POLARIS®

2017

ACE™ 570

Owner's Manual

for Maintenance and Safety

For videos and more information about a safe riding experience with your Polaris vehicle, scan this QR code with your smartphone.

WELCOME

Thank you for purchasing a POLARIS vehicle, and welcome to our world-wide family of POLARIS enthusiasts. Be sure to visit us online at www.polaris.com for the latest news, new product introductions, upcoming events, career opportunities and more.

Here at POLARIS we proudly produce an exciting line of utility and recreational products.

- Snowmobiles
- All-terrain vehicles (ATVs)
- Low emission vehicles (LEVs)
- *RANGER*® utility vehicles
- *RZR*® sport vehicles
- VICTORY® motorcycles
- INDIAN® motorcycles
- GEM® electric vehicles

Always follow the instructions and recommendations in this manual. The 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. Please see your dealer for all of your service needs during (and after) the warranty period.

The original instructions for this vehicle are in English. Other languages are provided as translations of the original instructions.

2017 POLARIS ACE 570 Owner's Manual

P/N 9927489

TABLE OF CONTENTS

INTRODUCTION

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

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

The safety alert symbol indicates a potential personal injury hazard.

DANGER

A DANGER indicates a hazardous situation that, if not avoided, will result in death or serious injury.

WARNING

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

CAUTION

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

NOTICE

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

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

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

⚠ WARNING

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

- Read this owner's manual and review the safety DVD that came with your vehicle. A free extra copy of the DVD can be obtained by contacting your local POLARIS dealer. Understand all safety warnings, precautions and operating procedures before operating the vehicle. Keep this manual with the vehicle.
- Never operate this vehicle without proper instruction. Take an authorized training course.
- This vehicle is an ADULT VEHICLE ONLY. You MUST be at least age 16 and have a valid driver's license to operate this vehicle.
- Always use the cab nets (or doors) while riding in this vehicle. Always keep hands, feet and all other body parts inside the vehicle at all times.
- Always wear a helmet, eye protection, gloves, long-sleeve shirt, long pants and over-the-ankle boots.
- Never use this vehicle with drugs or alcohol, as these conditions impair judgment and reduce operator reaction time.
- Complete the New Operator Driving Procedures outlined on pages 58-59. Never allow a guest to operate this vehicle until the guest has completed the New Operator Driving Procedures.
- Never permit a guest to operate this vehicle unless the guest has reviewed the owner's manual and all safety labels and has completed a safety training course.

INTRODUCTION
European Vibration and Noise

The driver-perceived noise and hand/arm and whole body vibration levels of this machinery is measured per EN 15997.

The operating conditions of the machinery during testing:

The vehicles were in like-new condition. The environment was controlled as indicated by the test procedure(s).

The uncertainty of vibration exposure measurement is dependent on many factors, including:

- Instrument and calibration uncertainty
- Variations in the machine such as wear of components
- Variation of machine operators such as experience or physique
- Ability of the worker to reproduce typical work during measurements
- Environmental factors such as ambient noise or temperature

Declaration of Conformity

Polaris Sales Europe Sàrl
Route de l'Etraz
Business Center A5
1180 Rolle, Switzerland
Telephone +41213-218-700

DECLARATION OF CONFORMITY

January 1, 2016

Polaris Sales Europe Sàrl declares that the vehicle(s) listed below conform to the essential requirements applicable to all terrain vehicles.

APPLICABLE EUROPEAN DIRECTIVES:	TEST / EVALUATION METHODS
2006/42/EC as amended (Machinery Directive)	EN ISO 12100:2010 Hazard Analysis EN 15997:2011/AC:2012 Driver Perceived Noise Level & Vibration
2014/30/EU as amended (EMC Directive)	UNECE R10

MODEL	COMMERCIAL NAME	SERIAL NUMBER
A_ _DA _ 57_ _ (All combinations)	ACE 570	(See Product Identification Label)

INTRODUCTION
Vehicle Identification Numbers

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

VIN
(Right Front Frame)

Key
Number

Engine Serial
Number

Vehicle Model Number: _____

Vehicle Identification Number (VIN): _____

Engine Serial Number: _____

Key Number _____

Safety Training

Safety training is a top priority for POLARIS. POLARIS strongly encourages you and any family members who will be riding this vehicle to take a training course.

For more information about safety, contact an authorized POLARIS dealer or visit the POLARIS web site at www.polaris.com.

Your POLARIS vehicle is considered 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.

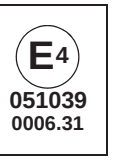
SAFETY
Safe Riding Gear

Always wear helmet, eye protection, gloves, long-sleeve shirt, long pants, over-the-ankle boots and seat belt at all times. Protective gear reduces the chance of injury.

Helmet

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

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



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

Safe Riding Gear

Eye Protection

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

Gloves

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

Boots

Wear sturdy over-the-ankle boots for support and protection. Never ride a POLARIS vehicle with bare feet or sandals.

Clothing

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

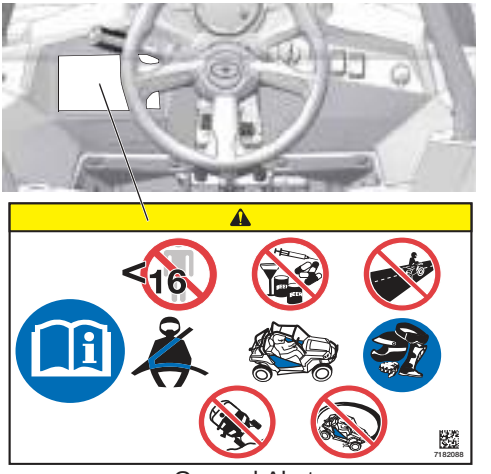
Rider Comfort

Under certain operating conditions, heat generated by the engine and exhaust system can elevate temperatures in the rider cab area. The condition occurs most frequently when a vehicle is being operated in high ambient temperatures at low speeds and/or high load conditions for an extended period of time. The use of certain windshield, roof and/or cab systems may contribute to this condition by restricting airflow. Any discomfort due to heat buildup in this area can be minimized by wearing proper riding apparel and by varying speeds to increase airflow.

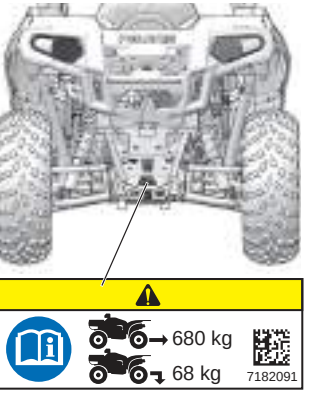
SAFETY
Safety Labels and Locations

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

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



General Alert



Hitch Capacity Alert

General Alert (7182088)

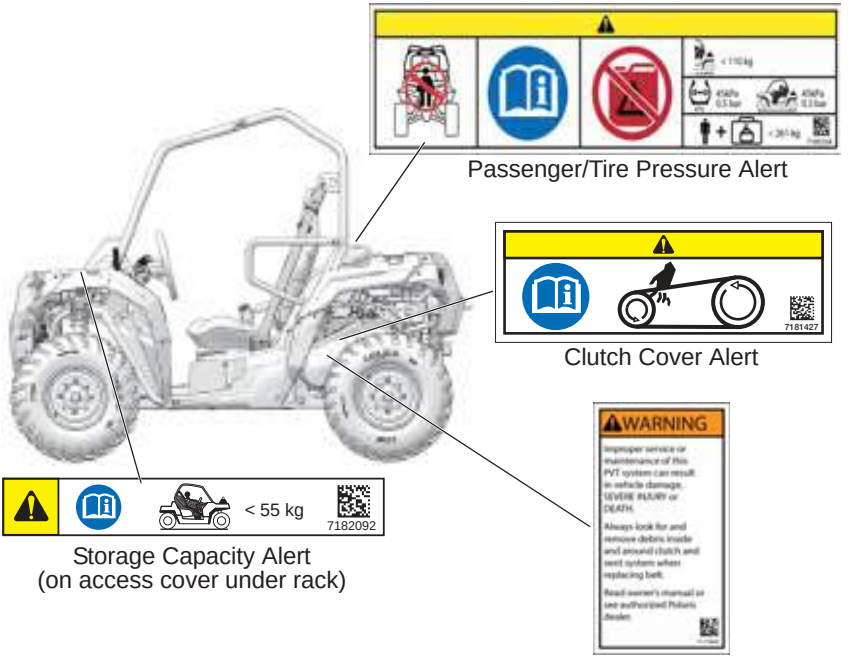
Before you operate this vehicle, read the owner's manual. Never allow anyone under 16 years of age to operate this vehicle. Never use alcohol or drugs before or while operating. Never operate the vehicle on any public street, road or highway. Always wear the seat belt. Always use the cab nets (or doors) while riding in this vehicle. Wear approved helmet, goggles, and protective clothing. Never carry a passenger on this vehicle. Vehicle rollover could cause severe injury or death. Always avoid operating in a manner that could result in vehicle rollover. Avoid exhibition driving.

Hitch Capacity Label (7182091)

Trailer Maximum Weight: 680 kg (on level ground)

Hitch Maximum Vertical Weight: 68 kg

Safety Labels and Locations



Passenger/Tire Pressure Alert

Clutch Cover Alert

Storage Capacity Alert
(on access cover under rack)

Passenger/Tire Pressure Alert (7182090)

Read Operation and Maintenance Manual for more detailed loading information. Do not carry a passenger in the cargo box.

Maximum Cargo Box Load: 110 kg

Tire Pressure: 45 kPa

Maximum Weight Capacity
(including weight of operator, cargo and accessories: 261 kg

Front Compartment Storage Capacity Alert (7182092)

Maximum Weight Capacity: 55 kg

Clutch Cover Alert (7181427)

Keep body parts away from belt.

SAFETY
Safety Warnings

⚠ WARNING

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

Operating Without Instruction

Operating this vehicle without proper instruction increases the risk of an accident. Complete the New Operator Driving Procedures outlined on pages 58-59.

All operators must read and understand the owner's manual and all warning and instruction labels before operating the vehicle. Never allow a guest to operate this vehicle until the guest has completed the New Operator Driving Procedures outlined on pages 58-59.

Age Restrictions

This vehicle is an ADULT VEHICLE ONLY. Operation is prohibited for anyone under 16 years of age or anyone without a valid driver's license.

The operator must be tall enough to sit with back against the seat, both feet flat on the floor and both hands on the steering wheel.

Using Alcohol or Drugs

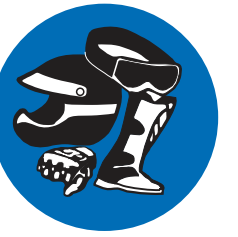
Operating this vehicle after consuming alcohol or drugs could adversely affect operator judgment, reaction time, balance and perception.

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

Protective Apparel

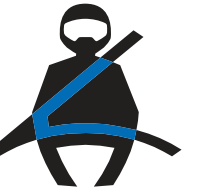
Riding in this vehicle without wearing an approved helmet and protective eyewear increases the risk of a serious injuries in the event of an accident.

Always wear a helmet, eye protection, gloves, long-sleeve shirt, long pants and over-the-ankle boots.



Safety Warnings

Seat Belts



Riding in this vehicle without wearing the seat belt increases the risk of serious injury in the event of rollover, loss of control, other accident or sudden stop. Seat belts may reduce the severity of injury in these circumstances.

The operator MUST wear the seat belt at all times.

Cab Nets

Riding in this vehicle without using the cab nets (or doors, if equipped) increases the risk of serious injury or death in the event of an accident or rollover. Always use the cab nets (or doors) while riding in this vehicle. *Always keep hands and feet inside the vehicle at all times.*

Operating on Public Roads

Operating this vehicle on public streets, roads or highways could result in a collision with another vehicle. Always heed all local laws and regulations governing the operation of this vehicle.

Rollovers

A rollover can result in serious injury or death. Avoid operating in a manner that could result in a rollover.

Jumps and Stunts

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

SAFETY
Safety Warnings
Carrying a Passenger

This POLARIS vehicle is a single-rider vehicle. Carrying a passenger greatly reduces the operator's ability to control the vehicle, which may result in an accident or rollover. Carrying a passenger in the cargo box could result in a fall from the vehicle or contact with moving components. Never carry a passenger on this vehicle.

Operating With a Load on the Vehicle

The weight of both cargo and operator impacts vehicle operation and stability. For your safety and the safety of others, carefully consider how your vehicle is loaded and how to safely operate the vehicle. Follow the instructions in this manual for loading, tire pressure, gear selection and speed.

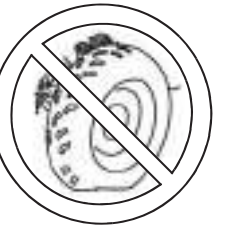
- ***Do not exceed vehicle weight capacities.*** The vehicle's maximum weight capacity is listed in the specifications section of this manual and on a label on the vehicle. When determining the weight you are adding to the vehicle, include the weight of the operator, accessories, loads in the rack or box and the load on the trailer tongue. The combined weight of these items must not exceed the maximum weight capacity.
- The recommended tire pressures are listed in the specifications section of this manual and on a label on the vehicle.

Always follow these guidelines:

Under ANY of these conditions:	**Do ALL of these steps:**
Operator and/or cargo exceeds half the maximum weight capacity	1. Slow down. 2. Verify tire pressure. 3. Use extra caution when operating.
Operating in rough terrain	
Operating over obstacles	
Climbing an incline	
Towing	

Safety Warnings

Improper Tire Maintenance



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

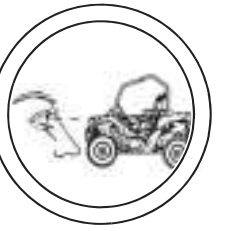
Always use the size and type of tires specified for your vehicle.

Always maintain proper tire pressure as described in the owner's manual and on safety labels.

Operating at Excessive Speeds

Operating this vehicle at excessive speeds increases the operator's risk of losing control. Always operate at a speed that's appropriate for the terrain, the visibility and operating conditions and your skills and experience.

Failure to Inspect Before Operating



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

Always perform the pre-ride inspection before each use of your vehicle to make sure it's in safe operating condition. See page 54.

Always follow the inspection and maintenance procedures and schedules described in this owner’s manual. See page 85.

SAFETY
Safety Warnings
Turning Improperly

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

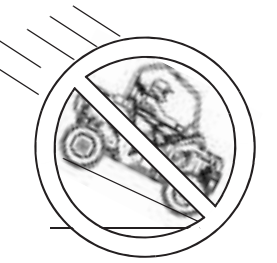
Avoid sharp turns. Never turn while applying heavy throttle. Never make abrupt steering maneuvers. Practice turning at slow speeds before attempting to turn at faster speeds.

Improper Hill Climbing

Improper hill climbing could cause loss of control or rollover. Use extreme caution when operating on hills. Always follow proper procedures for hill climbing as described in this owner's manual. See page 62.

Descending Hills Improperly

Improperly descending a hill could cause loss of control or rollover. Always follow proper procedures for traveling down hills as described in this owner's manual. See page 64.



Safety Warnings

Crossing Hillsides

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

If crossing a hillside is unavoidable, always follow proper procedures as described in this owner's manual. See page 63.

Stalling While Climbing a Hill

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

If you lose all forward speed:

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

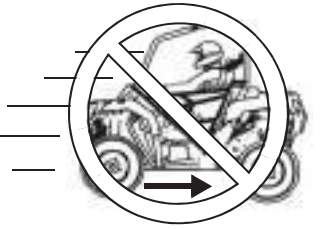
Operating in Unfamiliar Terrain

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

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

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

SAFETY
Safety Warnings
Operating Improperly in Reverse



Improperly operating in reverse could result in a collision with an obstacle or person. Always follow proper operating procedures as outlined in this manual. See page 67.

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

Improper Tire Maintenance

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

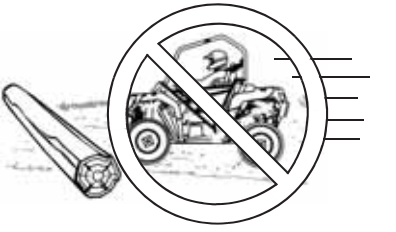
Always use the size and type of tires specified for your vehicle. Always maintain proper tire pressure as described in this owner's manual and on safety labels.

Skidding or Sliding

Failure to use extra caution when operating on excessively rough, slippery or loose terrain could cause loss of traction, loss of control, accident or rollover. Do not operate on excessively slippery surfaces. Always slow down and use additional caution when operating on slippery surfaces.

Skidding or sliding due to loss of traction can cause loss of control or rollover (if tires regain traction unexpectedly). Always follow proper procedures for operating on slippery surfaces as described in this owner's manual. See page 61.

Operating Over Obstacles



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

Before operating in a new area, check for obstacles. Avoid operating over large obstacles such as large rocks and fallen trees. Always follow the proper procedures outlined in this manual when operating over obstacles. See page 66.

Safety Warnings

Operating Through Water

Operating through deep or fast-flowing water can cause loss of traction, loss of control, rollover or accident. Never operate in fast-flowing water or in water that exceeds the floor level of the vehicle.

Always follow proper procedures for operating in water as described in this owner's manual. See page 65.

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

Operating on Frozen Bodies of Water

Severe injury or death can result if the vehicle and/or the operator fall through the ice. Never operate the vehicle on a frozen body of water unless you have first verified that the ice is sufficiently thick to support the weight and moving force of the vehicle, you and your cargo, together with any other vehicles in your party.

Always check with local authorities and residents to confirm ice conditions and thickness over your entire route. Vehicle operators assume all risk associated with ice conditions on frozen bodies of water.

Operating a Damaged Vehicle

Operating a damaged vehicle can result in an accident. After any rollover or other accident, have a qualified service dealer inspect the entire machine for possible damage, including (but not limited to) seat belts, rollover protection devices, brakes, throttle and steering systems.

SAFETY
Safety Warnings
Improper Cargo Loading

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

- Always follow the instructions in this owner's manual for carrying cargo. See page 68.
- Never exceed the stated load capacity for this vehicle. See page 13.
- Cargo should be properly distributed and securely attached. See page 68.
- Reduce speed when carrying cargo or pulling a trailer. Allow a greater distance for braking.

Poor Visibility

Operating this vehicle in darkness or inclement weather could result in a collision or accident, especially if operating on a road or street. This vehicle is not equipped with highway-approved lights. Operate this vehicle off-road only. Use caution and drive at reduced speeds in conditions of reduced visibility such as fog, rain and darkness. Clean headlights frequently and replace burned out headlamps promptly.

