



POLARIS

*For 50 years we've been
helping Polaris customers
find The Way Out.*

*It's been a fun ride.
But then, after all these years,
That's what we're all about.*

*Visit our Web site at
www.polarisindustries.com*



POLARIS
The Way Out.

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2005 *RANGER* XP Owner's Manual P/N 9919825

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.

Polaris Recreational and Utility Vehicles

- Snowmobiles
- All-terrain vehicles (ATVs)
- Personal watercraft
- Sport Boats
- *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 vehicle 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.

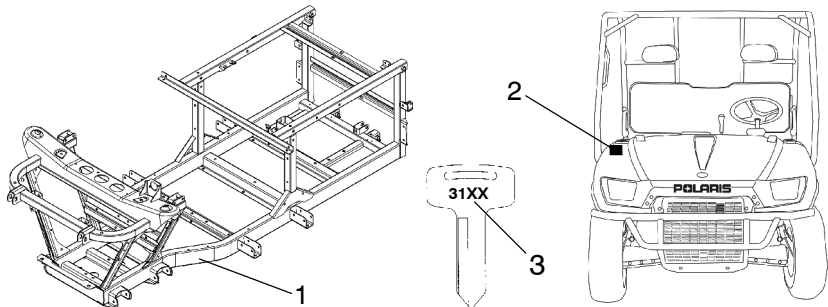
Your Polaris dealer knows your vehicle best and is interested in your total satisfaction. Be sure to return to your dealership for all of your service needs during, and after, the warranty period.

We also take great pride in our Parts Apparel and Accessories (PAA) products, available through our online store at www.purepolaris.com. Have your accessories and clothing delivered right to your door!

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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. Your key can be duplicated only by mating a Polaris key blank with one of your existing keys, so if both keys are lost, the ignition switch must be replaced.



Vehicle Model Number: _____
(behind left front wheel)

Frame VIN (1): _____
(under hood)

Engine Serial Number (2): _____
(right front side of engine crankcase)

Key Number (3): _____

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Operator Safety

WARNING

Failure to follow the warnings contained in this manual can result in severe injury or death.

A Polaris *RANGER* is not a toy and can be hazardous to operate. This vehicle handles differently than other vehicles, such as motorcycles and cars. 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.

Age Restrictions

This vehicle is an **ADULT VEHICLE ONLY**. Operation is prohibited for anyone under 16 years of age. No person under the age of 5 may ride as a passenger in this vehicle.

Know Your Vehicle

As the operator of the vehicle, you are responsible for your personal safety, the safety of others, 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.

The *RANGER* is an off-road vehicle. Familiarize yourself with all laws and regulations concerning the operation of this vehicle in your area.

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.

SAFETY

Operator Safety

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



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



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 personal 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.

Operator Safety

WARNING

Serious injury or death can result if you do not follow these 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 allow anyone without a valid driver's license to operate this vehicle.
- Minimum age recommendation for passengers is five years old. Passengers under five years of age require special restraints which are not available with this vehicle. Driver and passenger should wear their seat belts at all times.
- Never permit a guest to operate this vehicle unless the guest has read this manual and all product labels.
- To reduce tipover risk, be especially careful when encountering obstacles and slopes and when braking on hills or during turns.
- This vehicle is for off road use only. Never operate on public roads. Always avoid paved surfaces.
- Helmets are recommended whenever driving this vehicle in an aggressive manner. Eye protection is recommended at all times.
- Never consume alcohol or drugs before or while operating this vehicle.
- Never operate at excessive speeds. Always travel at a speed proper for the terrain, visibility and operating conditions, and your experience.
- Never attempt wheelies, jumps or other stunts.
- Always inspect your vehicle each time you use it to make sure it'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 and both feet on the floorboards of the vehicle during operation.
- 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.

SAFETY

Operator Safety

- Always follow proper procedures for turning as described in this manual. Practice turning at slow speeds before attempting to turn at faster speeds. Never turn at excessive 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.
- 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.
- 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 your vehicle in fast-flowing water or in water deeper than that specified in this manual. Wet brakes may have reduced stopping ability. Test your brakes after leaving water. If necessary, apply them lightly several times to let friction dry out the pads.
- Always be sure there are no obstacles or people behind your vehicle when operating in reverse. When it's safe to proceed in reverse, move slowly. Avoid turning at sharp angles in reverse.
- Always use the proper size and type of tires specified in this manual. Always maintain proper tire pressure as specified on page 21.

Operator Safety

- Never modify this vehicle through improper installation or use of accessories.
- Never exceed the stated load capacity for this vehicle. Cargo should be properly distributed and securely attached. Reduce speed and follow the instructions in this manual for hauling cargo or pulling a trailer. Allow a greater distance for braking.
- Always wear the seat belts when operating this vehicle. Seat belts reduce the severity of injury in case of a sudden stop or collision.
- Always keep arms and legs inside the cab frame while the vehicle is in motion.
- Always engage the park brake before getting out of the vehicle. See page 34.
- Always apply the service brakes before releasing the park brake.
- 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 24 for refueling instructions.
- 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.

SAFETY

Operator Safety

WARNING

Make sure your *RANGER* is in excellent operating condition at all times. We strongly recommend that the operator check all safety components before each ride.

Polaris *RANGERS* are designed to provide safe operation when used as directed. Failure of critical machine components may result from operation with any modifications, especially those that increase speed or power. The *RANGER* may become aerodynamically unstable at speeds higher than those for which it is designed. Loss of control may occur at higher speeds.

Modifications may also create a safety hazard and lead to bodily injury.

Do not make any modifications to your *RANGER*.

Equipment Modifications

We are concerned for the safety of our customers and for the general public. Therefore, we strongly recommend that consumers do not install on a Polaris *RANGER* 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 *RANGER* 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.

Operator Safety

⚠ WARNING

POTENTIAL HAZARD

Stalling, rolling backwards while climbing a hill

WHAT CAN HAPPEN

Vehicle overturn

HOW TO AVOID THE HAZARD

Maintain a steady speed when climbing a hill.

If you lose all forward speed:

Apply the brakes.

Engage the park brake after fully stopped.

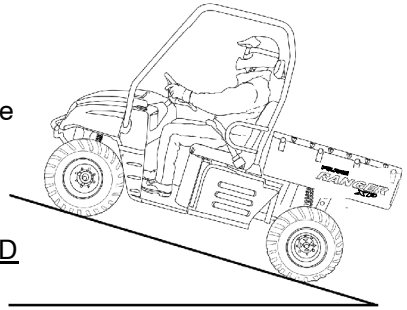
If you begin rolling backwards:

Never apply engine power.

Apply the brakes gradually.

When fully stopped, engage the park brake.

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



SAFETY

Operator Safety

WARNING

POTENTIAL HAZARD

Operating this vehicle on paved surfaces

WHAT CAN HAPPEN

Loss of control

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 without proper instruction

WHAT CAN HAPPEN

Loss of control, accident

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.

Operator Safety

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

WARNING

POTENTIAL HAZARD

Operating this vehicle after consuming alcohol or drugs

WHAT CAN HAPPEN

Could seriously affect your judgment.

Could cause you to react more slowly.

Could affect your balance and perception.

Could result in an accident.

HOW TO AVOID THE HAZARD

Driving a *RANGER* requires your full attention. **DO NOT** drink alcohol or use drugs or medications before or while driving. They will reduce your alertness and slow your reaction time. In most states and provinces, it's prohibited by law to drive while intoxicated or under the influence of drugs.

SAFETY

Operator Safety

WARNING

POTENTIAL HAZARD

Operating this vehicle at excessive speeds

WHAT CAN HAPPEN

Loss of control, accident

HOW TO AVOID THE HAZARD

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

WARNING

POTENTIAL HAZARD

Attempting jumps and other stunts

WHAT CAN HAPPEN

Loss of control, accident and/or vehicle overturn

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 can result if the vehicle and/or the operator fall through the ice.

HOW TO AVOID THE HAZARD

Never operate the *RANGER* on a frozen body of water.

Operator Safety

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 *RANGER* 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.

WARNING

POTENTIAL HAZARD

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

WHAT CAN HAPPEN

Loss of control, vehicle overturn

HOW TO AVOID THE HAZARD

Travel slowly and use extra caution when operating on unfamiliar terrain.

Always be alert to changing terrain conditions when operating the vehicle. You may come upon hidden rocks, bumps, or holes suddenly, without enough time to react.

SAFETY

Operator Safety

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

Only persons with a valid driver's license should operate a Polaris *RANGER*.

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

WARNING

POTENTIAL HAZARD

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

WHAT CAN HAPPEN

Loss of control, accident and/or overturn

HOW TO AVOID THE HAZARD

Always use the size and type of tires specified in the Owner's Manual for this vehicle. See page 21.

Always maintain proper tire pressure as described on the decal and in the Owner's Manual. See page 21.

Operator Safety

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.

WARNING

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.

CAUTION

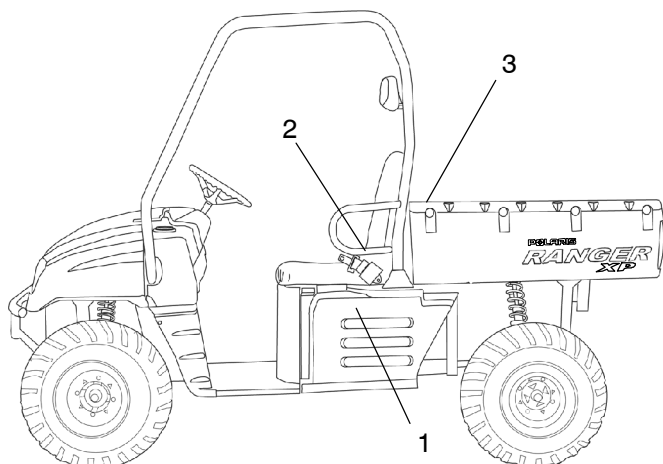
Always keep combustible materials away from the exhaust system. Exposure to the hot components could result in a fire.

SAFETY

Safety Decals and Locations

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

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.



⚠ WARNING


- Moving parts hazard under belt-clutch guard. To prevent serious injury, do not operate vehicle with guard removed.
- Do not modify engine or clutch. Doing so can cause part failure, possible imbalance, and excessive engine RPM, which can result in serious injury or death.

NO STEP








7172563


Location 1

Safety Decals and Locations

 WARNING
<ul style="list-style-type: none"> • VEHICLE ROLLOVER could cause severe injury or death. This cab frame is not designed or intended to provide rollover protection. • ALWAYS WEAR YOUR SEAT BELT for maximum protection.
7172676

Location 2

 WARNING		 WARNING
   <p>Remove flammable material containers from box before filling.</p>		<ul style="list-style-type: none"> • Passengers can be thrown off. This can cause serious injury or death. • Never carry passengers in cargo box.
 WARNING		<small>Max. 2 x 4 Box Load 850 lbs. Max. 4 x 4 Box Load 1000 lbs. Max. 6 x 6 Box Load 1200 lbs.</small>

 WARNING	
<small>IMPROPER TIRE PRESSURE OR OVERLOADING can cause loss of control resulting in SEVERE INJURY OR DEATH.</small> TIRE PRESSURE (PSI): RANGER - 2 x 4 and 4 x 4 FRONT 10 REAR 10 RANGER - 6 x 6 FRONT 10 CENTER 10 REAR 10 MAXIMUM WEIGHT CAPACITY (Gross Vehicle Weight) INCLUDING MACHINE, DRIVER AND CARGO: RANGER 2 X 4 and 4 x 4 is 2750 LBS. RANGER 6 X 6 is 2900 LBS.	<small>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.</small> <small>Read Owner's Manual for more detailed loading information.</small> <small>7173033</small>

Location 3 (inside front of box)

Fuel / Passenger / Tire Pressure Warning Decal Text

Remove flammable material containers from box before filling.

