

RANGER

RZR™



POLARIS®
The Way Out.

2008
Owner's Manual
for Maintenance and Safety

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 (763) 417-8650 Fax (763) 542-0599

Part No. 9921181 Rev 02
Printed in USA

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.

WELCOME

Thank you for purchasing a Polaris vehicle, and welcome to our world-wide 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!



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The Way Out.

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Copyright 2007 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.

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2008 *RANGER* RZR Owner's Manual

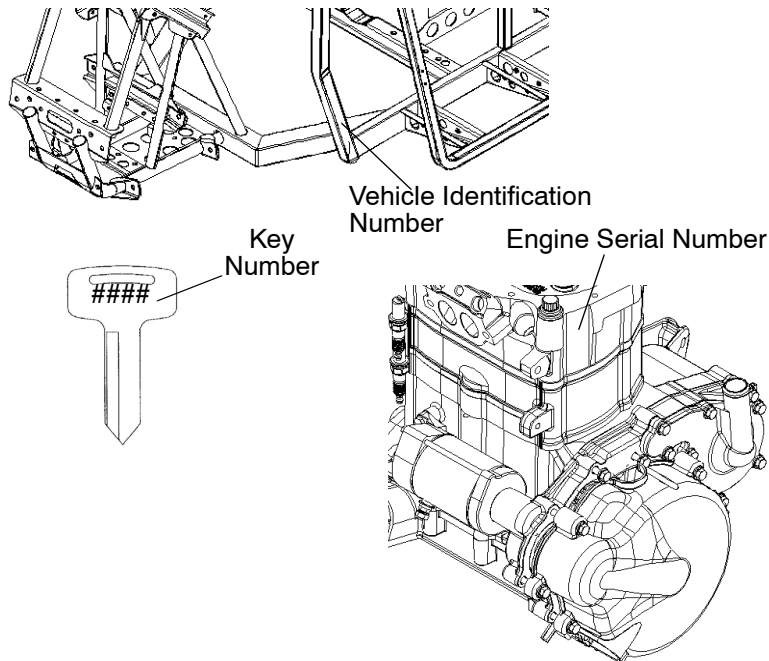
P/N 9921181

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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 _____

Rider Safety

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*, on your vehicle or in this manual, alerts you to the potential for injury.

WARNING

The *safety alert warning* indicates a potential hazard that may result in serious injury or death.

CAUTION

The *safety alert caution* indicates a potential hazard that may result in minor injury or damage to the vehicle.

CAUTION

A *caution* indicates a situation that may result in damage to the vehicle.

NOTE

A *note* will alert you to important information or instructions.

SAFETY

Safety Decals and Locations

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

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

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.

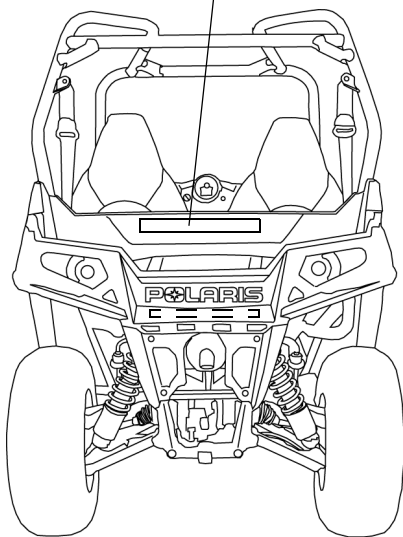
TIRE PRESSURE IN PSI (KPa):
4X4 - FRONT 8 (55.2) REAR 8 (55.2)

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.

Cargo Box Warning
Tire Pressure/Cargo Overload
Warning



Safety Decals and Locations

Cab Frame/Seat Belt Warning

WARNING

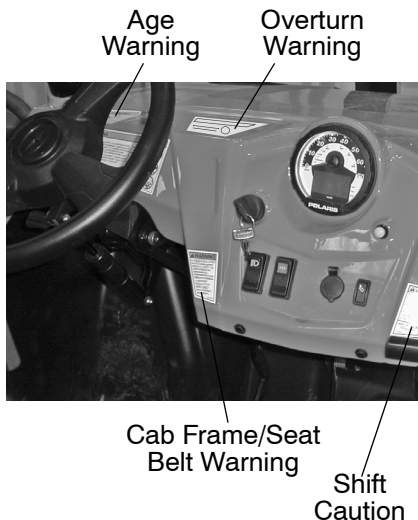
- ALWAYS WEAR YOUR SEAT BELT and make sure passenger wears seat belt.
- ALWAYS SECURE CAB NETS.
- VEHICLE OVERTURN could cause severe injury or death. The cab frame is not designed or intended to provide rollover protection.

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



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.



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.



SAFETY

Safety Decals and Locations

Discretionary
Warning

Passenger Safety
Warning



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.



Safety Decals and Locations

Discretionary Warning

WARNING

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

NEVER USE ON PUBLIC ROADS

NEVER USE WITH DRUGS OR ALCOHOL

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.

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



SAFETY

Rider Safety

WARNING

Failure to follow the warnings 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 and understand your owner's manual and all warnings before operating the vehicle. Always heed the following instructions and procedures, which are outlined in further detail within your owner's manual.

- Read this manual and all labels carefully. Follow the operating procedures described.
- 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 60-61.
- 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.
- Riders should wear seat belts at all times. Seat belts reduce the severity of injury in the event of a sudden stop or accident.
- Always use the cab nets while operating the vehicle.
- Helmets and eye protection are required for both operator and passenger at all times.
- Always keep hands and feet inside the vehicle at all times.
- Never allow a passenger to ride in the cargo box. Never carry more than one passenger.
- Never permit a guest to operate this vehicle unless the guest has read this manual and all product labels, and has completed the New Operator Driving Procedures outlined on pages 60-61.
- To reduce tipover risk, be especially careful when encountering obstacles and slopes and when braking on hills or during turns.
- Never operate with accessories not approved by Polaris for use on this vehicle. Non-approved accessories may seriously affect vehicle stability and could cause the vehicle to overturn.

Rider Safety

- This vehicle handles differently than cars, trucks or other off-road vehicles. Turning improperly can result in an overturn. 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.
- Never operate at excessive speeds. Always travel at a speed appropriate for your skills, your passenger's skills, and operating conditions.
- This vehicle is for off road use only. Never operate on public roads. Always avoid paved surfaces.
- Never consume alcohol or drugs before or while operating this vehicle.
- Always inspect your vehicle each time you use it to make sure it's in safe operating condition. Always follow the inspection and maintenance procedures and schedules described in this manual.
- 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 travel slowly and use extra caution when operating on unfamiliar terrain. Be alert to changing terrain.
- Never operate on excessively rough, slippery or loose terrain.
- Always follow proper procedures for turning as described in this manual. Practice turning at slow speeds before attempting to turn at faster speeds.
- Always have this vehicle checked by an authorized Polaris dealer if it has been involved in an accident.
- Never operate this vehicle on hills too steep for the vehicle or for your abilities. Practice on smaller hills before attempting larger hills.
- Always follow proper procedures for climbing hills as described in this manual. Check the terrain carefully before attempting to climb a hill. Never climb hills with excessively slippery or loose surfaces. Never open the throttle suddenly or make sudden gear changes. Never go over the top of a hill at high speed.

SAFETY

Rider Safety

- Always follow the proper procedures outlined in this manual for traveling downhill and for braking on hills. Check the terrain carefully before descending a hill. Never travel downhill at high speed. Avoid going downhill at an angle, which would cause the vehicle to lean sharply to one side. Travel straight down the hill where possible.
- Avoid crossing the side of a hill.
- Always check for obstacles before operating in a new area. 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.
- Always be careful of skidding or sliding. On slippery surfaces such as ice, travel slowly and exercise caution to reduce the chance of skidding or sliding out of control.
- Never operate in fast-flowing water or in water that exceeds the recommended maximum depth. See page 68. Wet brakes may have reduced stopping ability. To dry out the pads, apply the brakes lightly several times while driving slowly.
- Always be sure there are no obstacles or people behind your vehicle when operating in reverse. When it's safe to proceed in reverse, move slowly. Avoid making sharp turns in reverse.
- Always use the proper size and type of tires specified for your vehicle. Always maintain proper tire pressure.
- Never exceed the stated load capacity for this vehicle. Cargo should be properly distributed and securely attached. Reduce speed and follow the instructions in this manual for hauling cargo or pulling a trailer. Allow a greater distance for braking.
- 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. See page 31 for fuel safety warnings.
- Remove flammable material containers from the box before filling.
- Always remove the ignition key when the vehicle is not in use to prevent unauthorized use or accidental starting.

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

Rider Safety

WARNING

Modifications to your vehicle may negatively impact vehicle stability and result in serious injury or death. 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.

Your Polaris vehicle is designed to provide safe operation when used as directed.

- Do not make any modifications to this Polaris vehicle.
- Never operate with accessories not approved by Polaris for use on this vehicle.
- The operator must check all safety components before each ride.
- Make sure your vehicle is in excellent operating condition at all times.

Equipment Modifications

We are concerned for the safety of our customers and for the general public. Therefore, we design accessories for your vehicle that take into consideration safe vehicle handling and stability. Never operate with accessories not approved by Polaris for use on this vehicle. Non-approved accessories may seriously affect vehicle stability and could cause the vehicle to overturn.

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.

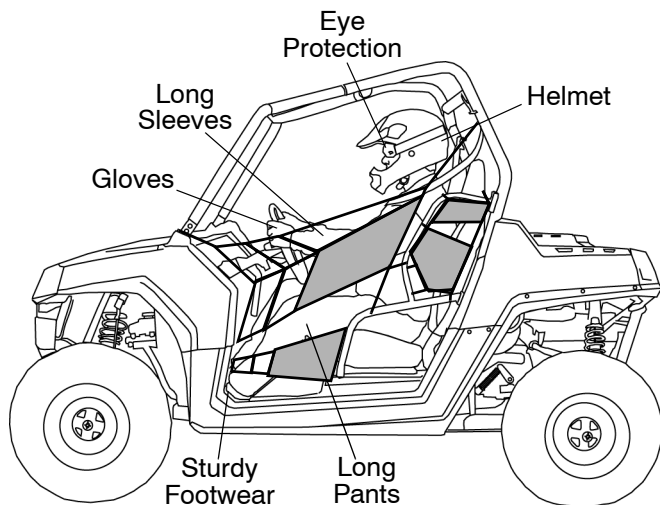
The warranty on your Polaris vehicle is terminated if any equipment has been added to the vehicle, or if any modifications have been made to the vehicle, that increase its speed or power.

NOTE: The addition of certain accessories, including (but not limited to) mowers, blades, tires, sprayers, or large racks, may change the handling characteristics of the vehicle. 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.



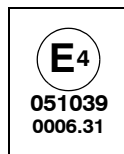
Safe Riding Gear

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.



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

Rider Safety

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.

