the battery if necessary. Install it in the vehicle. Make sure the battery vent hose is routed properly and that it's not pinched or restricted in any way.
2. Make sure the spark plug is tight.
3. Fill the fuel tank with fuel.
4. Check all the points listed in the Daily Pre-Ride Inspection section on page 50. Tightness of the bolts, nuts and other fasteners should be checked by an authorized Polaris dealer.
5. Lubricate at the intervals outlined in the Periodic Maintenance Chart beginning on page 67.

WARNING! Engine exhaust contains poisonous carbon monoxide and can cause loss of consciousness or death. Never run an engine in an enclosed area.

Transporting the Vehicle

Follow these procedures when transporting the vehicle.

1. Place the transmission in PARK. Stop the engine.
2. Remove the key to prevent loss during transporting.
3. Secure the fuel cap and seats.
4. Always tie the frame of the Polaris vehicle to the transporting unit securely with suitable straps or rope. Do not attach tie straps to the front control arm bolt pockets.

SPECIFICATIONS

RANGER RZR / RZR S	
Gross Vehicle Weight	1727 lbs. (783 kg) (RZR) 1782 lbs. (808 kg) (RZR S)
Dry Weight	945 lbs. (429 kg) (RZR) 961 lbs. (436 kg) (RZR EPS) 1000 lbs. (454 kg) (RZR S)
Rear Cargo Box Capacity	300 lbs. (136 kg)
Maximum Weight Capacity (Payload)	740 lbs. (336.4 kg) (riders/cargo/accessories/ trailer tongue weight)
Receiver Hitch Tongue Capacity	150 lbs. (68 kg)
Receiver Hitch Towing Capacity	1500 lbs. (680 kg
Fuel Capacity	7 gal. (26.5 l)
Engine Oil Capacity	2 qts. (1.9 l)
Coolant Capacity	4.8 qts. (4.5 l)
Rear Gearcase Oil Capacity	26 oz. (769 ml)
Demand Drive Fluid Capacity	6.75 oz. (200 ml)
Transmission Oil Capacity	24 oz. (710 ml)
Transfer Case Oil Capacity	14 oz. (414 ml)
Overall Length/Width/Height	102/50/68.5 in. (259/127/174 cm) (RZR) 106/60.5/70.5 in. (269/154/179 cm) (RZR S)
Wheelbase	77 in. (196 cm)
Ground Clearance	10 in. (25.4 cm) (RZR) 12 in. (30.5 cm) (RZR S)
Engine	4 valve 4 stroke twin cylinder with counterbalance
Displacement	760 cc
Bore x Stroke	80mm x 76mm
Alternator Output	500 W @ 3000 RPM
Compression Ratio	10:1
Starting System	Electric
Fuel System	Electronic fuel injection
Ignition System	ECU
Spark Plug / Gap	RC7YC /.035 in. (0.9 mm)
Front Suspension	Independent double a-arm with travel: 9 in. (23 cm) (RZR) 12 in. (30.5 cm) (RZR S)
Rear Suspension	Independent double a-arm with travel: 9.5 in. (24 cm) (RZR) 12 in. (30.5 cm) (RZR S)

RANGER RZR / RZR S	
Lubrication System	Wet Sump
Engine Oil	0W/40
Driving System Type	Automatic Polaris Variable Transmission
Shift Type	Dual Range P/R/N/L/H
Gear Reduction - Low	8.71:1
Gear Reduction - Reverse	5.94:1
Gear Reduction - High	3.14:1
Drive Ratio - Front	3.82:1
Drive Ratio - Final	3.70:1
Tire Size - Front	25x8-12 (RZR) 26x9-12 (RZR S)
Tire Size - Rear	25x10-12 (RZR) 26x12-12 (RZR S)
Tire Pressure - Front	8 psi (55 KPa)
Tire Pressure - Rear	8 psi (55 KPa)
Brakes, Front/Rear	Foot Activated, 4-wheel hydraulic disc
Headlights	2 single beam, 55W, quartz/halogen
Taillights	2 single beam, 5W
Brake Lights	2 single beam, 5W
Instrument Cluster	LCD
Auxiliary DC Outlet	12V

Clutching

See your Polaris dealer for clutching specifications.