- Passengers can be thrown off. This can cause serious injury or death.
- Never carry passengers in cargo box.

Maximum 2X4 Box Load 850 lbs. Maximum 4X4 Box Load 1000 lbs.

Maximum 6X6 Box Load 1200 lbs.

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

TIRE PRESSURE (PSI): FRONT 10 REAR 10

MAXIMUM WEIGHT CAPACITY (Gross Vehicle Weight)

INCLUDING MACHINE, DRIVER AND CARGO:

RANGER 2X4 and 4X4 is 2750 LBS. RANGER 6X6 is 2900 LBS.


Reduce speed and allow greater distance for braking when carrying cargo.

Overloading or carrying tall, off-center, or unsecured loads will increase your risk of losing control. Loads should be centered 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.

SAFETY

Safety Decals and Locations




MANUFACTURED
BY: POLARIS IND. INC.

DATE:

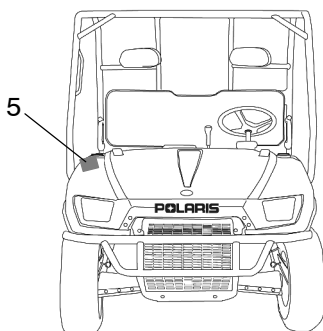
VIN:

THIS VEHICLE IS A GENERAL PURPOSE OFF-ROAD UTILITY VEHICLE AND IS NOT INTENDED FOR USE ON PUBLIC ROADS.

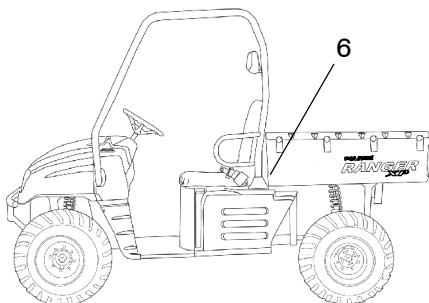
CE VÉHICULE USAGE GÉNÉRAL VÉHICULE UTILITAIRE POUR SERVICE HORS ROUTE QUI N'EST PAS DESTINÉ À ÊTRE UTILISÉ SUR LES CHEMINS PUBLICS.



7078472



Location 5 (under hood)




ATTENTION

- Operation of this vehicle without the air filter element will severely damage the engine.
- Clean pre-filter element often, more frequent cleaning required in dusty conditions. Do not operate vehicle without pre-filter.

7172921

Location 6

 **CAUTION**

To avoid transmission damage, shift only when vehicle is stationary and at idle.

7172674

 **ATTENTION**

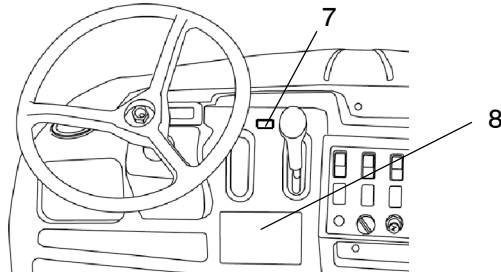
Pour ne pas endommager la boîte de vitesses, ne changer de vitesse que lorsque le véhicule est à l'arrêt ou au ralenti.

7172674-F

Location 7

Safety Decals and Locations

Discretionary Warning Decal



WARNING

Improper vehicle use can result in SEVERE INJURY or DEATH.

NEVER:

- Operate on public roads. A collision can occur with another vehicle.
- Carry more than two passengers, or passengers under age five.
- USE ALCOHOL or DRUGS before or while operating this vehicle.
- Operate at speeds too fast for your skills or the conditions.
- Operate this vehicle on HILLS steeper than 15 degrees $\triangleleft 15^\circ$. To prevent flipover on hilly terrain, use throttle and brakes gradually.

ALWAYS:

- Avoid paved surfaces which may adversely affect handling and control.
- Use proper RIDING TECHNIQUES to avoid vehicle overturns on hills and rough terrain and in turns.
- Wear eye protection.

REVERSE operation can be dangerous, even at low speeds. Steering becomes difficult. To prevent flipover, avoid sharp turns.

The park/emergency brake lever will supply increased braking, but should be used as an emergency or parking brake only.

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

THIS GENERAL PURPOSE OFF-ROAD UTILITY VEHICLE DOES NOT MEET FEDERAL MOTOR VEHICLE SAFETY STANDARDS FOR ON-ROAD VEHICLES. 7172675

AVERTISSEMENT

L'usage incorrect du véhicule peut entraîner des BLESSURES GRAVES ou MORTELLES. NE JAMAIS :

- conduire ce véhicule sur les voies publiques. Une collision avec un autre véhicule pourrait se produire.
- transporter plus de deux passagers ou des passagers âgés de moins de cinq ans.
- CONSOMMER D'ALCOOL ni prendre des MÉDICAMENTS ou DROGUES avant ou pendant la conduite de ce véhicule.
- conduire à des vitesses excessives pour ses propres compétences ou l'état de la route.
- conduire ce véhicule sur des PENTES à plus de 15 degrés $\triangleleft 15^\circ$. Pour éviter un retournement sur les pentes utiliser les freins et l'accélérateur graduellement.

TOUJOURS :

- éviter de conduire sur des surfaces pavées car cela pourrait sérieusement affecter la tenue de route et le contrôle.
- utiliser les bonnes TECHNIQUES DE CONDUITE sur les pentes, en terrain accidenté et dans les virages, afin d'éviter un retournement du véhicule.
- porter une protection oculaire.

La conduite en MARCHE ARRIÈRE peut être dangereuse, même à basse vitesse. Le braquage est plus difficile. Pour éviter un retournement, ne pas prendre de virages trop serrés. Le frein de stationnement/de secours augmente la puissance de freinage, mais ne doit s'utiliser que pour le stationnement ou en cas d'urgence.

LIRE LE MANUEL D'UTILISATION. SUIVRE TOUTES LES INSTRUCTIONS ET AVERTISSEMENTS. SI LE MANUEL D'UTILISATION EST MANQUANT, CONTACTER UN CONCESSIONNAIRE POLARIS POUR OBTENIR UN NOUVEL EXEMPLAIRE. CE VÉHICULE UTILITAIRE UNIVERSEL POUR SERVICE HORS ROUTE N'EST PAS CONFORME AUX RÉGLEMENTATIONS AMÉRICAINES POUR LA CONDUITE SUR VOIES PUBLIQUES. 7172675-F

SAFETY

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.

Do not smoke or allow open flames or sparks in or near the refueling area or where gasoline is stored.

Do not over fill the tank. Do not fill the tank neck.

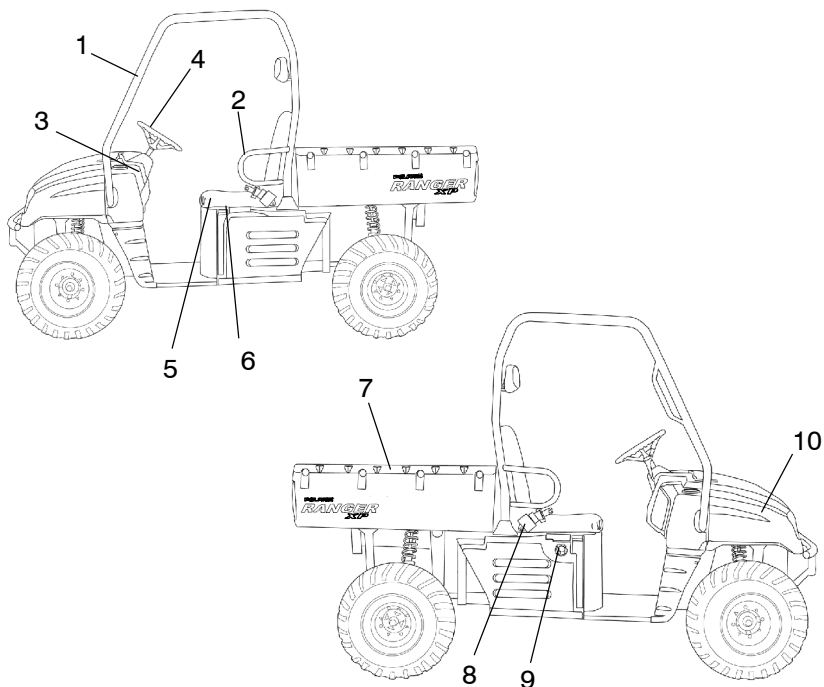
If gasoline spills on your skin or clothing, immediately wash it off with soap and water and change clothing.

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

Some Polaris vehicles are equipped with special features such as the cab frame. *Not all models come with all features.* Refer to the specifications section beginning on page 98.

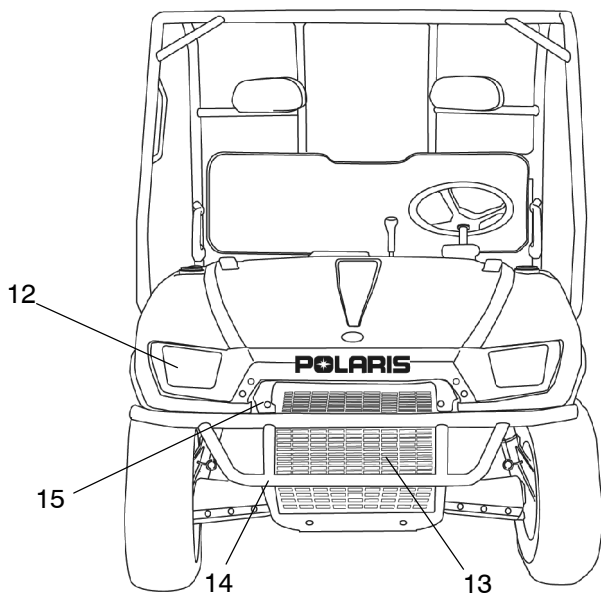
Component Locations



1. Cab Frame (if equipped)
2. Hip Bar
3. Console
4. Steering Wheel
5. Seat
6. Storage Box (under driver's seat)
7. Cargo Box
8. Seat Belts
9. Fuel Tank Cap / Fuel Gauge
10. Battery (under hood)
11. Storage Box (under hood)

FEATURES AND CONTROLS

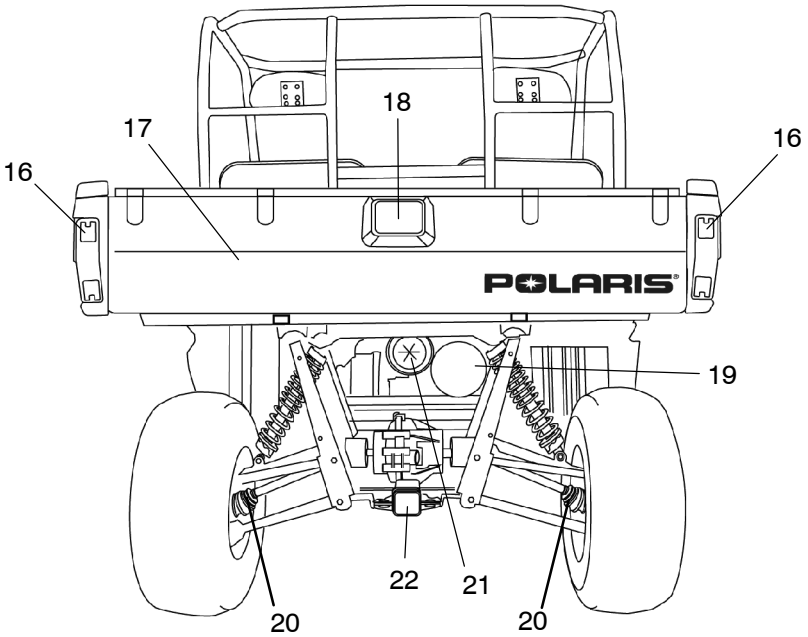
Component Locations



- 12. Headlights
- 13. Radiator (if equipped)
- 14. Front Bumper/Brush Guard
- 15. Hood Hold Down Strap