Refueling

Gasoline is highly flammable and explosive under certain conditions.

- Always exercise extreme caution whenever handling gasoline.
- Always turn off the engine when refueling.
- Always refuel outdoors or in a well ventilated area free of any source of flame or sparks.
- Always use an approved gasoline container to store fuel and remove the container from the vehicle before filling to avoid fuel ignition due to electrical static discharge.
- Do not smoke or allow open flames or sparks in or near the area where refueling is performed or where gasoline is stored.
- Do not overfill the tank. Do not fill the tank neck.
- If gasoline spills on your skin or clothing, immediately wash it off with soap and water and change clothing.

Safety Warnings

Exposure to Exhaust

Engine exhaust fumes are poisonous and can cause loss of consciousness or death in a short time. Never start the engine or let it run in an enclosed area. Operate this vehicle only outdoors or in well-ventilated areas.

Hot Exhaust Systems

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

Unauthorized Use of the Vehicle

Leaving the keys in the ignition can lead to unauthorized use of the vehicle by someone under the age of 16, without a drivers license, or without proper training. This could result in an accident or rollover. Always remove the ignition key when the vehicle is not in use.

Equipment Modifications

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

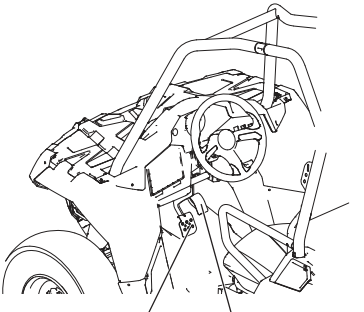
Do not install any non-POLARIS-approved accessory or modify the vehicle for the purpose of increasing speed or power. Any modifications or installation of non-POLARIS-approved accessories could create a substantial safety hazard and increase the risk of bodily injury.

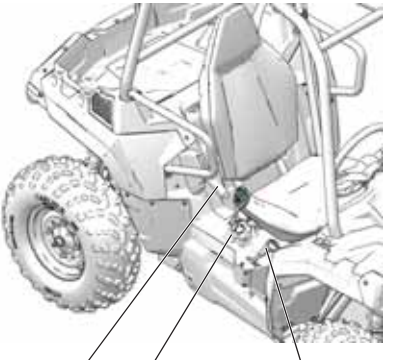
The warranty on your POLARIS vehicle will be terminated if any non-POLARIS-approved equipment and/or modifications have been added to the vehicle that increase speed or power.

The addition of certain accessories, including (but not limited to) mowers, blades, tires, sprayers, or large racks, may change the handling characteristics of the vehicle. Use only POLARIS-approved accessories, and familiarize yourself with their function and effect on the vehicle.

For more information about safety, contact an authorized POLARIS dealer or visit the POLARIS web site at www.polaris.com.

FEATURES AND CONTROLS
Component Locations





Trailer Receiver Hitch Bracket

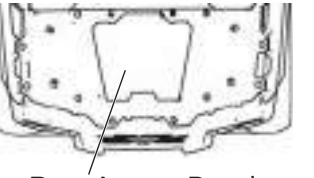
This vehicle is equipped with a receiver hitch bracket for a trailer hitch. Trailer towing equipment is not supplied with this vehicle.

To avoid injury and property damage, always heed the warnings and towing capacities outlined on pages 68-70.

Service Access Panels

Access serviceable engine components through the engine access panel behind the seat. Remove the seat and release the access panel latches to remove the access panel.

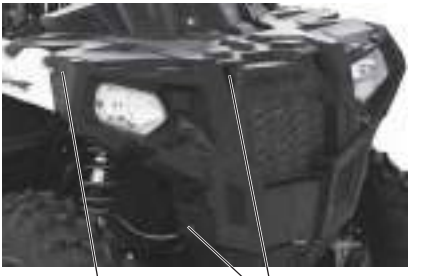
Remove rear access panel to access the air box and spark plug. The rear access panel is located in the bed of the cargo box. Pull the rear edge of the access panel upward to remove it.



Radiator Access/Bumper Removal

The front bumper can be removed to clean debris from the radiator.

1. Remove the four (4) torx screws and six (6) plastic rivets.
2. Lift the front bumper to remove it from the vehicle.



FEATURES AND CONTROLS

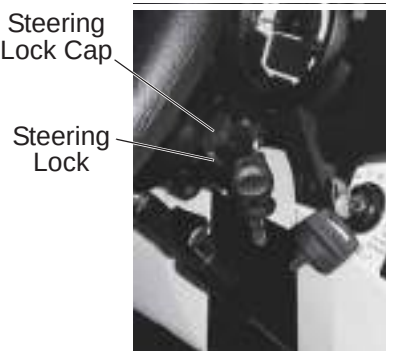
Steering Lock

Lock the steering to prevent unauthorized use or theft of the vehicle.

WARNING! Always unlock the steering before starting the engine.

NOTICE: Always remove the steering lock key before operating the vehicle. Place the steering lock keys in a safe place. The lock must be replaced if the keys are lost.

1. Turn the steering wheel full right or full left.
2. Open the steering lock cap. Insert the steering lock key and turn it clockwise.
3. Continue applying light clockwise pressure to the key while moving the steering wheel *slowly* in the reverse direction. When you feel a click and slight movement of the key, the steering has locked. Attempt to move the steering wheel to verify that it's locked.



4. Remove the key. Reinstall the steering lock cap.
5. To unlock the steering, insert the steering lock key and turn it counter-clockwise. Remove the key.

Steering Wheel

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

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

Always make sure the steering wheel position does not impede proper operation of the brake pedal, throttle pedal and all other controls.

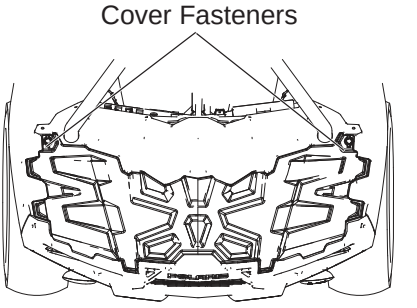
Mirrors

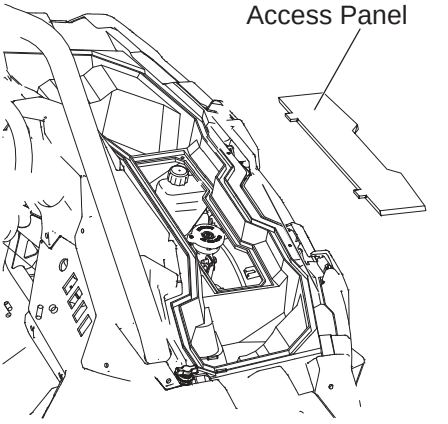
Use the mirrors to assist in traffic maneuvers. Always check and adjust the mirrors before driving the vehicle.

Front Box Cover

Remove the front box cover and access panel to access the radiator cap, coolant overflow bottle and brake master cylinder reservoir.

1. Turn the box cover fasteners 1/4 turn.
2. Lift the rear edge of the box cover.
3. Using the pliers provided in the tool kit, remove the two (2) push darts from the access panel. Remove the panel.





FEATURES AND CONTROLS

Cab Nets

Riding in this vehicle without using the cab nets (or doors, if equipped) increases the risk of serious injury or death in the event of an accident or rollover. Cab nets (or doors) must be used at all times. Make sure all latches on both sides of the vehicle are secure before operating the vehicle.

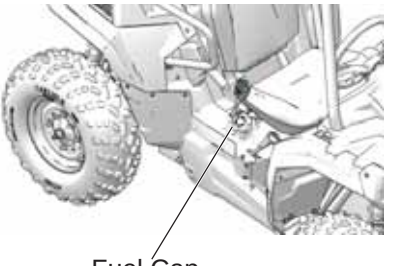
Always inspect cab nets and latches for tightness, wear and damage before each use of the vehicle. Use the strap adjusters to tighten any loose straps. Promptly replace worn or damaged cab nets and latches with new cab nets and latches. Please see your authorized POLARIS dealer.

Extreme Use Battery

An optional extreme use battery may be available for your model. If the performance of the factory-installed battery is inadequate due to operation in extreme cold or due to extended use of multiple electrical accessories, please see your POLARIS dealer. Ask your dealer to provide any installation procedures that may differ for an extreme use battery.

Fuel Cap

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



Seat

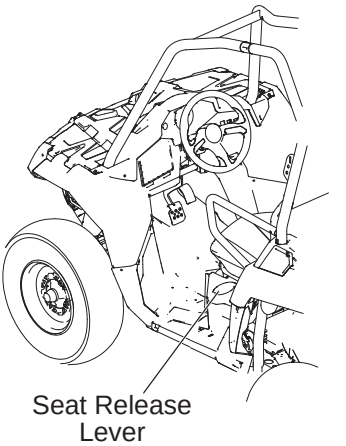
Seat Adjustments

Always make sure the seat position allows for proper access and operation of the brake pedal, throttle pedal and all other controls.

The seat release lever is located at the left side of the seat. Push the release lever downward and slide the seat forward or rearward to the desired position. Release the lever. The seat will lock into the new position.

Seat Removal

1. Push the seat release lever downward and slide the seat forward until it slides off the frame.
2. Lift the seat away from the vehicle.
3. Reverse the procedure to reinstall the seat.



FEATURES AND CONTROLS

Seat Belt

This POLARIS vehicle is equipped with three-point lap and diagonal seat belts. Always secure the seat belt before riding.

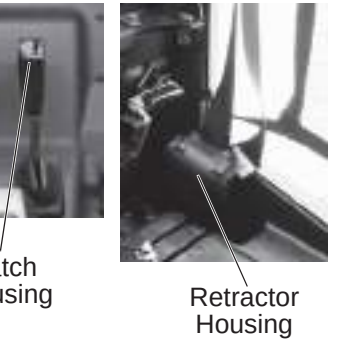
To wear the seat belt properly, follow this procedure:

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

Seat Belt Inspection

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

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

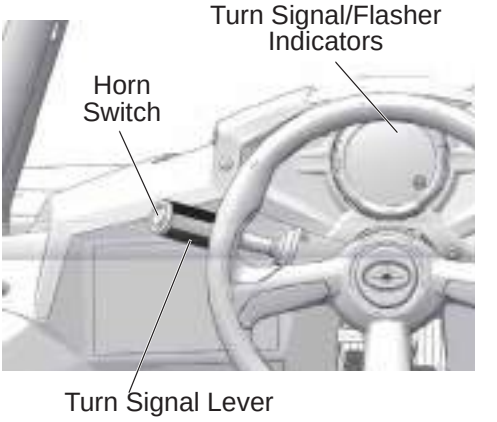


Switches

Turn Signal Lever

Before turning, activate a turn signal to alert others of your intentions. Check turn signal lamps before each ride.

Tip: The key must be in the ON position to activate the turn signals.



Move the turn signal lever downward to signal a left turn. The left turn signal lamps in the taillight and below the front headlight will flash. The turn signal indicator in the gauge will also flash.

Move the lever upward to signal a right turn. The right signal lamps and indicator will flash.

Return the lever to the center position to end the signal.

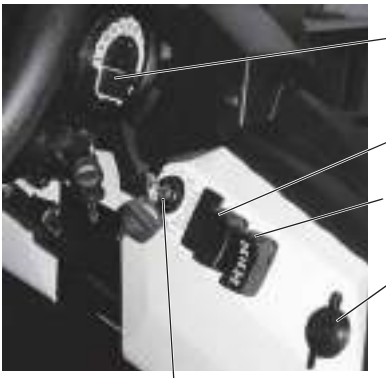
High Beam Switch

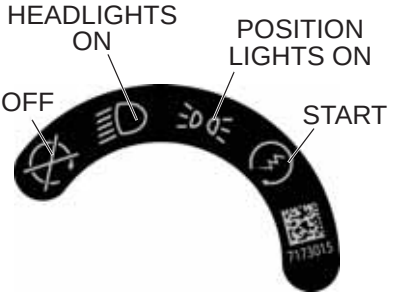
The headlight high beam is controlled by the turn signal lever. To switch the headlights to high beam, move the lever forward, toward the console. Move the lever rearward to switch the headlights to low beam.

Horn Switch

The horn switch is located on the turn signal lever. Press the tip of the turn signal lever inward to sound the horn.

FEATURES AND CONTROLS
Switches





Ignition Switch/Light Switch

Use the ignition switch to start the engine and to turn the lights on or off. The key can be removed from the switch when it is in the OFF position.

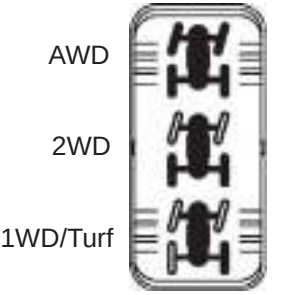
OFF	Turn the key to the OFF position to stop the engine. Electrical circuits are off.
HEADLIGHTS ON	The low beam headlights are on. Electrical circuits are on. Electrical equipment can be used.
POSITION LIGHTS ON	The low beam headlights are off. Positon lights are on. Electrical circuits are on. Electrical equipment can be used.
START	Turn the key to the START position to engage the electric starter. See page 56 for starting procedures.

Switches

All Wheel Drive (AWD) Switch (if equipped)

The AWD switch has three positions:

- All Wheel Drive (AWD)
- Differential Lock/Two Wheel Drive (2WD)
- Off (1WD/Turf Mode)



Press the top of the rocker switch to engage All Wheel Drive.

Move the switch to the center position to lock the differential and operate in two wheel drive (2WD).

Press the bottom of the switch to unlock the differential and allow the rear drive wheels to operate independently (1WD). This mode of operation is well suited to turf driving or when active traction is not needed.

See page 71 for AWD/2WD/1WD operating instructions.

Auxiliary Outlet

The vehicle is equipped with a 12-volt accessory outlet on the dash. Use the outlet to power an auxiliary light or other optional accessories or lights. For service, the dash outlet connection is under the dash.

Hazard Switch

Push the hazard warning switch to cause all turn signal lights to flash simultaneously. Use this feature to alert others of an emergency or other situation requiring caution.

FEATURES AND CONTROLS
Gear Selector

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.

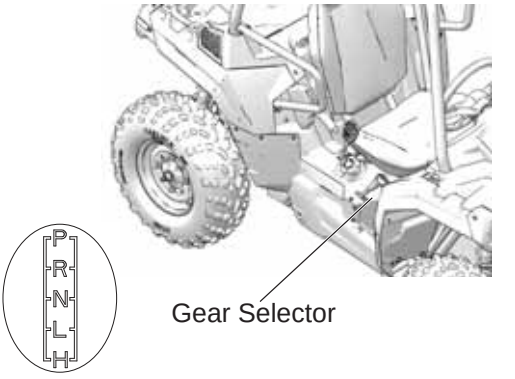
P: Park

R: Reverse

N: Neutral

L: Low Gear

H: High Gear



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

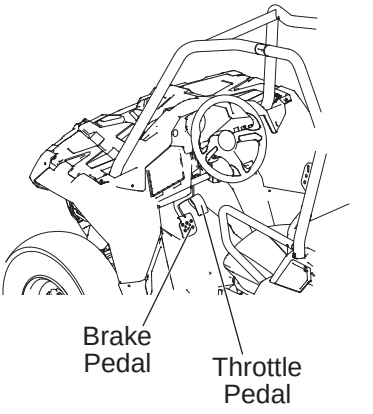
Using Low Range

Always shift into low gear for any of the following conditions.

- Operating in rough terrain or over obstacles
- Loading the vehicle onto a trailer
- Towing heavy loads

Brake Pedal

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



Throttle Pedal

Push the pedal down to increase engine speed. Spring pressure returns the pedal to the rest position when released. Always check that the throttle pedal returns normally before starting the engine. Make sure there's adequate throttle pedal freeplay. See page 112 for throttle pedal adjustment procedures.

This vehicle is equipped with a throttle release switch, which is designed to reduce the risk of a frozen or stuck throttle. If the throttle cable should stick in an open position when the operator releases the throttle pedal, engine speed will be limited, and power to the rear wheels will be reduced.

FEATURES AND CONTROLS
Park Brake Lever

Always apply the service brakes before engaging or releasing the park brake. To help prevent the vehicle from rolling, set the park brake when parking the vehicle. When the park brake is set and the park brake indicator is illuminated, engine speed is limited. If the accelerator is applied, this limiting feature prevents operation, which protects the park brake pads from excessive wear.

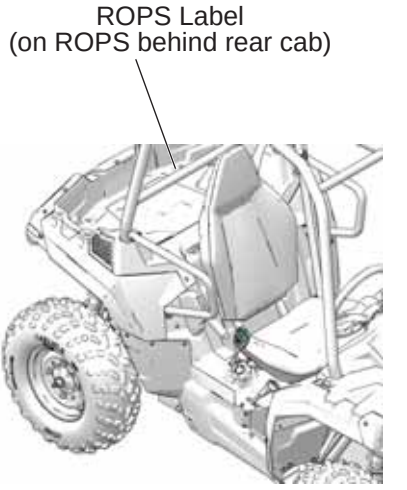
Tip: This feature will not operate properly if the park brake connector or switch (under the hood) malfunctions or becomes disconnected, or if the switch has moved. Check for disconnection, then see your dealer promptly if this feature fails to operate properly.

1. To set the park brake, apply the brakes.
2. Pull the park brake lever upward as far as possible.
3. To release the park brake, apply the brakes. Press the park brake release inward and move the lever downward as far as possible.

Rollover Protective Structure (ROPS)

The Rollover Protective Structure (ROPS) on this vehicle meets OSHA 1928.53 rollover performance requirements. Always have your authorized POLARIS dealer thoroughly inspect the ROPS if it ever becomes damaged in any way.

No device can assure occupant protection in the event of a rollover. When used with seat belts and cab nets, the ROPS helps prevent occupants from being ejected from the vehicle. Always follow all safe operating practices outlined in this manual to avoid vehicle rollover.



WARNING! Vehicle rollover could cause severe injury or death. Always avoid operating in a manner that could result in vehicle rollover.

FEATURES AND CONTROLS

Instrument Cluster

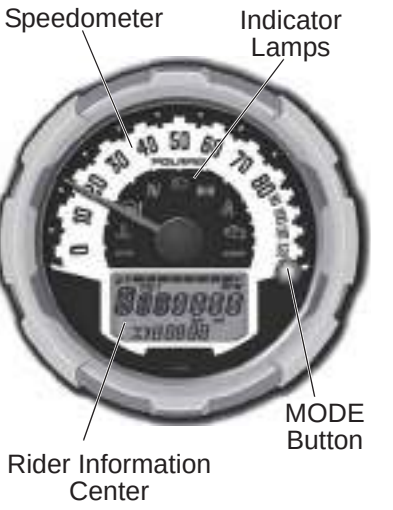
High water pressure may damage components. Wash the vehicle by hand or with a garden hose using mild soap. Do not use alcohol to clean the instrument cluster. Do not allow insect sprays to contact the lens.

