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# 2018 OWNER'S MANUAL

POLARIS ACE® 150 EFI

#### A WARNING

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

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

#### A WARNING

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



For videos and more information about a safe riding experience with your Polaris vehicle, scan this QR code with your smartphone. Visit us at www.polaris.com



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

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# WELCOME

#### **Dear Parents:**

We believe your children should have the opportunity to enjoy the POLARIS riding experience along with you. We encourage you to teach your children to ride safely, and to help ensure the future of recreational sports, please teach them to show respect for our environment and for the rights of others while operating the vehicle.

This vehicle is not a toy and can be hazardous to operate. We've provided this owner's manual and an instructional video to help you and your children learn about the safe operation and care of your new POLARIS vehicle. Before your children drive in the vehicle, please read and make sure they read this owner's manual. Watch the instructional video with them. *Make sure all operators understand and follow all of the instructions and warnings contained in this owner's manual and video*. Make sure they understand that the vehicle must be used under adult supervision at all times.

After reading this owner's manual and watching the video, help your child practice the New Operator Driving Procedures on pages 47-48.

*Never allow a child under age 10 to operate this vehicle.* Children differ in skills, physical abilities and judgement. Please supervise the use of the vehicle at all times. Permit continued use only if you determine that your child has the ability and maturity to operate safely.

# WELCOME

For your child's safety, be sure your child can reach and operate all ACE 150 controls, including steering wheel, accelerator and brake pedals, and ignition switch. Make sure your child is not too tall to ride safely in this vehicle. See page 14.

The vehicle's speed control system allows adults to limit vehicle speed for new and inexperienced operators. Please see page 39 for more information.

The preventive maintenance program outlined in this manual is designed to ensure that all critical components on your child's vehicle are thoroughly inspected at specific intervals. Always follow all of the instructions and recommendations in this manual to ensure the vehicle remains in safe operating condition at all times.

This POLARIS vehicle is not designed for adult use. Serious damage may occur if the maximum weight capacity is exceeded. Refer to vehicle labels and to the specifications section beginning on page 100 for the maximum weight capacity.

# WELCOME

Dear Young Operators:

Before you ride your new POLARIS vehicle, there are some important things that you need to know. You must learn how to keep yourself and those around you safe while you're riding.

Your parents and POLARIS want you to be safe while you enjoy riding your new vehicle, and that's why it's very important that you read this owner's manual and watch the instructional video. Make sure you *understand and follow all of the instructions and warnings in this owner's manual and video*. Ask your parents to explain anything you don't understand.

Your safety and the safety of others is the most important thing to think about at all times. Pay attention when you see this symbol:



This is the safety alert symbol. When you see this symbol on your vehicle or in this manual it means PAY ATTENTION because you could die or be seriously injured if you don't follow the instructions.

After reading this owner's manual and watching the video, complete the New Operator Driving Procedures on pages 47-48. Show your parent that you understand how to drive safely.

Enjoy riding your new POLARIS vehicle!

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# INTRODUCTION

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

#### Â

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.

# INTRODUCTION

#### **WARNING**

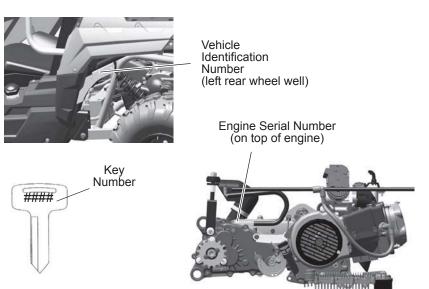
Failure to follow the warnings and safety precautions contained in this manual can result in severe injury or death. Your POLARIS vehicle is not a toy and can be hazardous to operate. This vehicle handles differently than cars, trucks or other off-road vehicles. A collision or rollover can occur quickly,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

- Never operate this vehicle without proper instruction. All operators and supervising adults must watch the instructional video that was provided with the vehicle. 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.
- For your child's safety, be sure your child can reach and operate all ACE 150 controls, including steering wheel, accelerator and brake pedals, and ignition switch. All operators must be able to sit with backs against the seat, both feet flat on the floor and both hands on the steering wheel.
- Always follow the age guidelines for your vehicle. Operation is prohibited for anyone under age 10.
- 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.
- Complete the New Operator Driving Procedures outlined on pages 47-3. Never allow a guest to operate this vehicle until the guest has watched the instructional video and has completed the New Operator Driving Procedures.
- Passengers are prohibited at all times. Never allow someone other than the current driver to occupy this vehicle.

# INTRODUCTION

#### **Vehicle Identification Numbers**

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



Vehicle Model Number:

Vehicle Identification Number:

Engine Serial Number:

Key Number:

# SAFETY Equipment Modifications

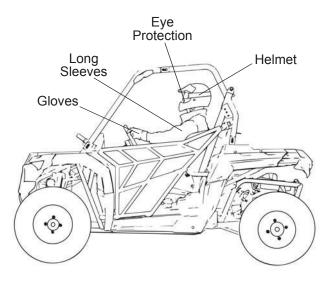
Your POLARIS vehicle is designed to provide safe operation when used as directed.