FEATURES AND CONTROLS

Component Locations

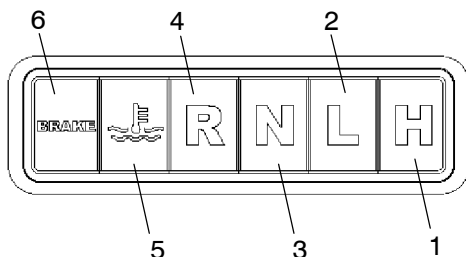


- 16. Taillights
- 17. Tailgate
- 18. Tailgate Latch Release
- 19. Muffler (Spark Arrester)
- 20. CV Boot/Rear Caliper
- 21. Air Box
- 22. Receiver Hitch

FEATURES AND CONTROLS

Indicator Lights

1. High Gear
2. Low Gear
3. Neutral Gear
4. Reverse Gear
5. High Temperature
6. Park Brake



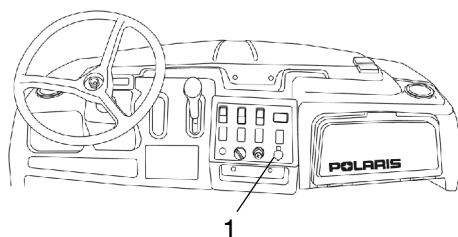
Trailer Hitch Bracket

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 page 50.

Auxiliary Outlet (1)

The 12-volt 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 behind the console, under the hood.



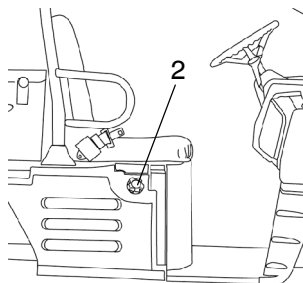
FEATURES AND CONTROLS

Fuel Cap/Fuel Gauge (2)

The fuel tank filler cap is located on the right-hand side of the vehicle near the passenger seat. It has a built-in fuel gauge that indicates the amount of fuel remaining in the tank.

When the indicator needle nears the E (empty) mark, refuel at the earliest opportunity.

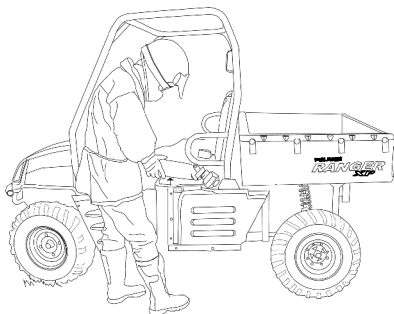
When refueling, always use either leaded or unleaded gasoline with a minimum pump octane number of 87 R+ M/2 octane.



Seat Removal

Pull up on the front of the seat and slide it toward the front of the vehicle.

Install the seat by sliding the tabs into the rear of the seat base. Push down firmly on the front of the seat until the pins are fully seated into the grommets.



FEATURES AND CONTROLS

Seat Belts

The *RANGER* is equipped with lap-style seat belts for the operator and passenger.

WARNING

Falling from a moving vehicle could result in serious injury or death. Always fasten your seat belt securely before operating or riding in the *RANGER*.

Passengers under five years of age require special restraints, which are not available with this vehicle. No person under the age of five years may ride in the *RANGER*.

To wear the seat belt properly, follow this procedure:

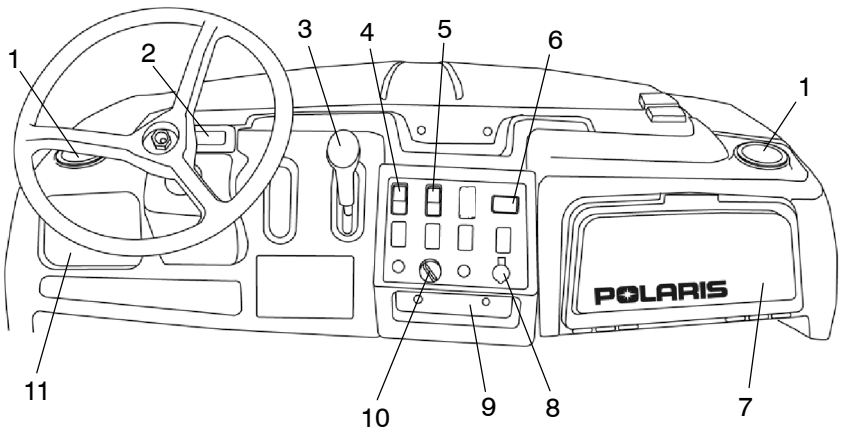
1. Place the belt across your lap as low on your hips as possible, taking care that the belt is not twisted.
2. Push the latch plate into the buckle until it clicks.
3. Release the strap, it will self tighten.

NOTE: The center belt must be tightened manually by pulling on the strap.

To unfasten, press the square red button in the buckle's center.

FEATURES AND CONTROLS

Console



1. Cup Holder
2. Indicator Lights
3. Shift Lever
4. Light Switch
5. AWD/Differential Switch (if equipped)
6. Hour Meter
7. Glove Box with Lid
8. 12V Accessory Plug
9. Storage Tray
10. Ignition Switch
11. Storage Box

FEATURES AND CONTROLS

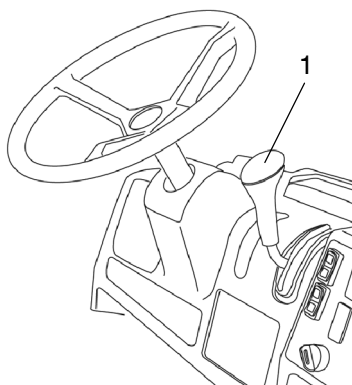
Gear Selector (1)

H: High Gear

L: Low Gear

N: Neutral

R: Reverse



NOTE: Low gear is the primary driving range for the *RANGER XP*. High gear is intended for use on hard-packed surfaces with light loads.

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.

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.

Always place the transmission in gear, engage the park brake and turn the engine off whenever the vehicle is left unattended.

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

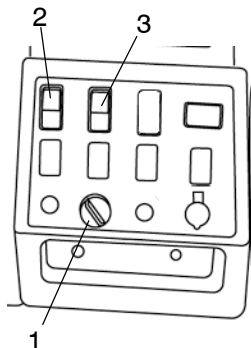
FEATURES AND CONTROLS

Switches

Ignition Switch (1)

The ignition switch is a three-position, key-operated switch. The key can be removed from the switch when it is in the OFF position.

OFF	Engine off. All electrical circuits are off except Acc. 12V.
ON/RUN	Electrical circuits are on. Electrical equipment can be used.
START	Electric starter is engaged by holding ignition switch key in this position. Upon release, the key will return to the ON/RUN position.



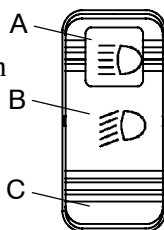
⚠ WARNING

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.

Light Switch (2)

The ignition switch key must be in the ON/RUN position to operate the headlights. The switch has three positions:

- A: High Beam
- B: Low Beam
- C: Off



AWD/Differential Lock Switch (3)

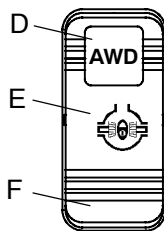
The AWD/Differential Switch has three positions:

- D: AWD
- E: Differential Lock (2WD)
- F: Off (1WD)

Press the top of the rocker switch to engage AWD. See page 53 for AWD operating instructions.

Move the rocker switch to the center position to lock the differential and return to 2WD. See page 52 for Differential Lock operating instructions.

Press the bottom of the switch to unlock the differential and return to 1WD.



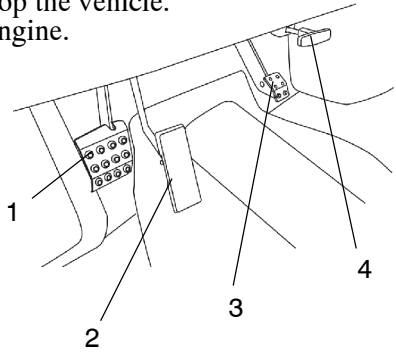
FEATURES AND CONTROLS

Brake Pedal (1)

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

Throttle Pedal (2)

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 79 for throttle pedal adjustment procedures.



Park Brake Pedal (3)

Engage the park brake when parking the vehicle to help prevent the vehicle from rolling. To engage the park brake, apply the brakes, then push the park brake pedal down firmly and fully with your foot.

Park Brake Release (4)

Always apply the service brakes before releasing the park brake. To release the park brake, pull the park brake release handle. Make sure the park brake pedal is functioning properly before each operation.

Vehicle Break-In Period

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

CAUTION

Excessive heat build-up during the first three hours of operation will damage close-fitted engine parts. Do not operate at full throttle or high speeds for extended periods 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.

1. Fill the fuel tank with gasoline. Heed the gasoline warnings on page 24.
2. Check the oil level on the dipstick. See page 62. Add Polaris Premium 4 Synthetic Oil if necessary to maintain the oil level in the normal (safe) operating range.
3. Drive slowly at first. Select an open area that allows room to familiarize yourself with vehicle operation and handling.
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 36.
6. Pull only light loads.
7. During the break-in period, change both the oil and the filter at 25 hours.

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.

Pre-Ride Checklist		
Item	Remarks	See Page
Brake system / lever travel	Ensure proper operation	80
Brake fluid	Ensure proper level	80
Front suspension	Inspect, lubricate if necessary	60
Rear suspension	Inspect, lubricate if necessary	60
Steering	Ensure free operation	-
Tires	Inspect condition and pressure	84, 99
Wheels / fasteners	Inspect, ensure fastener tightness	84
Frame nuts, bolts, fasteners	Inspect, ensure tightness	-
Fuel and oil	Ensure proper levels	62
Coolant level	Ensure proper level	69
Coolant hoses	Inspect for leaks	-
Throttle	Ensure proper operation	34
Indicator lights / switches	Ensure operation	28, 33
Air filter, pre-filter	Inspect, clean	75
Air box sediment tube	Drain deposits whenever visible	-
Headlamp	Check operation, apply Polaris dielectric grease when lamp is replaced	86
Brake light / tail lamp	Check operation, apply Polaris dielectric grease when lamp is replaced	87

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. Engage the park brake.
3. Shift the transmission to neutral.
4. Apply the brakes while starting the engine.

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

5. Turn the ignition key past the ON/RUN position to START. Engage the starter for a maximum of five seconds. Release the key when the engine starts.
6. If the engine does not start within five seconds, release the ignition switch and wait five seconds. Repeat steps 5 and 6 until the engine starts.
7. Vary the engine RPM slightly with the throttle to aid in warm up until the engine idles smoothly.

CAUTION

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

OPERATION

Stopping the Engine

1. Release the throttle pedal completely and brake to a complete stop.
2. Turn the engine off.
3. Engage the park brake.

WARNING

A rolling vehicle can cause property damage and serious injury. Always engage the park brake after stopping the engine.

Braking

1. Release the throttle pedal completely.
2. Press on the brake pedal evenly and firmly.

NOTE: Practice starting and stopping (using the brakes) until you're familiar with the controls.