POLARIS PRODUCTS

Part Number	Description
Engine Lubricant	
2870791	Fogging Oil (12 oz. Aerosol)
2871281	Premium 4 Synthetic 0W-40 (4-Cycle) Engine Oil (qt.)
2871844	Premium 4 Synthetic 0W-40 (4-Cycle) Engine Oil (gal.)
Gearcase / Transmission Lubricants	
2873602	Premium AGL Synthetic Gearcase Lubricant (qt.)
2873603	Premium AGL Synthetic Gearcase Lube (gal.)
2871653	Premium ATV Angle Drive Fluid (8 oz.)
2872276	Premium ATV Angle Drive Fluid (2.5 gal.)
2870465	Pump for Gallon Jug
2876251	Demand Drive LT Premium Fluid (8 oz./237 ml)
Coolant	
2871323	60/40 Coolant (gal.)
2871534	60/40 Coolant (qt.)
Grease / Specialized Lubricants	
2871312	Grease Gun Kit, Premium All Season (3 oz.)
2871322	Premium All Season Grease (3 oz. cartridge)
2871423	Premium All Season Grease (14 oz. cartridge)
2871460	Starter Drive Grease (2 oz.)
2871515	Premium U-Joint Lube (3 oz.)
2871551	Premium U-Joint Lube (14 oz.)
2871329	Dielectric Grease (Nyogel™)
Additives / Miscellaneous	
2871326	Carbon Clean Plus (12 oz.)
2870652	Fuel Stabilizer (16 oz.)
2872189	DOT 4 Brake Fluid
2871956	Loctite™ 565 Thread Sealant
2859044	Polaris Battery Tender™ Charger

Drive Belt Wear/Burn

Possible Cause	Solution
Driving onto a pickup or tall trailer in high range	Use low range during loading.
Starting out going up a steep incline	Use low range. See warnings on page 58.
Driving at low RPM or ground speed (3-7 MPH)	Drive at a higher speed or use low range more frequently. See page 38.
Insufficient warm-up at low ambient temperatures	Warm the engine at least 5 minutes. With the transmission in neutral, advance the throttle to about 1/8 throttle in short bursts, 5 to 7 times. The belt will become more flexible and prevent belt burning.
Slow/easy clutch engagement	Use the throttle quickly and effectively.
Towing/pushing at low RPM/low ground speed	Use low range only.
Utility use/plowing	Use low range only.
Stuck in mud or snow	Shift the transmission to low range and carefully use fast, aggressive throttle application to engage clutch. **WARNING**: Excessive throttle may cause loss of control and vehicle overturn.
Climbing over large objects from a stopped position	Shift the transmission to low range and carefully use fast, brief, aggressive throttle application to engage clutch. **WARNING**: Excessive throttle may cause loss of control and vehicle overturn.
Belt slippage from water or snow ingestion into the PVT system	Dry out the PVT (see page 92). Prevent water from entering the PVT outlet duct (see page 114). Inspect clutch seals for damage if repeated leaking occurs.
Clutch malfunction	See your Polaris dealer.
Poor engine performance	Check for fouled plugs or foreign material in gas tank or fuel lines. See your dealer.
Slippage from failure to warm up belt	Always warm up the belt by operating below 30 mph for one mile (5 miles or more when temperature is below freezing).
Wrong or missing belt	Install the recommended belt.
Improper break-in	Always break in a new belt and/or clutch. See pages 48 and 38.

TROUBLESHOOTING

Engine Doesn't Turn Over

Possible Cause	Solution
Low battery voltage	Recharge the battery to 12.8 VDC
Loose battery connections	Check all connections and tighten
Loose solenoid connections	Check all connections and tighten
Loose electronic control box connections	Inspect, clean, reinstall connectors

Engine Turns Over, Fails to Start

Possible Cause	Solution
Out of fuel	Refuel
Clogged fuel filter	See your Polaris dealer
Water is present in fuel	Drain the fuel system and refuel
Old or non-recommended fuel	Replace with fresh recommended fuel
Fouled or defective spark plugs	Inspect plugs and replace if necessary
No spark to spark plug	Inspect plugs and replace if necessary
Water or fuel in crankcase	Immediately see your Polaris dealer
Low battery voltage	Recharge the battery to 12.8 VDC
Mechanical failure	See your dealer

Engine Backfires

Possible Cause	Solution
Weak spark from spark plug	Inspect, clean and/or replace spark plugs
Incorrect spark plug gap or heat range	Set gap to specs or replace plugs
Old or non-recommended fuel	Replace with fresh recommended fuel
Incorrectly installed spark plug wires	See your dealer
Incorrect ignition timing	See your dealer
Mechanical failure	See your dealer
Loose ignition connections	Check all connections and tighten
Water present in fuel	Replace with fresh recommended fuel