**WARNING!** Modifying this vehicle in any way can change the top speed, stability and handling performance of this vehicle. Modifications that increase speed, decrease stability or change performance may present a greater risk to inexperienced or younger operators and could result in loss of control and serious injury or death. Use only POLARIS-approved accessories to modify this vehicle. Review all vehicle changes with your child prior to operating.

The POLARIS limited 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, ride height, handling characteristics, or power.

# Safe Riding Gear

The driver must 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.

# SAFETY 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 driver 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 Warnings

#### A 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.

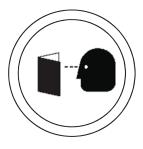
Be sure to read all of the following warnings about driving hazards and how to avoid them. These warnings are provided for your child's safety. Be sure to explain to your young driver that the hazards outlined in this section of this owner's manual MUST be avoided at all times. See the OPERATION section of this owner's manual for proper operating procedures.

#### **Operating Without Instruction**

Operating this vehicle without proper instruction increases the risk of an accident. The operator and the supervising adult must understand how to operate the vehicle properly in different situations and on different types of terrain. Complete the New Operator Driving Procedures outlined on pages 47-8.

All operators must read and understand this 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 read this manual and all product labels and has completed the New Operator Driving

Procedures outlined on pages 47-48.



# SAFETY

#### Age Restrictions

This vehicle is for recreational use by young operators under adult supervision ONLY.

Operation is prohibited for anyone under age 10. Operators must be able to sit with backs against the seat, both feet flat on the floor and both hands on the steering wheel.

#### **Rider Height**

Some riders may be too tall to ride safely in this vehicle. Do not operate in this vehicle if the clearance between the top of your helmet and the overhead cab frame is less than 2 inches (5 cm).

#### 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. Operators *must* wear seat belts at all times. Always make sure the seat belt is secured for the operator before riding.

#### Passengers

Passengers are prohibited on this vehicle. Never carry passengers in the vehicle cab or in the cargo box. Passengers can be thrown off. This can cause serious injury or death.





#### Safety Warnings Failure to Inspect Before Operating

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

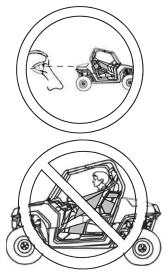
Always inspect the vehicle before each use to make sure it's in safe operating condition. See page 43.

Always follow the inspection and maintenance procedures and schedules described in this owner's manual. See page 57.

#### **Protective Apparel**

Riding in this vehicle without wearing an approved helmet and protective eye-wear increases the risk of serious injury in the event of an accident.

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



#### 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.* 

#### SAFETY Safety Warnings Using Alcohol or Drugs

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

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

#### **Operating on Pavement**

This vehicle's tires are designed for off-road use only, not for use on pavement. Operating this vehicle on paved surfaces (including sidewalks,

paths, parking lots and driveways) may adversely affect the handling of the vehicle and may increase the risk of loss of control and accident or rollover. Avoid operating the vehicle on pavement. If it's unavoidable, travel slowly, travel short distances and avoid sudden turns or stops.

#### **Operating on Public Roads**

Operating this vehicle on public streets, roads or highways could result in a collision with another vehicle. Never operate this vehicle on any public street, road or highway, including dirt and gravel roads (unless designated for off-highway use).





#### Safety Warnings Operating at Excessive Speeds

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

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

#### **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.

Never turn abruptly or at sharp angles. Never turn at high speeds. Practice turning at slow speeds before attempting to turn at faster speeds.

#### **Physical Control of the Vehicle**

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

The operator should always keep both hands on the steering wheel during operation.

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

#### **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 Driving Downhill Improperly

Driving down a hill improperly could cause loss of control or rollover. Always follow proper procedures for driving down a hill as described in this owner's manual. See page 51.

#### 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 50. Never operate the vehicle on hills steeper than 15 degrees.

#### **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 51.





#### 19

#### Safety Warnings 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 Safety Warnings Operating on Sand or Slippery Terrain

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

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

# Operating Improperly in Reverse

Improperly operating in reverse could result in a collision with an obstacle or person. Always follow proper operating procedures as outlined in this manual. See page 54.

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

#### Improper Tires and 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.





# SAFETY

#### Safety Warnings Operating Over Obstacles

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

Before operating in a new area, check for obstacles. Never attempt to operate over large obstacles such as large rocks or fallen trees. Always follow the proper procedures outlined in this manual when operating over obstacles. See page 53.



#### **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.

Always follow proper procedures for operating in water as described in this owner's manual. See page 52.

Wet brakes may have reduced stopping ability. After leaving water, test the brakes. Apply them lightly



several times while driving slowly. The friction will help dry out the pads.

#### SAFETY Safety Warnings Overloading the Vehicle

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

- · Never tow objects.
- Never carry loads over the maximum cargo limit.
- Never exceed the maximum weight capacity for this vehicle. See page 26.

#### **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 belt, rollover protection devices, brakes, throttle and steering systems.