NOTE: When the throttle pedal is released completely and the engine speed drops near an 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.

Driving Safely

Driving Procedures



1. Sit in the driver's seat and fasten the seat belt.
2. After starting the engine and allowing it to warm up, apply the service brakes, and shift the transmission into gear.
3. Check your surroundings and determine your path of travel.
4. Release the park brake.
5. Keeping both hands on the steering wheel, slowly release the brakes and depress the throttle with your right foot to begin driving.
6. Drive slowly. Practice maneuvering and using the throttle and brakes on level surfaces.

NOTE: Low gear is the primary range for operating the *RANGER XP*. High gear is intended for use on hard-packed surfaces with light loads.

OPERATION

Driving Safely

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. Correct a skid by turning the steering wheel in the direction of the skid.
4. Drive with AWD engaged (if equipped) to assist in controlling the vehicle.

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.

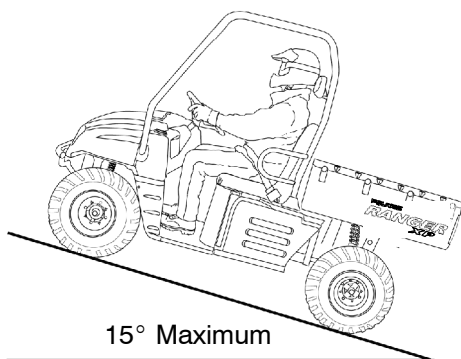
Never apply the brakes during a skid.

Do not operate on excessively slippery surfaces.

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

Driving Safely

Driving Uphill



Whenever traveling uphill, follow these precautions:

1. Always travel straight uphill.
2. Avoid steep hills (15° maximum).
3. Keep both feet on the floor.
4. Proceed at a steady rate of speed and throttle opening.

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 procedure 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 Safely

Sidehilling

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 when possible. When unavoidable, exercise extreme caution. Avoid operating on steep hills (15° maximum).

Driving Downhill

Whenever descending a hill, follow these precautions:

1. Proceed directly downhill.
2. Slow down.
3. Apply the brakes *slightly* 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 when possible.

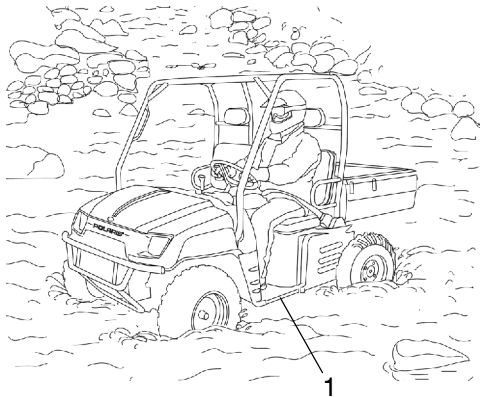
Driving Safely

Driving Through Water

⚠ WARNING

The large tires on your *RANGER* 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 *RANGER*.

Your Polaris *RANGER* can operate through water up to a maximum recommended depth equal to the floorboards (1). Follow these procedures when operating through water:



1. Always determine water depths and current before entering.
2. Choose a crossing where both banks have gradual inclines.
3. Proceed slowly, avoiding rocks and obstacles.
4. After leaving water, always dry the brakes by applying light pressure to the pedal repeatedly until braking action is normal.

NOTE: After running your vehicle in water, it's *critical* that you perform the services outlined in the Periodic Maintenance Chart beginning on page 56. Give special attention to engine oil, transmission oil, front and rear gearcases, 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 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 89, and take the vehicle to your dealer at the first opportunity.

OPERATION

Driving Safely

Driving Over Obstacles



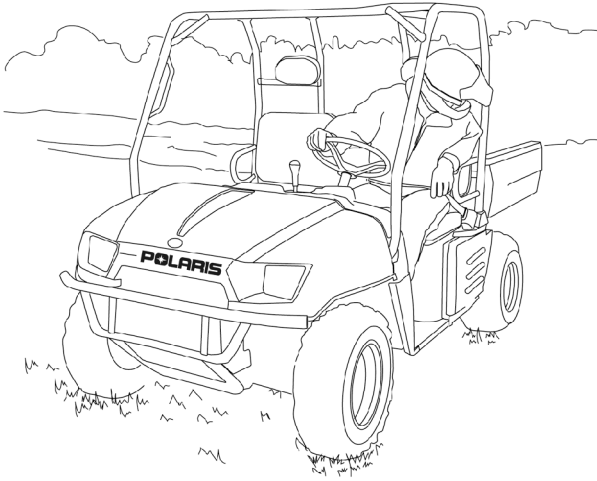
Be alert! Look ahead and learn to read the terrain you're traveling on. Watch for hazards such as logs, rocks and low hanging branches.

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.

Driving Safely

Driving in Reverse



Follow these guidelines when operating in reverse:

1. Back slowly.
2. Apply the brakes lightly for stopping.
3. Avoid turning at sharp angles.
4. Always avoid backing downhill.
5. Never open the throttle suddenly while backing.
6. Always inspect left and right fields of vision before backing.

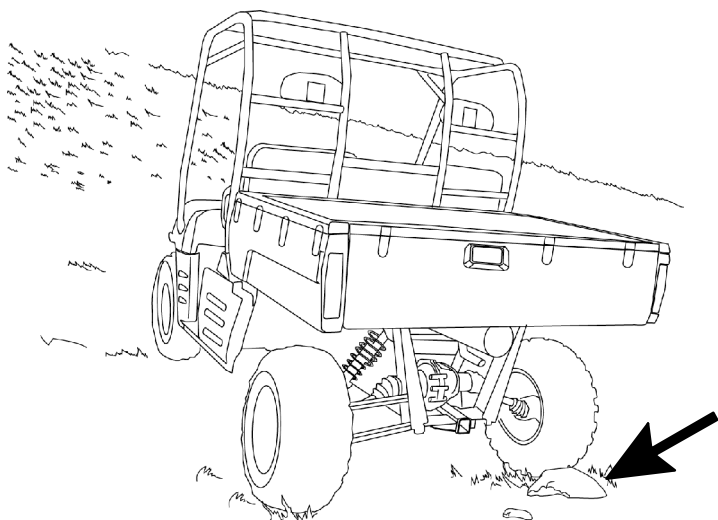
WARNING

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 and follow the reverse operation procedures outlined in this manual. Always back slowly.

OPERATION

Driving Safely

Parking on an Incline



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

1. Place the transmission in gear.
2. Engage the park brake.
3. Turn the engine off.
4. Block the rear wheels on the downhill side.

WARNING

A rolling vehicle can cause property damage and serious injury. Always engage the park brake after 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.

Operating the vehicle while the park brake is engaged could cause loss of control and result in serious injury or death. Always disengage the park brake before operating the vehicle.

Driving Safely

Hauling Cargo

WARNING

Hauling cargo 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 hauling cargo:

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.

OPERATION

Driving Safely

Hauling Cargo

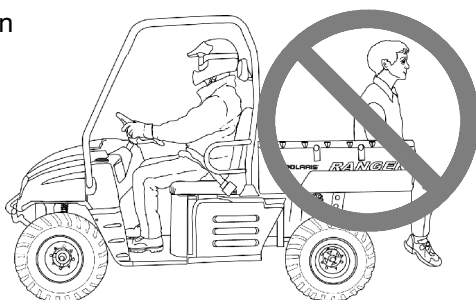
The *RANGER* has been designed to carry or tow specific capacities. Always read and understand the load distribution warnings listed on the warning labels. Never exceed the following capacities.

	Maximum Capacities (Level Ground)	Cargo Box
<i>RANGER XP</i>	1500 lbs. (681 kg)	1000 lbs. (454 kg)

WARNING

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

Never allow passengers to ride in the cargo box. Passengers must always ride in the cab with seat belts fastened securely.



Driving Safely

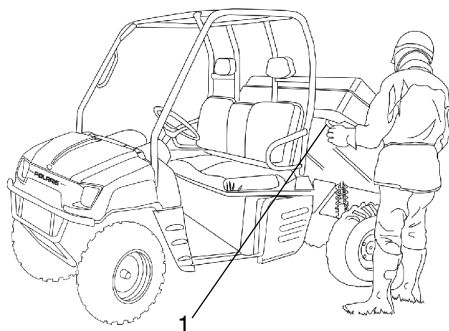
Dumping the Cargo Box

⚠ WARNING

Operating the vehicle while the cargo box is raised could result in severe injury. The box could close unexpectedly and cause injury to the driver or passenger. The rear tires will also catch the rear of a raised box, damaging the vehicle and creating hazardous driving conditions.

Never operate this vehicle with the cargo box in the raised position.

1. Select a level site to dump the cargo box. Do not attempt to dump or unload the vehicle while parked on an incline.
2. Engage the park brake.
3. Dismount the vehicle.
4. Ensure that the cargo is positioned evenly or toward the front of the cargo box.
5. Release the tailgate by pulling up on the tailgate latch.
6. Stand clear and pull up on the cargo box release lever (1).
7. Lift the front of the cargo box to dump the cargo.
8. Lower the cargo box and push down securely to latch.



⚠ WARNING

If the weight distribution on the box is located toward the rear of the box when the release lever is pulled forward, the box may dump unexpectedly and cause serious injury to the operator or bystanders.

Never operate the dump lever without ensuring that the load is positioned evenly or at the front of the box.

OPERATION

Driving Safely

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. See page 47. Towing a trailer increases braking distance.

Do not tow more than the recommended weight for the vehicle. See the towing capacity chart below and the specifications charts beginning on page 98.

Attach a trailer to the trailer hitch bracket only. Do not attach a trailer to any other location or you may lose control of the vehicle.

Never tow a trailer on a grade steeper than 15°.

Maximum Towing Capacities (Level Ground)

	Total Towed Load Weight (level ground)	Total Towed Load Weight (15° grade)	Total Hitch Vertical Weight	Maximum Towing Speed
<i>RANGER</i> XP	1500 lbs. (681 kg)	850 lbs. (386 kg)	150 lbs. (68.1 kg)	10 mph (16 kph)

Belt Life

To extend belt life, use the lowest gear possible when hauling or towing heavy cargo.

Driving Safely

Parking the *RANGER*

WARNING

A rolling vehicle can cause property damage and serious injury. Always engage the park brake after stopping the engine.

1. Stop the vehicle on a level surface.
2. Turn the engine off.
3. Engage the park brake.
4. Remove the ignition switch key to prevent unauthorized use.

WARNING

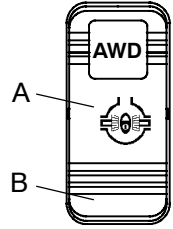
Gasoline is extremely flammable and can be explosive under certain conditions. When parking inside a garage or other structure, be sure that the structure is well ventilated and that the vehicle is not close to any source of flame or sparks, including any appliance with pilot lights.

OPERATION

Differential Lock

The rear axle is equipped with a lockable differential that allows the operator to choose between an open differential or a closed differential. It's beneficial to lock the differential in low traction situations.

Move the AWD/Differential Lock rocker switch to the center position (A) to lock the differential and return to 2WD. Press the bottom of the switch (B) to unlock the differential and return to 1WD.



CAUTION

Damage to the differential can occur if it is engaged while the vehicle is traveling at high speeds or while the rear wheels are spinning. Slow the vehicle to nearly stopped before engaging the differential.

OPERATION

All Wheel Drive (AWD)

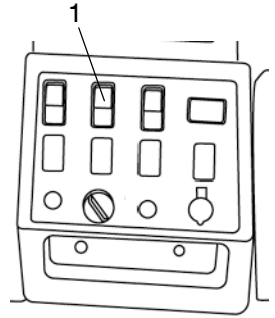
Your Polaris *RANGER* is equipped with an exclusive Polaris AWD system activated by a switch on the console (1). The illuminated amber AWD switch indicates that the vehicle is in AWD.