Engine Pings or Knocks

Possible Cause	Solution
Poor quality or low octane fuel	Replace with recommended fuel
Incorrect ignition timing	See your dealer
Incorrect spark plug gap or heat range	Set gap to specs or replace plugs

Engine Runs Irregularly, Stalls or Misfires

Possible Cause	Solution
Fouled or defective spark plugs	Inspect, clean and/or replace spark plugs
Worn or defective spark plug wires	See your dealer
Incorrect spark plug gap or heat range	Set gap to specs or replace plugs
Loose ignition connections	Check all connections and tighten
Water present in fuel	Replace with new fuel
Low battery voltage	Recharge battery to 12.8 VDC
Kinked or plugged fuel tank vent line	Inspect and replace
Incorrect fuel	Replace with recommended fuel
Clogged air filter	Inspect and clean or replace
Other mechanical failure	See your dealer
Possible Lean Fuel Cause	**Solution**
Low or contaminated fuel	Add or change fuel, clean the fuel system
Low octane fuel	Replace with recommended fuel
Clogged fuel filter	See your Polaris dealer
Possible Rich Fuel Cause	**Solution**
Fuel is very high octane	Replace with lower octane fuel

TROUBLESHOOTING

Engine Stops or Loses Power

Possible Cause	Solution
Out of fuel	Refuel
Kinked or plugged fuel vent line	Inspect and replace
Water is present in fuel	Replace with new fuel
Fouled or defective spark plugs	Inspect, clean and/or replace spark plug
Worn or defective spark plug wires	See your dealer
Incorrect spark plug gap or heat range	Set gap to specs or replace plug
Loose ignition connections	Check all connections and tighten
Low battery voltage	Recharge the battery to 12.8 VDC
Incorrect fuel	Replace with fresh recommended fuel
Clogged air filter	Inspect and clean or replace
Other mechanical failure	See your dealer
Overheated engine	Clean radiator screen and core, clean engine exterior, see your dealer

DECLARATION OF CONFORMITY

Polaris Industries Inc.,
2100 Hwy 55, Medina, MN 55340 U.S.A.
Telephone 763-542-0500

We, Polaris Industries Inc., declare that the vehicles listed below conform to the essential health and safety requirements applicable to off-road all-terrain vehicles.

APPLICABLE EUROPEAN DIRECTIVES	TEST / EVALUATION METHODS	
98/37/EC as amended (Machinery Directive)	EN 1050 hazard analysis CD 77/311/EEC driver-perceived noise level	
2004/108/EC as amended (EMC Directive)	CISPR 12:2001 CAN/CSA-C108.4-M92	EN 55012:2002 EN 61000-6-2:2001

PRODUCT IDENTIFICATION

VEHICLE SERIES	TRADE NAME	MODEL YEARS	SOUND PRESSURE dB (A)
___KA05__	OUTLAW 50	2008, 2009, 2010	76.8
___KA09__	OUTLAW 90	2008, 2009, 2010	76.8
___FA09__	SPORTSMAN 90	2008, 2009, 2010	76.8
___VA17__	RZR 170	2009, 2010	81.3
___PB20__	PHOENIX 200	2008, 2009, 2010	76.8
___BA32__	TRAIL BLAZER 330	2008, 2009, 2010	76.8
___CA32__	TRAIL BOSS 330	2008, 2009, 2010	76.8
___BA50__	SCRAMBLER 500	2008, 2009, 2010	79.6
___GJ45__	OUTLAW 450	2008, 2009, 2010	80.7
___GJ52__, ___GP52__	OUTLAW 525	2008, 2009, 2010	80.7
___LH27__	SPORTSMAN 300	2008, 2009, 2010	81.1
___LH46__	SPORTSMAN 400	2008, 2009, 2010	80.2
___MN50__	SPORTSMAN 500 EFI	2008, 2009, 2010	80.4
___ZN55__ ___ZX55__	SPORTSMAN 550 EFI	2009, 2010	80.8
___TN55__, ___DN55__	SPORTSMAN X2/TOURING 550	2010	77.2
___MN76__	SPORTSMAN 800	2008, 2009, 2010	83.6
___TN85__, ___DN85__	SPORTSMAN X2/TOURING 850	2010	77.2
___CL76__	SPORTSMAN 800 6X6	2009, 2010	80.1
___ZN85__, ___ZX85__	SPORTSMAN 850 EFI	2009, 2010	80.4
___RH50__, ___HH50__	RANGER 500 EFI 4X4	2009, 2010	76.5
___HH76__	RANGER 800 EFI 4X4	2010	76.5
___WH76__	RANGER 800 EFI CREW	2010	76.5
___HR__	RANGER 800 6X6	2010	76.5
___HY__	RANGER HD 800 4X4	2010	76.5
___VH76__	RANGER RZR	2008, 2009, 2010	85.8