#### **Operating on Frozen Bodies of Water**

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





#### Safety Warnings Refueling

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

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

#### **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. Always inspect the underside of the vehicle and areas near the exhaust system after driving through tall grass, weeds, brush and other tall ground cover. Promptly remove any grass or debris clinging to the vehicle.

#### **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 10 or without proper training. This could result in an accident or rollover. Always remove the ignition key when the vehicle is not in use.

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

# SAFETY Safety Labels and Locations

Warning labels have been placed on the vehicle for your protection. Read and follow the instructions on each label carefully. If any of the labels shown 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.



Rear Warning Label

# SAFETY

### Safety Labels and Locations Dash Warning Label

#### WARNING

Improper vehicle use can result in SEVERE INJURY or DEATH

NEVER allow vehicle to be operated:

- without first viewing and understanding the safety video and warning labels.
- on hills steeper than 15 degrees 15°.
- on paved surfaces pavement may seriously affect handling and control.
- with non-POLARIS approved accessories they may seriously affect stability.
- at speeds that are too fast for the operator's skills, the conditions and/or the terrain.

ALWAYS require operator to:

- wear seat belt and plant feet firmly on the floor.
- secure cab nets.
- keep hands and feet inside vehicle.
- use an approved helmet and protective gear.
- avoid quick turns of the steering wheel and driving stunts such as jumps, donuts or power slides.
- watch for branches or other hazards that could enter vehicle.







### SAFETY Safety Labels and Locations Dash Warning Label

#### WARNING

Operation of this vehicle by children under age 10 increases the risk of severe injury or death.

Adult supervision required for children under age 16.

NEVER permit children under age 10 to operate in this vehicle.

#### Rear Warning Label

off. This can cause serious - Overloading or canying tail, off center, or unsecured loads will MAXIMUM WEIGHT CAPACITY INCLUDES WEIGHT 2000		Never carry passengers in cargo box.   Passengers can be thrown	CAUSE LOSS OF CONTROL RESULTING IN SERIOUS INURY OR DEATH. • Reduce speed and allow greater distance for bailing when carrying cargo. • Dverbading or carrying fall, off center, or unrecursed loads will increase your risk of losing control on injury. Loads should be centered and	MAXIMUM CARGO BOX LOAD TIRE PRESSURE IN PSI (KPa)	ACE 150 50 lbs. (22 Kg) FRONT 3 (20.7) REAR 6 (41.4)
		injury or death.		OF OPERATOR, CARGO, AND ACCESSORIES. Read Operation & Maintenance Manual for more deta	230 lbs. (104 Kg) alled loading

#### WARNING

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

# IMPROPER TIRE PRESSURE OR OVERLOADING CAN CAUSE LOSS OF CONTROL RESULTING IN SERIOUS INJURY OR DEATH.

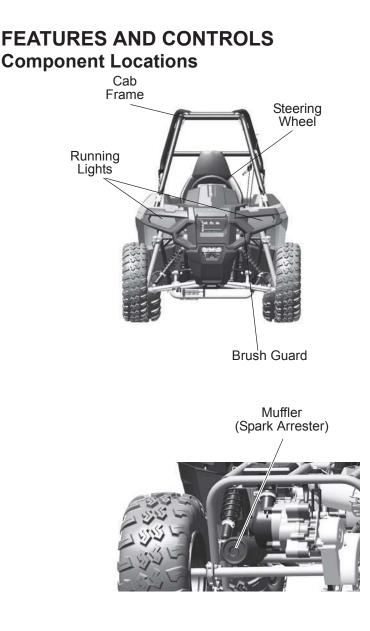
- Reduce speed and allow greater distance for braking when carrying cargo.
- Overloading or carrying tall, off-center, or unsecured loads will increase your risk of losing control or injury. Loads should be centered and carried as low as possible in box.
- · For stability on rough or hilly terrain, reduce speed and cargo.

	ACE 150
MAXIMUM CARGO BOX LOAD	50 lbs (22 kg)
TIRE PRESSURE IN PSI (KPa)	FRONT - 3 (20.7) REAR - 6 (41.4)
MAXIMUM WEIGHT CAPACITY INCLUDES WEIGHT OF OPERATOR, CARGO, AND ACCESSORIES	230 lbs (104 kg)

### FEATURES AND CONTROLS Component Locations

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





#### Seats Driver's Seat Adjustment

- 1. Lift the seat latch lever located under the right front edge of the driver's seat.
- 2. While holding the lever upward, slide the seat forward or rearward to the desired position, then release the lever.
- 3. Slide the seat forward and rearward to ensure the latch is engaged. Before operating the vehicle, always make sure the seat is securely installed.

#### Seat Removal

- 1. To remove the driver's seat, lift the seat latch lever.
- 2. While holding the lever upward, slide the seat completely forward, remove 10mm bolts, and remove seat from the seat mounting rails.
- 3. Before operating the vehicle, always make sure the driver's seat is installed and securely latched.