When the AWD switch is not on, the *RANGER* is in 1WD or 2WD.

When the AWD switch is on, the front wheels will automatically engage any time the rear wheels lose traction. When the rear wheels regain traction, the front wheels will automatically disengage.

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

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



CAUTION

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

Disengaging AWD

Under certain conditions, it may be possible for the front gearcase to remain locked unnecessarily. This condition causes increased steering effort and some vehicle speed restriction.

Take the following steps to disengage the AWD system:

1. Stop the vehicle.
2. Shift to reverse and back up a minimum of 10 feet.
3. Stop completely.
4. Shift into low gear and drive forward.

If the front gearcase remains locked after following these instructions, return the vehicle to your dealer for service.

NOTES

EMISSION CONTROL SYSTEMS

Noise Emission Control System

Do not modify the engine, intake or exhaust components, as doing so may affect compliance with state and local noise level requirements.

Spark Arrestor

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.

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.

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. The system does not allow the blow-by gases to enter the atmosphere.

Electromagnetic Interference

This spark ignition system complies with Canadian ICES-002 and European directives 97/24/EC and 89/336/EEC.

MAINTENANCE AND LUBRICATION

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.

NOTE: Service and adjustments are critical. 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 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 Chart Key

- ▶ Perform these procedures more frequently for vehicles subjected to severe use.
- E Emission Control System Service - 4 Cycle (California)
- 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 AND LUBRICATION

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 36.
▶	Front suspension	-	Pre-Ride	-	
▶	Rear suspension	-	Pre-Ride	-	
	Tires	-	Pre-Ride	-	
▶	Brake fluid level	-	Pre-Ride	-	
▶	Brake pedal travel	-	Pre-Ride	-	
	Brake systems	-	Pre-Ride	-	
	Wheels/fasteners	-	Pre-Ride	-	
	Frame fasteners	-	Pre-Ride	-	
▶ E	Engine oil level	-	Pre-Ride	-	
▶ E	Air filter, pre-filter	-	Daily	-	
▶ E	Air box sediment tube	-	Daily	-	Drain deposits when visible
	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	-	Inspect periodically
	Battery	20 H	Monthly	-	Check terminals; clean; test
▶	Front gearcase oil (if equipped)	25 H	Monthly	-	Inspect level; change yearly
▶	Middle gearcase oil (if equipped)	25 H	Monthly	-	Inspect level; change yearly
▶	Rear gearcase oil (if equipped)	25 H	Monthly	-	Inspect level; change yearly
▶	Transmission oil	25 H	Monthly	-	Inspect level; change yearly

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

E Emission Control System Service - 4 Cycle (California)

■ Have an authorized Polaris dealer perform these services.

MAINTENANCE AND LUBRICATION

Periodic Maintenance Chart

Item		Maintenance Interval (whichever comes first)			Remarks
		Hours	Calendar	Miles (Km)	
▶ E	Engine breather filter (if equipped)	25 H	Monthly	-	Inspect; replace if necessary
▶ E	Engine oil change (break-in)	25 H	1 M	-	Perform a break-in oil change at one month
▶	General lubrication	50 H	3 M	-	Lubricate all fittings, pivots, cables, etc.
	Shift Linkage	50 H	6 M	-	Inspect, lubricate, adjust
■	Steering	50 H	6 M	-	Lubricate
▶	Front suspension	50 H	6 M	-	Lubricate
▶	Rear suspension	50 H	6 M	-	Lubricate
■ E	Throttle Cable/ ETC Switch	50 H	6 M	-	Inspect; adjust; lubricate; replace if necessary
E	Throttle body air intake ducts/ flange	50 H	6 M	-	Inspect ducts for proper sealing/air leaks
	Drive belt	50 H	6 M	-	Inspect; adjust; replace as needed
	Cooling system (if applicable)	50 H	6 M	-	Inspect coolant strength seasonally; pressure test system yearly
▶ E	Engine oil change	100 H	6 M	-	Perform a break-in oil change at 25 hours/one month
▶ E	Oil filter change	100 H	6 M	-	Replace with oil change

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

E Emission Control System Service - 4 Cycle (California)

■ Have an authorized Polaris dealer perform these services.

MAINTENANCE AND LUBRICATION

Periodic Maintenance Chart

Item		Maintenance Interval (whichever comes first)			Remarks
		Hours	Calendar	Miles (Km)	
■ E	Fuel system	100 H	12 M	-	Check for leaks at tank cap, lines, fuel valve, filter, pump, throttle body; replace lines every two years
■ E	Fuel filter	100 H	12 M	-	Replace yearly
▶	Radiator (if applicable)	100 H	12 M	-	Inspect; clean external surfaces
▶	Cooling hoses (if applicable)	100 H	12 M	-	Inspect for leaks
▶	Engine mounts	100 H	12 M	-	Inspect
	Exhaust muffler/ pipe	100 H	12 M	-	Inspect
■ E	Spark plug	100 H	12 M	-	Inspect; replace as needed
■ E	Ignition Timing	100 H	12 M	-	Inspect
▶	Wiring	100 H	12 M	-	Inspect for wear, routing, security; apply dielectric grease to connectors subjected to water, mud, etc.
■	Clutches (drive and driven)	100 H	12 M	-	Inspect; clean; replace worn parts
■	Front wheel bearings	100 H	12 M	-	Inspect; replace as needed
■	Brake fluid	200 H	24 M	-	Change every two years
	Spark arrestor	300 H	36 M	-	Clean out
E	Idle speed	-			Adjust as needed
■	Toe adjustment	-			Inspect periodically; adjust when parts are replaced
▶ ■	Auxiliary brake (if equipped)	-			Inspect daily; adjust as needed
	Headlight aim	-			Adjust as needed

- ▶ Perform these procedures more often for vehicles subjected to severe use.
- E Emission Control System Service - 4 Cycle (California)
- Have an authorized Polaris dealer perform these services.

MAINTENANCE AND LUBRICATION

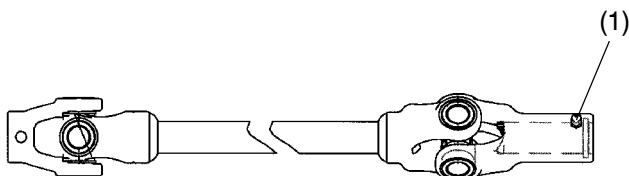
Lubrication Recommendations

Check and lubricate all components at the intervals outlined in the Periodic Maintenance Chart beginning on page 56. Items not listed in the chart should be lubricated at the General Lubrication interval.

Lubrication Chart Key

- ▶ More often under severe use, such as wet or dusty conditions
- ★ Polaris Premium all Season Grease or grease conforming to NLGI No. 2, such as Conoco Superlube M or Mobilegrease Special
- Use Polaris Premium U-Joint Lube every 500 miles, before long periods of storage, or after pressure washing or submerging.

Item	Lube	Method
Engine Oil	Polaris Premium 4 Synthetic 0W40	Add to proper level on dipstick.
Brake Fluid	DOT 3 or DOT 4	Maintain level between fill lines. See page 80.
Main Gearcase Oil (Transmission)	Premium AGL Synthetic Gearcase Lube	Maintain as recommended on page 65.
Front Gearcase Oil	Premium Demand Drive Hub Fluid	Maintain as recommended on page 66.
Rear Gearcase Oil	Premium ATV Angle Drive Fluid	Maintain as recommended on page 67.
(1) Prop Shaft U-joints	●Grease	Locate fittings and grease
Front Prop Shaft Yoke	●Grease	Locate fittings and grease (3 pumps maximum)
Ball Joint	▶★ Grease	Locate fitting (back side of struts), grease with grease gun.



MAINTENANCE AND LUBRICATION

Engine Oil

Always check and change the engine oil at the intervals outlined in the Periodic Maintenance Chart beginning on page 56. 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 97 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° F. to 120° F. Its exceptional frictional properties result in more efficient operation, more power output and lower fuel consumption.

Although Polaris Premium 4 is the only oil recommended for use in this engine, use of any API certified "SH" oil is allowable 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.

MAINTENANCE AND LUBRICATION

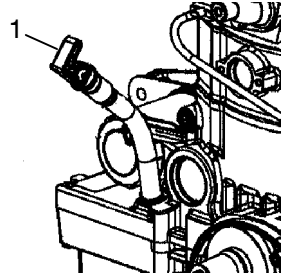
Engine Oil

Always check and change the oil at the intervals outlined in the Periodic Maintenance Chart beginning on page 56. We recommend the use of Polaris Premium 4 All Season Synthetic engine oil.

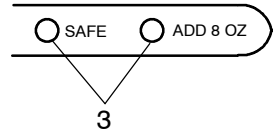
Oil Check

The oil dipstick and fill tube (1) is located on the engine.

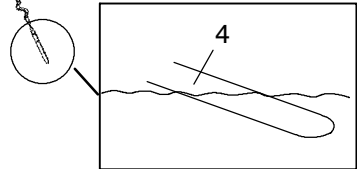
1. Position the vehicle on a level surface.
2. Apply the brakes. Start the engine and let it idle for 20-30 seconds, then stop the engine.
3. Lift the lever lock (2) to remove the dipstick. Wipe it dry with a clean cloth.
4. Reinstall the dipstick completely, but do not lock it. The dipstick must be screwed completely in to keep the angle and depth of the stick consistent.



5. Remove the dipstick and check the oil level. Maintain the oil level in the safe range (3). 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 (4) of the dipstick.



6. After reinstalling the dipstick, be sure to seat the lever lock.

MAINTENANCE AND LUBRICATION

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 56. Always change the oil filter whenever changing oil.

1. Position the vehicle on a level surface.
2. Run the engine for two to three minutes until warm. 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.

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 20 ft. lbs. (27 Nm).
8. Place shop towels beneath the oil filter. Using an oil filter wrench, turn the filter counterclockwise to remove.
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. Shift the transmission to neutral.
14. Engage the park brake.
15. Apply the brakes. Start the engine. Allow it to idle for one to two minutes.
16. Stop the engine. Inspect for leaks.
17. Re-check the oil level on the dipstick and add oil as necessary to bring the level to the upper mark on the dipstick.
18. Dispose of used filter and oil properly.

MAINTENANCE AND LUBRICATION

Gearcases

Gearcase Specification Chart

Gearcase	Lubricant	Capacity	Fill Plug Torque	Drain Plug Torque
Main Gearcase (Transmission)	Premium AGL Synthetic Gearcase Lube	15.2 oz. (450 ml)	14 ft. lbs. (19.4 Nm)	14 ft. lbs. (19.4 Nm)
Front Gearcase	Premium Demand Drive Hub Fluid	5 oz. (150 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)

MAINTENANCE AND LUBRICATION

Gearcases

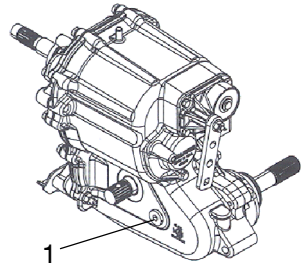
Transmission (Main Gearcase)

Always check and change the transmission oil at the intervals outlined in the Periodic Maintenance Chart beginning on page 56. Maintain the oil level even with the bottom of the fill plug hole.

Refer to the Gearcase Specifications Chart on page 64 for recommended lubricants, capacities and torque specifications. See page 97 for the part numbers of Polaris products.