Authorized Signatory:

Alexander A. Kennedy

Alexander A. Kennedy, Product Compliance
Polaris Industries Inc., Engineering Operations
301 5th Avenue SW, Roseau, MN 56751

WARRANTY

LIMITED WARRANTY

Polaris Sales Inc., 2100 Highway 55, Medina, MN 55340, gives a SIX MONTH LIMITED WARRANTY on all components of your Polaris vehicle against defects in material or workmanship. This warranty covers the parts and labor charges for repair or replacement of defective parts which are covered by this warranty. This warranty begins on the date of purchase. This warranty is transferable to another consumer during the warranty period through a Polaris dealer.

REGISTRATION

At the time of sale, the Warranty Registration Form must be completed by your dealer and submitted to Polaris within ten days. Upon receipt of this registration, Polaris will record the registration for warranty. No verification of registration will be sent to the purchaser as the copy of the Warranty Registration Form will be the warranty entitlement. If you have not signed the original registration and received the customer copy, please contact your dealer immediately. NO WARRANTY COVERAGE WILL BE ALLOWED UNLESS YOUR 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, modified, 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 does not apply to parts exposed to friction surfaces, stresses, environmental conditions and/or contamination for which they were not designed or not intended, including but not limited to the following items:

- Wheels and tires
- Suspension components
- Brake components
- Seat components
- Clutches and components
- Steering components
- Batteries
- Light bulbs/Sealed beam lamps
- Finished and unfinished surfaces
- Carburetor/Throttle body components
- Engine components
- Drive belts
- Hydraulic components
- Circuit breakers/Fuses
- Electronic components

Warranty applies to the product only and does not allow for coverage of personal loss. Some items are considered "consumable," meaning they are considered part of normal maintenance or part of completing an effective repair. The following items are excluded from warranty coverage in the event of a warranty claim:

- Spark Plugs
- Filters
- Fuel
- Sealants
- Hotel fees
- Towing charges
- Mileage
- Rentals/Loss of product use
- Lubricants such as oil, grease, etc.
- Batteries (unless defective)
- Cosmetic damage/repair
- Coolants
- Meals
- Shipping/ handling fees
- Product pick-up/delivery
- Loss of vacation/personal time

WARRANTY

LIMITATIONS OF WARRANTIES AND REMEDIES

This warranty also excludes failures resulting from improper lubrication; improper engine timing; improper fuel; surface imperfections caused by external stress, heat, cold or contamination; operator error or abuse; improper component alignment, tension, adjustment or altitude compensation; failure due to snow, water, dirt or other foreign substance ingestion/contamination; improper maintenance; modified components; use of aftermarket components resulting in failure; unauthorized repairs; repairs made after the warranty period expires or by an unauthorized repair center; use of the product in competition or for commercial purposes. Warranty will not apply to any product which has been damaged by abuse, accident, fire or any other casualty not determined a defect of materials or workmanship.

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.

Lubricants

1. Mixing oil brands or using non-recommended oil may cause engine damage. We recommend the use of Polaris engine oil.

2. Damage resulting from the use of non-recommended lubricants may not be covered by warranty.

SPARK ARRESTOR

Polaris warrants that the spark arrestor in this vehicle will meet the efficiency requirements of USFS standard 5100-1C for at least 1000 hours when subjected to normal use and when maintenance and installation are in accordance with Polaris recommendations.

WARRANTY

Exported Vehicles

EXCEPT WHERE SPECIFICALLY REQUIRED BY LAW, THERE IS NO WARRANTY OR SERVICE BULLETIN COVERAGE ON THIS VEHICLE IF IT IS SOLD OUTSIDE THE COUNTRY OF THE SELLING DEALER'S AUTHORIZED LOCATION.

This policy does not apply to vehicles that have received authorization for export from Polaris Industries. Dealers may not give authorization for export. You should consult an authorized dealer to determine this vehicle's warranty or service bulletin coverage if you have any questions.