Know Your Vehicle

As the operator of the vehicle, you are responsible for your personal safety, the safety of others (including your passenger), and the protection of our environment. Read and understand your owner's manual, which includes valuable information about all aspects of your vehicle, including safe operating procedures.

We strongly advise you to strictly follow the recommended maintenance program outlined in your owner's manual. This preventive maintenance program is designed to ensure that all critical components on your vehicle are thoroughly inspected at specific intervals.

Rider Safety

Know Your Riding Area/Tread Lightly

Your Polaris vehicle is an off-road vehicle. 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.

SAFETY

Rider Safety

WARNING

POTENTIAL HAZARD

Operating this vehicle without proper instruction

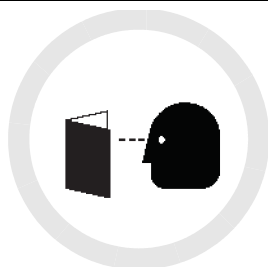
WHAT CAN HAPPEN

Loss of control and accident resulting in serious injury or death

HOW TO AVOID THE HAZARD

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

All operators must read and understand the owner's manual and all warning and instruction labels before operating the vehicle.



WARNING

POTENTIAL HAZARD

Turning improperly

WHAT CAN HAPPEN

Loss of control, accident or overturn resulting in serious injury or death

HOW TO AVOID THE HAZARD

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

WARNING

POTENTIAL HAZARD

Riding in this vehicle without wearing the seat belt

WHAT CAN HAPPEN

Serious injury or death in the event of an accident or sudden stop

HOW TO AVOID THE HAZARD

Always make sure the seat belts are secured for both the operator and passenger before riding.

Rider Safety

⚠ WARNING

POTENTIAL HAZARD

Riding in this vehicle without using the cab nets

WHAT CAN HAPPEN

Serious injury or death in the event of an accident or overturn

HOW TO AVOID THE HAZARD

Always use the cab nets while operating the vehicle.

⚠ WARNING

POTENTIAL HAZARD

Failure to follow the minimum age recommendations for this vehicle

WHAT CAN HAPPEN

Serious injury or death (the child or others)

HOW TO AVOID THE HAZARD

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.

⚠ WARNING

POTENTIAL HAZARD

Riding this vehicle without wearing an approved helmet and eye protection

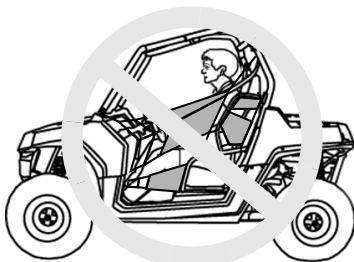
WHAT CAN HAPPEN

Head injury, eye injury or death in the event of an accident

HOW TO AVOID THE HAZARD

Operator and passenger:

Always wear an approved helmet that fits properly. Always wear eye protection (goggles or face shield).



SAFETY

Rider Safety

WARNING

POTENTIAL HAZARD

Riding this vehicle after consuming alcohol or drugs

WHAT CAN HAPPEN

Accident resulting in serious injury or death due to affected judgment, balance and perception and slower reaction time

HOW TO AVOID THE HAZARD

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



WARNING

POTENTIAL HAZARD

Removing hands from the steering wheel or hand holds or removing feet from the floor while riding

WHAT CAN HAPPEN

Loss of control and accident resulting in serious injury or death

HOW TO AVOID THE HAZARD

The operator should always keep both hands on the steering wheel during operation. A passenger should securely grasp the hand holds and plant both feet firmly on the floor.

WARNING

POTENTIAL HAZARD

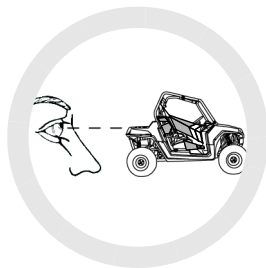
Failure to inspect the vehicle before operating
Failure to properly maintain the vehicle

WHAT CAN HAPPEN

Accident, equipment damage

HOW TO AVOID THE HAZARD

Always inspect your 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.



Rider Safety

⚠ WARNING

POTENTIAL HAZARD

Using accessories not approved by Polaris for use on this vehicle

WHAT CAN HAPPEN

Loss of control, accident or overturn resulting in serious injury or death

HOW TO AVOID THE HAZARD

Never operate with accessories not approved by Polaris for use on this vehicle. Non-approved accessories may seriously affect vehicle stability.

⚠ WARNING

POTENTIAL HAZARD

Operating this vehicle on paved surfaces, including sidewalks, paths, parking lots, and driveways

WHAT CAN HAPPEN

Loss of control and accident resulting in serious injury or death

HOW TO AVOID THE HAZARD

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

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

⚠ WARNING

POTENTIAL HAZARD

Operating this vehicle on public streets, roads or highways

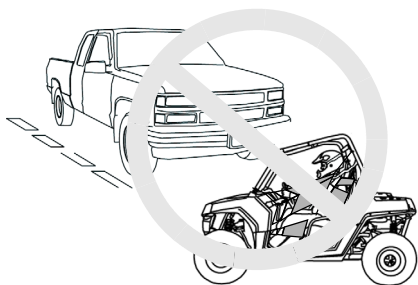
WHAT CAN HAPPEN

Collision with another vehicle

HOW TO AVOID THE HAZARD

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

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



SAFETY

Rider Safety

WARNING

POTENTIAL HAZARD

Improperly operating over obstacles

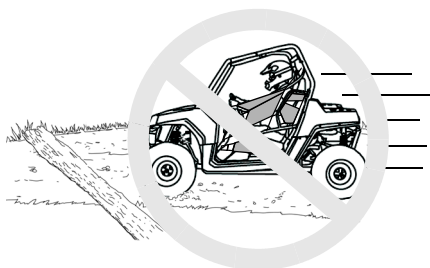
WHAT CAN HAPPEN

Loss of control or overturn resulting in serious injury or death

HOW TO AVOID THE HAZARD

Before operating in a new area, check for obstacles.

Avoid operating over large obstacles such as rocks and fallen trees when possible. If unavoidable, use extreme caution and operate slowly.



WARNING

POTENTIAL HAZARD

Skidding or sliding

WHAT CAN HAPPEN

Loss of control, accident or overturn resulting in serious injury or death

HOW TO AVOID THE HAZARD

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 out of control.

Do not operate on excessively slippery surfaces.

Rider Safety

⚠ WARNING**POTENTIAL HAZARD**

Operating through deep or fast-flowing water

WHAT CAN HAPPEN

Loss of traction, loss of control, overturn or accident resulting in serious injury or death

HOW TO AVOID THE HAZARD

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

Never operate in fast-flowing water or in water that exceeds the recommended maximum depth.

**⚠ WARNING****POTENTIAL HAZARD**

Improperly operating in reverse

WHAT CAN HAPPEN

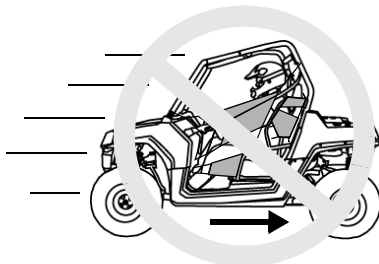
Collision with an obstacle or person, resulting in severe injury or death

HOW TO AVOID THE HAZARD

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

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

Avoid making sharp turns in reverse.



SAFETY

Rider Safety

WARNING

POTENTIAL HAZARD

Overloading the vehicle or carrying/towing cargo improperly

WHAT CAN HAPPEN

Loss of control, accident due to instability and changes in vehicle handling

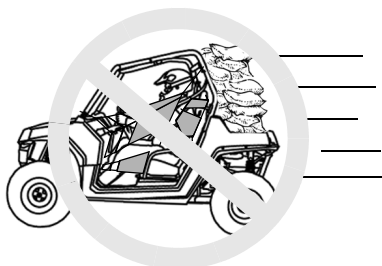
HOW TO AVOID THE HAZARD

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.



WARNING

POTENTIAL HAZARD

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

WHAT CAN HAPPEN

Loss of control, accident or overturn resulting in serious injury or death

HOW TO AVOID THE HAZARD

Always use the size and type of tires specified for your vehicle. Always maintain proper tire pressure.



Rider Safety

⚠ WARNING**POTENTIAL HAZARD**

Climbing hills improperly

WHAT CAN HAPPEN

Loss of control or overturn resulting in serious injury or death

HOW TO AVOID THE HAZARD

Always follow proper procedures for climbing hills as described in the owner's manual.

Always check the terrain carefully before ascending a hill.

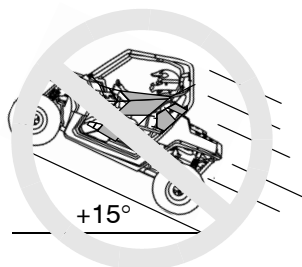
Avoid climbing steep hills (15° maximum).

Use extreme caution when operating on hills, and follow proper operating procedures outlined in the owner's manual.

Never climb hills with excessively slippery or loose surfaces.

Never open the throttle suddenly.

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.

**⚠ WARNING****POTENTIAL HAZARD**

Traveling downhill improperly

WHAT CAN HAPPEN

Loss of control or overturn resulting in serious injury or death

HOW TO AVOID THE HAZARD

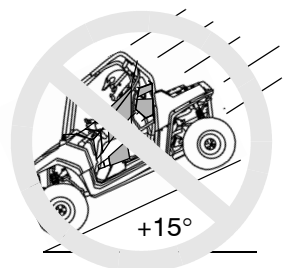
Always follow proper procedures for traveling down hills as described in the owner's manual.

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.



SAFETY

Rider Safety

⚠ WARNING

POTENTIAL HAZARD

Crossing hills and turning on hills

WHAT CAN HAPPEN

Loss of control or overturn resulting in serious injury or death

HOW TO AVOID THE HAZARD

Avoid operating on steep hills (15° maximum).

Avoid crossing the side of a hill.

⚠ WARNING

POTENTIAL HAZARD

Stalling, rolling backwards while climbing a hill

WHAT CAN HAPPEN

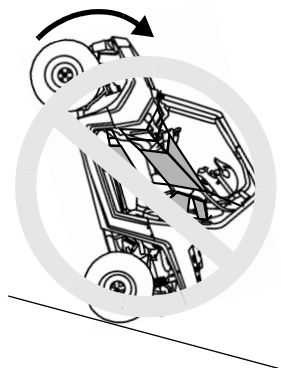
Loss of control or overturn resulting in serious injury or death

HOW TO AVOID THE HAZARD

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.



Rider Safety

WARNING

POTENTIAL HAZARD

Operating on excessively rough, slippery or loose terrain

WHAT CAN HAPPEN

Loss of traction, loss of control, accident or overturn resulting in serious injury or death

HOW TO AVOID THE HAZARD

Do not operate on excessively rough, slippery or loose terrain.