Oil Check

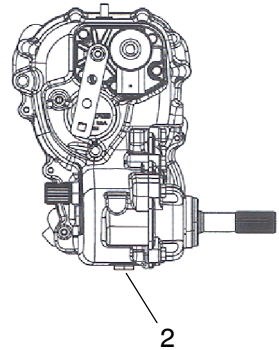
1. Position the vehicle on a level surface.
2. Remove the fill plug (1), which is located at the rear of the vehicle.
3. Check the oil level. Add the recommended oil as needed.
4. Reinstall the fill plug. Torque to specification.



Oil Change

The drain plug (2) is located on the bottom of the transmission. 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. Remove the drain plug. Drain the oil. Dispose of used oil properly.
3. Wipe the magnetic end of the drain plug clean to remove accumulated metallic filings.
4. After the oil has drained completely, install a new sealing washer.
5. Reinstall the drain plug. Torque to specification.
6. Add the recommended oil as needed. Do not overfill.
7. Reinstall the fill plug. Torque to specification.
8. Check for leaks.



MAINTENANCE AND LUBRICATION

Gearcases

Front Gearcase

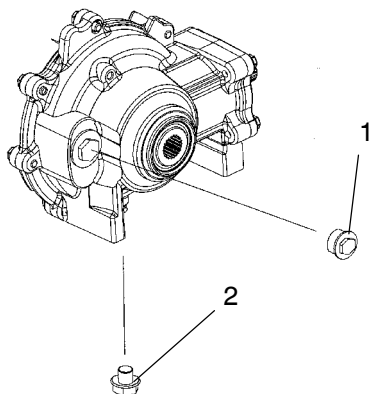
Always check and change the front gearcase oil at the intervals outlined in the Periodic Maintenance Chart beginning on page 56. Maintain the oil level even with the bottom thread of the fill plug hole.

Refer to the Gearcase Specifications Chart on page 64 for recommended lubricants, capacities and torque specifications. See page 97 for the part numbers of Polaris products.

The front gearcase fill plug (1) is located on the right side of the front gearcase.

Oil Check

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



Oil Change

1. Support the vehicle securely with a jackstand.
2. Remove the front tire on the driver's side.
3. Remove the fill plug.
4. Place a drain pan under the drain plug (2) on the bottom right-hand side.
5. Remove the drain plug. Drain the oil. Discard used oil properly.
6. Clean the drain plug. Reinstall the drain plug. Torque to specification.
7. Add the recommended oil.
8. Reinstall the fill plug. Torque to specification.
9. Check for leaks.

MAINTENANCE AND LUBRICATION

Gearcases

Rear Gearcase

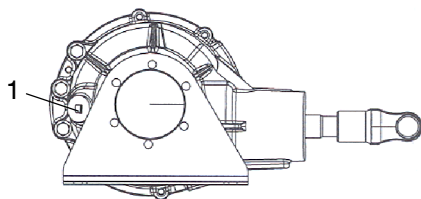
Always check and change the rear gearcase oil at the intervals outlined in the Periodic Maintenance Chart beginning on page 56. Maintain the oil level even with the bottom thread of the fill plug hole.

Refer to the Gearcase Specifications Chart on page 64 for recommended lubricants, capacities and torque specifications. See page 97 for the part numbers of Polaris products.

The rear gearcase fill plug (1) is on the driver's side of the rear gearcase.

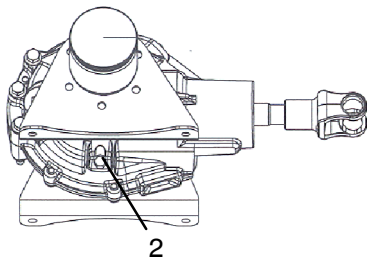
Oil Check

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



Oil Change

1. Remove the fill plug.
2. Place a drain pan under the drain plug (2). Remove the drain plug.
3. Drain the oil. Dispose of used oil properly.
4. Clean the drain plug. Reinstall the drain plug. Torque to specification.
5. Add the recommended oil.
6. Reinstall the fill plug. Torque to specification.
7. Check for leaks.



MAINTENANCE AND LUBRICATION

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 97 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 AND LUBRICATION

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 56. 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.

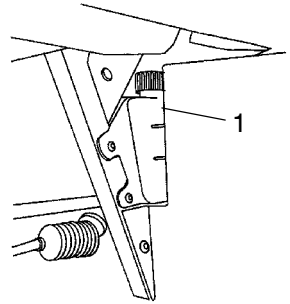
CAUTION

Washing the vehicle with a high-pressure hose could damage the radiator fins and impair the radiator's effectiveness. Exercise caution if a high-pressure system is used for washing the vehicle.

Coolant Level

Always check and change the coolant at the intervals outlined in the Periodic Maintenance Chart beginning on page 56. Maintain the coolant level between the minimum and maximum marks on the bottle (when the fluid is cool). The overflow bottle (1) is located in front of the right front wheel.

1. Position the vehicle on level ground.
2. View the coolant level in the overflow bottle.
3. If the coolant level is below the safe operating range, lift the hood and locate the overflow bottle lid. Remove the lid and use a funnel to add coolant through the filler 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 AND LUBRICATION

Cooling System

Radiator Coolant Level

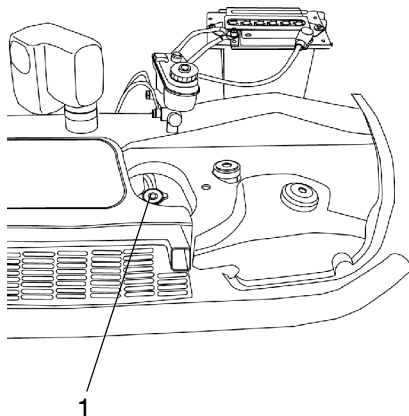
Always check and change the coolant at the intervals outlined in the Periodic Maintenance Chart beginning on page 56.

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. Lift the hood and slowly remove the radiator cap (1).
2. View the coolant level through the opening.
3. 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.

MAINTENANCE AND LUBRICATION

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 98.

Spark Plug Gap/Torque

Model	Electrode Gap	New Plug Torque	Used Plug Torque
RANGER XP	.025" (.06 cm)	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.

WARNING

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

1. Normal

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.

2. Wet Fouled

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 the seat to access the engine compartment.
2. Remove the spark plug cap. Using the spark plug wrench provided in the tool kit, remove the plug by rotating it counterclockwise.
3. Reverse the procedure for spark plug installation. Torque to specification. See page 71.

MAINTENANCE AND LUBRICATION

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.).

When To Use Low Range vs. High Range

Following is a guideline for when to use low range and high range.

Low Range

- When basic operation is at speeds less than 7 MPH (11 KPH)
- For heavy pulling
- When operating in rough terrain (swamps, mountains, etc.) at low ground speeds

High Range

- When basic operation is at speeds greater than 7 MPH (11 KPH)
- When operating at high ground speeds

MAINTENANCE AND LUBRICATION

PVT System

WARNING

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

Do not modify any component of the PVT system. Doing so may reduce its strength so that a failure may occur at a high speed.

The PVT system has been precision balanced. Any modification will cause the system to be out of balance, creating vibration and additional loads on components.

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

Always follow all recommended maintenance procedures. See your dealer as outlined in the owner's manual.

This PVT system is intended for use on Polaris products only. Do not install it in any other product.

Always make sure the PVT housing is securely in place during operation.

MAINTENANCE AND LUBRICATION

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 drain plug. Allow the water to drain. Reinstall the drain plug.
2. Apply the brakes. Start the engine.
3. Engage the park brake.
4. Shift the transmission to neutral.
5. 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.
6. Allow the engine RPM to settle to idle speed. Apply the service brakes. Release the park brake and shift the transmission to the lowest available range.
7. Test for belt slippage. If the belt slips, repeat the process.
8. Take the vehicle to your dealer for service as soon as possible.

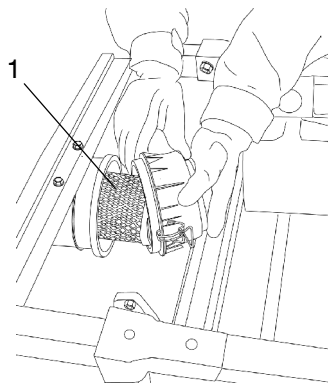
MAINTENANCE AND LUBRICATION

Filter Systems

Air Filter

Always change the air filter at the intervals outlined in the Periodic Maintenance Chart beginning on page 56.

1. Lift the cargo box to access the air box.
2. Remove the air box cover and inspect the gasket. It should adhere tightly to the cover and seal all the way around.
3. Remove the air filter (1).
4. Do not attempt to clean the main element. Install a new air filter.



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

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

NOTE: Service the air filter more frequently if the vehicle is operated in wet conditions or at high throttle openings for extended periods.

Fuel Filter

Your Polaris vehicle is equipped with an in-line fuel filter. Have your dealer replace it after every 100 hours of operation. Do not attempt to clean the fuel filter.

MAINTENANCE AND LUBRICATION

Spark Arrestor

WARNING

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

Do not perform service on the spark arrestor while the system is hot. Exhaust system temperatures can reach 1000° F. Allow components to cool sufficiently before proceeding.

Remove any combustible materials from the area.

Wear eye protection and gloves.

Do not stand behind or in front of the vehicle while purging.

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.

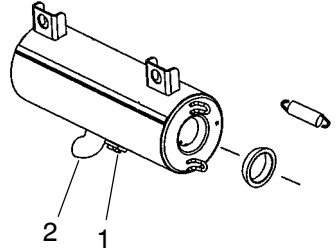
Never go under the vehicle while it's inclined.

MAINTENANCE AND LUBRICATION

Spark Arrestor

Use the following procedure to periodically purge accumulated carbon from the exhaust pipe.

1. Remove the arrestor clean-out plugs (1) located on the bottom of the muffler.
2. Shift the transmission to neutral. Apply the brakes. Start the engine.
3. Purge accumulated carbon from the system by momentarily revving the engine several times.
4. If carbon is expelled, cover or plug the exhaust outlet (2) and rap on the pipe around the clean-out plugs while revving the engine several more times.
5. If particles are still suspected to be in the muffler, elevate the rear of the vehicle one foot higher than the front. Engage the park brake. Block the wheels. Make sure the transmission is in neutral and repeat steps 3 and 4 until no more particles are expelled when the engine is revved.
6. Stop the engine. Allow the arrestor to cool.
7. Reinstall the arrestor plugs and remove the outlet cover or plug.



MAINTENANCE AND LUBRICATION

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.

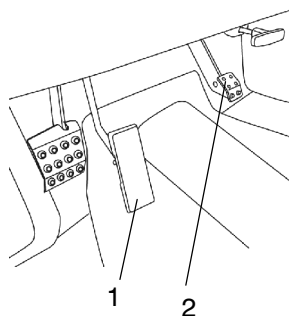
Immediately contact your dealer for service if throttle problems arise.

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

Throttle Freeplay

If the throttle pedal (1) has excessive play due to cable stretch or misadjustment, 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 56. Adjust the freeplay if necessary.



Throttle Freeplay Inspection

1. Engage the park brake (2). Shift the transmission to neutral.
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 AND LUBRICATION

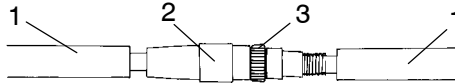
Throttle System

Throttle Freeplay Adjustment

1. Slide the boots (1) off the inline cable adjuster sleeve (2). Loosen the adjuster locknut (3).
2. Turn the adjuster until 1/16 to 1/8 inch freeplay is achieved.

NOTE: While adjusting, flip the throttle lever back and forth.

3. Tighten the locknut and slide the boots over the cable adjuster until they touch at the midpoint of adjuster.



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.