This policy does not apply to vehicles registered to government officials or military personnel on assignment outside the country of the selling dealer's authorized location.

This policy does not apply to Safety Recalls.

How to Get Service

In the Country where your vehicle was purchased:

Warranty or Service Bulletin repairs must be done by an authorized Polaris dealer. If you move or are traveling within the country where your vehicle was purchased, Warranty or Service Bulletin repairs may be requested from any authorized Polaris dealer who sells the same line as your vehicle.

Outside the Country where your vehicle was purchased:

If you are traveling temporarily outside the country where your vehicle was purchased, you should take your vehicle to an authorized Polaris dealer. You must show the dealer photo identification from the country of the selling dealer's authorized location as proof of residence. Upon residence verification, the servicing dealer will be authorized to perform the warranty repair.

If You Move:

If you move to another country, be sure to contact Polaris Customer Assistance and the customs department of the destination country before you move. Vehicles importation rules vary considerably from country to country. You may be required to present documentation of your move to Polaris Industries in order to continue your warranty coverage. You may also be required to obtain documentation from Polaris Industries in order to register your vehicle in your new country.

If Purchased From A Private Party:

If you purchase a Polaris product from a private citizen outside of the country in which the vehicle was originally purchased, all warranty coverage will be denied.

Notice

If your vehicle is registered outside of the country where it was purchased, and you have not followed the procedure set out above, your vehicle will no longer be eligible for warranty or service bulletin coverage of any kind. (Vehicles registered to Government officials or military personnel on assignment outside of the country where the vehicle was purchased will continue to be covered by the basic warranty.)

For questions call Polaris Customer Assistance:

United States: 1-888-704-5290

Canada: 1-204-925-7100

U.S.A. EPA Emissions Limited Warranty

This emissions limited warranty is in addition to the Polaris standard limited warranty for your vehicle. Polaris Industries Inc. warrants that at the time it is first purchased, this emissions-certified vehicle is designed, built and equipped so it conforms with applicable U.S. Environmental Protection Agency emission regulations. Polaris warrants that the vehicle is free from defects in materials and workmanship that would cause it to fail to meet these regulations.

The warranty period for this emissions-certified vehicle starts on the date the vehicle is first purchased and continues for a period of 500 hours of engine operation, 5000 kilometers (3100 miles) of vehicle travel, or 30 calendar months from the date of purchase, whichever comes first.

This emissions limited warranty covers components whose failure increases the vehicle's regulated emissions, and it covers components of systems whose only purpose is to control emissions. Repairing or replacing other components not covered by this warranty is the responsibility of the vehicle owner. This emissions limited warranty does not cover components whose failure does not increase the vehicle's regulated emissions.

For exhaust emissions, emission-related components include any engine parts related to the following systems:

- Air-induction system
- Fuel system
- Ignition system
- Exhaust gas recirculation systems

The following parts are also considered emission-related components for exhaust emissions:

- Aftertreatment devices
- Crankcase ventilation valves
- Sensors
- Electronic control units

The following parts are considered emission-related components for evaporative emissions:

- Fuel Tank
- Fuel Cap
- Fuel Line
- Fuel Line Fittings
- Clamps*
- Pressure Relief Valves*
- Control Valves*
- Control Solenoids*
- Electronic Controls*
- Vacuum Control Diaphragms*
- Control Cables*
- Control Linkages*
- Purge Valves
- Vapor Hoses
- Liquid/Vapor Separator
- Carbon Canister
- Canister Mounting Brackets
- Carburetor Purge Port Connector

*As related to the evaporative emission control system.

WARRANTY

U.S.A. EPA Emissions Limited Warranty

The exclusive remedy for breach of this limited warranty shall be, at the exclusive option of Polaris, repair or replacement of any defective materials, components or products. THE REMEDIES SET FORTH IN THIS LIMITED 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.

ALL IMPLIED WARRANTIES (INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) ARE LIMITED IN DURATION TO THE WARRANTY PERIOD DESCRIBED HEREIN. POLARIS 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 if it is inconsistent with the controlling state law.

This limited warranty excludes failures not caused by a defect in material or workmanship.This limited warranty does not cover damage due to accidents, abuse or improper handling, maintenance or use. This limited warranty also does not cover any engine that has been structurally altered, or when the vehicle has been used in racing competition. This limited warranty also does not cover physical damage, corrosion or defects caused by fire, explosions or other similar causes beyond the control of Polaris.