WARNING

POTENTIAL HAZARD

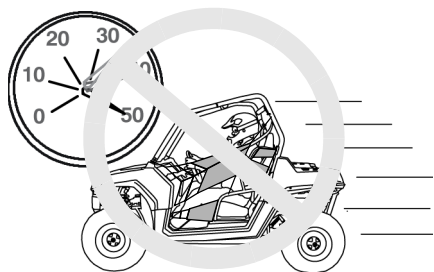
Operating this vehicle at excessive speeds

WHAT CAN HAPPEN

Loss of control and accident resulting in serious injury or death

HOW TO AVOID THE HAZARD

Operate at speeds appropriate for your skills, the conditions and the terrain.



SAFETY

Rider Safety

⚠ WARNING

POTENTIAL HAZARD

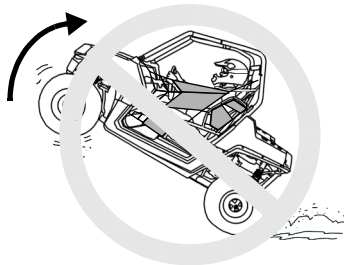
Attempting jumps and other stunts

WHAT CAN HAPPEN

Loss of control, accident or overturn resulting in serious injury or death

HOW TO AVOID THE HAZARD

Never attempt jumps and other stunts.
Avoid exhibition driving.



⚠ WARNING

POTENTIAL HAZARD

Operating on frozen bodies of water

WHAT CAN HAPPEN

Severe injury or death if the vehicle and/or riders fall through the ice

HOW TO AVOID THE HAZARD

Never operate this vehicle on a frozen body of water.



Rider Safety

⚠ WARNING

POTENTIAL HAZARD

Failure to use extra caution when operating this vehicle on unfamiliar terrain

WHAT CAN HAPPEN

Loss of control or overturn resulting in serious injury or death

HOW TO AVOID THE HAZARD

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



⚠ WARNING

POTENTIAL HAZARD

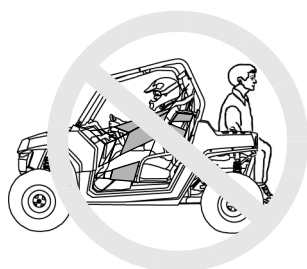
Carrying a passenger in the cargo box

WHAT CAN HAPPEN

Serious injury or death due to a fall from the vehicle or contact with moving components

HOW TO AVOID THE HAZARD

Never allow a passenger to ride in the cargo box.



⚠ WARNING

POTENTIAL HAZARD

Operating with more than one passenger

WHAT CAN HAPPEN

Loss of control and accident resulting in serious injury or death

HOW TO AVOID THE HAZARD

Never carry more than one passenger. Additional passengers can affect the operator's ability to steer and operate the controls.



SAFETY

Rider Safety

WARNING

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.

WARNING

Exhaust system components are very hot during and after use of the vehicle. Hot components can cause serious 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.

WARNING

Leaving the keys in the ignition can lead to unauthorized use of the vehicle resulting in serious injury or death. Always remove the ignition key when the vehicle is not in use.

Fuel Safety

WARNING

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.

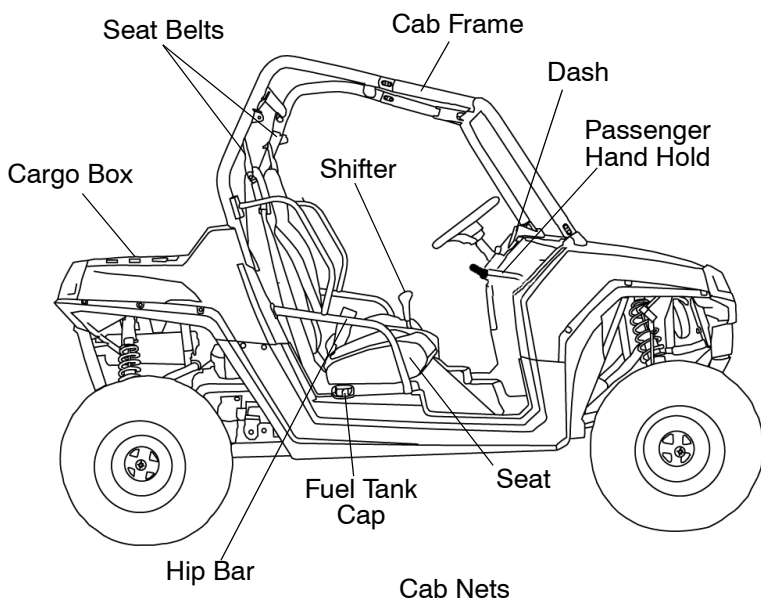
Never start the engine or let it run in an enclosed area. Gasoline powered engine exhaust fumes are poisonous and can cause loss of consciousness and death in a short time.

FEATURES AND CONTROLS

Component Locations

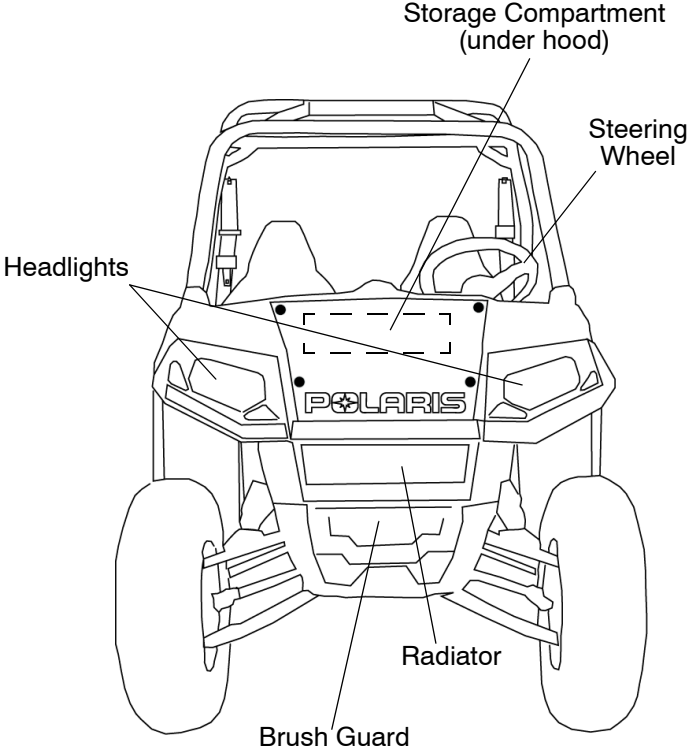
Your vehicle is equipped with upper and lower cab nets on both sides of the vehicle. Cab nets must be used by both operator and passenger at all times. Promptly replace worn or damaged cab nets with new cab nets, available from your authorized Polaris dealer.

NOTE: The vehicle illustrated below is shown without cab nets only to allow component identification.



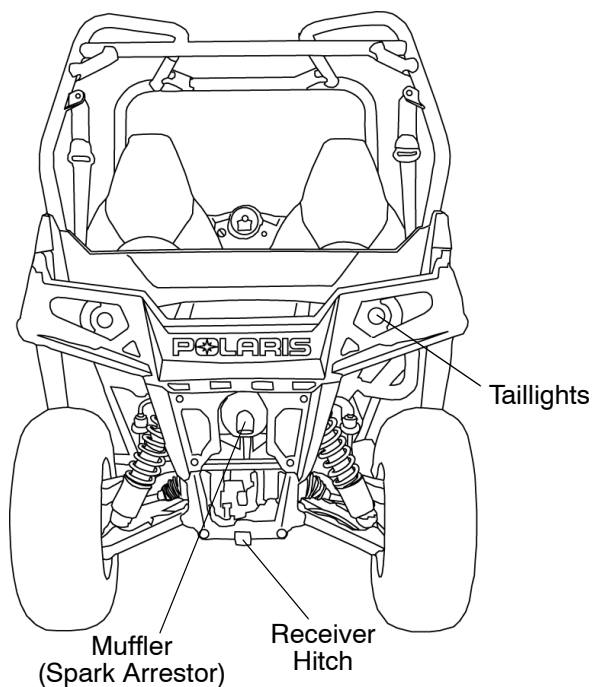
FEATURES AND CONTROLS

Component Locations



FEATURES AND CONTROLS

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 72-73.

FEATURES AND CONTROLS

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.

Reverse this procedure to reinstall the seat. Make sure the front edge of the seat is properly installed to the seat retainer bar. Press down firmly at the rear of the seat to engage the rear latch.



Front Seat Retainer

Seat Latch

FEATURES AND CONTROLS

Steering Wheel

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

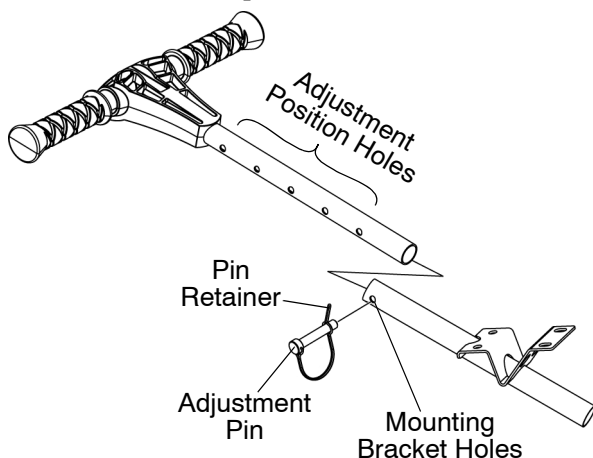
Lift and hold the steering wheel adjustment lever while moving the steering wheel upward or downward. Release the lever when the steering wheel is at the desired position.



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.



FEATURES AND CONTROLS

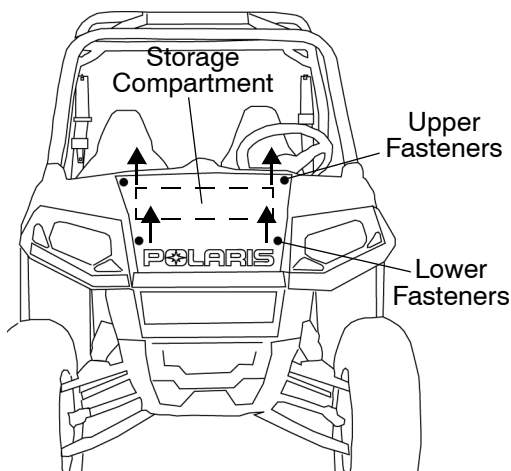
Storage Compartment

Remove the hood to access the front storage compartment. Refer to the specifications section beginning on page 126 for storage compartment capacity.

Hood

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

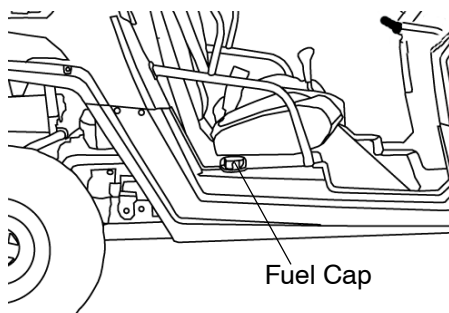
1. If your model is equipped with removable fasteners at the upper hood edge, remove the fasteners.
2. Grasp the upper hood edge and pull upward to disengage the hood from the vehicle.
3. Continue pulling the hood upward to disengage the lower hood fasteners.
4. Lift the hood away from the vehicle.