Slide Seat Forward

#### **Steering Wheel**

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

- 1. Loosen and remove the steering wheel adjustment bolt.
- 2. Move steering wheel upward or downward to the desired position by aligning the mounting holes.
- 3. Tighten bolt to 10 ft-lbs (13.5 Nm).

**CAUTION!** Ensure bolt is fully tightened prior to operating the vehicle.

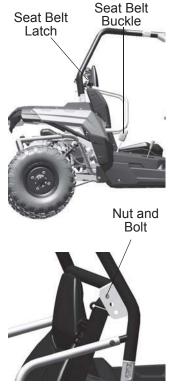
Adjustment Bolt

# Seat Belts

This POLARIS vehicle is equipped with three-point lap and diagonal seat belt for the operator. Always make sure the seat belt are secured for the operator 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.
- Tip: The position of the shoulder strap can be adjusted to the height of the operator. Have an adult relocate the mounting bolt to a different position, making sure the nut and bolt are tightened securely. Nut and bolt should be tightened to 30 ft-lbs (40.6 Nm)
- 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.



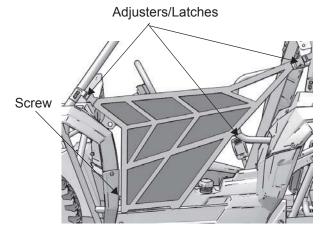
#### FEATURES AND CONTROLS Seat Belts Seat Belt Inspection

Inspect seat belt 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 the 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 belt, sponge the straps with mild soap and water. Do not use bleach, dye or household detergents.

# **Cab Nets**

Riding in this vehicle without using the cab nets increases the risk of serious injury or death in the event of an accident or rollover.



Cab nets must be used by the operator at all times. Make sure all latches are secure before operating the vehicle.

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

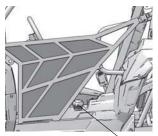
# FEATURES AND CONTROLS Fuel Cap



Never allow a child to refuel or handle gasoline.

The fuel tank filler cap is located on the left-hand side of the vehicle.

Use POLARIS Carbon Clean fuel treatment at each fill. Follow the mixing directions on the container. See page 102 for the part numbers of POLARIS products.



Fuel Cap

When refueling, always use either leaded

or unleaded gasoline with a minimum pump octane number of 87 R+M/2 octane. Non-ethanol fuel is recommended. *Do not use fuel with ethanol content greater than 10 percent, such as E-85 fuel.* 

# FEATURES AND CONTROLS

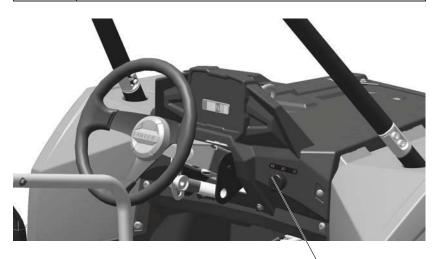
## **Ignition Switch**

The ignition switch is a three-position, key-operated switch. Use the ignition switch to start the engine. See page 45 for starting procedures.



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

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



Ignition Switch

## FEATURES AND CONTROLS Gear Selector

- F: Forward
- N: Neutral
- R: Reverse

The gear selector is located to the right of the seat. To change gears, stop the vehicle, and with the engine idling, move the lever to the desired gear. Do not attempt to shift gears with engine speed above idle or while the vehicle is moving.



- **Tip:** Maintaining shift linkage adjustment is important to assure proper transmission function. Your POLARIS dealer can assist in resolving any shifting problems.
- **NOTICE:** Do not attempt to shift the transmission while the vehicle is moving or damage to the transmission could result. Always shift when the vehicle is stationary and the engine is at idle.

# FEATURES AND CONTROLS

## **Parking Brake**

- 1. Apply the brakes.
- 2. When the vehicle is fully stopped, pull the parking brake lever rearward as far as possible to set the parking brake.
- 3. Stop the engine.
- 4. To release the parking brake, apply the brakes and push the lever toward the outside of the vehicle and forward.
- 5. See page 70 for parking brake adjustment procedures.

Tip: Always set the parking brake whenever the vehicle is left unattended.



Operating the vehicle while the parking brake is engaged could cause an accident resulting in serious injury or death. It could also result in driveline or engine damage. Always be sure to disengage the parking brake before operating the vehicle.

## FEATURES AND CONTROLS Brake Pedal

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

## **Throttle Pedal**

Push the pedal down to increase engine speed. Spring pressure returns the pedal to the rest position when released. Always check that the throttle pedal returns normally before starting the engine.



Brake Pedal

Throttle Pedal

## FEATURES AND CONTROLS Speed Control System

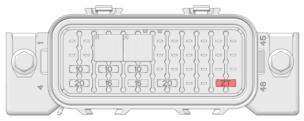
This vehicle has an adjustable speed control system that controls the speed of the vehicle. The speed of this vehicle is restricted to 10 MPH (16 km/h) at manufacture. The speed limiting device may be adjusted by supervising adults when they determine that their child is capable of safely handling additional speed.

#### **Electronic Speed Control System**

Adjust speed modes by moving the jumper fuse between the assigned speed slots inside the fuse box.