Owners are responsible for performing the scheduled maintenance identified in the owner's manual. Polaris may deny warranty claims for failures that have been caused by the owner’s or operator’s improper maintenance or use, by accidents for which Polaris has no responsibility, or by acts of God.

Any qualified repair shop or person may maintain, replace, or repair the emission control devices or systems on your vehicle. Polaris recommends that you contact an authorized Polaris dealer to perform any service that may be necessary for your vehicle. Polaris also recommends that you use only Pure Polaris parts. It is a potential violation of the Clean Air Act if a part supplied by an aftermarket parts manufacturer reduces the effectiveness of the vehicle's emission controls. Tampering with emission controls is prohibited by federal law.

If you have any questions regarding your warranty rights and responsibilities, please contact the Polaris Warranty Department at 1-888-704-5290.

MAINTENANCE LOG

Use the following chart to record periodic maintenance.

DATE	MILES (KM) OR HOURS	TECHNICIAN	SERVICE PERFORMED / COMMENTS

MAINTENANCE LOG

DATE	MILES (KM) OR HOURS	TECHNICIAN	SERVICE PERFORMED / COMMENTS

MAINTENANCE LOG

DATE	MILES (KM) OR HOURS	TECHNICIAN	SERVICE PERFORMED / COMMENTS

INDEX

A

Accessory Outlet 36
Adding Coolant 87
Adjustments
Headlight Beam 106
Passenger Hand Hold. 30
Seat 29
Steering Wheel. 30
Throttle Freeplay 96
Air Filter 93
Air Filter Cleaning. 93
All Wheel Drive Switch. 37
All Wheel Drive System 40
Arrestor, Spark, Warning. 94
Auxiliary Outlet 36
AWD Diagnostics 45
AWD Switch 37, 40
AWD System 40
Axle Nut Torque 103

B

Battery 108-113
Charging 112
Charging (Sealed Battery) 112-113
Fluid Replenishment 111
Installation 110
Removal. 109
Storage 111
Beam Adjustment, Headlight. 106
Before Riding. 50
Belt Burning. 123
Belt Life. 65
Belt Wear. 123
Belts, Seat 34-35
Blink Codes 46-47
Boots 9
Brake Fluid 98
Brake Inspection 99
Brake Lights. 107
Brake Pedal 39
Brake System Break-in 49
Brakes 97-99
Braking 52
Break-In Period 48-49
Burning Belts. 123

C

Cab Nets 32-33
Cap, Fuel 31
Cargo 64-65
Changing Coolant 87
Changing Gears 38
Chart, Periodic Maintenance 67-71
Chrome Wheel Care 116
Cleaning and Storage. 114-119
Cleaning the Air Filter. 93
Cleaning the Exhaust System 94
Cleaning the Spark Arrestor 94
Clock, Setting 44
Clothing 9
Clutching 121
Component Locations 26-28
Condition, Spark Plugs 86
Coolant Level, Overflow Bottle 89
Coolant Level, Radiator. 90
Coolant, Adding or Changing 87
Cooling Fan 88
Cooling System 87-90
Corrosion Removal, Chrome. 116
Cover for Storage. 118
Crankcase Emission Control System. 66

D

Declaration of Conformity. 127
Demand Drive Fluid 82
Diagnostic Mode 44-46
Diagnostics, AWD. 45
Diagnostics, EFI Blink Codes 47
Diagnostics, Gear Circuit 45
Downloading Blink Codes. 46-47
Drive Belt Wear. 123
Drivetrain Break-In 49
Driving Downhill. 59
Driving in Reverse. 62
Driving on a Sidehill 59
Driving on Slippery Surfaces 57
Driving Over Obstacles 61
Driving Procedures 54-55
Driving Through Water 60
Driving Uphill 58
Driving With a Passenger 56
Driving, After Driving in Water 92
Drying the Transmission 92

INDEX

E

EFI Blink Codes 46-47
Electromagnetic Interference 66
Electronic Power Steering 36
Emission Control, Crankcase 66
Emission Control, Exhaust 66
Emission Control, Noise 66
Emissions Limited Warranty 133
Engaging AWD 40
Engine Break-In 49
Engine Fogging 118
Engine Idle Speed 96
Engine Oil 74-77
Engine Speed Display 44
Engine Starting 52
Engine Stopping 52
EPS 36
Equipment Modifications 7
Etiquette, Trail Riding 53
Exhaust Cleaning 94
Exhaust Emission Control System . . 66
Exhaust System Warning 94
Eye Protection 9