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 E-85 fuel.*

Remove flammable material containers from the box before filling.



FEATURES AND CONTROLS

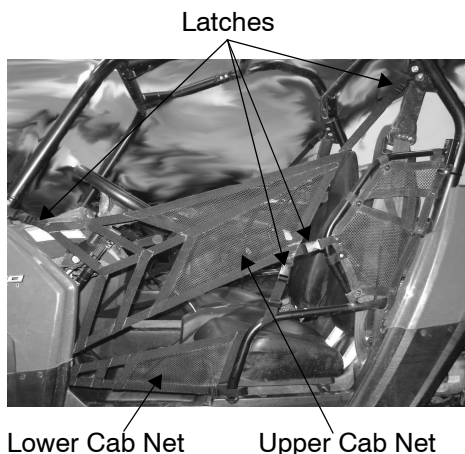
Cab Nets

⚠ WARNING

Riding in this vehicle without using the cab nets can result in serious injury or death in the event of an accident or overturn. Always use the cab nets while operating the vehicle.

Your vehicle is equipped with upper and lower cab nets on both sides of the vehicle. Cab nets 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 60-61.
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 39.

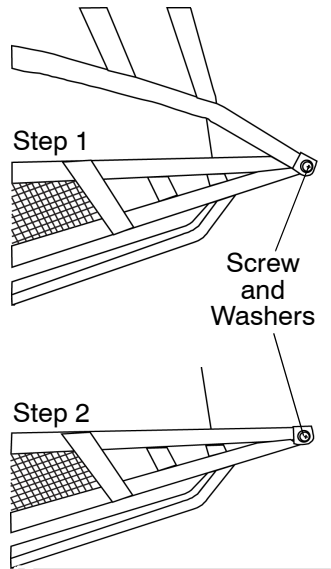
FEATURES AND CONTROLS

Cab Nets

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 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 four latches that secure the upper net to the chassis and lower net. See the photo on the previous page.
4. Clip the free upper latch of the lower cab net to the free latch on the shoulder net, adjusting strap length as needed. Tighten the strap.
5. Reverse all steps to reinstall the cab net.



NOTE: Always reinstall the upper cab net for any other operator of the vehicle.

FEATURES AND CONTROLS

Seat Belts

This Polaris vehicle is equipped with three-point lap and diagonal seat belts for the operator and passenger.

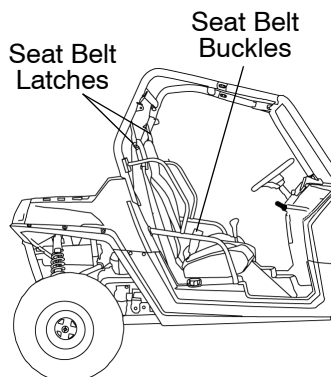
⚠ WARNING

Riding in this vehicle without wearing the seat belt can result in serious injury or death in the event of an accident or sudden stop. 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.

NOTE: Press the red release latch on the buckle to release the seat belt.



FEATURES AND CONTROLS

Seat Belts

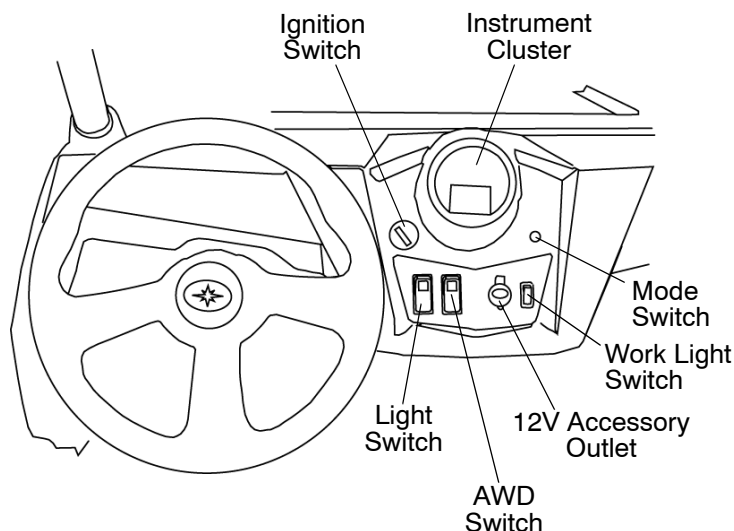
Seat Belt Inspection

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, dirt, debris or stiffness. If any damage is found, have the seat belt system checked and/or replaced by an authorized Polaris dealer.

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, tachometer and clock. See page 49 for operation of the modes.

Work Light Switch

Use the work light switch to turn the work light on or off. The work light is located at the rear of the vehicle. Turn the light on while loading and unloading cargo in low light situations. Turn the work light off when driving.

FEATURES AND CONTROLS

Switches

Ignition Switch

WARNING

Leaving the keys in the ignition can lead to unauthorized use of the vehicle resulting in serious injury or death. Always remove the ignition key when the vehicle is not in use.

The ignition switch is a three-position, key-operated switch. Use the ignition switch to start the engine. See page 57 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.

NOTE: The ignition switch must be in the ON position to operate the headlights.

All Wheel Drive (AWD) Switch

The AWD Switch has two positions:

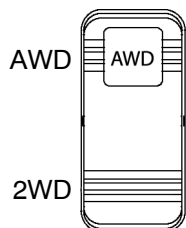
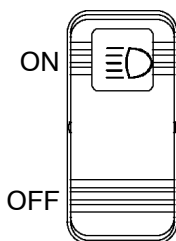
- All Wheel Drive (AWD)
- Two Wheel Drive (2WD).

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 46 for AWD operating instructions.

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.



FEATURES AND CONTROLS

Gear Selector

P: Park

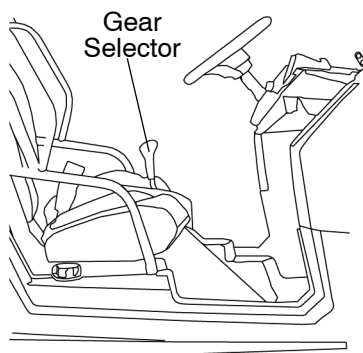
R: Reverse

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.



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

CAUTION

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

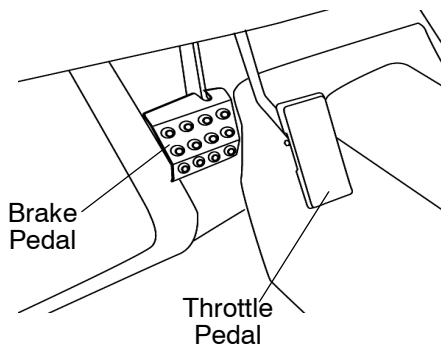
FEATURES AND CONTROLS

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 104 for throttle pedal adjustment procedures.



FEATURES AND CONTROLS

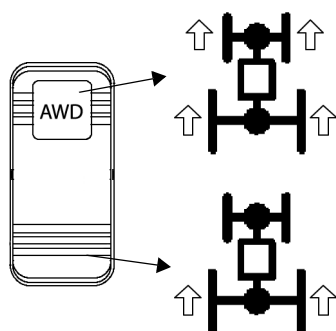
All Wheel Drive (AWD) System

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.

CAUTION

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

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.

NOTE: 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

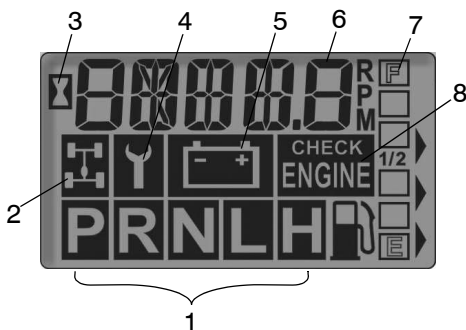
R = Reverse

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/Clock**
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.

FEATURES AND CONTROLS

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 42.

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.

NOTE: 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.

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

Clock Mode

The clock displays time in a 12-hour format. To reset the clock, see page 50.

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.

Clock Screen

To reset the clock:

1. Enter the diagnostic mode. Toggle to the clock screen.
2. Press and hold the mode switch until the hour display 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.
4. When the desired hour is displayed, wait approximately four seconds, until the minute display flashes.
5. When the display stops flashing, the mode has been set.
6. Use the same procedure to reset the minutes.

Battery Voltage Screen

View this screen to check battery voltage level.

Tachometer Screen

View the tachometer to check engine speed.

FEATURES AND CONTROLS

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.

NOTE: 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 53 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.

FEATURES AND CONTROLS

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

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.

CAUTION
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

The break-in period for your vehicle is defined on the previous page. Please read the information carefully.

Engine and Drivetrain Break-in

1. Fill the fuel tank with gasoline. See page 37.
2. Check the oil level. See page 83. 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 60-61.

NOTE: Avoid aggressive use of the brakes. See Brake System Break-in.

4. Vary throttle positions. Do not operate at sustained idle.
5. Perform regular checks on fluid levels, controls and areas outlined on the daily pre-ride inspection checklist. See page 56.
6. Pull only light loads.
7. 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

WARNING

If a proper inspection is not done before each use, severe injury or death could result. Always inspect the vehicle before each use to ensure it's in proper operating condition.

Item	Remarks	Page
Brake system/pedal travel	Ensure proper operation	45 105
Brake fluid	Ensure proper level	106
Front suspension	Inspect, lubricate if necessary	80
Rear suspension	Inspect, lubricate if necessary	80
Steering	Ensure free operation	107
Tires	Inspect condition and pressure	6 109
Wheels/fasteners	Inspect, ensure fastener tightness	109
Frame nuts, bolts, fasteners	Inspect, ensure tightness	-
Fuel and oil	Ensure proper levels	48 83
Coolant level	Ensure proper level	97 98
Coolant hoses	Inspect for leaks	-
Throttle	Ensure proper operation	103
Indicator lights/switches	Ensure proper operation	43
Air filter, pre-filter	Inspect, clean	101
Headlamp	Check operation, apply Polaris dielectric grease when lamp is replaced	111
Brake light/tail lamp	Check operation, apply Polaris dielectric grease when lamp is replaced	113
Seat Latches	Push down on both seat backs to ensure the latches are secure	35
Seat Belts	Check length of belt for damage, check latches for proper operation	40
Cab Nets	Check for wear or damage, ensure proper installation	38

Starting the Engine

WARNING

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

1. Sit in the driver's seat and fasten the seat belt.
2. Place the transmission in PARK.
3. Apply the brakes.

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

4. 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.
5. If the engine does not start within five seconds, return the ignition switch to the OFF position and wait five seconds. Repeat steps 4 and 5 until the engine starts.
6. Vary the engine RPM slightly with the throttle to aid in warm up until the engine idles smoothly.

CAUTION

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.

WARNING

A rolling vehicle can cause property damage and serious injury. Always place the transmission in PARK when stopping the engine.