Speedometer

The speedometer displays vehicle speed in either miles per hour (MPH) or kilometers per hour (km/h). See page 42.

Mode Button

Use the MODE button to toggle through mode options. See page 42 for operation of the modes.



Instrument Cluster Indicator Lamps

Lamp	Indicates	Condition
MPH	Vehicle Speed	When standard mode is selected, speed displays in miles per hour.
KM/H		When metric mode is selected, speed displays in kilometers per hour.
	Over Temperature	This lamp illuminates to indicate an overheated engine. If the indicator flashes, the overheating condition remains, and the system will automatically reduce engine power.
	Neutral	This lamp illuminates when the transmission is in neutral and the ignition key is in the ON position.
	High Beam (if equipped)	This lamp illuminates when the headlamp switch is set to high beam.
	Helmet/Seat Belt	This lamp flashes for several seconds when the key is turned to the ON position. The lamp is a reminder to wear helmet and seat belt before operating.
	Check Engine	This indicator appears if an EFI-related fault occurs. Do not operate the vehicle if this warning appears. Serious engine damage could result. See your dealer.
	Direction Indicators	A direction indicator flashes when a turn signal is active. Both indicators flash when the hazard signal is active.

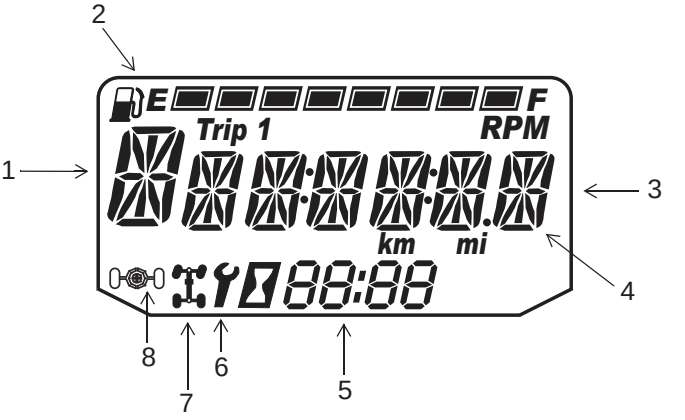
FEATURES AND CONTROLS

Instrument Cluster

Rider Information Center

The rider information center is located in the instrument cluster. All segments will light up for one second at start-up. If the instrument cluster fails to illuminate, a battery over-voltage may have occurred and the instrument cluster may have shut off to protect the electronic speedometer. If this occurs, take the vehicle to your POLARIS dealer for proper diagnosis.

The information center is set to display standard units of measurement and a 12-hour clock at the factory. To change to metric and/or a 24-hour clock, see page 43.



1. **Gear Indicator** - This indicator displays gear shifter position.
   H = High Gear
   L = Low Gear
   N = Neutral
   R = Reverse Gear
   P = Park
   -- = Gear Signal Error (or shifter between gears)

Instrument Cluster

Rider Information Center

2. **Fuel Gauge** - The segments of the fuel gauge show the level of fuel in the fuel tank. When the last segment clears, a low fuel warning is activated. All segments including the fuel icon will flash. Refuel immediately.

Tip: If the fuel icon fails to display, an open or short circuit has occurred in the fuel sensor circuit. See your POLARIS dealer.

3. **Information Display Area** - This area displays odometer, trip meter, engine hour meter and programmable service hour interval.
4. **Under / Over Voltage** - This warning usually indicates that the vehicle is operating at an RPM too low to keep the battery charged. It may also occur when the engine is at idle and high electrical load (lights, cooling fan, accessories) is applied. Drive at a higher RPM or recharge the battery to clear the warning.
5. **Clock** - The clock displays time in a 12-hour or 24-hour format. See page 43 for resetting instructions.
6. **Service Indicator** - A flashing wrench symbol alerts the operator that the preset service interval has been reached. The vehicle should be brought to your POLARIS dealer for scheduled maintenance. See page 43 for resetting instructions.
7. **4X4 Indicator** - This indicator illuminates when the 4X4 system is engaged (switch is on 4X4).
8. **Turf Mode Indicator (if equipped)** - This indicator illuminates when the operator unlocks the differential.

FEATURES AND CONTROLS

Instrument Cluster

Rider Information Center

Use the MODE button to toggle through the information area options.

Display Units (Standard/Metric)

The display can be changed to show either standard or metric units of measurement for each of the following settings.

Tip: To exit the set-up mode, turn the key off. Wait 5 seconds, then turn the key on. The gauge displays the mode that was displayed prior to setting the units.

	Standard Display	Metric Display
Distance	Miles	Kilometers
Fuel	U.S. Gallons	Liters, Imperial Gallons
Temperature	Fahrenheit	Celsius
Time	12-Hour Clock	24-Hour Clock

1. Turn the key to the OFF position.
2. Press and *hold* the MODE button while turning the key to the ON position.
3. When the display flashes the distance setting, tap the MODE button to advance to the desired setting.
4. Press and *hold* the MODE button to save the setting and advance to the next display option.
5. Repeat the procedure to change remaining display settings.

Instrument Cluster

Rider Information Center

Clock Mode

Tip: The clock must be reset any time the battery has been disconnected or discharged.

1. Turn the key to the ON position. Use the MODE button to toggle to the odometer display.
2. Press and *hold* the MODE button until the hour segment flashes. Release the button.
3. With the segment flashing, tap the MODE button to advance to the desired setting.
4. Press and *hold* the MODE button until the next segment flashes. Release the button.
5. Repeat steps 3-4 twice to set the 10-minute and 1-minute segments. After completing the 1-minute segment, step 4 will save the new settings and exit the clock mode.
6. Turn the key to the OFF position.

Odometer Mode

The odometer records and displays the distance traveled by the vehicle.

Trip Meter Mode

The trip meter records the distance traveled by the vehicle if reset before each trip. To reset, select the trip meter mode. Press and hold the MODE button until the meter resets to zero. In the Rider Information Center, the trip meter display contains a decimal point, but the odometer displays without a decimal point.

Hour Meter Mode

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

Engine Temperature Mode

This mode displays current temperature of the coolant.

Tachometer Mode

The engine RPM is displayed digitally.

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

FEATURES AND CONTROLS
Instrument Cluster
Rider Information Center
Programmable Service Interval

When the hours of engine operation equal the programmed service interval setting, the wrench icon will flash for 5 seconds each time the engine is started. When this feature is enabled, it provides a convenient reminder to perform routine maintenance. The service interval is programmed at 50 hours at the factory. Use the following procedure to change the service interval.

1. Press the MODE button until remaining service hours display.
2. Press and hold the MODE button.
3. When the service hours flash, press and release the MODE button to advance the hours to the desired setting (including OFF). Press and hold the MODE button to set the new service hour interval.

Diagnostic Display Mode

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

The diagnostic mode is accessible only when the check engine warning indicator activates after the key has been turned on. Leave the key on if you want to view the active code (failure code).

The diagnostic mode becomes inaccessible if the key is turned off and on and the warning indicator is no longer active. This allows the determination of persistent as well as intermittent faults.

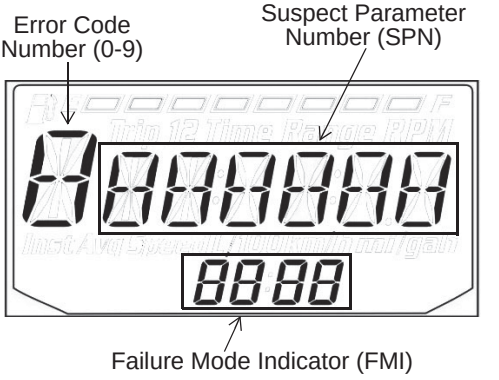
Inactive codes are stored in the history of the unit.

Instrument Cluster

Rider Information Center

Engine Error Codes

The error screen displays only when the CHECK ENGINE light is on or when it goes on and off during one ignition cycle. Error codes are not stored. When the key is turned OFF, the code and message is lost, but will reappear if the fault reoccurs after restarting the engine.



If the CHECK ENGINE light illuminates, retrieve the error codes from the display.

1. If the error codes are not displayed, use the MODE button to toggle until “Ck ENG” displays on the main line of the display.
2. Press and hold the MODE button to enter the diagnostics code menu.
3. Record the three numbers displayed in the gear position, clock and odometer displays.
4. Press the MODE button to advance to the next error code.
5. Press and hold the MODE button to exit the diagnostics code menu.
6. See pages 46-51 for code definitions and failure descriptions. Please see your POLARIS dealer for all major repairs.

FEATURES AND CONTROLS
Instrument Cluster
Diagnostic Display Code Definitions

Open Load: There is a break in the wires that lead to the item listed in the chart (injector, fuel pump, etc.), or the item has failed.

Short-to-Ground: The wire is shorted to ground between the electronic control unit and the item listed in the chart.

Shorted Load: The wires leading to the item listed in the chart are shorted together, or the item has shorted internally.

Short-to-Battery: The wire leading from the item listed in the chart to the electronic control unit is shorted to a wire at battery voltage.

Instrument Cluster

Diagnostic Display Code Definitions

Diagnostic Codes			
Component	**Condition**	**SPN**	**FMI**
Accelerator Position 2	Data Erratic, Intermittent Or Incorrect	29	2
	Voltage Above Normal, Or Shorted To High Source	29	3
	Voltage Below Normal, Or Shorted To Low Source	29	4
Throttle Position Sensor 1	Data Valid But Above Normal Operational Range - Most Severe Level	51	0
	Data Valid But Below Normal Operational Range - Most Severe Level	51	1
	Data Erratic, Intermittent Or Incorrect	51	2
	Voltage Above Normal, Or Shorted To High Source	51	3
	Voltage Below Normal, Or Shorted To Low Source	51	4
	Abnormal Rate Of Change	51	10
	Out Of Calibration	51	13
Vehicle Speed Sensor	Data Valid But Above Normal Operational Range - Most Severe Level	84	0
	Data Valid But Below Normal Operational Range - Most Severe Level	84	1
	Data Erratic, Intermittent Or Incorrect	84	2
	Voltage Above Normal, Or Shorted To High Source	84	3
	Voltage Below Normal, Or Shorted To Low Source	84	4
	Abnormal Frequency Or Pulse Width Or Period	84	8
	Abnormal Update Rate	84	9
	Abnormal Rate Of Change	84	10
	Bad Intelligent Device Or Component	84	12
	Received Network Data In Error	84	19
Accelerator Position 1	Data Erratic, Intermittent Or Incorrect	91	2
	Voltage Above Normal, Or Shorted To High Source	91	3
	Voltage Below Normal, Or Shorted To Low Source	91	4
Manifold Absolute Pressure Sensor	Data Erratic, Intermittent Or Incorrect	102	2
	Voltage Above Normal, Or Shorted To High Source	102	3
	Voltage Below Normal, Or Shorted To Low Source	102	4
	Mechanical System Not Responding Or Out Of Adjustment	102	7
	Abnormal Rate Of Change	102	10

FEATURES AND CONTROLS
Instrument Cluster
Diagnostic Display Code Definitions

Diagnostic Codes			
Component	**Condition**	**SPN**	**FMI**
Intake Air Temperature Sensor	Data Erratic, Intermittent Or Incorrect	105	2
	Voltage Above Normal, Or Shorted To High Source	105	3
	Voltage Below Normal, Or Shorted To Low Source	105	4
	Abnormal Rate Of Change	105	10
	Data Valid But Above Normal Operating Range - Least Severe Level	105	15
Engine Temperature Sensor	Data Valid But Above Normal Operational Range - Most Severe Level	110	0
	Data Erratic, Intermittent Or Incorrect	110	2
	Voltage Above Normal, Or Shorted To High Source	110	3
	Voltage Below Normal, Or Shorted To Low Source	110	4
	Abnormal Rate Of Change	110	10
	Data Valid But Above Normal Operating Range - Least Severe Level	110	15
	Data Valid But Above Normal Operating Range - Moderately Severe Level	110	16
	Data Valid But Below Normal Operating Range - Least Severe Level	110	17
System Power	Data Valid But Above Normal Operational Range - Most Severe Level	168	0
	Data Valid But Below Normal Operational Range - Most Severe Level	168	1
	Voltage Above Normal, Or Shorted To High Source	168	3
	Voltage Below Normal, Or Shorted To Low Source	168	4
	Data Valid But Above Normal Operating Range - Moderately Severe Level	168	16
	Data Valid But Below Normal Operating Range - Moderately Severe Level	168	18
Engine Speed	Data Valid But Above Normal Operational Range - Most Severe Level	190	0
	Data Valid But Below Normal Operational Range - Most Severe Level	190	1
	Data Erratic, Intermittent Or Incorrect	190	2
	Mechanical System Not Responding Or Out Of Adjustment	190	7
	Received Network Data In Error	190	19
	Condition Exists	190	31
Gear Sensor Signal	Data Erratic, Intermittent Or Incorrect	523	2
	Voltage Above Normal, Or Shorted To High Source	523	3
	Voltage Below Normal, Or Shorted To Low Source	523	4
	Abnormal Update Rate	523	9
ECU Memory	Bad Intelligent Device Or Component	628	12
	Out Of Calibration	628	13
Calibration	Out Of Calibration	630	13
Crankshaft Position Sensor	Data Erratic, Intermittent Or Incorrect	636	2
	Abnormal Frequency Or Pulse Width Or Period	636	8
Injector 1 (Front) (MAG) (SDI Port Injector)	Voltage Above Normal, Or Shorted To High Source	651	3
	Voltage Below Normal, Or Shorted To Low Source	651	4
	Current Below Normal Or Open Circuit	651	5

Instrument Cluster

Diagnostic Display Code Definitions

Diagnostic Codes			
Component	**Condition**	**SPN**	**FMI**
Fan Relay Driver Circuit	Voltage Above Normal, Or Shorted To High Source	1071	3
	Voltage Below Normal, Or Shorted To Low Source	1071	4
	Current Below Normal Or Open Circuit	1071	5
Ignition Coil Primary Driver 1 (Front) (MAG)	Voltage Above Normal, Or Shorted To High Source	1268	3
	Voltage Below Normal, Or Shorted To Low Source	1268	4
	Current Below Normal Or Open Circuit	1268	5
Fuel Pump Driver Circuit	Voltage Above Normal, Or Shorted To High Source	1347	3
	Voltage Below Normal, Or Shorted To Low Source	1347	4
	Current Below Normal Or Open Circuit	1347	5
Oxygen Sensor 1	Data Erratic, Intermittent Or Incorrect	3056	2
	Voltage Above Normal, Or Shorted To High Source	3056	3
	Voltage Below Normal, Or Shorted To Low Source	3056	4
	Bad Intelligent Device Or Component	3056	12
ECU Output Supply Voltage 1	Data Valid But Above Normal Operational Range - Most Severe Level	3597	0
	Data Valid But Below Normal Operational Range - Most Severe Level	3597	1
	Voltage Above Normal, Or Shorted To High Source	3597	3
	Voltage Below Normal, Or Shorted To Low Source	3597	4
	Data Valid But Above Normal Operating Range - Moderately Severe Level	3597	16
	Data Valid But Below Normal Operating Range - Moderately Severe Level	3597	18
ECU Output Supply Voltage 2	Data Valid But Above Normal Operational Range - Most Severe Level	3598	0
	Data Valid But Below Normal Operational Range - Most Severe Level	3598	1
	Voltage Above Normal, Or Shorted To High Source	3598	3
	Voltage Below Normal, Or Shorted To Low Source	3598	4
	Data Valid But Above Normal Operating Range - Moderately Severe Level	3598	16
	Data Valid But Below Normal Operating Range - Moderately Severe Level	3598	18
ECU Output Supply Voltage 3	Data Valid But Above Normal Operational Range - Most Severe Level	3599	0
	Data Valid But Below Normal Operational Range - Most Severe Level	3599	1
	Voltage Above Normal, Or Shorted To High Source	3599	3
	Voltage Below Normal, Or Shorted To Low Source	3599	4
	Data Valid But Above Normal Operating Range - Moderately Severe Level	3599	16
	Data Valid But Below Normal Operating Range - Moderately Severe Level	3599	18
ETC Accelerator Position Sensor Outputs 1 & 2 Correlation	Data Erratic, Intermittent Or Incorrect	65613	2

FEATURES AND CONTROLS
Instrument Cluster
Diagnostic Display Code Definitions

Diagnostic Codes			
Component	**Condition**	**SPN**	**FMI**
Throttle Position Sensor 2	Data Valid But Above Normal Operational Range - Most Severe Level	520198	0
	Data Valid But Below Normal Operational Range - Most Severe Level	520198	1
	Data Erratic, Intermittent Or Incorrect	520198	2
	Voltage Above Normal, Or Shorted To High Source	520198	3
	Voltage Below Normal, Or Shorted To Low Source	520198	4
	Abnormal Rate Of Change	520198	10
	Out Of Calibration	520198	13
Active Descent Control System	Voltage Above Normal, Or Shorted To High Source	520203	3
	Voltage Below Normal, Or Shorted To Low Source	520203	4
	Current Below Normal Or Open Circuit	520203	5
Fuel Correction Front	Data Valid But Above Normal Operating Range - Least Severe Level	520204	15
	Data Valid But Below Normal Operating Range - Least Severe Level	520204	17
All Wheel Drive Control Circuit	Voltage Above Normal, Or Shorted To High Source	520207	3
	Voltage Below Normal, Or Shorted To Low Source	520207	4
	Current Below Normal Or Open Circuit	520207	5
Oxygen Sensor Heater 1	Data Erratic, Intermittent Or Incorrect	520209	2
	Voltage Above Normal, Or Shorted To High Source	520209	3
	Voltage Below Normal, Or Shorted To Low Source	520209	4
	Current Below Normal Or Open Circuit	520209	5
Accelerator Position/Brake Position Interaction	Condition Exists	520275	31
Throttle Position Sensor (1 or 2 Indeterminable)	Data Erratic, Intermittent Or Incorrect	520276	2
	Bad Intelligent Device Or Component	520276	12
Throttle Body Control - Power Stage	Data Erratic, Intermittent Or Incorrect	520277	2
	Voltage Above Normal, Or Shorted To High Source	520277	3
	Voltage Below Normal, Or Shorted To Low Source	520277	4
	Abnormal Frequency Or Pulse Width Or Period	520277	8
	Condition Exists	520277	31
Throttle Body Control - Return Spring Check Failed	Condition Exists	520278	31
Throttle Body Control - Adaption Aborted	Condition Exists	520279	31
Throttle Body Control - Limp Home Position Check Failed	Condition Exists	520280	31
Throttle Body Control - Mechanical Stop Adaptation Failure	Condition Exists	520281	31
Throttle Body Control - Repeated Adaptation Failed	Condition Exists	520282	31
Throttle Body Control	Data Erratic, Intermittent Or Incorrect	520283	2
	Voltage Above Normal, Or Shorted To High Source	520283	3
	Voltage Below Normal, Or Shorted To Low Source	520283	4

Instrument Cluster

Diagnostic Display Code Definitions

Diagnostic Codes			
Component	**Condition**	**SPN**	**FMI**
Throttle Body Control - Position Deviation Fault	Condition Exists	520284	31
ECU Monitoring Error	Condition Exists	520286	31
ECU Monitoring Error (Level 3)	Condition Exists	520287	31
ECU Monitoring of Injection Cut Off (Level 1)	Condition Exists	520288	31
ECU Monitoring of Injection Cut Off (Level 2)	Condition Exists	520289	31
Throttle Body Control - Requested Throttle Angle Not Plausible	Condition Exists	520305	31
ECU ADC Fault - No Load	Condition Exists	520306	31
ECU ADC Fault - Voltage	Condition Exists	520307	31
Accelerator Sensor Sync Fault - Sensor Diff Exceeds Limit	Condition Exists	520308	31
ECU Fault - ICO	Condition Exists	520309	31
ECU Fault - Hardware Disruption	Condition Exists	520311	31
Idle Fuel Correction Bank 1	Data Valid But Above Normal Operating Range - Least Severe	520342	15
	Data Valid But Below Normal Operating Range - Least Severe	520342	17
Adaptive Fuel Correction Bank 1	Data Valid But Above Normal Operating Range - Least Severe	520344	15
	Data Valid But Below Normal Operating Range - Least Severe	520344	17

OPERATION

⚠ WARNING

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

Vehicle Break-in Period

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

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

Use of any oils other than those recommended by POLARIS may cause serious engine damage. We recommend the use of POLARIS PS-4 Full Synthetic 5W-50 4-Cycle Oil for your 4-cycle engine.