Jumper Condition	Restricted Maximum Speed of Vehicle
Speed 1	29 MPH (47 km/h)
Speed 2	22 MPH (35 km/h)
Speed 3	15 MPH (24 km/h)
Speed 4	10 MPH (16 km/h)

	EFI	FUEL		SPEED	1
	RELAY	RELAY		SPEED	2
BRAKE LT. 10A	LIGHTS 10A	SPARE 10A		SPEED	3
MAIN FUSE 7005853 20A	EFI 15A	SPARE 15A	SPARE 20A	SPEED	4



#### FEATURES AND CONTROLS Electronic Speed Control System

1. Slide the driver's seat forward to access the fuse box.

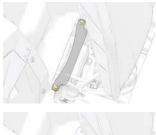
2. Remove the two push rivets from the retention bracket. Remove bracket.

3. Remove fuse box cover.

4. Move fuse jumper to desired speed mode slot.

- 5. Replace fuse box cover.
- 6. Replace fuse box bracket and replace push rivets.
- 7. Reposition the seat.









#### **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 defined as the first ten hours of operation, or the time it takes to use the first two full tanks 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.

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

#### OPERATION Vehicle Break-in Period Engine and Drivetrain Break-in

- 1. Fill the fuel tank with gasoline. Always exercise extreme caution whenever handling gasoline. Never allow a child to handle gasoline.
- 2. Check the oil level. See page 65. 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 47-48.
- 4. Avoid aggressive use of the brakes. See Brake System Break-in below.
- 5. Vary throttle position. Don't idle extensively.
- 6. Perform regular checks on fluid levels, controls and areas outlined on the daily pre-ride inspection checklist. See page 43.
- 7. Change the engine oil at 5 hours or one month.
- 8. Adjust/lubricate drive chain at 5 hours or 1 month.

#### Brake System Break-in

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

#### CVT 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. Avoid aggressive acceleration and high speed operation during the break-in period.

## **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	38 77
Brake fluid	Ensure proper level	79
Front suspension	Inspect, lubricate if necessary	64
Rear suspension	Inspect, lubricate if necessary	64
Steering	Ensure free operation	80
Tires	Inspect condition and pressure	26 82
Wheels/fasteners	Inspect, ensure fastener tightness	83
Frame nuts, bolts, fasteners	Inspect, ensure tightness	-
Fuel and oil	Ensure proper levels	34 65
Grass and debris	Remove grass and debris from the vehicle, especially on the engine intake and near the exhaust system	-
Throttle	Ensure proper operation	38
Indicator lights/switches	Ensure proper operation	-
Air filter	Inspect and clean or replace	76
Daytime running lights	Ensure proper operation	84
Brake light	Ensure proper operation	-
Seat Latch	Move the seat forward and rearward to ensure correct installation	29
Seat Belt	Check length of belt for damage, check latches for proper operation	31
Cab Nets	Check for wear or damage, ensure proper installation	33

## OPERATION Safe Operation Practices

- 1. Complete the New Operator Driving Procedures outlined on pages 47-6.
- 2. Do not ride at night or when visibility is poor (rain, fog, dusk). Your vehicle doesn't have lights that are designed for driving in these conditions.
- 3. Never tow objects with this vehicle.
- 4. Engine exhaust fumes are poisonous. Never start the engine or let it run in an enclosed area. Never allow a child to handle gasoline.
- 5. Never install accessories not approved by POLARIS for use on this vehicle.
- 6. Ride this vehicle only in areas permitted by a supervising adult. Never operate the vehicle on pavement or on any public street, road or highway, including dirt and gravel roads.
- 7. Drive in a manner appropriate for your skills and operating conditions. Never operate at excessive speeds. DO NOT attempt to do power slides, "donuts", jumps or other driving stunts. Keep both hands on the steering wheel at all times.
- 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.
- 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.

## Starting the Engine

- 1. Sit in the driver's seat and fasten the seat belt.
- 2. Secure the cab nets.
- 3. Place the transmission in neutral. Set the parking brake.
- 4. Apply the brakes.
- 5. Do not press the throttle pedal while starting the engine.
- 6. Turn the ignition key past the ON/RUN position to START. Engage the starter for a maximum of five seconds. Release the key when the engine starts.
- **NOTICE:** Operating the vehicle immediately after starting could cause engine damage. Allow the engine to warm up for several minutes before operating the vehicle.
- 7. If the engine does not start within five seconds, return the ignition switch to the OFF position and wait five seconds. Repeat steps 6 and 7 until the engine starts.
- 8. Vary the engine RPM slightly with the throttle to aid in warm-up until the engine idles smoothly.
- 9. Release the parking brake before driving.

## OPERATION Stopping the Engine

- 1. Release the throttle pedal completely and brake to a complete stop.
- 2. Place the transmission in neutral.
- 3. Set the parking brake.
- 4. Stop the engine.