F

Fan, Cooling 88
Filling the Battery 111
Filter Care During Storage 117
Filter Cleaning, Air 93
Filter Systems 93
Filter, Air 93
Fluid
- Demand Drive 82
- Front Gearcase 82
- Main Gearcase 80-81
- Rear Gearcase 83
- Transfer Case 78-79
- Transmission 80-81

Fluid Change
- Demand Drive 82
- Front Gearcase 82
- Main Gearcase 81
- Rear Gearcase 83
- Transfer Case 79
- Transmission 81

Fluid Check
- Demand Drive 82
- Front Gearcase 82
- Main Gearcase 80
- Transfer Case 78
- Transmission 80

F

Fluid Levels During Storage 117
Fluid Recommendations, Gearcase . 84
Fluid, Battery 111
Fluid, Brake 98
Fogging the Engine 118
Fouled Plugs 86
Freeplay Adjustment, Throttle 96
Freeplay, Steering Wheel 99
Fuel Cap 31
Fuel Safety 19
Fuel Stabilizer 117
Fuel Tank Filler Cap 31
Fuses 85

G

Gap, Spark Plug 85
Gasoline Handling 19
Gear Circuit Diagnostics 45
Gear Selector 38
Gearcase Capacities 84
Gearcase Oil
- Demand Drive 82
- Front 82
- Main 80-81
- Rear 83
- Transfer Case 78-79

Gearcase Specifications 84
Gearcases 78-84
- Demand Drive 82
- Front Gearcase 82
- Main Gearcase 80-81
- Rear Gearcase 83
- Specification Chart 84
- Transfer Case 78-79
- Transmission 80-81

Gears, Shifting 38
Gloves 9

H

Hand Hold, Passenger 30
Hauling a Load 64-65
Hauling Cargo 64-65
Headlight Beam Adjustment 106
Headlight Lamp Replacement 105
Helmet 8
Hitch 28
Hitch Weight 65
Hood Removal 31
Hour Meter 43

INDEX

I

Idle Speed 96
Ignition Switch. 37
Indicator, Service Interval 45
Inspection, Axle Nuts 103
Inspection, Brakes 99
Inspection, Pre-Ride 50
Inspection, Seat Belts. 34-35
Inspection, Steering Wheel 99
Inspection, Throttle Freeplay. 95
Inspection, Wheel Nuts 103
Installation, Battery 110
Installation, Wheels 104
Instrument Cluster 41-47
Interference, Electromagnetic 66

K

Key, Periodic Maintenance Chart . . 68
Kilometers to Miles Toggle. 46

L

Lamp Replacement, Headlight . . . 105
Level, Coolant 89-90
Light Switch. 37
Lights. 105-107
Lights, Brake 107
Loads, Towing 65
Lubricant Part Numbers. 122
Lubrication for Storage 118
Lubrication Recommendations . . 72-73

M

Maintenance Log 135-137
Maintenance, Periodic 67-71
Miles to Kilometers Toggle 46
Mode Switch 36

N

Nets, Cab 32-33
New Operator Procedures 54-55
Noise Emission Control System . . . 66

O

Obstacles 61
Odometer 43

O

Oil
- Demand Drive 82
- Engine 74-77
- Front Gearcase. 82
- Main Gearcase. 80-81
- Rear Gearcase 83
- Transfer Case. 78-79
- Transmission 80-81

Oil and Filter Care During Storage . 117

Oil Change
- Demand Drive 82
- Engine 77
- Engine Oil 76
- Front Gearcase. 82
- Main Gearcase. 81
- Rear Gearcase 83
- Transfer Case. 79
- Transmission 81

Oil Check
- Demand Drive 82
- Engine Oil 75
- Front Gearcase. 82
- Main Gearcase. 80
- Transfer Case. 78
- Transmission 80

Operation on Public Lands 66
Operation, Cooling System 87
Operation, Transmission 91-92

P

Parking on an Incline. 63
Parking the Vehicle 53
Passenger Hand Hold Adjustment. . . 30
Periodic Maintenance Chart 67-71
Plug Condition. 86
Plug Gap 85
Plug Torque 85
Plug, Accessory 36
Plugs, Fouled 86
Plugs, Spark. 85-86
Polaris Products 122
Polishing the Vehicle. 115
Power Steering. 36
Pre-Ride Inspection 50
Programmable Service Interval 45
Public Lands 66
PVT Break-In 49
PVT Drying 92
PVT System Operation 91-92