OPERATION

Braking

1. Release the throttle pedal completely.
2. Press on the brake pedal evenly and firmly. Practice starting and stopping (using the brakes) until you're familiar with the controls.

NOTE: When the throttle pedal is released completely and engine speed slows to near idle, the vehicle has no engine braking.

WARNING

Failure to allow for increased braking distance when hauling cargo or towing a trailer may result in accident and injury. Always slow down and allow additional braking distance when towing or hauling cargo.

Parking the Vehicle

WARNING

Gasoline is extremely flammable and can be explosive under certain conditions. 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.

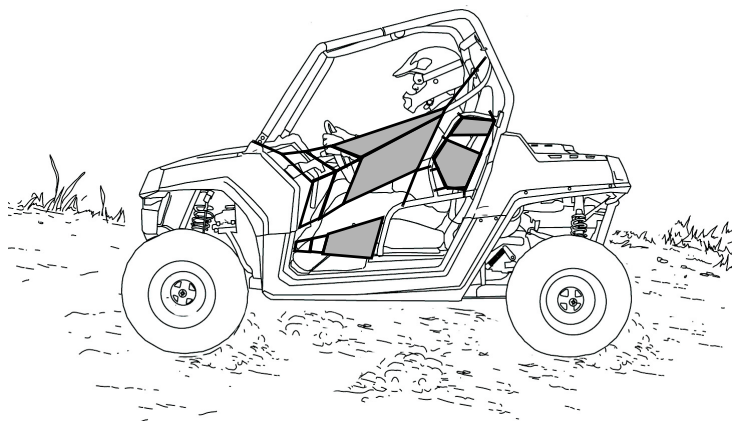
WARNING

A rolling vehicle can cause property damage and serious injury. Always place the transmission in PARK when stopping the engine.

1. Stop the vehicle on a level surface. Place the transmission in PARK.
2. Turn the engine off.
3. Remove the ignition switch key to prevent unauthorized use.

OPERATION

New Operator Driving Procedures



⚠ WARNING

Operating improperly can cause an accident or overturn which could result in severe injury or death. This vehicle handles differently than cars, trucks or other off-road vehicles. Operators of this vehicle must become familiar with vehicle handling at slow speeds before operating at faster speeds.

Do not carry a passenger until you have at least two hours of driving experience with this vehicle.

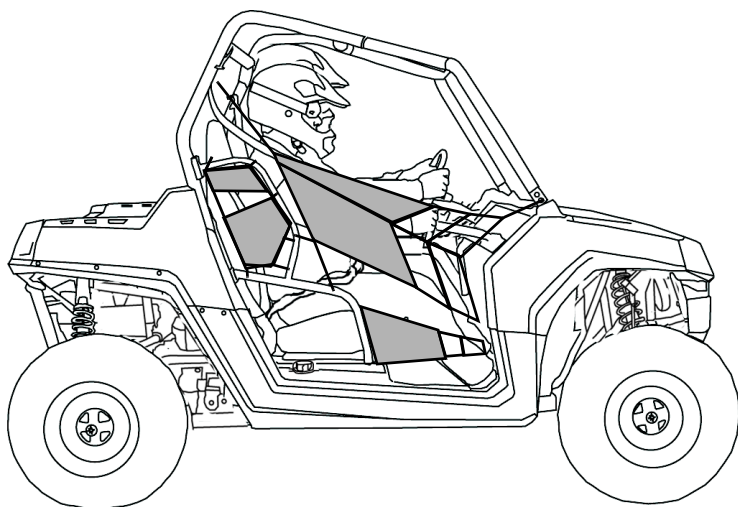
1. Do not carry a passenger until you have at least two hours of driving experience with this vehicle.
2. Do not tow or carry cargo during this period.
3. Select an open area that allows room to familiarize yourself with vehicle operation and handling. Check your surroundings and determine your path of travel.
4. Keeping both hands on the steering wheel, slowly release the brakes and depress the throttle with your right foot to begin driving.

New Operator Driving Procedures

5. 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.
6. Check for upper cab net interference. See page 39.
7. Increase speed only after mastering all maneuvers at a slow speed.
8. 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 60-61.
2. Perform the pre-ride inspection. See page 56.
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 14.
5. Make sure the passenger secures the seat belt.
6. Make sure all cab nets are properly secured.

Driving with a Passenger

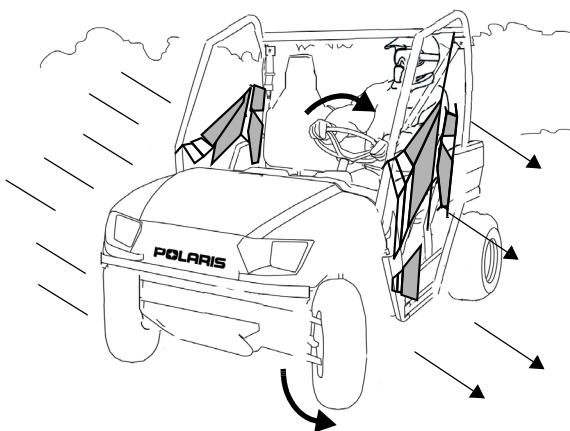
7. Allow a passenger to ride only in the passenger seat.
8. Do not carry more than one passenger. Additional passengers can affect the operator's ability to steer and operate the controls.
9. Slow down. Always travel at a speed appropriate for your skills, your passenger's skills, and operating conditions. 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.

OPERATION

Driving on Slippery Surfaces

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

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



CAUTION

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.

⚠ WARNING

Failure to exercise care when operating on slippery surfaces can result in loss of tire traction and cause loss of control, accident, and serious injury or death.

Never apply the brakes during a skid.

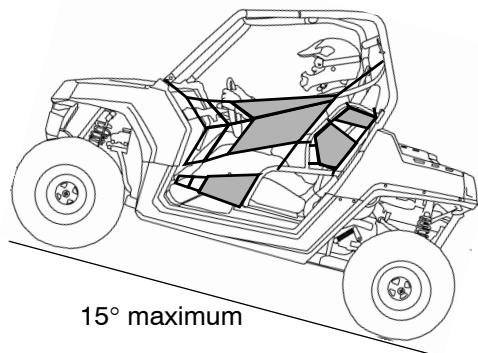
Do not operate on excessively slippery surfaces.

Always reduce speed and use additional caution when operating on slippery surfaces.

Driving Uphill

Whenever traveling uphill, follow these precautions:

1. Drive straight uphill.
2. Proceed at a steady rate of speed and throttle opening. Avoid unnecessary changes in speed or direction.
3. Avoid steep hills (15° maximum).



NOTE: If ascending a steeper grade is unavoidable, engage all-wheel drive before ascending.

4. 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.

▲ WARNING

Climbing hills improperly can cause loss of control or vehicle overturn. Always check the terrain carefully before climbing a hill.

Braking and handling are greatly affected when operating in hilly terrain. Improper operating procedures could cause loss of control or overturn and result in serious injury or death.

Avoid climbing steep hills (15° maximum).

Use extreme caution when operating on hills, and follow proper operating procedures outlined in the owner's manual.

Never climb hills with excessively slippery or loose surfaces.

Never open the throttle suddenly.

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.

OPERATION

Driving on a Sidehill (Sidehilling)

Avoid driving across the side of a hill. Control becomes difficult and there is an increased chance of vehicle overturn when driving on a hillside.

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.

WARNING

Crossing hillsides or turning on hills can result in loss of control or vehicle overturn, resulting in severe injury or death. Avoid crossing the side of a hill. Avoid operating on steep hills (15° maximum).

Driving Downhill

Whenever descending a hill, follow these precautions:

1. Slow down.
2. Always descend a hill with the transmission in forward gear. *Never descend a hill with the transmission in neutral.*
3. Travel straight downhill.
4. Apply the brakes *lightly* to aid in slowing.

WARNING

Traveling downhill improperly could cause loss of control or vehicle overturn. Always check the terrain carefully before descending a hill.

Never descend a hill at high speed. Excessive speed may result in loss of vehicle control and lead to serious injury or death. Always operate slowly when traveling downhill.

Avoid descending a hill at an angle, which would cause the vehicle to lean sharply to one side. Travel straight downhill.

OPERATION

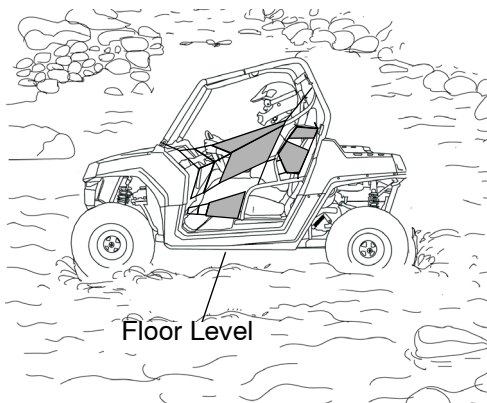
Driving Through Water

⚠ 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 control and lead to serious injury or death. Never cross deep or fast-flowing water with your vehicle.

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

1. Determine water depths and current before crossing.
2. Never operate in water that exceeds the maximum recommended depth.
3. Choose a crossing where both banks have gradual inclines.
4. Proceed slowly, avoiding rocks and obstacles.
5. Wet brakes may have reduced stopping ability. To dry out the pads, apply the brakes lightly several times while driving slowly.



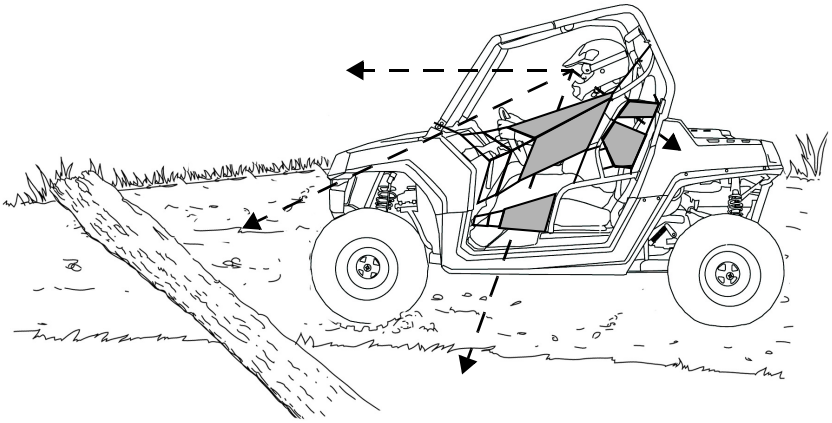
NOTE: After running your vehicle in water, it's *critical* that you perform the services outlined in the Periodic Maintenance Chart beginning on page 75. Give special attention to engine oil, transmission oil, demand drive fluid, rear gearcase oil, and all grease fittings.

CAUTION

Immersion can result in major damage if the vehicle isn't serviced correctly and promptly. After immersion, always take the vehicle to your dealer for service. *Do not start the engine.*

If it's impossible to bring the vehicle to your dealer before starting the engine, perform the service outlined on page 113, and take the vehicle to your dealer at the first opportunity.