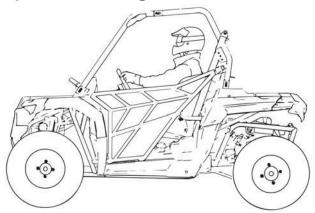
## Braking

- 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.

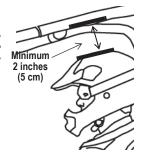
# Parking the Vehicle

- 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 neutral.
- 3. Set the parking brake.
- 4. Stop the engine.
- 5. Remove the ignition key to prevent unauthorized use.

#### **New Operator Driving Procedures**



- 1. Read and understand this owner's manual and all warning and instruction labels before operating this vehicle.
- 2. Watch the instructional video with the supervising adult.
- 3. Review the section of this owner's manual about starting the engine, stopping the engine, braking and parking (pages 45-46).
- 4. Perform the pre-ride inspection (page 43).
- 5. The driver must wear helmet, eye protection, gloves, long-sleeve shirt, long pants, over-the-ankle boots and seat belt at all times.
- 6. Do not operate in this vehicle if the clearance between the top of your helmet and the overhead cab frame is less than 2 inches (5 cm).
- 7. Select a level open area to practice driving. Make sure you have adult supervision and permission to drive in this area.
- 8. Sit in the driver's seat and fasten the seat belt.
- 9. Make sure all cab nets are properly secured.
- 10. Set the parking brake.
- 11. Place the transmission in neutral.
- 12. Start the engine.



## OPERATION New Operator Driving Procedures

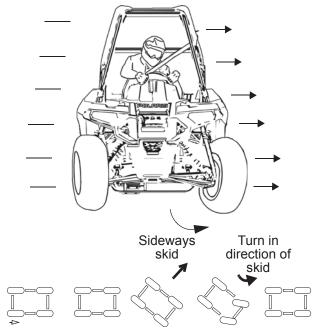
- 13. Apply the brakes and shift into gear.
- 14. Release the parking brake.
- 15. Check your surroundings. Make sure the area is clear of people and obstacles.
- 16. Keeping both hands on the steering wheel, slowly release the brakes and press the throttle with your right foot to begin driving.
- 17. Drive slowly at first. Practice starting, stopping, turning, 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.
- 18. Increase speed only after mastering all maneuvers at a slow speed.
- 19. After you become skilled at making turns and begin to operate at faster speeds, follow these precautions:
  - Avoid sharp turns. Make turns gradually.
  - Never turn while applying heavy throttle.
  - Never turn the steering wheel abruptly.
  - Operate at speeds appropriate for your skills, the conditions and the terrain.
  - DO NOT attempt to do power slides, "donuts", jumps or other driving stunts.

## **Driving on Slippery Surfaces**

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

Follow these precautions when driving in slippery conditions:

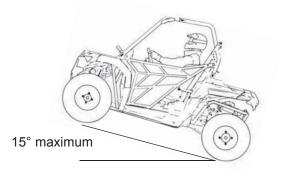
- 1. Slow down before entering slippery areas.
- 2. Be alert, watch the path ahead and avoid quick turns, which can cause skids.
- 3. Correct a skid by turning the steering wheel in the direction of the skid. *Never apply the brakes during a skid.*



## OPERATION Driving Uphill

Whenever traveling uphill, follow these precautions:

- 1. Always check the terrain carefully before ascending a hill. Never drive on hills with excessively slippery or loose surfaces.
- 2. Avoid excessively steep hills (15° maximum).
- 3. Drive straight uphill.
- 4. Drive at a steady rate of speed. Never press the throttle suddenly.
- 5. Avoid unnecessary changes in speed or direction.
- 6. Never go over the crest of a hill at a high speed. An obstacle, a sharp drop, or another vehicle or person could be on the other side of the hill.
- 7. 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 the brakes lightly to control speed.



## Driving on a Sidehill (Sidehilling)

Driving on a sidehill is not recommended. Driving on a sidehill improperly cause loss of control or rollover.

If crossing a hill is unavoidable, follow these precautions:

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

## **Driving Downhill**

Whenever driving down a hill, follow these precautions:

- 1. Avoid excessively steep hills (15° maximum).
- 2. Slow down. Never travel down a hill at high speed.
- 3. Always check the terrain carefully before driving down a hill. Never drive on hills with excessively slippery or loose surfaces.
- 4. Always drive down a hill with the transmission in forward gear. *Never "coast" or drive down a hill with the transmission in neutral.*
- 5. Avoid driving down a hill at an angle, which would cause the vehicle to lean sharply to one side. Always drive straight downhill.
- 6. Apply the brakes *lightly* to keep speed slow.

## OPERATION Driving Through Water

Your vehicle can drive through shallow water. Make sure the water is no deeper than the floor of the vehicle. Follow these precautions when driving through water:

- 1. Check water depth. Never drive through water that is deeper than the floor level.
- 2. After driving through water, test the brakes. Apply them lightly several times while driving slowly. The friction will help dry out the pads.