Vehicle Break-in Period

Engine and Drivetrain Break-in

1. Fill the fuel tank with gasoline. See page 29. Always exercise extreme caution whenever handling gasoline.
2. Check the oil level. See page 92. Add the recommended oil as needed to maintain the oil level in the safe operating range.
3. Complete the New Operator Driving Procedures outlined on pages 58-59.
4. Avoid aggressive use of the brakes.
5. Vary throttle positions. Do not operate at sustained idle.
6. Pull only light loads.
7. Perform regular checks on fluid levels, controls and areas outlined on the daily pre-ride inspection checklist. See page 54.
8. During the break-in period, change both the oil and the filter at 25 hours or one month.
9. Check fluid levels of transmission and all gearcases after the first 25 hours of operation and every 100 hours thereafter.

Brake System Break-in

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

PVT Break-in (Clutches/Belt)

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

If a belt fails, always clean any debris from the PVT intake and outlet duct and from the clutch and engine compartments when replacing the belt.

OPERATION
Pre-Ride Inspection

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

Item	Remarks	Page
Brake system/pedal travel	Ensure proper operation	35, 111
Brake fluid	Ensure proper level	112
Front suspension	Inspect, lubricate if necessary	89
Rear suspension	Inspect, lubricate if necessary	89
Steering/Steering Lock	Unlock the steering; Ensure free operation	114
Tires	Inspect condition and pressure	13, 115
Wheels/fasteners	Inspect, ensure fastener tightness	115
Frame nuts, bolts, fasteners	Inspect, ensure tightness	-
Fuel and oil	Ensure proper levels	41, 92
Coolant level	Ensure proper level	103-104
Coolant hoses	Inspect for leaks	-
Throttle	Ensure proper operation	111
Indicator lights/switches	Ensure proper operation	31
Air filter, pre-filter	Inspect, clean	108-109
Intake pre-filters	Inspect, clean	109
Headlamps	Check operation, apply POLARIS dielectric grease when lamp is replaced	117
Turn Signals	Ensure operation of all signal lamps	31
Mirrors	Adjust for best side/rear vision	27
Horn	Ensure operation	31
Brake light/tail lamps	Check operation, apply POLARIS dielectric grease when lamp is replaced	117
Riding gear	Wear approved helmet, goggles, and protective clothing	10
Seat Latch	Push down on the seat back to ensure the latch is secure	29
Seat Belt	Check length of belt for damage, check latches for proper operation	30
Cab Nets	Check for wear or damage, ensure proper installation	28

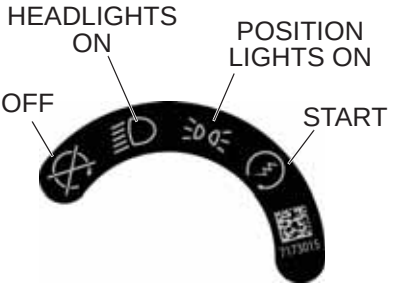
Safe Operation Practices

1. POLARIS strongly encourages you and any family members who will be riding this vehicle to take a training course.
2. Do not allow anyone under 16 years of age or without a valid driver's license to operate this vehicle.
3. Never carry a passenger on this vehicle.
4. Engine exhaust fumes are poisonous. Never start the engine or let it run in an enclosed area.
5. Never operate with accessories not approved by POLARIS for use on this vehicle.
6. Use caution and drive at reduced speeds in conditions of reduced visibility such as fog, rain and darkness. Clean headlights frequently and replace burned out headlamps promptly.
7. Always operate at a speed that's appropriate for the terrain, the visibility and operating conditions and your skills and experience. Never operate at excessive speeds. Never attempt wheelies, jumps, or other stunts. Keep both hands on the steering wheel during operation.
8. Never consume alcohol or drugs before or while operating this vehicle.
9. Always use the size and type of tires specified for your vehicle. Always maintain proper tire pressure.
10. Never operate a damaged vehicle. After any rollover or accident, have a qualified service dealer inspect the entire machine for possible damage.
11. Never operate the vehicle on a frozen body of water unless you have first verified that the ice is sufficiently thick to support the weight and moving force of the vehicle, you and your cargo, together with any other vehicles in your party.
12. Do not touch hot exhaust system components. Always keep combustible materials away from the exhaust system.
13. Always remove the ignition key when the vehicle is not in use to prevent unauthorized use.

OPERATION
Starting the Engine

WARNING! Always unlock the steering before starting the engine.

1. Position the vehicle on a level surface outdoors or in a well-ventilated area.
2. Sit in the driver's seat and fasten the seat belt. Secure the cab nets.
3. Place the transmission in PARK.
4. Apply the brakes. Do not press the throttle pedal while starting the engine.
5. Turn the ignition key to the START position. Engage the starter for a maximum of five seconds. Release the key when the engine starts. Turn the key to either HEADLIGHTS ON or POSITION LIGHTS ON.



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

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

Cold Weather Operation

If the vehicle is used year-round, check the oil level frequently. A rising oil level could indicate the accumulation of contaminates such as water or excess fuel in the bottom of the crankcase. Water in the bottom of the crankcase can lead to engine damage and must be drained. Water accumulation increases as outside temperature decreases.

Stopping the Engine

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

Braking

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

Parking the Vehicle

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

OPERATION
New Operator Driving Procedures

1. Read and understand the owner's manual and all warning and instruction labels before operating this vehicle.
2. Take a training course.
3. Perform the pre-ride inspection. See page 54.
4. Do not tow or carry cargo during this period.
5. Select an open area that allows room to familiarize yourself with vehicle operation and handling.
6. The driver must wear helmet, eye protection, gloves, long-sleeve shirt, long pants, over-the-ankle boots and seat belt at all times.
7. Sit in the driver's seat and fasten the seat belt.
8. Make sure all cab nets are properly secured.
9. Place the transmission in PARK.
10. Start the engine.

New Operator Driving Procedures

11. Apply the brakes and shift into low gear.
12. Check your surroundings and determine your path of travel.
13. Keeping both hands on the steering wheel, slowly release the brakes and depress the throttle with your right foot to begin driving.
14. Drive slowly at first. On level surfaces, practice starting, stopping, turning, maneuvering, using the throttle and brakes and driving in reverse. Learn how the vehicle handles when making both left and right turns at a slow speed.

WARNING! Operating in TURF mode (if equipped) when on sloped, uneven, or loose terrain could cause loss of control and result in serious injury or death. One rear wheel may slip and lose traction or may lift up and grab when it touches the ground again.

15. Increase speed only after mastering all maneuvers at a slow speed.
16. After you become skilled at making turns and begin to operate at faster speeds, follow these precautions:
    - Avoid sharp turns.
    - Never turn while applying heavy throttle.
    - Never make abrupt steering maneuvers.
    - Operate at speeds appropriate for your skills, the conditions and the terrain.
    - DO NOT do power slides, “donuts”, jumps or other driving stunts.

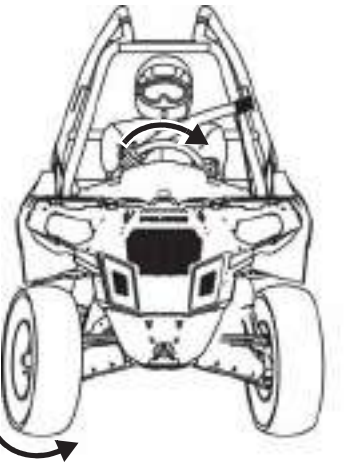
OPERATION
Turning the Vehicle

Your vehicle is equipped with a solid rear axle, which drives both rear wheels equally at all times. This means that the wheel on the outside of the turn must travel a greater distance than the inside wheel when turning and the inside tire must slip traction slightly.

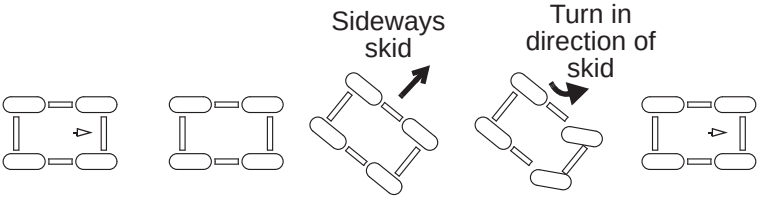
To turn the vehicle, rotate the steering wheel in the direction of the turn.

Practice making turns at slow speeds before attempting to turn at faster speeds.

WARNING! Turning improperly can result in vehicle rollover. Never turn abruptly or at sharp angles. Never turn at high speeds.



Driving on Slippery Surfaces



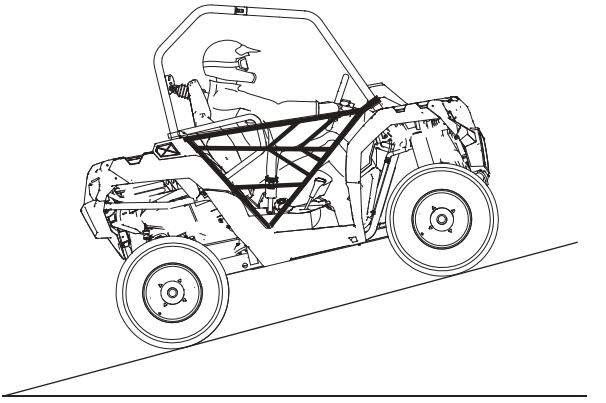
When driving on slippery surfaces such as wet trails, loose gravel, or ice, be alert for the possibility of skidding and sliding. Follow these precautions when encountering slippery conditions:

1. Do not operate on excessively rough, slippery or loose terrain.
2. Slow down before entering slippery areas.
3. Maintain a high level of alertness, reading the trail and avoiding quick, sharp turns, which can cause skids.
4. Engage all-wheel drive before wheels begin to lose traction.

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

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

OPERATION
Driving Uphill



Whenever traveling uphill, follow these precautions:

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

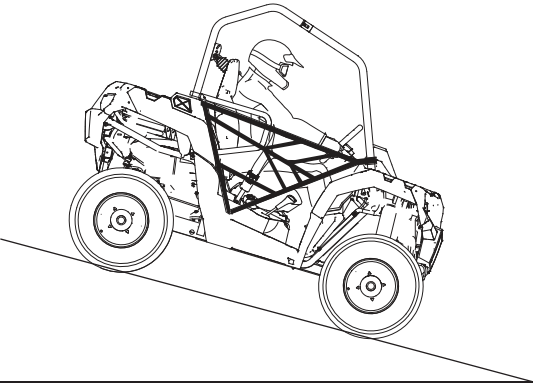
Driving on a Sidehill (Sidehilling)

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

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

1. Engage all-wheel drive.
2. Never operate in TURF mode (if equipped) while operating on a hill or other irregular terrain. Always move the AWD switch to AWD before ascending or descending a hill.
3. Drive slowly and use extreme caution.
4. If the vehicle begins to overturn, or if it feels as if it may overturn, *immediately* turn downhill.
5. Avoid obstacles and changes in terrain that may lower or raise one side of the vehicle or cause the vehicle to slide.
6. If the vehicle begins to slide downhill, immediately turn downhill to stop the slide, or stop the vehicle and maneuver slowly and carefully until the vehicle can be driven straight downhill.

OPERATION
Driving Downhill



Whenever descending a hill, follow these precautions:

1. Avoid excessively steep hills.
2. Never operate in TURF mode (if equipped) while operating on a hill or other irregular terrain. Always move the AWD switch to AWD before ascending or descending a hill.
3. Slow down. Never travel down a hill at high speed.
4. Always check the terrain carefully before descending a hill. Never drive on hills with excessively slippery or loose surfaces.
5. Always descend a hill with the transmission in forward gear. *Never descend a hill with the transmission in neutral*.
6. Avoid traveling down a hill at an angle, which would cause the vehicle to lean sharply to one side. Travel straight downhill.
7. Apply the brakes *lightly* to aid in slowing.

Driving Through Water

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

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

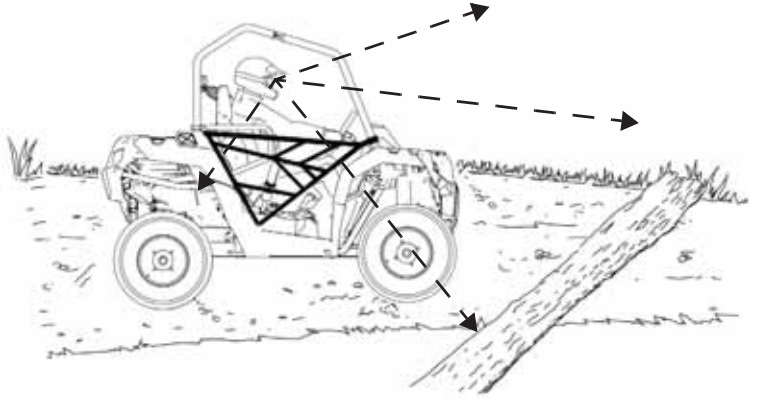
WARNING! The large tires on your vehicle may cause the vehicle to float in deep or fast-flowing water, which could result in loss of traction, loss of control, rollover or accident.

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

NOTICE: Major engine damage can result if the vehicle is not thoroughly inspected after operation in water. Perform the services outlined in the maintenance chart. See page 85. Give special attention to engine oil, transmission oil, demand drive fluid, rear gearcase oil (if equipped) and all grease fittings.

If your vehicle becomes immersed or is operated in water that exceeds the floor level, take it to your POLARIS dealer for service *before starting the engine.* If it's impossible to bring the vehicle to your dealer before starting the engine, perform the service outlined on page 120, and take the vehicle to your dealer at the first opportunity.

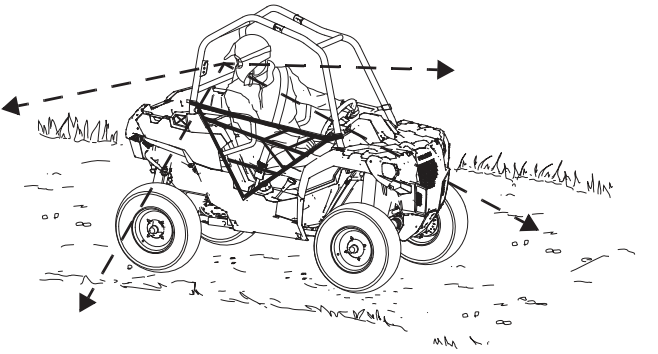
OPERATION
Driving Over Obstacles



Follow these precautions when operating over obstacles:

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

Driving in Reverse



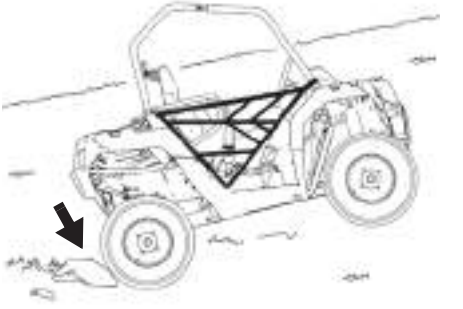
Follow these precautions when operating in reverse:

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

Parking on an Incline

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

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



OPERATION
Hauling Cargo

⚠ WARNING

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

Never exceed the stated load capacity for this vehicle.

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

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

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

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

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

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

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

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

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

DO NOT TRAVEL FASTER THAN THE RECOMMENDED SPEEDS. Vehicle should never exceed 10 MPH (16 km/h) while towing a load on a level grass surface. Vehicle speed should never exceed 5 MPH (8 km/h) when towing loads in rough terrain, while cornering, or while ascending or descending a hill.

Carrying a passenger in the cargo box could result in a fall from the vehicle or contact with moving components. Never allow a passenger to ride in the cargo box.

Hauling Cargo

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

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

Always read and understand the load distribution warnings listed on warning labels and in this manual. Never exceed the maximum capacities specified for your vehicle. See page 132.

Belt Life

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

OPERATION
Towing Loads

⚠ WARNING

Towing is approved OFF-ROAD ONLY. See your POLARIS dealer about configuring the vehicle to be certified to tow a trailer on-road.