Driving Over Obstacles



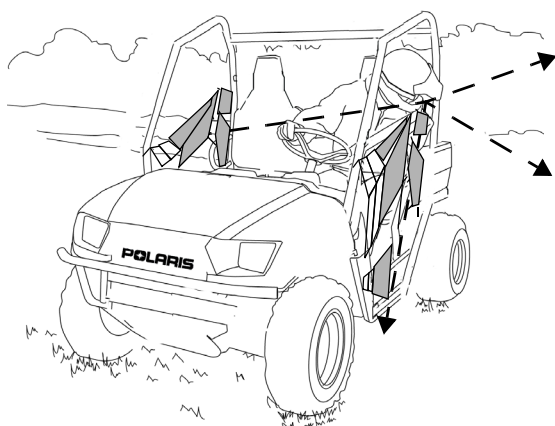
1. Be alert! Look ahead and learn to read the terrain you're traveling on. Watch for hazards such as logs, rocks and low hanging branches.
2. Before operating in a new area, check for obstacles.
3. Avoid operating over large obstacles such as rocks and fallen trees. If unavoidable, use extreme caution and operate slowly.
4. Always have a passenger dismount and move away from the vehicle before operating over an obstacle that could cause an overturn.

⚠ WARNING

Severe injury or death can result if your vehicle suddenly comes in contact with a hidden obstacle. Not all obstacles are immediately visible. Reduce speed and travel with caution in unfamiliar terrain.

OPERATION

Driving in Reverse



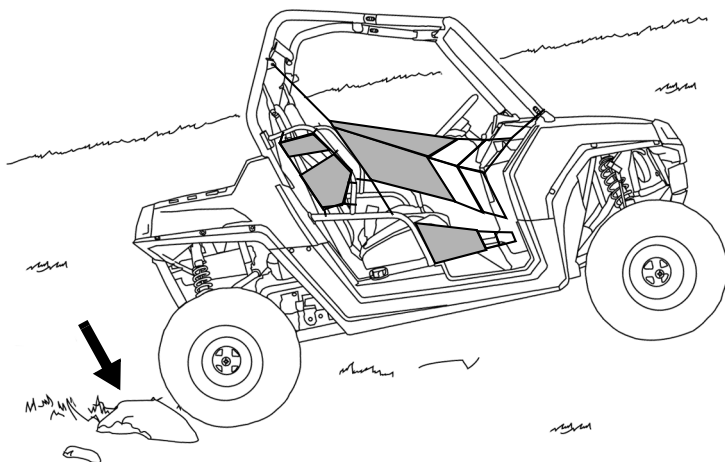
Follow these guidelines when operating in reverse:

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.

▲ WARNING

Failure to use caution when operating in reverse can result in serious injury or death. Before shifting into reverse, always check for obstacles or people behind the vehicle. When it's safe to proceed, back slowly. Avoid making sharp turns.

Parking on an Incline



Avoid parking on an incline if possible. If it's unavoidable, follow these precautions:

1. Place the transmission in PARK.
2. Turn the engine off.
3. Block the rear wheels on the downhill side.

⚠ WARNING

A rolling vehicle can cause property damage and serious injury. Always place the transmission in PARK when stopping the engine. Always block the downhill side of the wheels if leaving the vehicle on a hill, 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.

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.

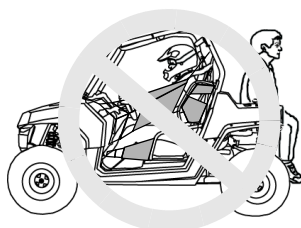
USE EXTREME CAUTION when operating with loads that extend over the rack sides. Stability and maneuverability may be adversely affected, causing the vehicle to overturn.

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.

⚠ WARNING

Driving with passengers in the cargo box can result in severe injury or death.

Never allow a passenger to ride in the cargo box. A passenger must always ride in the passenger seat with the seat belt fastened securely.



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 126.

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, which can result in serious injury or death. Always follow these precautions when towing:

Never load more than 150 lbs. (68.1 kg) tongue weight on the towing bracket.

Do not operate the vehicle faster than 10 mph (16 km/h) when towing. Towing a trailer increases braking distance.

Do not tow more than the recommended weight for the vehicle.

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.

Model	Total Towed Load Weight (Level Ground)	Total Towed Load Weight (15° grade)	Total Hitch Vertical Weight	Maximum Towing Speed
RANGER RZR	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 USDA Forest Service 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 8343. 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 European directives 97/24/EC and 89/336/EEC.

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 137.

NOTE: 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.

MAINTENANCE

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 needed. See Pre-Ride Checklist on page 56.
▶	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

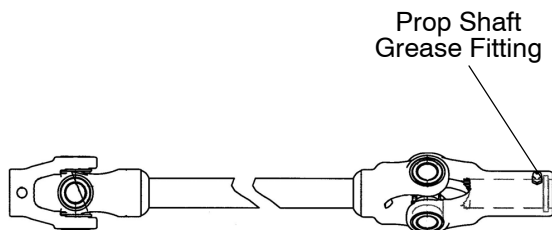
■ Have an authorized Polaris dealer perform these services

MAINTENANCE

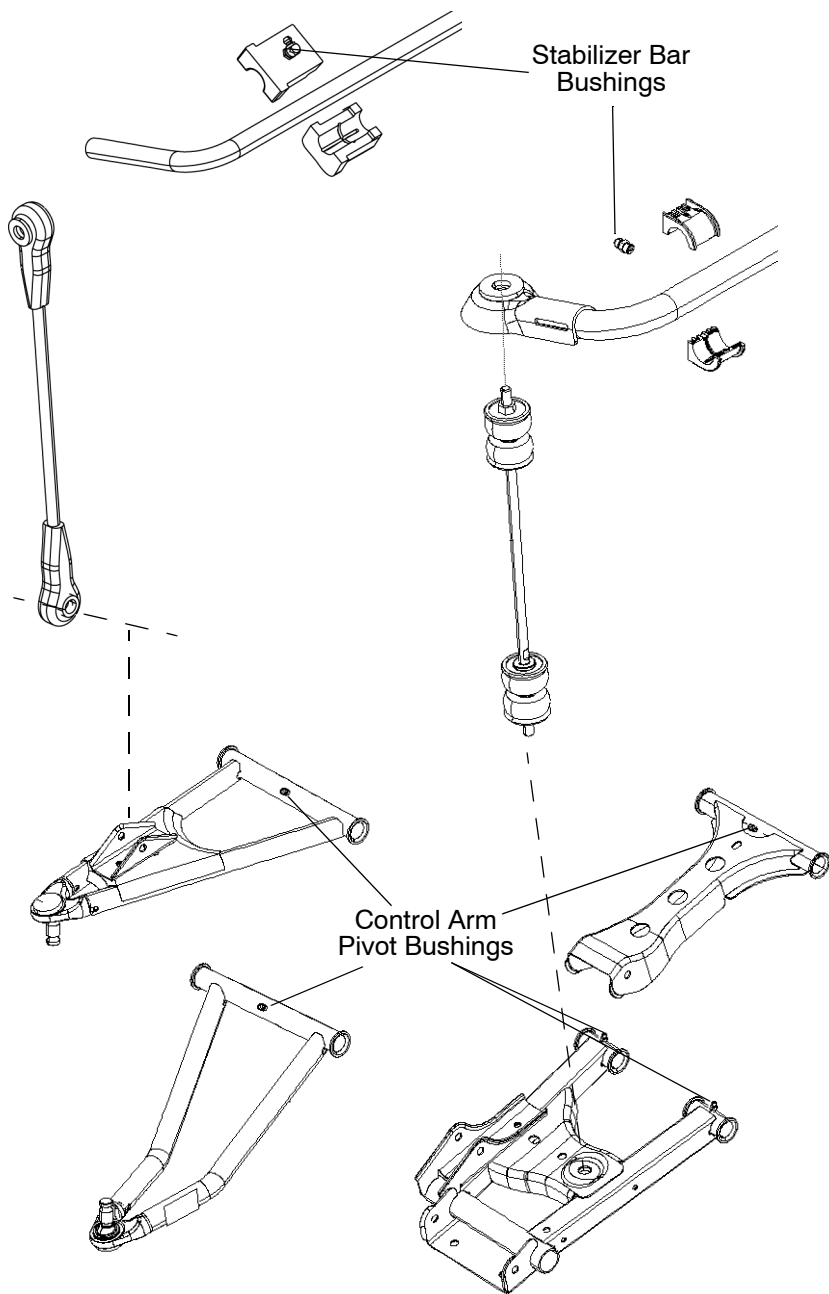
Lubrication Recommendations

Check and lubricate all components at the intervals outlined in the Periodic Maintenance Chart beginning on page 75, 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 83.
Brake Fluid	DOT 4	Maintain level between fill lines. See page 106.
Transmission Oil (Main Gearcase)	Premium AGL Synthetic Gearcase Lube	See page 88.
Transmission Oil (Transfer Case)	Premium AGL Synthetic Gearcase Lube	See page 86.
Demand Drive Fluid (Front Gearcase)	Demand Drive LT Premium Fluid	See page 90.
Rear Gearcase Oil	Premium ATV Angle Drive Fluid	See page 91.
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 75. Always change the oil filter whenever changing oil.

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 128 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.

CAUTION

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.

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.

Engine Oil

Always check and change the oil at the intervals outlined in the Periodic Maintenance Chart beginning on page 75. Always use the recommended engine oil.

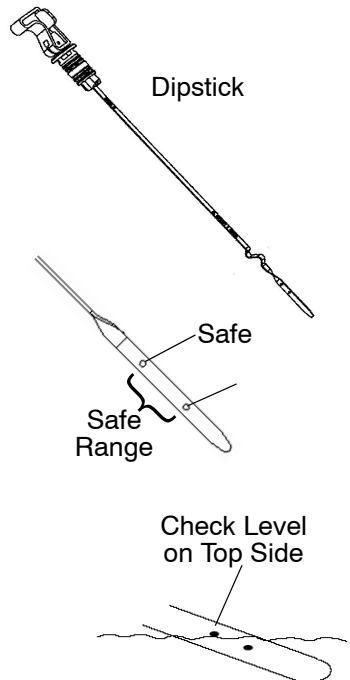
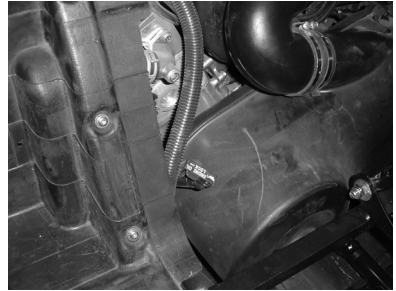
Oil Check

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. Apply the brakes.
3. Start the engine. Allow it to idle for 20-30 seconds. Stop the engine.
4. Remove both seats. Remove the rear service panel. See page 35.
5. Lift the lever lock to remove the dipstick. Wipe it dry with a clean cloth.
6. 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.
7. Remove the dipstick and check the oil level. Maintain the oil level in the safe range. Do not overfill.