MAINTENANCE AND LUBRICATION

Brakes

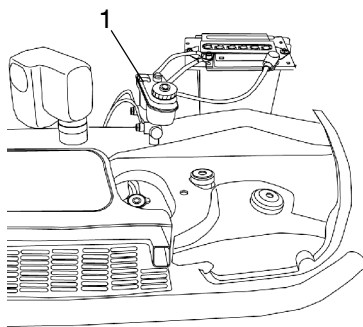
The front and rear brakes are hydraulic disc type brakes and are activated by the brake pedal. See page 34.

Brake Fluid

Routine inspections are recommended to keep the brake system in good operating condition. Inspect the level of the brake fluid before each operation.

Change the brake fluid at the intervals outlined in the Periodic Maintenance Chart beginning on page 56. The brake fluid should also be changed if it becomes contaminated, if the fluid level is below the minimum, or if the type and brand of the fluid in the reservoir are unknown.

1. Position the vehicle on a level surface.
2. View the brake fluid level at the reservoir (1) under the hood. The level should be between the upper (MAX) and lower (MIN) level lines.
3. If the fluid level is lower than the lower level line, add brake fluid to the upper (MAX) line.
4. Apply the brake forcefully for a few seconds and check for fluid leakage around the fittings.



WARNING

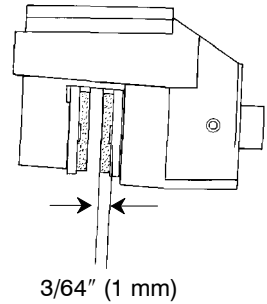
After opening a bottle of brake fluid, always discard any unused portion. Never store or use a partial bottle. Brake fluid is hygroscopic, meaning it rapidly absorbs moisture from the air. The moisture causes the boiling temperature of the brake fluid to drop, which can lead to early brake fade and the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

MAINTENANCE AND LUBRICATION

Brakes

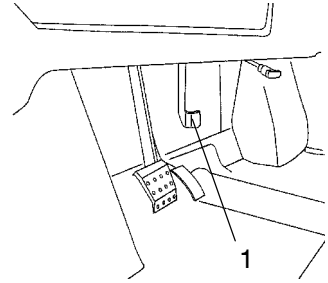
Brake Inspection

5. Check the brake system for fluid leaks.
6. Check the brake pedal for excessive travel or a spongy feel.
7. Check the friction pads for wear, damage and looseness.
8. Inspect the brake disc spline and pad wear surface for excessive wear.
9. Change pads when worn to $3/64''$ (1 mm).



Park Brake Inspection

1. Slowly push the park brake pedal down with your foot.
2. After 8 to 12 clicks of pedal travel, check the vehicle for movement. The vehicle should not roll while parked. If the vehicle moves, adjustment is necessary.



Park Brake Adjustment

1. Position the vehicle on a level surface.
2. Shift the transmission to neutral.
3. Loosen or tighten the nuts on the pedal end of the park brake cable as needed.

MAINTENANCE AND LUBRICATION

Steering Wheel Inspection

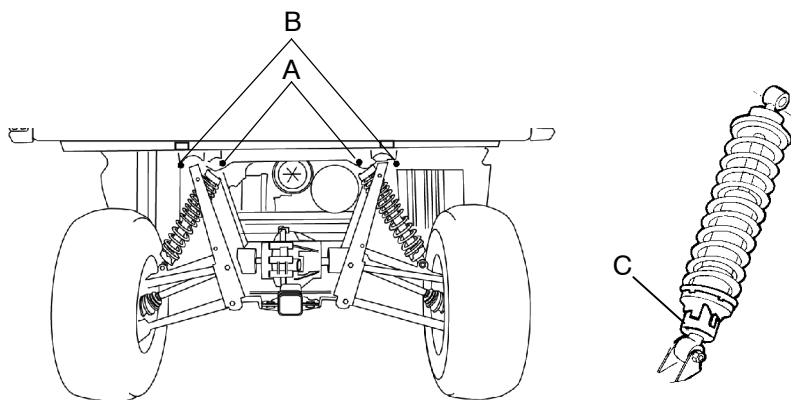
Check the steering wheel for specified freeplay and smooth operation at the intervals outlined in the Periodic Maintenance Chart beginning on page 56.

1. Position the vehicle on level ground.
2. Lightly turn the steering wheel left and right.
3. There should be 0.8 - 1.0 in (20 - 25 mm) of free play.
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.

Suspension Adjustment

The rear suspension may be adjusted to provide a stiffer suspension if necessary. The shocks are mounted to the inside mounting holes (A) at the factory, but they may be relocated to the outside mounting holes (B).

1. Remove the top shock mounting bolts (A).
2. Reposition the shocks to the outside mounting holes (B).
3. Reinstall the shock mounting bolts. Torque to 30 ft. lbs. (40 Nm).



Rear Spring Adjustment

The rear shock absorber springs are adjusted by rotating the adjustment cam (C) either clockwise or counterclockwise to increase or decrease spring tension.

MAINTENANCE AND LUBRICATION

Seat Belts

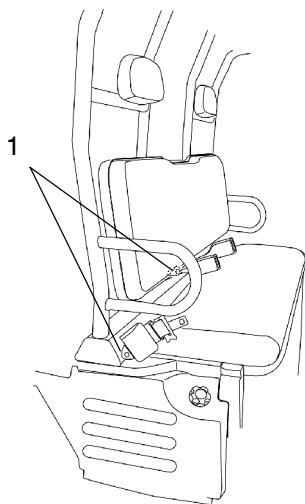
Inspect all three seat belts for proper operation before each use of the vehicle.

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 button in the middle of the buckle to make sure it releases freely.
3. Check the belt webbing for wear, cuts or damage. If any irregularities are found, have the seat belt system checked and/or replaced by an authorized Polaris dealer.

The *RANGER* seat belt is adjustable and should be adjusted for both the operator and passengers before driving. Although having the belt at 30° is typical for many people, it will not accommodate all body sizes and shapes. *Make sure the seat belt is adjusted to the lowest possible lap position before riding.*

1. To adjust, loosen the bolts (1).
2. Reposition both the buckle and retractor. Tighten the bolts.

NOTE: The center belt does not self adjust. Before riding, pull on the strap to secure the belt on the lap of the center passenger.



⚠ WARNING

Failure to follow the age recommendations for this vehicle could result in serious injury or death. No one under the age of 16 may operate this vehicle. No one under the age of 5 may ride as a passenger in this vehicle.

MAINTENANCE AND LUBRICATION

Tires

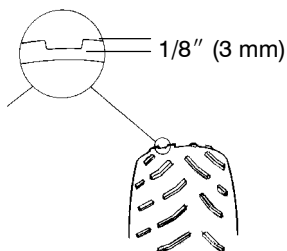
⚠ WARNING

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.

Location	Specification
Front Wheel Nuts	35 ft. lbs. (47 Nm)
Rear Wheel Nuts	35 ft. lbs. (47 Nm)
Front Spindle Nut	70 ft. lbs. (95 Nm)
Center and Rear Hub Retaining Nuts	110 ft. lbs. (150 Nm)

MAINTENANCE AND LUBRICATION

Tires

⚠ WARNING

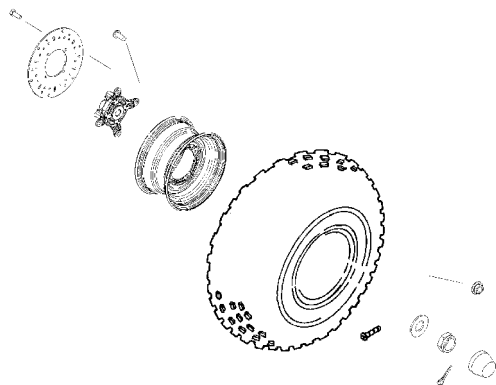
Improperly installed wheels can adversely affect tire wear and vehicle handling, which can result in serious injury or death. Always ensure that all nuts are torqued to specification. Do not service axle nuts that have a cotter pin installed. See your Polaris dealer.

Wheel Removal

1. Stop the engine. Place the transmission in gear. Engage the park brake.
2. Loosen the wheel nuts slightly.
3. Elevate the side of the vehicle by placing a suitable stand under the frame.
4. Remove the wheel nuts and washers. Remove the wheel.

Wheel Installation

1. With the transmission in gear and the park brake engaged, place the wheel in the correct position on the wheel hub. Be sure the valve stem is toward the outside and rotation arrows on the tire point toward forward rotation.
2. Attach the wheel nuts and washers and finger tighten.
3. Carefully lower the vehicle to the ground.
4. Torque the wheel nuts to specification. See page 84.



MAINTENANCE AND LUBRICATION

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.

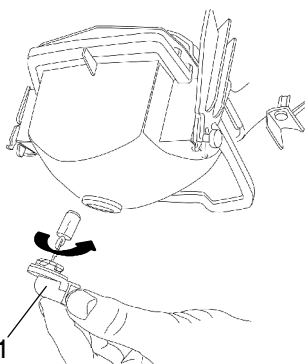
Hot components can cause serious burns to skin. Do not service the headlamps until they've cooled sufficiently.

Headlight Lamp Replacement

1. Open the hood.
2. Unplug the headlamp from the wiring harness (1). Be sure to pull on the connector, not on the wiring.
3. Turn the lamp counterclockwise to remove it.
4. Install the new lamp.

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

5. Reinstall the harness assembly into the headlight assembly.

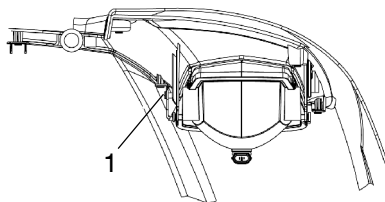


MAINTENANCE AND LUBRICATION

Lights

Headlight Beam Adjustment

1. Place the vehicle on a level surface with the headlight approximately 25 ft. (7.6 m) from a wall.
2. Measure the distance from the floor to the center of the headlight and make a mark on the wall at the same height.
3. 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" (20.3 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. Adjust the beam to the desired position by turning the adjustment screw (1).

Brake Lights

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

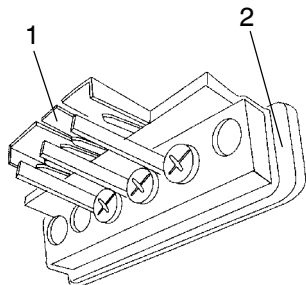
1. Turn the ignition switch to the ON position.
2. Depress the brake pedal. The brake light should come on after about 10mm (0.4 in.) of pedal travel. If the light doesn't come on, check the bulb.

MAINTENANCE AND LUBRICATION

Lights

Indicator Lamp Replacement

1. Lift the hood.
2. Reach in behind the console panel and lift the release (1) to unplug the light from the harness.
3. Using a flathead screwdriver, press on the tab (2) on the top of the light to remove the indicator light assembly from the console panel.
4. Using a screwdriver, turn the light that needs to be replaced 1/4 turn counterclockwise.
5. Grip the light with a needle nose plier and remove the light from the assembly.
6. Install the new light and use a small flat head screwdriver to seat it into place, 1/4 turn clockwise.
7. Snap the assembly back into the console panel and reconnect the harness.
8. Close the hood.



Tool Kit

To help you perform routine maintenance, a tool kit is provided with your vehicle. Items included in the kit are:

- A screwdriver
- An open-end wrench (8-10 mm)
- An open-end wrench (12-14 mm)
- A tire pressure gauge
- A spark plug wrench and handle
- A spanner wrench (for shock adjustment)

NOTE: Additional tools will be necessary to perform routine maintenance.