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

Always follow these precautions when towing:

1. Never load more than 150 lbs. (68 kg) tongue weight on the towing bracket.
2. When towing a disabled vehicle, place the disabled vehicle's transmission in neutral. Do not operate the vehicle faster than 10 MPH (16 km/h) when towing.
3. Towing a trailer increases braking distance. Do not operate the vehicle faster than 10 MPH (16 km/h) when towing.
4. Do not tow more than the recommended weight for the vehicle.
5. Attach a trailer to the trailer hitch bracket only. Do not attach a trailer to any other location, which could result in loss of control of the vehicle.
6. The total load (operator, accessories, cargo and weight on hitch) must not exceed the maximum weight capacity of the vehicle.

Total Towed Load Weight (Level Ground)	Total Towed Load Weight (15° grade)	Total Hitch Vertical Weight	Maximum Towing Speed
1500 lbs. (680 kg)	850 lbs. (386 kg)	150 lbs. (68 kg)	10 MPH (16 km/h)

All Wheel Drive (AWD) System

Engaging AWD

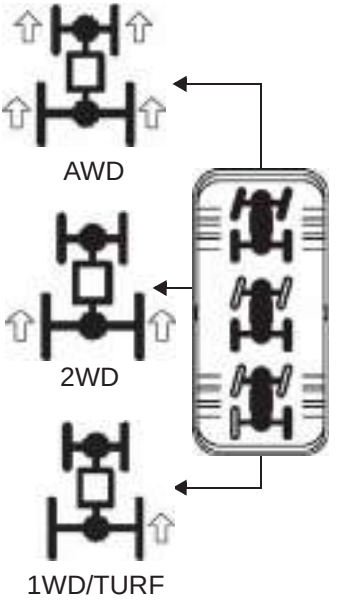
Press the top of the rocker switch to engage All Wheel Drive (AWD). Once enabled, the AWD remains enabled until the switch is turned off.

The AWD switch may be turned on or off while the vehicle is moving. When the AWD switch is on, the front gearcase will automatically engage any time the rear wheels lose traction. When the rear wheels regain traction, the front gearcase will automatically disengage.

Tip: AWD will not engage initially until speed is less than 5 MPH (8 km/h).

Engage the AWD before getting into conditions where front wheel drive may be needed. If the rear wheels are spinning, release the accelerator before switching to AWD.

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



Locking the Differential

NOTICE: 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.

Locking the differential in slippery or low traction conditions helps improve traction. Move the rocker switch to the center position (2WD) to lock the differential and operate in rear wheel drive.

Press the bottom of the switch to unlock the differential and allow the rear drive wheels to operate independently. This mode of operation is well suited to turf driving or whenever aggressive traction is not required.

OPERATION
All Wheel Drive (AWD) System
Disengaging AWD

Move the AWD switch to the center or bottom position to disengage AWD.

If the switch is turned off while the front gearcase is moving, it will not disengage until the rear wheels regain traction.

In some situations, the front gearcase may remain locked after turning the AWD switch off. If this occurs, you may notice increased steering effort and some vehicle speed restriction. Perform the following procedure to unlock the front gearcase.

1. Stop the vehicle.
2. Move the gear selector to reverse. Operate in reverse for at least 10 feet (3 m).
3. Stop completely.
4. Move the gear selector to forward and drive forward.
5. If the front gearcase remains locked after following these instructions, return the vehicle to your dealer for service.

These safety warnings and instructions apply if your vehicle came equipped with a winch or if you choose to add an accessory winch to your vehicle.

⚠WARNING

Improper winch use can result in SEVERE INJURY or DEATH. Always follow all winch instructions and warnings in this manual.

Your winch may have a cable made of either wire rope or specially designed synthetic rope. The term “winch cable” will be used for either unless noted otherwise.

Winch Safety Precautions

1. Read all sections of this manual.
2. Never use alcohol or drugs before or while operating the winch.
3. Never allow children under 16 years of age to operate the winch.
4. Always wear eye protection and heavy gloves when operating the winch.
5. Always keep body, hair, clothing and jewelry clear of the winch cable, fairlead and hook when operating winch.
6. Never attempt to “jerk” a load attached to the winch with a moving vehicle. See the *Shock Loading* section on page 82.
7. Always keep the area around the vehicle, winch, winch cable and load clear of people (especially children) and distractions while operating the winch.
8. Always turn the vehicle ignition power OFF when it and the winch are not being used.
9. Always be sure that at least five (5) full turns of winch cable are wrapped around the winch drum at all times. The friction provided by this wrapped cable allows the drum to pull on the winch cable and move the load.

WINCH GUIDE
Winch Safety Precautions

10. Always apply your vehicle's park brake and/or park mechanism to hold the vehicle in place during winching. Use wheel chocks if needed.
11. Always align the vehicle and winch with the load directly in front of the vehicle as much as possible. Avoid winching with the winch cable at an angle to the winching vehicle's centerline whenever possible.
12. If winching at an angle is unavoidable, follow these precautions:
    A. Look at the winch drum occasionally. Never let the winch cable "stack" or accumulate at one end of the winch drum. Too much winch cable at one end of the winch drum can damage the winch and the winch cable.
    B. If stacking occurs, stop winching. Follow step 15 on page 80 to feed and rewind the cable evenly before continuing the winch operation.
13. Never winch up or down at sharp angles. This can destabilize the winching vehicle and possibly cause it to move without warning.
14. Never attempt to winch loads that weigh more than the winch's rated capacity.
15. The winch motor may become hot during winch use. If you winch for more than 45 seconds, or if the winch stalls during operation, stop winching and permit the winch to cool down for 10 minutes before using it again.
16. Never touch, push, pull or straddle the winch cable while winching a load.
17. Never let the winch cable run through your hands, even if wearing heavy gloves.

Winch Safety Precautions

18. Never release the clutch on the winch when the winch cable is under load.
19. Never use the winch for lifting or transporting people.
20. Never use the winch to hoist or suspend a vertical load.
21. Never immerse or submerse your winch in water. Take your winch to your dealer for service if this occurs.
22. Always inspect your winch and winch cable before each use.
23. Never winch the hook fully into the winch. This can cause damage to winch components.
24. Unplug the remote control from the vehicle when the winch is not in use to prevent inadvertent activation and use by unauthorized persons.
25. Never grease or oil the winch cable. This will cause the winch cable to collect debris that will shorten the life of the cable.

WINCH GUIDE
Winch Operation

Read the *Winch Safety Precautions* in the preceding pages before using your winch.

Tip: Consider practicing the operation and use of your winch before you actually need to use it in the field.

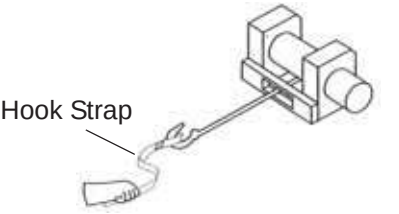
⚠WARNING

Improper winch use can result in SEVERE INJURY or DEATH. Always follow all winch instructions and warnings in this manual.

Each winching situation is unique.

- Take your time to think through the winching you are about to do.
- Proceed slowly and deliberately.
- Never hurry or rush during winching.
- Always pay attention to your surroundings.
- You may need to change your winching strategy if it is not working.
- Always remember that your winch is very powerful.
- There are simply some situations that you and your winch will not be able to deal with. Do not be afraid to ask others to help when this happens.

1. Always inspect the vehicle, winch, winch cable and winch controls for any signs of damage or parts in need of repair or replacement before each use. *Pay particular attention to the first 3 feet (1 meter) of winch cable if the winch is being used (or has been used) for lifting an accessory plow assembly.* Promptly replace any worn or damaged cable.
2. Never operate a winch or a vehicle in need of repair or service.
3. Always apply your vehicle's park brake and/or park mechanism to hold the vehicle in place during winching. Use wheel chocks if needed.



Winch Operation

4. Always use the hook strap when handling the hook.

WARNING! Never put your fingers into the hook. This could lead to SEVERE INJURY.

A. Attach the hook itself onto the load or use a tow strap or chain to secure the load to the winch cable.

Tip: A “tow strap” is NOT intended to stretch. A “recovery strap” is designed to stretch.

WARNING! Never use a recovery strap when winching due to the excessive energy that can be released if the winch cable breaks. This can result in SEVERE INJURY or DEATH. See the *Shock Loading* section on page 82.

B. Never hook the winch cable back onto itself. This will damage the winch cable and may result in winch cable failure.

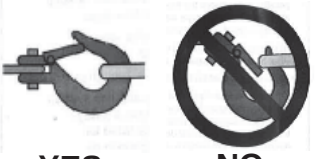
WARNING! Replace the winch cable at the first sign of damage to prevent SEVERE INJURY or DEATH in the event of failure. For your safety, always replace POLARIS winch parts (including the cable) with genuine POLARIS replacement parts available at your authorized POLARIS dealer.

C. If possible, keep the winch cable aligned with the centerline of the winching vehicle. This will help the spooling of the winch cable and reduce the load on the fairlead.

D. If freeing a stuck vehicle by attaching to a tree, use an item such as a tow strap to avoid damaging the tree during winch operation. Sharp cables and chains can damage and even kill trees. Please remember to TreadLightly® (treadlightly.org).

E. Before operating the winch, be sure that the safety latch on the winch cable hook is fully seated when the load is attached.

F. Never operate your winch with a damaged hook or latch. Always replace damaged parts before using the winch.



WINCH GUIDE
Winch Operation

5. Never remove the hook strap from the hook.
6. Release the winch clutch and pull out the winch cable.
7. Pulling out as much cable as possible maximizes the winch's pulling capacity. Always be sure that at least five (5) full turns of winch cable are wrapped around the winch drum at all times. The friction provided by this wrapped cable allows the drum to pull on the winch cable and move the load.
8. Read and adhere to the following information for winch damping to ensure safe winch use.
   A. In order to absorb energy that could be released by a winch cable failure, always place a "damper" on the winch cable. A damper can be a heavy jacket, tarp, or other soft, dense object. A damper can absorb much of the energy released if a winch cable breaks when winching. Even a tree limb can help as a damper if no other items are available to you.
   B. Lay the damper on top of the mid-point of the winch cable length that is spooled out.
   C. On a long pull, it may be necessary to stop winching so that the damper can be repositioned to the new mid-point of the winch cable. Always release the tension on the winch cable before repositioning the damper.
   D. Avoid being directly in line with the winch cable whenever possible. Also, never permit others to stand near or in line with the winch cable during winch operation.
9. Never hook the winch cable back onto itself. This will damage the winch cable and may result in winch cable failure.
10. Never use straps, chains or other rigging items that are damaged or worn.

Winch Operation

11. The ONLY time a winch-equipped vehicle should be moving when using the winch is when that vehicle itself is stuck. The winch-equipped vehicle should NEVER be in motion to "shock" load the winch cable in an attempt to move a second stuck vehicle. See the *Shock Loading* section on page 82. For your safety, always follow these guidelines when winching a vehicle free:
    A. Release the winch clutch and spool out the necessary length of winch cable.
    B. Align the winch cable as close as possible to the winching vehicle's centerline.
    C. Attach the winch cable hook to the anchor point or the stuck vehicle's frame following instructions in this manual.
    D. Re-engage the clutch on the winch.
    E. Slowly winch in the slack in the winch cable.
    F. Select the proper vehicle gear to propel the stuck vehicle in the direction of winching.
    G. Shift to the lowest gear available on the stuck vehicle.
    H. Slowly and carefully apply vehicle throttle and winch together to free the vehicle.
    I. Stop winching as soon as the stuck vehicle is able to propel itself without the help of the winch.
    J. Detach the winch cable hook.
    K. Rewind the winch cable evenly back onto the winch drum following the instructions in this manual.
12. Never attempt to winch another stuck vehicle by attaching the winch cable to a suspension component, brush guard, bumper or cargo rack. Vehicle damage may result. Instead, attach the winch to a strong portion of the vehicle frame or hitch.
13. Extensive winching will run down the battery on the winching vehicle. Let the winching vehicle's engine run while operating the winch to prevent the battery from running low if winching for long periods.

WINCH GUIDE
Winch Operation

14. The winch motor may become hot during winch use. If you winch for more than 45 seconds, or if the winch stalls during operation, stop winching and permit the winch to cool down for 10 minutes before using it again.
15. After winching is complete, especially if winching at an angle, it may be necessary to re-distribute the winch cable across the winch drum. You will need an assistant to perform this task.
    A. Release the clutch on the winch.
    B. Feed out the winch cable that is unevenly bunched up in one area.
    C. Re-engage the winch clutch.
    D. Have an assistant pull the winch cable tightly with about 100 lbs. (45 kg) of tension using the hook strap.
    E. Slowly winch the cable in while your assistant moves the end of the winch cable back and forth horizontally to evenly distribute the winch cable on the drum.
    F. Doing this reduces the chances of the winch cable “wedging” itself between lower layers of winch cable.

Winch Cable Care

For your safety, always replace POLARIS winch parts (including the cable) with genuine POLARIS replacement parts available at your authorized POLARIS dealer.

WARNING! Use of worn or damaged cable could lead to sudden failure and SEVERE INJURY.

1. Always inspect your winch before each use. Inspect for worn or loose parts including mounting hardware. Never use the winch if any part needs repair or replacement.
2. Always inspect your winch cable before each use. Inspect for worn or kinked winch cable.
   A. A kinked winch cable made of wire rope is shown at right. Even after being "straightened out," this cable has already been permanently and severely damaged. Promptly discontinue use of a winch cable in this condition.

   B. A kinked winch cable made of wire rope that has been "straightened out" is shown at right. Even though it may look usable, the cable has been permanently and severely damaged. It can no longer transmit the load that it could prior to kinking. Promptly discontinue use of a winch cable in this condition.

   C. A winch cable made of synthetic rope should be inspected for signs of fraying. Replace the cable if fraying is observed (shown at right). Promptly discontinue use of a winch cable in this condition.

   D. Also replace the winch cable if there are fused or melted fibers. Such an area of the synthetic rope will be stiff and appear smooth or glazed. Promptly discontinue use of a winch cable in this condition.

WINCH GUIDE
Shock Loading

WARNING! Your winch cable is very strong but it is NOT designed for dynamic, or "shock" loading. Shock loading may tension a winch cable beyond its strength and cause the cable to break. The end of a broken winch cable under such high loading can cause SEVERE INJURY or DEATH to you and other bystanders.

Winch cables are designed to NOT absorb energy. This is true of both wire-rope and synthetic-rope winch cables.

1. Never attempt to "jerk" a load with the winch. For example, never take up slack in the winch cable by moving the winching vehicle in an attempt to move an object. This is a dangerous practice. It generates high winch cable loads that may exceed the strength of the cable. Even a slowly moving vehicle can create large shock loads in a winch cable.

WARNING! SEVERE INJURY or DEATH can result from a broken winch cable.

2. Never quickly turn the winch ON and OFF repeatedly ("jogging"). This puts extra load on the winch, winch cable, and generates excessive heat from the motor. This is a form of shock loading.
3. Never tow a vehicle or other object with your winch. Towing an object with a winch produces shock loading of the cable even when towing at slow speeds. Towing from a winch also positions the towing force high on the vehicle. This can cause instability of the vehicle and possibly lead to an accident.
4. Never use recovery straps with your winch. Recovery straps are designed to stretch and can store energy. This stored energy in the recovery strap is released if a winch cable fails making the event even more hazardous. Similarly, never use elastic "bungie" cords for winching.
5. Never use the winch to tie down a vehicle to a trailer or other transportation vehicle. This type of use also causes shock loading that can cause damage to the winch, winch cable, or vehicles used.

Your winch cable is designed and tested to withstand the loads produced by the winch motor when operated from a stationary vehicle. Always remember that the winch and winch cable are NOT designed for shock loading.

Winch Maintenance and Service Safety

WARNING! Improper or lack of winch maintenance and service could lead to SEVERE INJURY or DEATH. Always follow all winch instructions and warnings in this manual.

1. Always inspect your winch before each use. Inspect for worn or kinked winch cable. Also inspect for worn or loose parts including mounting hardware.
2. Permit your winch motor to cool down prior to servicing your winch.
3. Never work on your winch without first disconnecting the battery connections to prevent accidental activation of the winch.
4. For your safety, always replace POLARIS winch parts (including the cable) with genuine POLARIS replacement parts available at your authorized POLARIS dealer.
5. Some winch models use wire rope as the winch cable. Other winches use a specially designed synthetic rope as the winch cable.
6. Never replace a synthetic-rope winch cable with a consumer-grade polymer rope such as can be purchased in a hardware store. Although they may look similar, they are NOT alike. A polymer rope not designed for winch use will stretch and store excessive energy when winching.

WARNING! Failure of a stretched rope under winching conditions will release all of the stored energy. This will increase the chances of SEVERE INJURY or DEATH.

EMISSION CONTROL SYSTEMS

Noise Emission Control System

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

Spark Arrester

Your POLARIS vehicle has a spark arrester that was designed for on-road and off-road operation. It is required that this spark arrester remain installed and functional when the vehicle is operated.

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.

Electromagnetic Interference

This spark ignition system complies with Canadian ICES-002.

This vehicle complies with the EMC requirements of European directive 2014/30/EU.

Non-ionizing Radiation: This vehicle emits some electromagnetic energy. People with active or non-active implantable medical devices (such as heart monitoring or controlling devices) should review the limitations of their device and the applicable electromagnetic standards and directives that apply to this vehicle.

Periodic Maintenance Chart

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

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

Record maintenance and service in the Maintenance Log beginning on page 144.

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

Vehicles subjected to heavy or severe use patterns must be inspected and serviced more frequently.

Severe Use Definition

- Frequent immersion in mud, water or sand
- Frequent or prolonged operation in dusty environments
- 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 POLARIS dealer.

MAINTENANCE
Periodic Maintenance Chart
Maintenance Chart Key

Symbol	Description
►	Perform these operations more often for vehicles subjected to severe use.
D	Have an authorized POLARIS dealer perform these services.

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

Perform all services at whichever maintenance interval is reached first.