NOTE: 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.

8. Reinstall the dipstick. Seat the lever lock.



MAINTENANCE

Engine Oil

Oil and Filter Change

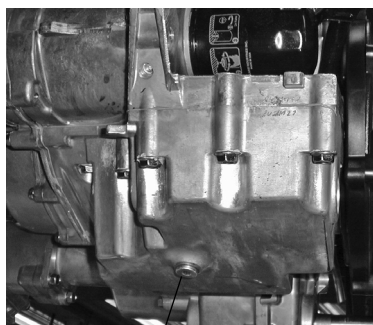
CAUTION

Hot oil can cause serious burns to skin. Do not allow hot oil to come into contact with skin.

Always change the oil and filter at the intervals outlined in the Periodic Maintenance Chart beginning on page 75. 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.
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.



Drain Plug

NOTE: 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

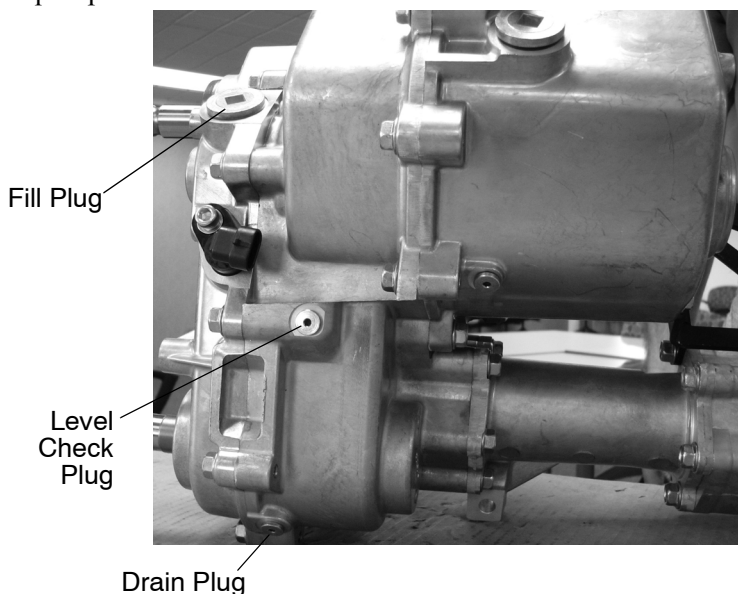
8. Using a cap-style oil filter wrench, turn the filter counter-clockwise to remove it.
9. Using a clean dry cloth, clean the filter sealing surface on the crankcase.
10. Lubricate the o-ring on the new filter with a film of fresh engine oil. Check to make sure the o-ring is in good condition.
11. Install the new filter and turn by hand until the filter gasket contacts the sealing surface, then turn an 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 75. Refer to the Gearcase Specifications Chart on page 92 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 75. Refer to the Gearcase Specifications Chart on page 92 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.



Fill Plug

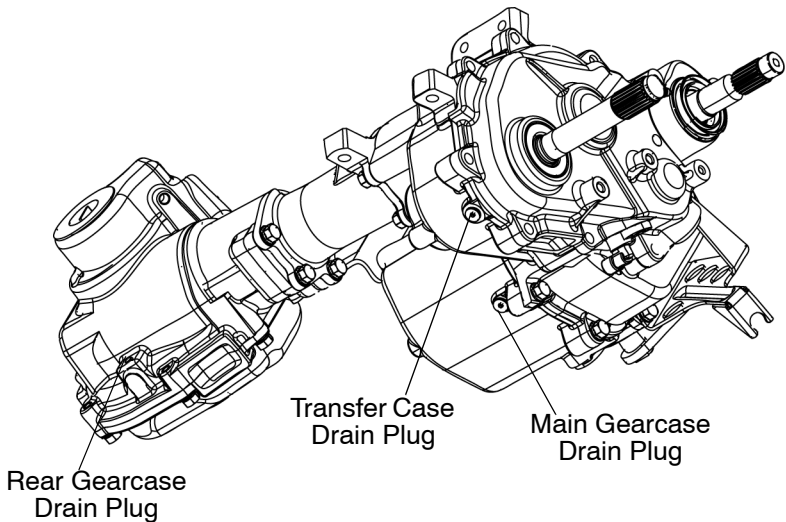
Gearcases

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

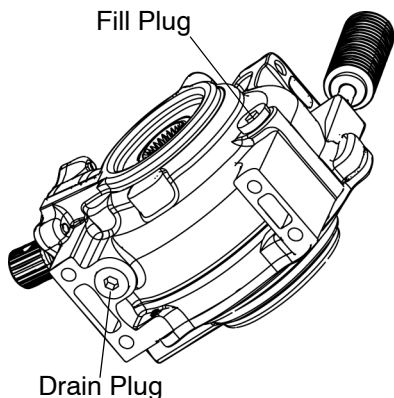
Demand Drive Unit (Front Gearcase)

Always check and change the fluid at the intervals outlined in the Periodic Maintenance Chart beginning on page 75. Refer to the Gearcase Specifications Chart on page 92 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 75. Refer to the Gearcase Specifications Chart on page 92 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.



Fill Plug

Drain Plug

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 128 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	18 oz. (532 ml)	40-50 ft. lbs. (54-68 Nm)	30-45 in. lbs. (3-5 Nm)

Spark Plugs

CAUTION

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 126.

Spark Plug Gap/Torque

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

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 94.

WARNING

A hot exhaust system and engine can cause serious 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.

NOTE: 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 35.
3. Remove the spark plug cap.
4. Using the spark plug wrench provided in the tool kit, remove the plug by rotating it counterclockwise.
5. Reverse the procedure for spark plug installation. Torque to specification. See page 93.

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.

NOTE: 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 128 for the part numbers of Polaris products.

NOTE: 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 75. 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.

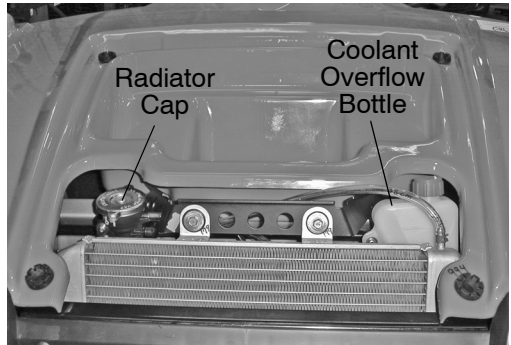
CAUTION
Washing the vehicle with a high-pressure hose could damage the radiator fins and impair the radiator's effectiveness. Using a high-pressure system is not recommended.

Cooling System Coolant Level

Always check and change the coolant at the intervals outlined in the Periodic Maintenance Chart beginning on page 75. 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 37.
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.

NOTE: 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 75. 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.

WARNING

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

1. Remove the hood. See page 37.
2. Slowly remove the radiator cap.
3. View the coolant level through the opening.
4. Use a funnel and slowly add coolant as needed.

NOTE: 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.

NOTE: 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

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.).

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.

MAINTENANCE

Polaris Variable Transmission (PVT) System

PVT Drying

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

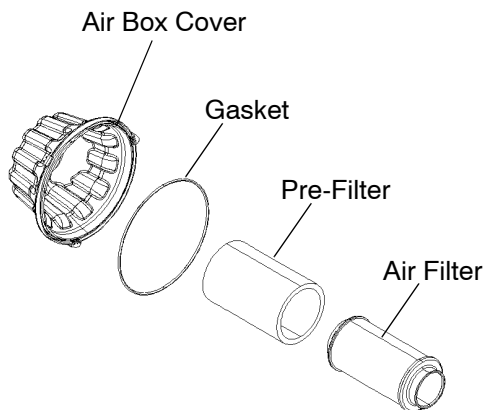
1. Remove the seats. See page 35.
2. Loosen the lower screws that secure the clutch cover.
3. Allow the water to drain.
4. Tighten the screws.
5. Place the transmission in PARK. Apply the brakes.
6. Start the engine.
7. Apply varying throttle for 10-15 seconds to expel the moisture and air-dry the belt 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 75.

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. Remove the pre-filter from the main air filter.
5. Wash the pre-filter in soapy water, then rinse and let dry.



NOTE: Install a new main filter if needed. Do not attempt to clean the main air filter.

6. Reinstall the pre-filter over the main filter.

NOTE: Apply a small amount of general purpose grease to the sealing edges of the filter before installing.

7. 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.

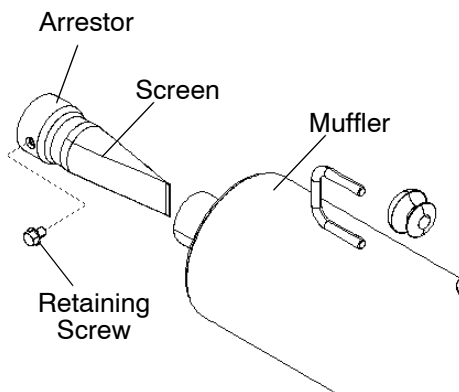
Never run the engine in an enclosed area. Exhaust contains poisonous carbon monoxide gas that can cause loss of consciousness or death in a very short time.

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.

NOTE: 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.

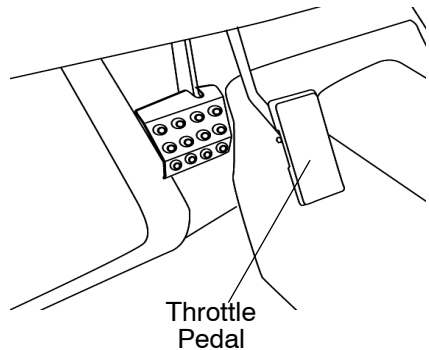
Immediately contact your dealer for service if throttle problems arise.

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 75. 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 (1.6-3.2 mm).

MAINTENANCE

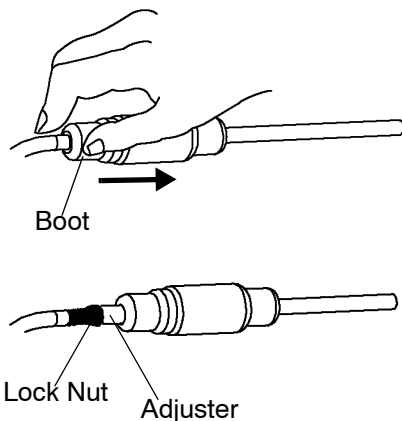
Throttle System

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 35.
2. Locate the throttle cable adjuster.
3. Squeeze the end of the rubber boot and slide it far enough to expose the end of the inline cable adjuster.
4. Loosen the adjuster lock nut.
5. Rotate the boot to turn the adjuster until $1/16"$ to $1/8"$ (1.5-3 mm) of freeplay is achieved at the throttle pedal. See page 103.



NOTE: While adjusting, lightly flip the throttle pedal up and down.