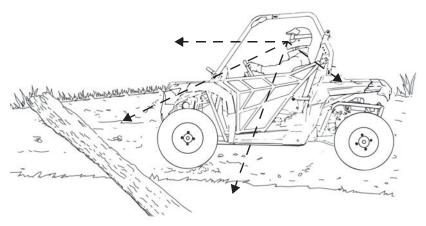


**NOTICE:** Major engine damage can result if

the vehicle is not thoroughly inspected after operation in water. Perform the services outlined in the maintenance chart. See page 57. Give special attention to engine oil, transmission oil and all grease fittings.

If your vehicle becomes immersed or is operated in water that exceeds the floor level, *service is required before starting the engine.* Your POLARIS dealer can provide this service. If it's impossible to bring the vehicle in before starting the engine, perform the service outlined on page 86, and take the vehicle in for service at the first opportunity.

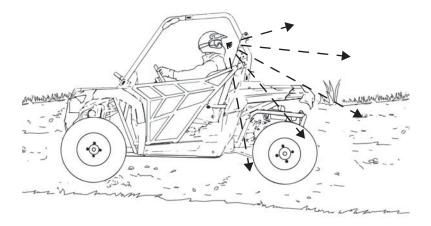
#### **Driving Over Obstacles**



Follow these precautions when driving over obstacles:

- 1. Always check for obstacles before driving in a new area.
- 2. Look ahead and watch the terrain. Always be alert for hazards such as logs, rocks and low hanging branches.
- 3. Drive slowly and use extra caution when driving on unfamiliar terrain. Obstacles are not always clearly visible.
- 4. Do not drive over large obstacles such as large rocks and fallen trees. If it's unavoidable, use extreme caution and drive slowly.

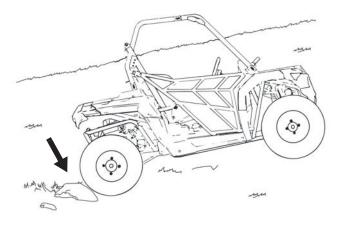
## OPERATION Driving in Reverse



Follow these precautions when driving in reverse:

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

#### Parking on an Incline



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

- 1. Place the transmission in neutral.
- 2. Set the parking brake.
- 3. Stop the engine.
- 4. Always block the rear wheels on the downhill side.

## EMISSION CONTROL SYSTEMS Noise Emission Control System

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

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

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

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

## **Crankcase Emission Control System**

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

## **Exhaust Emission Control System**

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

The emissions label is located on the frame behind the left front wheel.

## **Electromagnetic Interference**

This spark ignition system complies with Canadian ICES-002.

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.

## MAINTENANCE

## **Periodic Maintenance Chart**

Any qualified repair shop or person may maintain, replace or repair the emission control devices or systems on your vehicle. An authorized POLARIS dealer can perform any service that may be necessary for your vehicle. POLARIS also recommends POLARIS parts for emissions-related service, however equivalent parts can be used.

It is a potential violation of the Clean Air Act if a part supplied by an aftermarket parts manufacturer reduces the effectiveness of the vehicle's emission controls. Tampering with emission controls is prohibited by federal law.

Owners are responsible for performing the scheduled maintenance identified in this owner's manual.

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.

## MAINTENANCE Periodic Maintenance Chart

Inspect, clean, lubricate, adjust and replace parts as necessary. When inspection reveals the need for replacement parts, genuine POLARIS parts are available from your POLARIS dealer. Equivalent parts may be used for emissions-related service.

Record maintenance and service in the Maintenance Log beginning on page 115.

Service and adjustments are important for proper vehicle operation. If you're not familiar with safe service and adjustment procedures, a qualified dealer can 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
- Racing or race-style high RPM use
- Prolonged low speed 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. Your POLARIS dealer can assist.

## 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 or other qulaified person 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 or other qualified person perform these services.

## MAINTENANCE Periodic Maintenance Chart

Perform all services at whichever maintenance interval is reached first.

Item		intenance Ir		Remarks
	Hours	Calendar	Miles (Km)	
 Steering	-		-	
Front suspension	-		-	
Rear suspension	-		-	
Tires	-		-	Check each day before
Brake fluid level	-	Daily	-	driving the vehicle.
Brake pedal travel	-		-	Make adjustments as needed.
Brake system	-		-	See the Pre-Ride
Wheels/fasteners	-		-	Checklist on page 43.
Frame fasteners	-		-	
Engine oil level	-		-	
Air filter	-	Daily	-	Inspect; clean often; replace as needed
Airbox Purge Valve		Daily		Drain when deposits are visible

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

 ${\bf D}$  Have an authorized POLARIS dealer or other qualified person perform these services.