Item		Maintenance Interval (whichever comes first)			Remarks
		Hours	Calendar	Miles (Km)	
	Steering		Pre-Ride		Inspect and make adjustments as needed. See Pre-Ride Checklist on page 54.
	Front suspension				
	Rear suspension				
	Tires				
	Brake fluid level				
	Brake pedal travel				
	Brake system				
	Wheels/fasteners				
	Frame fasteners				
	Engine oil level				
	Intake pre-filters				
	Winch (if equipped)	-		-	See pages 73-83
	Coolant	-	Daily	-	Check level
	Headlamp/tail lamp	-	Daily	-	Check operation; apply dielectric grease if replacing
►	Air filter, main element	-	Weekly	-	Inspect; replace as needed
► D	Brake pad wear	10 H	Monthly	100 (160)	Inspect periodically
►	Engine breather	25 H	Monthly	150 (250)	Inspect; replace if necessary
	Battery	25 H	Monthly	250 (400)	Check terminals; clean; test
	Fuel System	25 H	Monthly	-	Inspect; cycle key to pressurize fuel pump; check lines and fittings for leaks and abrasion

Periodic Maintenance Chart

	Item	Maintenance Interval (whichever comes first)			Remarks
		Hours	Calendar	Miles (Km)	
►	Engine oil change	25 H	1 M	-	Break-in oil and filter change
►	Demand drive fluid	25 H	1 M	-	Break-in oil level check
►	Transmission oil (main gearcase)	25 H	1 M	-	Break-in oil level check
►	Throttle cable	50 H	6 M	300 (500)	Inspect; adjust; lubricate; replace if necessary
	Throttle body air intake ducts/flange	50 H	6 M	300 (500)	Inspect duct for proper sealing/air leaks
►	General lubrication	50 H	3 M	500 (800)	Lubricate all fittings, pivots, cables, etc.
►	Oil lines, fasteners (if equipped)	50 H	6 M	500 (800)	Inspect for leaks and loose fittings
	Shift Linkage	50 H	6 M	500 (800)	Inspect, lubricate, adjust
D	Steering	50 H	6 M	500 (800)	Lubricate
►	Front Suspension	50 H	6 M	500 (800)	Lubricate
►	Rear Suspension	50 H	6 M	500 (800)	Lubricate
	Cooling system	50 H	6 M	500 (800)	Inspect coolant strength seasonally; pressure test system yearly
►	Engine oil change	100 H	6 M	-	Change the oil and filter
D	Fuel system	100 H	12 M	600 (1000)	Cycle key to pressurize fuel pump; check for leaks at fill cap, fuel lines/rail and fuel pump; replace lines every two years
►	Spark plug	100 H	12 M	600 (1000)	Inspect; replace as needed
►	Demand drive fluid	100 H	12 M	-	Change fluid
►	Transmission oil (main gearcase)	100 H	12 M	-	Change fluid
►	Radiator	100 H	12 M	1000 (1600)	Inspect; clean external surfaces
►	Cooling Hoses	100 H	12 M	1000 (1600)	Inspect for leaks
►	Engine mounts	100 H	12 M	1000 (1600)	Inspect

► Perform these procedures more often for vehicles subjected to severe use.
D Have an authorized POLARIS dealer perform these services.

MAINTENANCE
Periodic Maintenance Chart

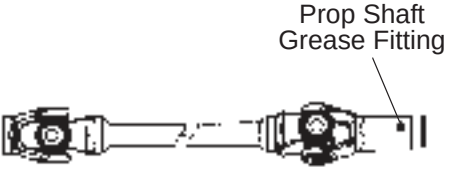
	Item	Maintenance Interval (whichever comes first)			Remarks
		Hours	Calendar	Miles (Km)	
	Exhaust muffler/ pipe	100 H	12 M	1000 (1600)	Inspect
►	Wiring	100 H	12 M	1000 (1600)	Inspect for wear, routing, security; apply dielectric grease to connectors subjected to water, mud, etc.
D	Clutches (drive and driven)	100 H	12 M	1000 (1600)	Inspect; clean; replace worn parts
	Drive belt	100 H	12 M	1000 (1600)	Inspect; replace as needed
D	Front wheel bearings	100 H	12 M	1000 (1600)	Inspect; replace as needed
D	Brake fluid	200 H	24 M	2000 (3200)	Change every two years
	Spark arrester	300 H	36 M	3000 (4800)	Clean out
►	Coolant	-	60 M	-	Replace coolant
►	Valve clearance	500 H	-	5000 (8000)	Inspect; adjust as needed
D	Toe adjustment	-			Inspect periodically; adjust when parts are replaced
	Headlight aim	-			Adjust as needed

► Perform these procedures more often for vehicles subjected to severe use.
D Have an authorized POLARIS dealer perform these services.

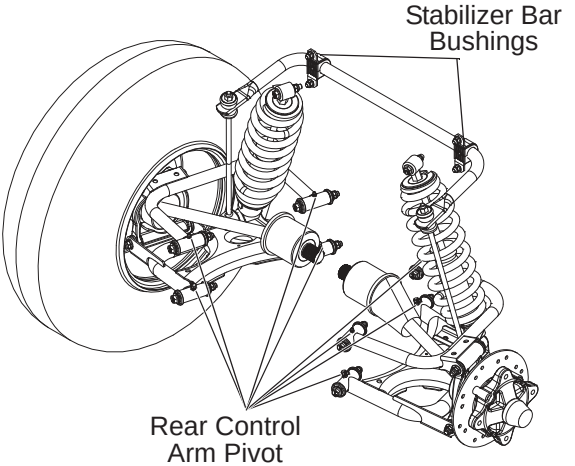
Lubrication Recommendations

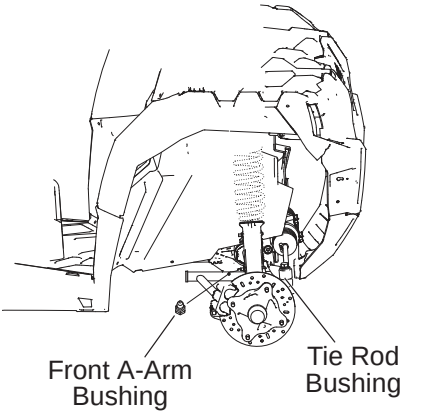
Check and lubricate all components at the intervals outlined in the Periodic Maintenance Chart beginning on page 85, or more often under severe use, such as wet or dusty conditions. Items not listed in the chart should be lubricated at the general lubrication interval.

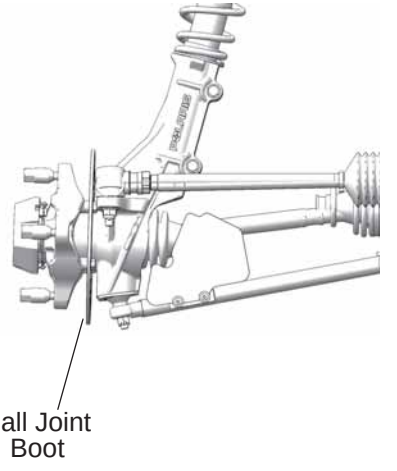
Item	Lube	Method
Engine Oil	PS-4 5W-50 4-Cycle Oil	Add to proper level on dipstick. See page 92.
Brake Fluid	DOT 4 Brake Fluid	Maintain level between fill lines. See page 112.
Transmission Oil (Main Gearcase)	AGL Gearcase Lubricant & Transmission Fluid	See page 97.
Demand Drive Fluid (Front Gearcase)	Demand Drive Fluid	See page 95.
Prop Shaft	U-Joint Grease	Locate fittings and grease.
Rear Control Arm Pivot Bushings, Front A-Arm Bushings	All Season Grease or grease conforming to NLGI No. 2	Locate fittings and grease.
Stabilizer Bar Bushings, Tie Rod Bushings, Ball Joint Boots	All Season Grease or grease conforming to NLGI No. 2	Locate fittings and grease.



MAINTENANCE
Lubrication Recommendations







Engine Oil

Oil Recommendations

POLARIS recommends the use of POLARIS PS-4 Full Synthetic 5W-50 4-cycle oil for this engine.

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.

Oil may need to be changed more frequently if POLARIS PS-4 engine oil is not used. Follow the manufacturer's recommendations for ambient temperature operation. See page 134 for the part numbers of POLARIS products.

NOTICE: Mixing brands or using a non-recommended oil may cause serious engine damage. Always use the recommended oil. Never substitute or mix oil brands.

MAINTENANCE
Engine Oil

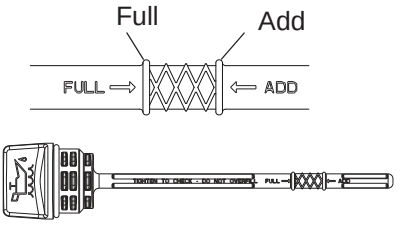
Always check and change the oil at the intervals outlined in the Periodic Maintenance Chart beginning on page 85. Always use the recommended engine oil. See page 91.

Oil Check

The oil dipstick and fill tube is located on the engine, behind the passenger seat. Access the dipstick through the right rear wheel well.

Dipstick

1. Position the vehicle on a level surface.
2. Place the transmission in PARK.
3. Always clean away all dirt and debris from the dipstick area before removing the dipstick. Remove the dipstick. Wipe it dry with a clean cloth.
4. Reinstall and tighten the dipstick.
5. Remove the dipstick and check the oil level.
6. Add the recommended fluid as needed. Maintain the oil level in the safe range between the FULL and ADD marks. Do not overfill.
7. Reinstall and tighten the dipstick.



Engine Oil

Oil and Filter Change

Always check and change the oil at the intervals outlined in the Periodic Maintenance Chart beginning on page 85. Always change the oil filter whenever changing oil.

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

Drain Plug Access

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

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

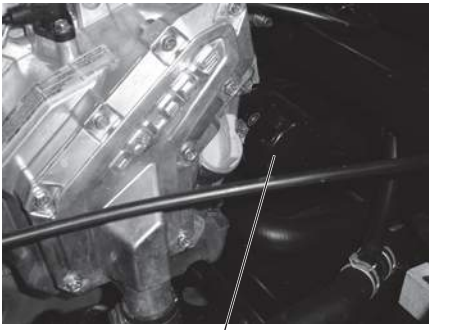
4. Place a drain pan beneath engine crankcase and remove the drain plug.
5. Allow the oil to drain completely.
6. Reinstall the sealing washer on the drain plug.

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

7. Reinstall the drain plug. Torque to 12 ft. lbs. (16 Nm).

MAINTENANCE
Engine Oil
Oil and Filter Change

8. Using a cap-style oil filter wrench, turn the filter counter-clockwise to remove it.
9. Using a clean dry cloth, clean the filter sealing surface on the crankcase. Make sure the old filter o-ring is completely removed.
10. Lubricate the o-ring on the new filter with a film of fresh engine oil. Check to make sure the o-ring is in good condition.



11. Install the new filter and turn by hand until the filter gasket contacts the sealing surface, then turn and additional 1/2 turn.
12. Always clean away all dirt and debris from the dipstick area before removing the dipstick. Remove the dipstick and fill the sump with two quarts (1.9 l) of recommended oil.
13. Reinstall and tighten the dipstick.
14. Make sure the transmission is in PARK. Apply the brakes.
15. 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.

Gearcases

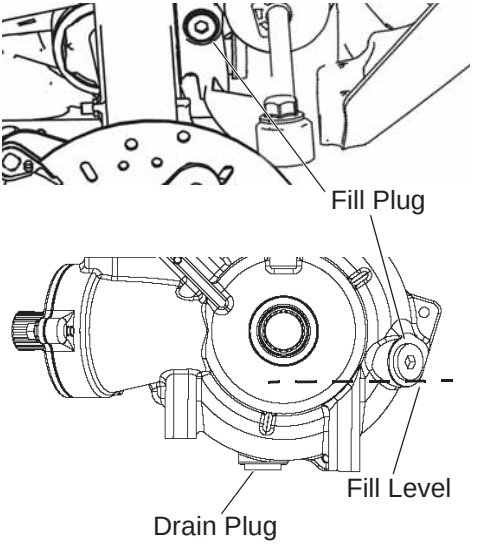
Demand Drive Unit (Front Gearcase)

Always check and change the fluid at the intervals outlined in the Periodic Maintenance Chart beginning on page 85. Refer to the Gearcase Specifications Chart on page 98 for recommended lubricants, capacities and torque specifications.

Fluid Check

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

1. Position the vehicle on a level surface.
2. Remove the fill plug. Check the fluid level.
3. Add the recommended fluid to the bottom thread of the fill plug hole.
4. Reinstall the fill plug. Torque to specification.



MAINTENANCE
Gearcases
Demand Drive Unit (Front Gearcase)
Fluid Change

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

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

Gearcases

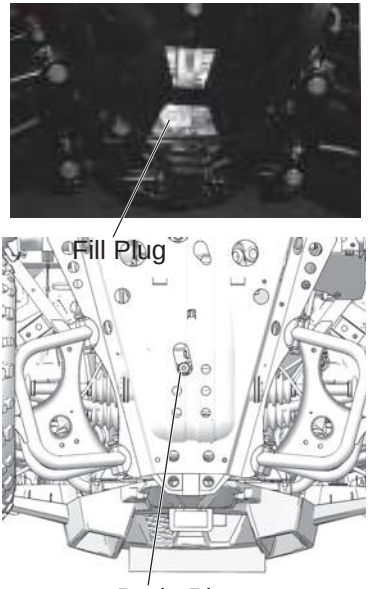
Transmission (Main Gearcase)

Always check and change the fluid at the intervals outlined in the Periodic Maintenance Chart beginning on page 85. Refer to the Gearcase Specifications Chart on page 98 for recommended lubricants, capacities and torque specifications.

Fluid Check

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

1. Position the vehicle on a level surface.
2. Remove the fill plug. Check the fluid level.
3. Add the recommended fluid to the bottom of the fill plug hole. Do not overfill.
4. Reinstall the fill plug. Torque to specification.



Fluid Change

The drain plug is located on the bottom of the gearcase between the rear tires. 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. Allow the fluid to drain completely.
3. Clean the drain plug. Reinstall the drain plug. Torque to specification.
4. Add the recommended fluid to the bottom of the fill plug hole. Do not overfill.
5. Reinstall the fill plug. Torque to specification.
6. Check for leaks. Discard used fluid properly.

MAINTENANCE

Gearcases

Gearcase Specification Chart

Use of other fluids may result in improper operation of components. See page 134 for the part numbers of POLARIS products.

Gearcase	Lubricant	Capacity	Fill Plug Torque	Drain Plug/ Level Check Plug Torque
Transmission (Main Gearcase)	AGL Gearcase Lubricant & Transmission Fluid	44 oz. (1300 ml)	10-14 ft-lbs (14-19 Nm)	10-14 ft-lbs (14-19 Nm)
Demand Drive Unit (Front Gearcase)	Demand Drive Fluid	9 oz. (265 ml)	8-10 ft-lbs (11-13.6 Nm)	8-10 ft-lbs (11-13.6 Nm)

Spark Plug

Spark Plug Gap/Torque

Electrode Gap	New Plug Torque	Used Plug Torque
0.8 +/- 0.1 mm	9 ft. lbs. (12 Nm)	9 ft. lbs. (12 Nm)

NOTICE: Using non-recommended spark plugs can result in serious engine damage. Always use POLARIS-recommended spark plugs. Refer to the specifications section beginning on page 132.

Spark plug condition is indicative of engine operation. The spark plug firing end condition should be read after the engine is warmed up and the vehicle is driven at higher speeds. Immediately check the spark plug for correct color. See page 99.

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

Spark Plug

Spark Plug Removal and Replacement

1. Remove the cargo box access panel.
2. Remove the spark plug cap.
3. Using the spark plug wrench provided in the tool kit, remove the plug by rotating it counter-clockwise.
4. Reverse the procedure for spark plug installation. Torque to specification. See page 98.

Spark Plug Condition

Normal Plug

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

Wet Fouled Plug

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

MAINTENANCE
Fuses

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

Main Fuse	Feature Supported
20A	Lights: Headlights, Taillights
20A	Drive: AWD
20A	Accessory: Winch Switch, 12V Power Receptacle
10A	Fuel Pump
20A	Electronic Engine Control, Starting
30A	Engine Control
10A	Constant Vehicle Power
15A	Fan Circuit Braker - Auto Reset

The fuse box is located under the seat. Spare fuses are provided in the fuse box.

Fuses

1. Remove the seat to access the fuse box.
2. Squeeze the cover release tabs inward and remove the fuse box cover.
3. Remove the suspect fuse from the fuse panel. If the fuse is blown, install a new fuse with the same amperage rating.
4. Reinstall the fuse box cover.
5. Reinstall the seat.

MAINTENANCE
Cooling System
Operation

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

As coolant operating temperature increases, the expanding (heated) excess coolant is forced out of the radiator, past the pressure cap, and into the overflow bottle. As engine coolant temperature decreases, the contracting (cooled) coolant is drawn back up from the tank, past the pressure cap, and into the radiator.

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

Adding or Changing Coolant

POLARIS recommends the use of POLARIS Antifreeze 50/50 Premix. This antifreeze is already premixed and ready to use. Do not dilute with water. See page 134 for the part numbers of POLARIS products.

To ensure that the coolant maintains its ability to protect the engine, we recommend that the system be completely drained every five (5) years and fresh Antifreeze 50/50 Premix added.

Any time the cooling system has been drained for maintenance or repair, replace the coolant with fresh Antifreeze 50/50 Premix.

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 85. Do not obstruct or deflect air flow through the radiator by installing unauthorized accessories in front of the radiator or behind the cooling fan. Interference with the radiator air flow can lead to overheating and consequent engine damage.

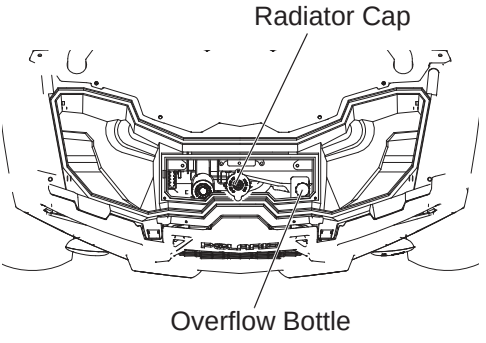
NOTICE: Washing the vehicle with a high-pressure hose could damage the radiator fins and impair the radiator's effectiveness. Using a high-pressure system is not recommended.

Radiator Coolant Level

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.

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

1. Remove the front box cover and access panel. See page 27.
2. Slowly remove the radiator cap.
3. View the coolant level through the opening.
4. Use a funnel and slowly add coolant as needed.