R

Radiator 88
Radiator Coolant Level 90
Rear Gearcase Fluid Change 83
Rear Gearcase Oil Change 83
Receiver Hitch 28
Removal, Battery 109
Removal, Seat 29
Removal, Wheels 104
Removing the Vehicle from Storage 119
Replacement, Headlight Lamp 105
Reverse 62
Rider Information Center 42-47
Riding Area 53
Riding Gear 8-9
RPM, Idle, Throttle Body 96

S

Safe Operation Practices 51
Safety Labels 20-25
Safety Symbols 4
Safety Warnings 10-19
- Accessories 10
- Age Restrictions 10
- Cab Nets/Side Guards 11
- Carrying a Passenger 12
- Crossing Hillsides 15
- Descending Hills Improperly . . 14
- Excessive Speeds 13
- Exposure to Exhaust 19
- Failure to Inspect 11
- Frozen Bodies of Water 18
- Handling Gasoline 19
- Hot Exhaust Systems 19
- Improper Cargo Loading 18
- Improper Hill Climbing 14
- Improper Tire Maintenance . . . 16
- Instruction 10
- Jumps and Stunts 13
- Multiple Passengers 12
- Obstacles 17
- Operating a Damaged Vehicle . 18
- Operating Through Water 17
- Passengers in the Cargo Box . . 12
- Pavement 12
- Physical Control 13
- Protective Apparel 11
- Public Roads 12

S

Safety Warnings 10-19
- Refueling 19
- Reverse 16
- Seat Belts 11
- Skidding or Sliding 17
- Slippery Terrain 16
- Stalling on a Hill 15
- Turning Improperly 13
- Unauthorized Vehicle Use 19
- Unfamiliar Terrain 15
- Using Alcohol or Drugs 10

Seat Adjustment 29
Seat Belt Cleaning 35
Seat Belt Inspection 35
Seat Belts 34-35
Seat Removal 29
Selector, Gear 38
Service Interval Indicator 45
Service Panel, Rear 29
Severe Use Definition 67
Shifting Gears 38
Shock Compression (RZR S) 101
Side Guards 32-33
Signal Words 4
Spark Arrestor Cleaning 94
Spark Arrestor Warning 94
Spark Plug Condition 86
Spark Plug Gap 85
Spark Plug Removal 86
Spark Plug Torque 85
Spark Plugs 85-86
Spark Plugs, Fouled 86
Specifications 120-121
Specifications, Gearcase 84
Speed, Idle 96
Speed, Towing 65
Speedometer 41
Spring Preload (RZR S) 101-102
Spring Preload (RZR) 100
Stabilizing the Fuel 117
Starting the Engine 52
Steering Wheel Adjustment 30
Steering Wheel Inspection 99
Stopping the Engine 52

INDEX

S

Storage 114-119
- Covers 118
- Fluid Levels 117
- Inspection. 118
- Lubrication. 118
- Oil and Filter 117
- Removal From 119
- Storage Area 118

Storage Compartments. 31
Storage, Battery 111

Suspension Settings (RZR S). . 101-102
Suspension Settings (RZR) 100
Switches
- AWD Switch 37, 40
- Ignition Switch 37
- Light Switch 37
- Mode Switch 36

T

Tachometer 43-44
Throttle Freeplay Adjustment 96
Throttle Freeplay Inspection 95
Throttle Freeplay, Freeplay, Throttle 95
Throttle Pedal. 39
Throttle System 95
Tire Tread Depth 103
Tires 103-104
Torque, Axle Nuts 103
Torque, Spark Plug 85
Torque, Wheel Nut 103

T

Towing Loads 65
Towing Speed 65
Trail Etiquette 53
Trailer Hitch 28
Transfer Case Oil. 78-79
Transmission Oil 80-81
Transmission Operation. 91-92
Transmission, Drying 92
Transporting the Vehicle 119
Tread Depth, Tire 103
Tread Lightly 53
Trip Meter 43

V

Vehicle Identification Numbers. 6
Vehicle Immersion 107
Vehicle Transport 119

W

Warning Symbols 4
Washing the Vehicle 114-115
Water, Immersion of Vehicle 107
Wear, Drive Belt 123
Weight, Hitch. 65
Wheel Installation 104
Wheel Nut Torque 103
Wheel Removal 104