MAINTENANCE AND LUBRICATION

Vehicle Immersion

CAUTION

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

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

1. Move the vehicle to dry land or at the very least, to water below the footrests.
2. Dry any water present in the air box.

NOTE: Filter replacement is required if water is present.

3. Thoroughly dry the air pre-cleaner located under the hood.
4. Remove the spark plugs.
5. Turn the engine over several times using the electric start.
6. Dry the spark plugs and reinstall, or replace with new plugs.
7. Attempt to start the engine. If necessary, repeat the drying procedure.
8. 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 74 for drying.

MAINTENANCE AND LUBRICATION

Battery

Keep the 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 the 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.

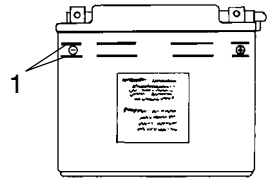
MAINTENANCE AND LUBRICATION

Battery

Replenishing Battery Fluid (Conventional Battery)

A poorly maintained battery will deteriorate rapidly. Check the battery fluid level often. The fluid level should be kept between the upper and lower level marks (1).

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

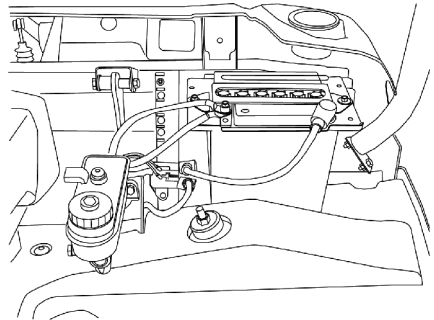


⚠ WARNING

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. Open the hood.
2. Remove the battery vent tube from the battery.
3. Disconnect the black (negative) battery cable first.
4. Disconnect the red (positive) battery cable next.
5. Lift the battery out of the vehicle, being careful not to tip it sideways and spill any 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 AND LUBRICATION

Battery

Battery Installation

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

NOTE: When installing a new battery, make sure it's fully charged prior to its initial use. 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.

Battery Storage

When the vehicle is placed in storage for three months or more, the battery should be removed, stored out of the sun in a cool, dry place and tested monthly. Before reusing, take the battery to your dealer for testing and recharging.

MAINTENANCE AND LUBRICATION

Cleaning and Storage

See page 97 for the part numbers of Polaris products.

Cleaning the *RANGER*

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

Washing the *RANGER*

The best and safest way to clean your *RANGER* is with a garden hose and a pail of mild soap and water. Use a professional type washing mitten, cleaning the upper body first and the lower parts last. Rinse with water frequently and dry with a chamois to prevent water spots.

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

CAUTION

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

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

If a high pressure water system is used, exercise extreme caution to avoid damaging wheel bearings, radiator, transmission seals, body panels, brakes and warning labels. Grease all zerk fittings immediately after washing, and allow the vehicle to run for a while to evaporate any water that may have entered the engine or exhaust system.

Waxing the *RANGER*

Your *RANGER* can be waxed with any non-abrasive automotive paste wax. Avoid the use of harsh cleaners since they can scratch the body finish.

MAINTENANCE AND LUBRICATION

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 necessary repairs and then clean the vehicle thoroughly with mild soap and warm water to remove all dirt and grime. Don't use harsh detergents or high pressure washers. Some detergents deteriorate rubber parts. Use dish soap type cleaners only. High pressure washers may force water past seals.

Stabilize the Fuel

Fill the fuel tank. Add Polaris Carbon Clean Fuel Treatment or Polaris Fuel Stabilizer. Follow the instructions on the container for the recommended amount. (Carbon clean will also reduce the possibility of bacterial growth in the fuel system.) Allow 15-20 minutes of operation for the stabilizer to disperse through the fuel in the tank.

Oil and Filter

Warm the engine and change the oil and filter.

Air Filter / Air Box / Breather Filter

Inspect and clean or replace the pre-cleaner and air filter. Clean the air box and drain the sediment tube.

Fluid Levels

Inspect the following fluid levels and change if necessary: front and rear gearcases; transmission and brake fluid (change every two years or as required if fluid looks dark or contaminated).

MAINTENANCE AND LUBRICATION

Cleaning and Storage

Storage Tips

Fog the Engine

1. Treat the fuel system with Polaris Carbon Clean, following the instructions on the can. Run the engine for several minutes so the Carbon Clean reaches the injectors. Turn the engine off.
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 71.
4. Apply dielectric grease to the inside of each spark plug cap and reinstall the caps onto the plugs.
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.

Inspect and Lubricate

Inspect all cables and lubricate. Follow lubrication guidelines in the Maintenance Section of the service or owner's manual to completely grease and lubricate the entire vehicle with Polaris Premium All Season Grease.

Battery Maintenance

Remove the battery and recharge it fully. Store the battery in a cool, dry place.

Engine Anti-Freeze

Test engine coolant strength and change if necessary. Coolant should be replaced every two years.

Storage Area/Covers

Be sure the storage area is well ventilated, and cover the machine 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.

MAINTENANCE AND LUBRICATION

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 36.

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 56.

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 *RANGER*

Follow these procedures when transporting the vehicle.

1. Turn off the engine and remove the key to prevent loss during transporting.
2. Place the transmission in gear. Engage the park brake.
3. Be sure the fuel cap, oil cap and seat are installed securely.
4. Always tie the *frame* of the *RANGER* to the transporting unit securely with suitable straps or rope. Do not attach tie straps to the front A-arm bolt pockets.

POLARIS PRODUCTS

Part No.	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 Lube (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
2871654	Premium Demand Drive Hub Fluid (8 oz.)
2872277	Premium Demand Drive Hub Fluid (2.5 gal.)
Grease / Specialized Lubricants	
2871322	Premium All Season Grease (3 oz. cartridge)
2871423	Premium All Season Grease (14 oz. cartridge)
2871460	Starter Drive Grease
2871515	Premium U-Joint Lube (3 oz.)
2871551	Premium U-Joint Lube (14 oz.)
2871312	Grease Gun Kit
2871329	Dielectric Grease (Nyogel™)
2872073	Chain Lube (6.25 oz. aerosol)
2872348	Chain Lube (16 oz. aerosol)
Coolant	
2871323	60/40 Coolant (gal.)
2871534	60/40 Coolant (qt.)
Additives / Miscellaneous	
2872889	Brake and Clutch Cleaner
2871326	Carbon Clean Plus (12 oz.)
2870652	Fuel Stabilizer (16 oz.)
2870990	DOT3 Brake Fluid
2872893	Engine Degreaser
2871956	LOCTITE 565 Thread Sealant

SPECIFICATIONS

RANGER XP	
Gross Vehicle Weight	2750 lbs. (1247 kg)
Fuel Capacity	8 gal. (30.3 l)
Engine Oil Capacity	2 qts. (2.1 l)
Coolant Capacity	2.25 qts. (2.4 l)
Towing Capacity	1500 lbs. (681 kg)
Hitch Tongue Capacity	150 lbs. (68 kg)
Max. Cargo Box Load	1000 lbs. (454 kg)
Dry Weight	1185 lbs. (537 kg)
Overall Length	113 in. (282 cm)
Overall Width (box)	60 in. (152.4 cm)
Overall Width (tires)	58 in. (147.3 cm)
Overall Height	75 in. (190.5 cm)
Wheelbase	76 in. (193 cm)
Cargo Box (L x W x H)	58 x 42 x 10 in. (147 x 106.7 x 25.4 cm)
Ground Clearance	11 in. (28 cm)
Min. Turning Radius	132 in. (335.3 cm)
Engine	4 valve 4 stroke twin cylinder with counter balance
Displacement	683 cc
Bore x Stroke	80 x 68
Alternator Output	500 W @ 3000 RPM
Compression Ratio	9.40:1
Starting System	Electric
Fuel System	Electronic Fuel Injection
Ignition System	ECU
Spark Plug / Gap	RC7YC / .035 in. (0.9 mm)
Front Suspension	MacPherson strut w/8 in. (20.3 cm) of travel
Rear Suspension	Independent w/9.0 in. (22.9 cm) of travel

SPECIFICATIONS

RANGER XP

Lubrication System	Pressurized Wet Sump
Engine Oil	0W/40
Driving System Type	PVT, 4-wheel independent shaft
Shift Type	Single Lever (H/L/N/R)
Gear Reduction - Low	8.71:1
Gear Reduction - Reverse	5.94:1
Gear Reduction - High	3.14:1
Drive Ratio - Front:	3.83:1
Drive Ratio - Final	3.70:1
Tire Size - Front	26 x 8 - 12
Tire Size - Rear	26 x 11 - 12
Tire Pressure - Front	10 psi
Tire Pressure - Rear	10 psi
Brakes, Front/Rear	Foot Activated, 4 wheel hydraulic disc
Brake, Park	Foot activated, mechanical
Hood Headlight	2 dual beam, 35W, quartz/halogen
Taillights	2 single beam, 5W
Brake Light	2 single beam, 5W
Indicator Light	1.0 W

NOTE: See your Polaris dealer for clutching specifications.

TROUBLESHOOTING

Contact your Polaris dealer for service if you're unable to identify solutions using the following charts.

Engine Doesn't Turn Over

Possible Cause	Solution
Low battery voltage	Recharge battery to 12.5 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	Inspect and clean or replace
Water is present in fuel	Drain the fuel system and refuel
Old or non-recommended fuel	Replace with new fuel
Fouled or defective spark plug(s)	Inspect plug(s), replace if necessary
No spark to spark plug	Inspect plug(s), replace if necessary
Crankcase filled with water or fuel	Immediately see your Polaris dealer
Clogged fuel filter	Replace the filter
Low battery voltage	Recharge battery to 12.5 VDC
Mechanical failure	See your Polaris dealer

Engine Pings or Knocks

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

TROUBLESHOOTING

Engine Backfires

Possible Cause	Solution
Weak spark from spark plugs	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 new fuel
Incorrectly installed spark plug wires	See your Polaris dealer
Incorrect ignition timing	See your Polaris dealer
Mechanical failure	See your Polaris dealer

Engine Runs Irregularly, Stalls or Misfires

Possible Weak Spark Cause	Solution
Fouled or defective spark plugs	Inspect, clean and/or replace spark plugs
Worn or defective spark plug wires	See your Polaris 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 12.5 VDC
Kinked or plugged fuel vent line	Inspect and replace
Incorrect fuel	Replace with recommended fuel
Clogged air filter	Inspect and clean or replace
Other mechanical failure	See your Polaris dealer
Possible Lean Fuel Mixture Cause	Solution
Low or contaminated fuel	Add or change fuel, clean the fuel system
Low octane fuel	Replace with recommended fuel
Clogged fuel filter	Replace filter
Possible Rich Fuel Mixture 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 present in fuel	Replace with new fuel
Fouled or defective spark plugs	Inspect, clean and/or replace spark plugs
Worn or defective spark plug wires	See your Polaris dealer
Incorrect spark plug gap or heat range	Set gap to specs or replace plugs
Loose ignition connections	Check all connections and tighten
Low battery voltage	Recharge battery to 12.5 VDC
Incorrect fuel	Replace with recommended fuel
Clogged air filter	Inspect and clean or replace
Other mechanical failure	See your Polaris dealer
Overheated engine	Clean radiator screen and core if equipped Clean engine exterior See your Polaris dealer

WARRANTY

LIMITED WARRANTY

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

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, 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 caused by 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.

WARRANTY

Exported Vehicles

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

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

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

This policy does not apply to Safety Recalls.

How to Get Service

In the Country where your vehicle was purchased:

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

Outside the Country where your vehicle was purchased:

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

If You Move:

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

How to Get Service

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

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