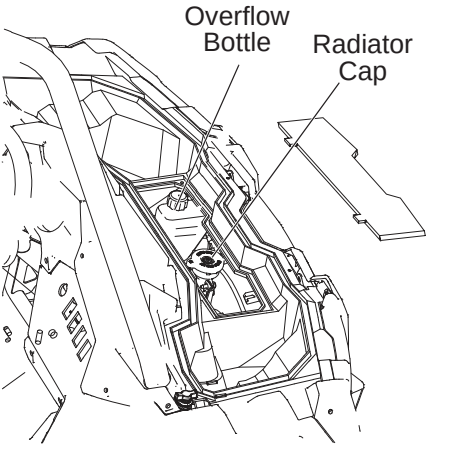
Tip: Use of a non-standard pressure cap will not allow the recovery system to function properly. See your POLARIS dealer for the correct replacement part.

MAINTENANCE
Cooling System
Coolant Level

Always check and change the coolant at the intervals outlined in the Periodic Maintenance Chart beginning on page 85. Maintain the coolant level between the minimum and maximum marks on the bottle (when the fluid is cool). The coolant level in the bottle can be viewed through the left front wheel well or in the compartment in the front box.

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

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



POLARIS Variable Transmission (PVT) System

⚠ WARNING

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

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

The PVT system rotates at high speeds, creating large amounts of force on clutch components. As the owner, you have the following responsibilities for your own safety and the safety of others:

- Always follow all recommended maintenance procedures. Always look for and remove debris inside and around the clutch and vent system when replacing the belt.
- See your POLARIS dealer as outlined in the owner's manual.
- This PVT system is intended for use on POLARIS products only. Do not install it in any other product.
- Always make sure the PVT housing is securely in place during operation.

MAINTENANCE
POLARIS Variable Transmission (PVT) System
Belt Replacement/Debris Removal

If a belt fails, always clean any debris from the PVT intake and outlet duct and from the clutch and engine compartments when replacing the belt.

WARNING! Failure to remove ALL debris when replacing the belt could result in vehicle damage, loss of control and severe injury or death.

1. Allow hot components to cool before performing this procedure.
2. Remove the clutch cover screws and open the clutch cover. Remove all debris wrapped in and around the PVT system.
3. Remove all debris from the entire clutch air duct passage.
4. Check for signs of damage to seals on the transmission and engine. See your POLARIS dealer promptly for service if any seals appear to be damaged.

Tip: 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.).

POLARIS Variable Transmission (PVT) System

PVT Drying

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

NOTICE: When washing the vehicle, always avoid spraying water directly toward the PVT intake duct. See page 127 for recommended washing procedures.

1. Remove the drain plug from the bottom of the clutch box. Allow the water to drain. Reinstall the drain plug securely.
2. Place the transmission in PARK. Apply the brakes. Start the engine.
3. 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.
4. Allow the engine RPM to settle to idle speed. Apply the brakes. Shift the transmission to the lowest available range.

5. Test for belt slippage. If the belt slips, repeat the process.
6. Take the vehicle to your POLARIS dealer for service as soon as possible.

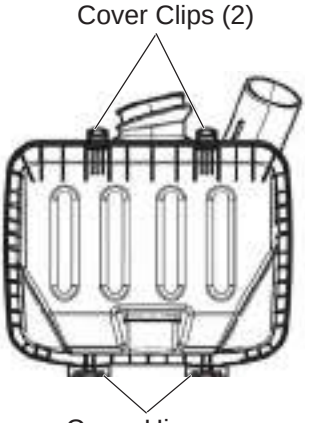
MAINTENANCE
Air Filter

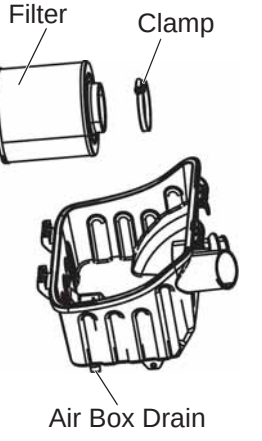
Always clean all dirt and debris away from the air box area before servicing the air filter. Always change the air filter at the intervals outlined in the Periodic Maintenance Chart beginning on page 85.

1. Remove the cargo box access panel.
2. Clean all dirt and debris from the air box area BEFORE servicing the air filter.
3. Unlatch the cover clips and carefully remove the air box cover.
4. Loosen the air filter clamp and remove the filter.

NOTICE: Dirt or debris in the air box could result in severe engine damage. Always clean all dirt and debris from the air box before installing the filter.

5. Inspect the air box for dirt, debris, oil or water. Compress the edges of the air box drain to drain any water. Clean the air box thoroughly and wipe it well with a clean, dry cloth.
6. Reinstall the filter. Install a new filter if needed. Do not attempt to clean the air filter. Tighten the clamp.
7. Reinstall the air box cover and secure the cover clips.
8. Reinstall the access panel.





Breather Hose Inspection

1. Remove the breather hose clamp at the engine (near the exhaust outlet).
2. Pull the other end of the breather hose assembly away from the airbox.
3. Remove the breather hose assembly from the vehicle.
4. Inspect the hoses for debris. Blow gently through the hoses to check for clogging. Replace a damaged or clogged hose.
5. Check hoses for cracks, deterioration, abrasions or leaks. Replace as needed.
6. Reinstall the hose assembly and secure the clamp at the engine. Push the other end of the hose firmly into the airbox fitting.

NOTICE: Operation of the vehicle without breather hoses can cause engine damage. Always reinstall a breather hose after removing it for service.

Intake Pre-Filters

The engine intake pre-filter is located on the right side of the cargo box. The PVT intake pre-filter is located on the left side of the cargo box.

Inspect both pre-filters before each use of the vehicle to ensure adequate air flow. If necessary, remove the pre-filters and clean with soapy water. Dry with low pressure compressed air.

NOTICE: When washing the vehicle, always avoid spraying water directly toward the PVT intake duct. See page 127 for recommended washing procedures.

MAINTENANCE
Spark Arrester

⚠ WARNING

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

Never run the engine in an enclosed area. Remove any combustible materials from the area. Wear eye protection and leather work gloves. Do not stand behind or in front of the vehicle while purging. Never go under the vehicle while it's inclined.

The exhaust system can get extremely hot. Do not perform service on the spark arrester while the system is hot. Allow components to cool sufficiently before proceeding.

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

1. Remove the arrester clean-out plug from the bottom of the muffler.
2. Place the transmission in PARK.
3. Start the engine.
4. Quickly press and release the throttle pedal several times to purge carbon from the system.
5. If carbon comes out of the exhaust, cover or plug the exhaust outlet. Wear protective gloves.

6. Lightly tap on the exhaust pipe with a rubber mallet while repeating step 4.
7. If particles are still suspected to be in the muffler, elevate the rear of the vehicle one foot (30 cm) higher than the front. Block the wheels.
8. Place the transmission in PARK. Repeat steps 4 to 6 until no more particles are expelled.
9. Stop the engine. Allow the arrester to cool.
10. Reinstall the arrester plug and remove the exhaust outlet cover or plug.

Brakes

The front and rear brakes are hydraulic disc type brakes activated by the brake pedal. See page 35.

Always check brake pedal travel and the brake fluid reservoir level before each use of the vehicle. When applied, the brake pedal should feel firm. Any sponginess would indicate a possible fluid leak or low brake fluid level, which must be corrected before riding. See page 112 for brake fluid information.

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

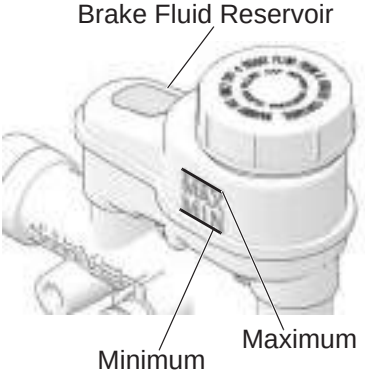
WARNING! Operating the vehicle with a spongy brake pedal can result in loss of braking, which could cause an accident resulting in severe injury or death. Never operate the vehicle with a spongy-feeling brake pedal.

MAINTENANCE
Brakes
Brake Fluid

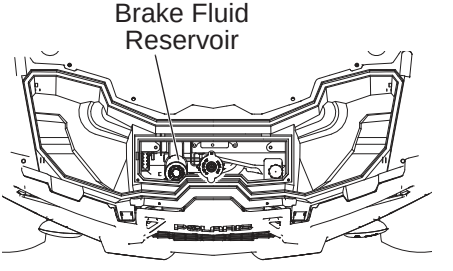
Inspect the level of the brake fluid before each operation. If the fluid level is low add DOT 4 brake fluid only. See page 134 for the part numbers of POLARIS products.

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

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



1. Position the vehicle on a level surface.
2. Place the transmission in PARK.
3. Remove the front box cover and access panel. See page 27.
4. View the brake fluid level in the reservoir. The level should be between the maximum and minimum level lines.
5. If the fluid level is lower than the lower level line, add brake fluid to the upper line.

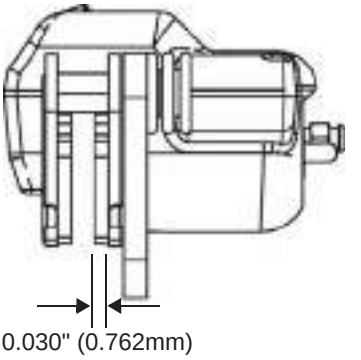


6. Apply the brake forcefully for a few seconds and check for fluid leakage around the fittings.

Brakes

Brake Inspection

1. Check the brake system for fluid leaks.
2. Check the brake pedal for excessive travel or a spongy feel.
3. Check the friction pads for wear, damage and looseness.
4. Check brake discs for signs of cracks, excessive corrosion, warping or other damage. Clean any grease using an approved brake cleaner or alcohol.



WARNING! Do not apply WD-40 or any petroleum product to brake discs. These types of products are flammable and may also reduce the friction between the brake pad and caliper.

5. Inspect the brake disc spline and pad wear surface for excessive wear. Change pads when worn to 0.030” (0.762 mm).

MAINTENANCE

Steering Wheel Inspection

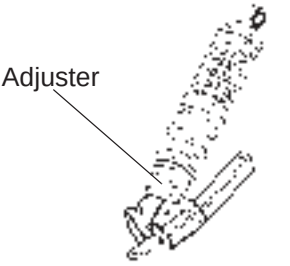
Check the steering wheel for specified freeplay and smooth operation at the intervals outlined in the Periodic Maintenance Chart beginning on page 85.

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

Rear Spring

The rear shock absorber spring is adjusted by rotating the adjuster either clockwise or counter-clockwise to increase or decrease spring tension.

Accessory springs are available through your POLARIS dealer.



Tires

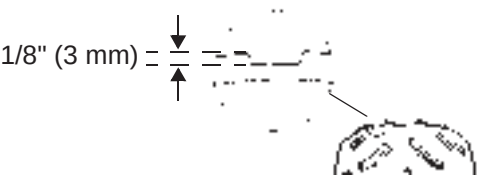
⚠WARNING

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. Always use POLARIS-approved size and type of tires for this vehicle when replacing tires.

Tire Tread Depth

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



Axle and Wheel Nut Torque Specifications

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

Lug Nut (Aluminum Wheels) 	Front and Rear	30 ft-lbs (41 Nm) PLUS 1/4 TURN or 90 degrees
2-Piece Flange Nut (Steel Wheels) 	Front and Rear	27 ft-lbs (37 Nm)
Hub Retaining Nut	Front and Rear	80 ft-lbs (108 Nm)

MAINTENANCE

Tires

Wheel Removal

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

Wheel Installation

1. Place the transmission in PARK.
2. Place the wheel on the hub with the valve stem toward the outside and rotation arrows on the tire pointing toward forward rotation.

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

3. Attach the wheel nuts and washers and finger-tighten.
4. Carefully lower the vehicle to the ground.
5. Torque the wheel nuts to specification. See page 115.

Lights

Headlight and taillight lenses become dirty during normal operation. Clean all lights frequently to ensure a clear field of vision as well as visibility to other vehicles.

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.

LED Headlamps (if equipped)

If a headlight becomes damaged or inoperable, the entire headlight assembly must be replaced.

Tip: If an LED headlamp has moisture or fogging inside, disconnect the wiring harness from the headlamp(s) for a few days to allow the moisture to clear out. Do not operate the vehicle at night or in low light conditions without properly working headlights.

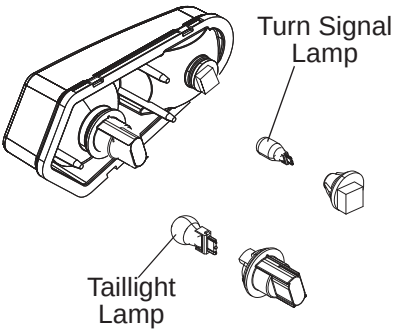
Brake Lights

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

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

Taillight/Brake Light/Turn Signal Lamp Replacement

1. Remove the harness connector from the back of the light assembly.
2. Pull the lamp out of the connector to remove it.
3. Install the new lamp.
4. Reinstall the harness connector.
5. Test the light for proper operation.

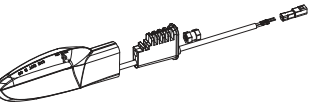


MAINTENANCE

Lights

Front Turn Signal Replacement

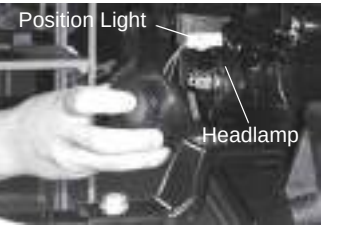
If a front turn signal light becomes inoperable, the lamps cannot be replaced. Replace the entire signal lamp assembly.

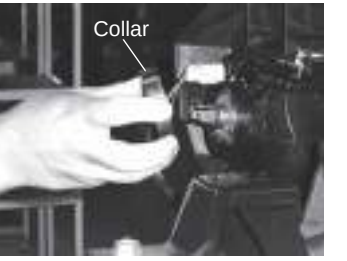


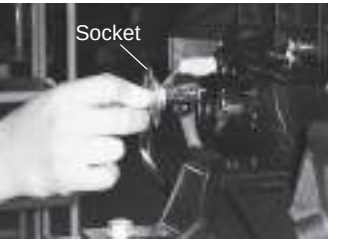
Headlight/Position Light Lamp Replacement

When servicing a halogen lamp, do not 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. Hold the plastic part of the lamp.

1. Place the transmission in PARK.
2. Open the front rack cover.
3. Remove the plug at the back of the headlight.
4. Pull the harness plug to disconnect it from the back of the headlight.
5. *Position light*: Rotate the socket to remove it. Go to step 6. *Headlamp*: Reach under the bumper and remove the rubber cover from the back of the headlight. Turn the collar counter-clockwise and carefully remove the collar and socket.
6. Remove the lamp. Apply dielectric grease to the socket and install a new lamp.
7. Reverse all steps to reassemble the headlight.

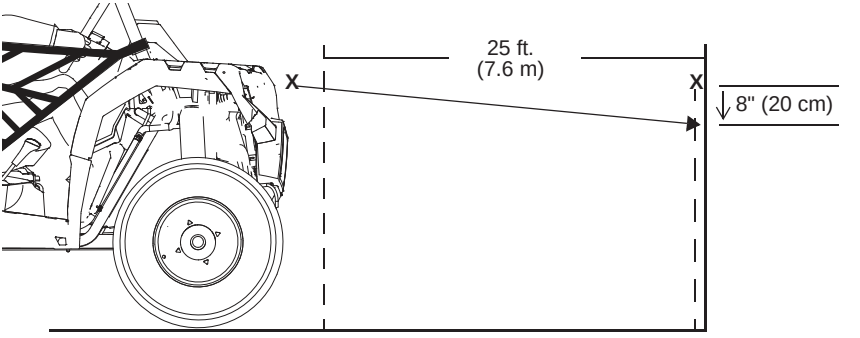






Lights

Headlight Beam Adjustment



1. Place the vehicle on a level surface with the headlight approximately 25 ft. (7.6 m) from a wall. Place the transmission in PARK.
2. Measure the distance from the floor to the center of the headlight and make a mark on the wall at the same height.
3. Apply the brakes. Turn the ignition switch to the HEADLIGHTS ON position.
4. Observe the headlight aim. The most intense part of the headlight beam should be aimed 8" (20 cm) below the mark placed on the wall in step 2. Include the weight of a rider on the seat while performing this step.
5. If adjustment is necessary, turn the headlight adjustment screw to adjust the beam.
6. Repeat steps 4-5 until the beam is properly adjusted.

MAINTENANCE
Vehicle Immersion

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

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

1. Move the vehicle to dry land.
2. Check the air box. If water is present, dry the air box and replace the filter with a new filter.
3. Remove the spark plug.
4. Turn the engine over several times.
5. Dry the spark plug and reinstall it, or install a new plug.
6. Attempt to start the engine. If necessary, repeat the drying procedure.
7. Take the vehicle to your POLARIS dealer for service as soon as possible, whether you succeed in starting it or not.
8. If water has been ingested into the PVT follow the procedure on page 107 for drying.

Battery

⚠WARNING

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

Antidote:

External: Flush with water.

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

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

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

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

Always keep battery terminals and connections free of corrosion. If cleaning is necessary, remove the corrosion with a stiff wire brush. Wash with a solution of one tablespoon baking soda and one cup water. Rinse well with tap water and dry off with clean shop towels. Coat the terminals with dielectric grease or petroleum jelly. Be careful not to allow cleaning solution or tap water into a conventional battery.

MAINTENANCE
Battery

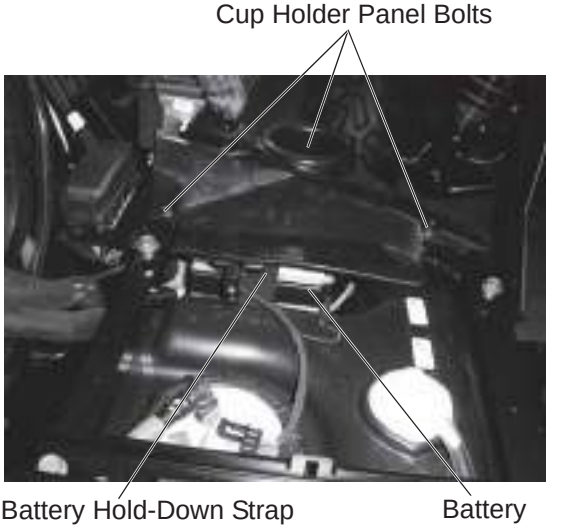
⚠WARNING

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

Battery Removal

1. Remove the seat. See page 29.
2. Remove the three (3) bolts securing the cup holder panel to the frame. Lift the panel to access the battery.
3. Remove the battery hold-down strap screws and remove the strap.
4. On conventional batteries, remove the battery vent tube.
5. Disconnect the black (negative) battery cable first.
6. Disconnect the red (positive) battery cable last.
7. Lift the battery out of the vehicle. Be careful not to tip a conventional battery sideways, which could spill electrolyte.