6. Tighten the lock nut.
7. Squeeze the end of the rubber 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 45.

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 106 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

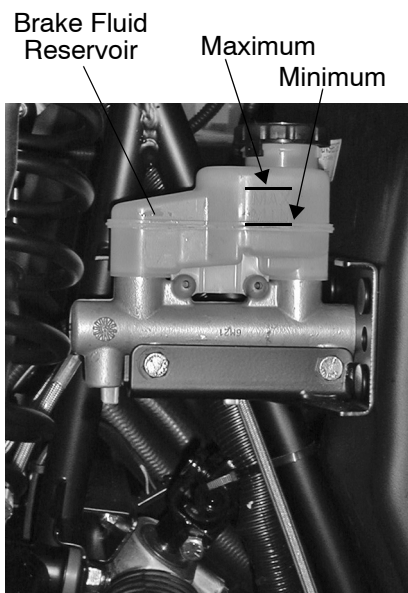
Brake Fluid

Inspect the level of the brake fluid before each operation. If the fluid level is low add DOT 4 brake fluid only. See page 128 for the part numbers of Polaris products.

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.



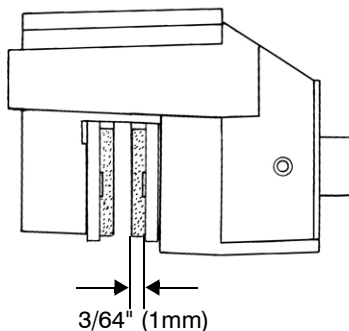
⚠ WARNING

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.

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 $\frac{3}{64}$ " (1 mm).



Steering Wheel Inspection

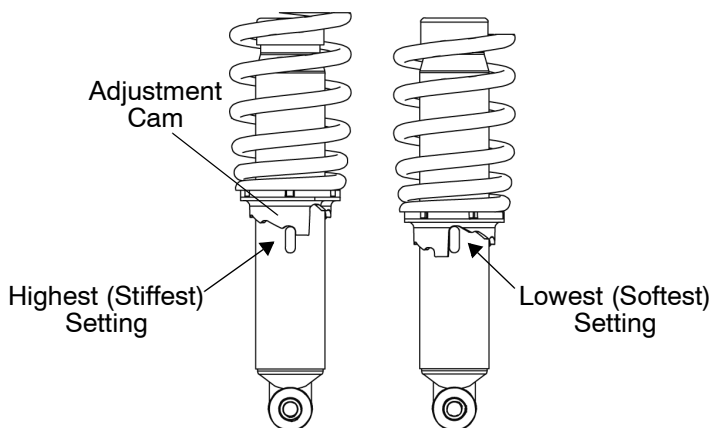
Check the steering wheel for specified freeplay and smooth operation at the intervals outlined in the Periodic Maintenance Chart beginning on page 75.

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 Adjustment

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 126.

Tires

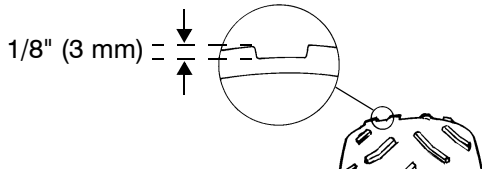
⚠ WARNING

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.



Cast Aluminum



90 ft. lbs.
(122 Nm)



Steel



27 ft. lbs.
(37 Nm)

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)

NOTE: Do not lubricate the stud or the lug nut.

MAINTENANCE

Tires

⚠ WARNING

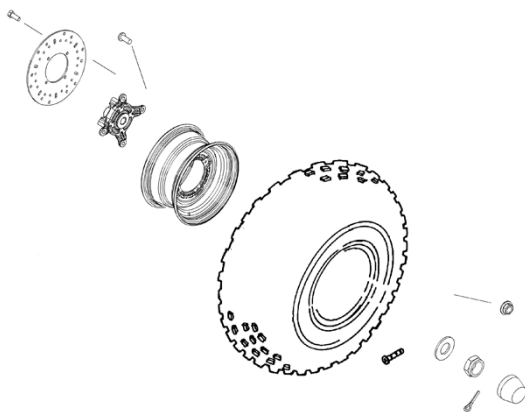
Improperly installed wheels can adversely affect tire wear and vehicle handling, which can result in serious injury or death. Always ensure that all nuts are torqued to specification. Do not service axle nuts that have a cotter pin installed. See your Polaris dealer.

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.
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 109.



Lights

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.

⚠ WARNING

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.

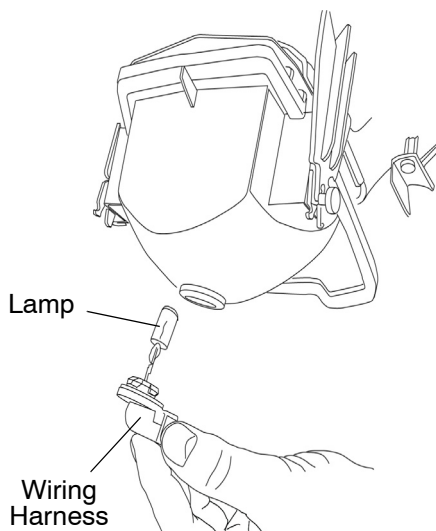
Hot components can cause serious burns to skin. Do not service the headlamps until they've cooled sufficiently.

Headlight Lamp Replacement

1. Unplug the headlamp from the wiring harness. Be sure to pull on the connector, not on the wiring.
2. Turn the lamp counter-clockwise to remove it.
3. Install the new lamp.

NOTE: Make sure the tab on the lamp locates properly in the housing.

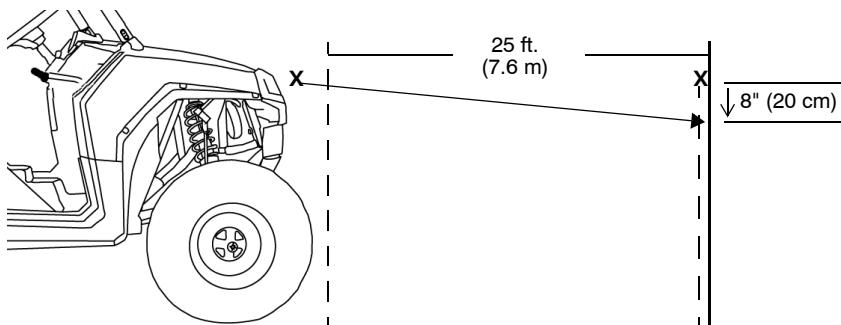
4. Reinstall the harness assembly into the headlight assembly.



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.

NOTE: 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

CAUTION

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 101.
3. Remove the spark plugs.
4. Turn the engine over several times.
5. Dry the spark plugs and reinstall them, or install new plugs.

NOTE: Attempt to start the engine. If necessary, repeat the drying procedure.

6. Take the vehicle to your dealer for service as soon as possible, whether you succeed in starting it or not.

NOTE: If water has been ingested into the PVT follow the procedure on page 100 for drying.

MAINTENANCE

Battery

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.

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.**

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 35.
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.



CAUTION

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 118 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).

NOTE: 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

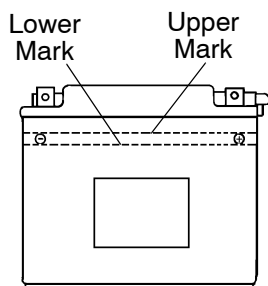
Whenever the vehicle is not used for a period of three months or more, remove the battery from the vehicle, ensure that it's fully charged, and store it out of the sun in a cool, dry place. Check battery voltage each month during storage and recharge as needed to maintain a full charge. See page 118.

NOTE: 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 128 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 115.
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 116. 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.

NOTE: 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)

NOTE: 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.

CAUTION
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 decals. 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

NOTE: 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.

NOTE: 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

CAUTION

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 120.

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.

NOTE: 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 84.

Air Filter / Air Box

Inspect and clean or replace the pre-filter and air filter. See page 101. 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 75.

- 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 75.

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 pre-measured amount of oil.

NOTE: 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 94.
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 117-119 for storage and charging procedures.

Storage Area/Covers

Be sure the storage area is well ventilated. Cover the vehicle with a genuine Polaris cover.

NOTE: 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 56.

NOTE: 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 75.

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	
Gross Vehicle Weight	1727 lbs. (783 kg)
Dry Weight	945 lbs. (429 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	18 oz. (532 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)
Front Storage Capacity	25 lbs. (11.3 kg)
Rear Cargo Box Capacity	300 lbs. (136 kg)
Maximum Weight Capacity (Payload)	740 lbs. (336.4 kg) (riders/cargo/accessories)
Receiver Hitch Tongue Capacity	150 lbs. (68 kg)
Receiver Hitch Towing Capacity	1500 lbs. (680 kg)
Overall Length	102 in. (259 cm)
Overall Width	50 in. (127 cm)
Overall Height	68.5 in. (174 cm)
Wheelbase	77 in. (196 cm)
Ground Clearance	10 in. (25.4 cm)
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 w/9 in. (23 cm) of travel
Rear Suspension	Independent double a-arm w/9.5 in. (24 cm) of travel

SPECIFICATIONS

<i>RANGER RZR</i>	
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	25 x 8 - 12
Tire Size - Rear	25 x 10 - 12
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

NOTE: 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

TROUBLESHOOTING

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 65.
Driving at low RPM or ground speed (3-7 MPH)	Drive at a higher speed or use low range more frequently. See page 44.
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 100. 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 54 and 44.

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

TROUBLESHOOTING

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

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.

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.

WARRANTY

LIMITATIONS OF WARRANTIES AND REMEDIES

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 43 CFR 8343.1(c) for at least 1000 hours when subjected to normal use and when maintenance and installation are in accordance with Polaris recommendations.

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: 1-763-417-8650

Canada: 1-204-925-7100

WARRANTY

U.S.A. EPA Emissions Limited Warranty

This All Terrain Vehicle (ATV) or Off Road Utility Vehicle (ORUV) emissions limited warranty is in addition to the Polaris standard limited warranty for this vehicle.

Polaris warrants that this vehicle is; (1) designed, built, and equipped to conform at the time of initial sale with the requirements of 40 CFR 1051 and, (2) free from defects in materials and workmanship that may keep it from meeting these requirements.

The emissions warranty period for this vehicle begins on the date the vehicle is delivered to the original retail purchaser and ends 30 months (2.5 years) after that date, or after 5000 km (3100 miles), or after 500 hours of operation, whichever comes first.

This emission-related warranty covers components whose failure would increase an engine's emissions, including electronic controls, fuel injection, exhaust-gas recirculation, aftertreatment, or any other system utilized in this vehicle to control emissions. Replacing or repairing other components not covered by this emissions warranty or the standard warranty is the responsibility of the owner; including the parts, labor and other costs associated with recommended maintenance.

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 any engine that 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.

If you have any questions regarding your warranty rights and responsibilities, you should contact the Polaris Warranty Department at 1-763-417-8650.

MAINTENANCE LOG

Use the following chart to record periodic maintenance.

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

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