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



Battery

Battery Installation

Using a new battery that has not been fully charged can damage the battery and result in a shorter life. It can also hinder vehicle performance. Follow the battery charging instructions on page 125 before installing the battery.

An optional extreme use battery may be available for your model. If the performance of the factory-installed battery is inadequate due to operation in extreme cold or due to extended use of multiple electrical accessories, please see your POLARIS dealer. Ask your dealer to provide any installation procedures that may differ for an extreme use battery.

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

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

4. Coat the terminals with dielectric grease or petroleum jelly.
5. Connect and tighten the red (positive) cable first.
6. Connect and tighten the black (negative) cable last.
7. Install the battery hold-down strap and tighten the screws.
8. Verify that cables are properly routed.
9. Reinstall the cup holder panel. Tighten the bolts.
10. Reinstall the seat.

MAINTENANCE

Battery

Battery Storage

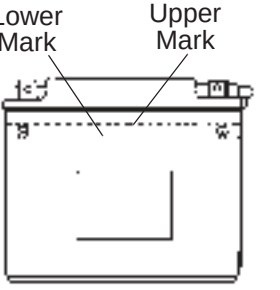
Whenever the vehicle is not used for a period of three months or more, remove the battery from the vehicle, ensure that it's fully charged, and store it out of the sun in a cool, dry place. Check battery voltage each month during storage and recharge as needed to maintain a full charge. See page 125.

Tip: Battery charge can be maintained by using a POLARIS Battery Tender charger or by charging about once a month to make up for normal self-discharge. Battery Tender can be left connected during the storage period, and will automatically charge the battery if the voltage drops below a pre-determined point. See page 134 for the part numbers of POLARIS products.

Battery Fluid (Conventional Battery)

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

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



Battery

Battery Charging (Conventional Battery)

1. Remove the battery from the vehicle to prevent damage from leaking or spilled electrolyte during charging. See page 122.
2. Charge the battery with a charging output no larger than 1/10 of the battery's amp/hr rating. Charge as needed to raise the specific gravity to 1.270 or greater.
3. Reinstall the battery. See page 123. Make sure the positive terminal is toward the front of the vehicle.

Battery Charging (Sealed Battery)

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

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

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

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

For a refresh charge, follow all instructions carefully.

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

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

MAINTENANCE
Battery
Battery Charging (Sealed Battery)

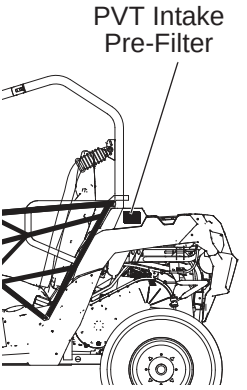
Always verify battery condition before and 1-2 hours after the end of charging.

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

Cleaning and Storage

Washing the Vehicle

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



NOTICE: Water in the PVT system could cause the drive belt to become wet and slip in the clutches. Always avoid spraying water directly toward any intake pre-filters.

High water pressure may damage the radiator fins and impair the radiator's effectiveness. High pressure may also damage other vehicle components.

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

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

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

Washing Tips

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

MAINTENANCE
Cleaning and Storage
Washing the Vehicle

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

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

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

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

Polishing the Vehicle

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

Polishing Tips

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

Cleaning and Storage

Storage Tips

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

Clean the Exterior

Make any necessary repairs and clean the vehicle as recommended. See page 127.

Stabilize the Fuel

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

Oil and Filter

Change the oil and filter. See page 93.

Air Filter / Air Box

Inspect and clean or replace the pre-filter and air filter. Clean the air box. See pages 108-109.

Fluid Levels

Inspect the fluid levels. Add or change fluids as recommended in the Periodic Maintenance Chart beginning on page 85.

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

MAINTENANCE
Cleaning and Storage
Storage Tips
Inspect and Lubricate

Inspect all cables and lubricate all areas of the vehicle as recommended in the Periodic Maintenance Chart beginning on page 85.

Fog the Engine

1. Treat the fuel system with POLARIS Carbon Clean. Follow the instructions on the container. Start the engine. Allow it to idle for several minutes so the Carbon Clean reaches the injectors. Stop the engine.
2. Remove the spark plug and add 2-3 tablespoons of 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. *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 plug. Torque to specification. See page 99.
4. Apply dielectric grease to the inside of each spark plug cap. *Do not reinstall the cap onto the plug at this step.*
5. Turn the engine over several times. Oil will be forced in and around the piston rings and ring lands, coating the cylinder with a protective film of fresh oil.
6. If POLARIS fuel system additive is not used, fuel tank, fuel lines, and injectors should be completely drained of gasoline.
7. Reinstall the spark plug cap to the spark plug.

Battery Maintenance

See pages 124-126 for storage and charging procedures.

Storage Area/Covers

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

Cleaning and Storage

Removal from Storage

1. Check the battery electrolyte level and charge the battery if necessary. Install it in the vehicle. Make sure the battery vent hose is routed properly and that it's not pinched or restricted in any way.
2. Make sure the spark plug is tight.
3. Fill the fuel tank with fuel.
4. Check all the points listed in the Daily Pre-Ride Inspection section on page 54. 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 85.

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

Transporting the Vehicle

Follow these procedures when transporting the vehicle.

1. Place the transmission in PARK. Stop the engine.
2. Remove the key to prevent loss during transporting.
3. Secure the fuel cap and seat. Ensure that the seat is attached correctly and is not loose.

WARNING! Cargo and other loose vehicle parts may fly off while transporting this vehicle. Secure or remove all cargo, and inspect the unit for loose parts prior to transport.

4. Always tie the frame of the POLARIS vehicle to the transporting unit securely with suitable straps or rope. Do not attach tie straps to the front control arm bolt pockets.

SPECIFICATIONS

ACE 570	
Gross Vehicle Weight	660 kg
Dry Weight	392.4 kg (+/- 5%)
Test GVW - Rollover Protection System (ROPS)	682.7 kg per OSHA 29 CFR 1928.53
Front Rack/Box Capacity	55 kg
Rear Rack/Box Capacity	110 kg
Maximum Weight Capacity (Payload)	261 kg (operator/cargo/accessories/trailer tongue weight)
Receiver Hitch Tongue Capacity	68 kg
Receiver Hitch Towing Capacity	680 kg
Fuel Capacity	19.9 l
Engine Oil Capacity	1.9 l
Coolant System Capacity	2.8 l excluding coolant bottle
Coolant Bottle Capacity	237 ml
Demand Drive Fluid Capacity	265 ml
Transmission Oil Capacity	1300 ml
Overall Length/Width/Height	228.6/122/173 cm
Wheelbase	156.2 cm
Ground Clearance	26 cm
Engine	Dual overhead cam, 4 valve 4 stroke single cylinder
Displacement	567 cc
Bore x Stroke	99 mm x 73.6 mm
Alternator Output	650 W @ 7000 RPM
Compression Ratio	10:1
Starting System	Electric
Fuel System	Electronic fuel injection
Throttle Body Size	36 mm
Ignition System	Digital CDI
Ignition Timing	10° +/- 1° @ 1200 RPM (non-adjustable)
Spark Plug / Gap	NGK MR7F / 0.8 +/- 0.1 mm
Front Suspension	MacPherson strut with 20.8 cm travel
Rear Suspension	Dual A-arm, anti-sway bar with 24.1 cm travel

ACE 570	
Lubrication System	Wet Sump
Engine Oil	PS-4 5W-50
Driving System Type	Automatic POLARIS Variable Transmission
Shift Type	Side Lever (H/L/N/R/P)
Gear Reduction - Low	28.84:1
Gear Reduction - Reverse	25.83:1
Gear Reduction - High	9.65:1
Drive Ratio - Front	2.989:1
Tire Size - Front	25x8-12
Tire Size - Rear	25x10-12
Tire Pressure	45 kPa
Brakes, Park	Park in Transmission
Brakes, Front/Rear	Foot Activated, 4-wheel hydraulic disc
Headlights	2 single beam, 55W halogen
Turn Signal	Standard
Hazard Signals	Standard
Horn	Standard
Mirrors	Standard
Taillights	2 single beam, 6W
Brake Lights	2 single beam, 27W
Instrument Cluster	LCD
Auxiliary DC Outlet	12V

Clutching

Altitude		Shift Weight	Drive Clutch Spring	Driven Clutch Spring
Meters (Feet)	0-1500 (0-5000)	25-52 PN 5632409	Black 35-240 PN 7043594	Black/Almond PN 3235088
	1500-3700 (5000-12000)	25-48 PN 5632408	Black 35-240 PN 7043594	Black/Almond PN 3235088

POLARIS PRODUCTS

Part Number	Description
	Engine Lubricant
2870791	Fogging Oil (12 oz./355 ml Aerosol)
2876244	PS-4 Full Synthetic 5W-50 4-Cycle Oil (qt./.95 l)
2876245	PS-4 Full Synthetic 5W-50 4-Cycle Oil (gal./3.8 l)
	Gearcase / Transmission Lubricants
2878068	AGL Full Synthetic Gearcase Lubricant & Transmission Fluid (qt./.95 l)
2878069	AGL Full Synthetic Gearcase Lubricant & Transmission Fluid (gal./3.8 l)
2870465	Pump for Gallon (3.8 l) Jug
2877922	Demand Drive Fluid (qt./.95 l)
2877923	Demand Drive Fluid (gal./3.8 l)
	Coolant
2880514	Antifreeze 50/50 Premix (qt./.95 l)
2880513	Antifreeze 50/50 Premix (gal./3.8 l)
	Grease / Specialized Lubricants
2871312	Grease Gun Kit, Premium All Season
2871322	All Season Grease (3 oz./89 ml cartridge)
2871423	All Season Grease (14 oz./414 ml cartridge)
2871460	Premium Starter Grease
2871515	U-Joint Grease (3 oz./89 ml cartridge)
2871551	U-Joint Grease (14 oz./414 ml cartridge)
2871329	Dielectric Grease (Nyogel™)
	Additives / Miscellaneous
2871326	Carbon Clean
2870652	Fuel Stabilizer
2872189	DOT 4 Brake Fluid
2871956	Loctite™ 565 Thread Sealant
2859044	POLARIS Battery Tender™ Charger

Drive Belt Wear/Burn

Possible Cause	Solution
Driving onto a pickup or tall trailer in high range	Use low range during loading.
Starting out going up a steep incline	Use low range. See warnings on page 62.
Driving at low RPM or ground speed (3-7 MPH)	Drive at a higher speed or use low range more frequently.
Insufficient warm-up at low ambient temperatures	Warm the engine at least 5 minutes. With the transmission in neutral, advance the throttle to about 1/8 throttle in short bursts, 5 to 7 times. The belt will become more flexible and prevent belt burning.
Slow/easy clutch engagement	Use the throttle quickly and effectively.
Towing/pushing at low RPM/low ground speed	Use low range only.
Utility use/plowing	Use low range only.
Stuck in mud or snow	Shift the transmission to low range and carefully use fast, aggressive throttle application to engage clutch. **WARNING**: Excessive throttle may cause loss of control and vehicle rollover.
Climbing over large objects from a stopped position	Shift the transmission to low range and carefully use fast, brief, aggressive throttle application to engage clutch. **WARNING**: Excessive throttle may cause loss of control and vehicle rollover.
Belt slippage from water or snow ingestion into the PVT system	Dry out the PVT (see page 107). Prevent water from entering the PVT intake duct (see page 109). Inspect clutch seals for damage if repeated leaking occurs.
Clutch malfunction	See your POLARIS dealer.
Poor engine performance	Check for fouled plug or foreign material in gas tank or fuel lines. See your POLARIS dealer.
Slippage from failure to warm up belt	Always warm up the belt by operating below 30 mph for one mile (5 miles or more when temperature is below freezing).
Wrong or missing belt	Install the recommended belt.
Improper break-in	Always break in a new belt and/or clutch. See page 52.

TROUBLESHOOTING

Engine Doesn't Turn Over

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

Engine Turns Over, Fails to Start

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

Engine Backfires

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

Engine Pings or Knocks

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

Engine Runs Irregularly, Stalls or Misfires

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

TROUBLESHOOTING

Engine Stops or Loses Power

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

LIMITED WARRANTY

POLARIS Industries Inc., 2100 Highway 55, Medina, MN 55340 (POLARIS) gives a TWO YEAR LIMITED WARRANTY on all components of your POLARIS vehicle against defects in material or workmanship. POLARIS further warrants that the spark arrester in this product will meet the efficiency requirements of USFS standard 5100-1C for at least 1000 hours when subjected to normal use and when maintenance and installation are in accordance with POLARIS recommendations.

This warranty covers parts and labor charges for repair or replacement of defective parts and begins on the date of purchase by the original retail purchaser. This warranty is transferable to another owner during the warranty period through a POLARIS dealer, but any such transfer will not extend the original term of the warranty. The duration of this warranty may vary by international region based upon local laws and regulations.

Registration

At the time of sale, the Warranty Registration Form must be completed by your dealer and submitted to POLARIS within ten days of purchase. 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 your proof of warranty coverage. 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

This POLARIS limited warranty excludes any failures that are not caused by a defect in material or workmanship. THIS WARRANTY DOES NOT COVER CLAIMS OF DEFECTIVE DESIGN. This warranty also does not cover acts of God, accidental damage, normal wear and tear, abuse or improper handling. This warranty also does not cover any vehicle, component, or part that has been altered structurally, modified, neglected, improperly maintained or used for racing, competition or purposes other than for which it was designed.

This warranty excludes damages or failures resulting from improper lubrication; improper engine timing; improper fuel; surface imperfections caused by external stress, heat, cold or contamination; operator error or abuse; improper component alignment, tension, adjustment or altitude compensation; snow, water, dirt or other foreign substance ingestion/contamination; improper maintenance; modified components; use of aftermarket or unapproved components, accessories, or attachments; unauthorized repairs; or repairs made after the warranty period expires or by an unauthorized repair center.

WARRANTY

Warranty Coverage And Exclusions:

Limitations Of Warranties And Remedies

This warranty excludes damages or failures caused by abuse, accident, fire, or any other cause other than a defect in materials or workmanship and provides no coverage for consumable components, general wear items, or any parts exposed to friction surfaces, stresses, environmental conditions and/or contamination for which they were not designed or not intended, including but not limited to the following items:

- Wheels and tires
- Suspension components
- Brake components
- Seat components
- Clutches and components
- Steering components
- Batteries
- Light bulbs/Sealed beam lamps
- Filters
- Lubricants
- Bushings
- Finished and unfinished surfaces
- Carburetor/Throttle body components
- Engine components
- Drive belts
- Hydraulic components and fluids
- Circuit breakers/Fuses
- Electronic components
- Spark plugs
- Sealants
- Coolants
- Bearings

Lubricants and Fluids

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

2. Damage or failure resulting from the use of non-recommended lubricants or fluids is not covered by this warranty.

This warranty provides no coverage for personal loss or expense, including mileage, transportation costs, hotels, meals, shipping or handling fees, product pick-up or delivery, replacement rentals, loss of product use, loss of profits, or loss of vacation or personal time.

Warranty Coverage And Exclusions:

Limitations Of Warranties And Remedies

THE EXCLUSIVE REMEDY FOR BREACH OF THIS WARRANTY SHALL BE, AT POLARIS' OPTION, REPAIR OR REPLACEMENT OF ANY DEFECTIVE MATERIALS, 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. THIS EXCLUSION OF CONSEQUENTIAL, INCIDENTAL, AND SPECIAL DAMAGES IS INDEPENDENT FROM AND SHALL SURVIVE ANY FINDING THAT THE EXCLUSIVE REMEDY FAILED OF ITS ESSENTIAL PURPOSE.

THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS EXCLUDED FROM THIS LIMITED WARRANTY. ALL OTHER IMPLIED WARRANTIES (INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTY OF MERCHANTABILITY) ARE LIMITED IN DURATION TO THE ABOVE TWO YEAR WARRANTY PERIOD. POLARIS DISCLAIMS ALL EXPRESS WARRANTIES NOT STATED IN THIS WARRANTY. SOME STATES DO NOT PERMIT THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR ALLOW LIMITATIONS ON THE DURATION OF IMPLIED WARRANTIES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU IF INCONSISTENT WITH CONTROLLING STATE LAW.

WARRANTY

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.

In the Country where your product 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 product was purchased, Warranty and Service Bulletin repairs may be requested from any authorized POLARIS dealer that sells the same line as your product.

Outside the Country where your product was purchased:

If you are traveling temporarily outside the country where your product was purchased, you should take your product 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. Product importation rules vary considerably from country to country. You may be required to present documentation of your move to POLARIS in order to continue your warranty coverage. You may also be required to obtain documentation from POLARIS in order to register your product in your new country. You should warranty register your product at a local POLARIS dealer in your new country immediately after you move to continue your warranty coverage and to ensure that you receive information and notices regarding your vehicle.

If you purchase from a private party:

If you purchase a POLARIS product from a private party, to be kept and used outside of the country in which the product was originally purchased, all warranty coverage will be denied. You must nonetheless register your product under your name and address with a local POLARIS dealer in your country to ensure that you receive safety information and notices regarding your product.

Exported Products

EXCEPT WHERE SPECIFICALLY REQUIRED BY LAW, THERE IS NO WARRANTY OR SERVICE BULLETIN COVERAGE ON THIS PRODUCT IF IT IS SOLD OUTSIDE THE COUNTRY OF THE SELLING DEALER'S AUTHORIZED LOCATION. This policy does not apply to products that have received authorization for export from POLARIS. Dealers may not give authorization for export. You should consult an authorized dealer to determine this product's warranty or service coverage if you have any questions. This policy does not apply to products 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 Bulletins.

Notice

If your product is registered outside of the country where it was purchased and you have not followed the procedure set above, your product will no longer be eligible for warranty or service bulletin coverage of any kind, other than safety bulletins. Products registered to government officials or military personnel on assignment outside of the country where the product was purchased will continue to be covered by the Limited Warranty.

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

MAINTENANCE LOG

Use the following chart to record periodic maintenance.

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

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For your nearest Polaris dealer, visit www.polaris.com

Polaris Sales Europe Sarl
Route de l'Etraz
Business Center A5
1180 Rolle, Switzerland

Part No. 9927489 Rev 01