## MAINTENANCE

#### **Periodic Maintenance Chart**

Item		Maintenance Interval (whichever comes first)			Remarks
		Hours	Calendar	Miles (Km)	
	Daytime running lights/taillight	-	Daily	-	Check operation
	Drive chain	-	Daily	-	Inspect daily; adjust and lubricate if needed
	CVT housing (if equipped)	-	Weekly	-	Drain water as needed, check often if driving in wet conditions
	Engine oil change (break-in)	5	1 M	-	Perform a break-in oil change at one month
	Drive chain (break-in)	5	1 M	-	Adjust and lubricate
► D	Brake pad wear	10	Monthly	100 (160)	Inspect periodically
D	Valve Clearance (Initial)	10	Monthly	100 (160)	Valve lash adjustment: Every 40 hours after first 10-hour adjustment
	Fuel System	25	Monthly	-	Inspect; cycle key to pressurize fuel pump; check lines and fittings for leaks and abrasion
	Battery	25	Monthly	250 (400)	Check terminals; clean; test
	Main gearcase oil	25	Monthly	250 (400)	Inspect level; change yearly

Perform these procedures more often for vehicles subjected to severe use.
 D Have an authorized POLARIS dealer or other qualified person perform these

services.

## MAINTENANCE **Periodic Maintenance Chart**

ltem		Maintenance Interval (whichever comes first)			Remarks
		Hours	Calendar	Miles (Km)	
	Engine oil change	30	6 M	300 (480)	
D	Valve Clearance	40	6M	500 (800)	Valve lash adjustment: Every 40 hours after first 10-hour adjustment.
	General lubrication	50	3 M	500 (800)	Lubricate all fittings, pivots, cables, etc.
	Shift Linkage	50	6 M	500 (800)	Inspect, lubricate, adjust
D	Steering	50	6 M	500 (800)	Lubricate
	Front Suspension	50	6 M	500 (800)	Lubricate
	Rear Suspension	50	6 M	500 (800)	Lubricate
	Throttle Body Intake Duct	50	6 M	500 (800)	Inspect duct for proper sealing/air leaks
D	Fuel system/filter	100	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	12M	600 (1000)	Inspect; replace as needed

Perform these procedures more often for vehicles subjected to severe use.
 D Have an authorized POLARIS dealer or other qualified person perform these

services.

## MAINTENANCE

#### **Periodic Maintenance Chart**

Item		Maintenance Interval (whichever comes first)			Remarks
		Hours	Calendar	Miles (Km)	
	Engine mounts	100	12 M	1000 (1600)	Inspect
	Exhaust muffler/ pipe	100	12 M	1000 (1600)	Inspect
	Wiring	100	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	12 M	1000 (1600)	Inspect; clean; replace worn parts
	Drive belt	100	12 M	1000 (1600)	Inspect; replace as needed
D	Front wheel bearings	100	12 M	1000 (1600)	Inspect; replace as needed
D	Brake fluid	200	24 M	2000 (3200)	Change every two years
	Spark arrester	300	36 M	3000 (4800)	Clean out
D	Toe adjustment		-		Inspect periodically; adjust when parts are replaced

Perform these procedures more often for vehicles subjected to severe use.
 D Have an authorized POLARIS dealer or other qualified person perform these

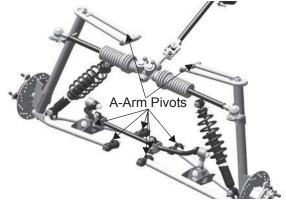
services.

## MAINTENANCE Lubrication Recommendations

Check and lubricate all components at the intervals outlined in the Periodic Maintenance Chart beginning on page 57, 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.

ltem	Lube	Method	
Engine Oil	PS-4 Synthetic Engine Oil	See page 65.	
Brake Fluid	DOT 4 Brake Fluid	See page 79.	
Transmission Oil (Main Gearcase)	AGL Gearcase Lubricant & Transmission Fluid	See page 67.	
Drive Chain	POLARIS Chain Lube or SAE 80/90	See page 68.	
A-Arm Pivots	POLARIS All Season Grease or grease conforming to NLGI No. 2	Grease at general lubrication interval, also after washing vehicle or driving in water.	

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



# MAINTENANCE

#### Engine Oil Oil Recommendations

Always check and change the engine oil at the intervals outlined in the Periodic Maintenance Chart beginning on page 57. POLARIS recommends the use of PS-4 Synthetic Engine Oil for this vehicle. Mixing brands or using a non-recommended oil may cause serious engine damage. Always use the recommended oil. Never substitute or mix oil brands.

#### Oil Check

Maintain the oil level within the safe range on the dipstick. Do not overfill.

- 1. Position the vehicle on a level surface.
- 2. Remove the dipstick. Wipe it dry with a clean cloth.
- 3. Reinstall the dipstick completely.
- 4. Remove the dipstick and check the oil level.
- Tip: A rising oil level between checks in cool weather driving can indicate contaminants such as gas or moisture collecting in the crankcase. If the oil level is over the full/ safe mark, change the oil immediately.
- 5. Add the recommended oil as needed.
- 6. Reinstall the dipstick.



### MAINTENANCE Engine Oil Oil Change

- 1. Position the vehicle on a level surface. Set the parking brake.
- 2. Clean the area around the pre-filter plug.
- 3. Start the engine. Allow it to idle for two to three minutes.
- 4. Stop the engine.



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

- 5. Remove the 4 nuts/bolts holding the lower chain guard in place. Remove the lower chain guard to avoid collecting oil as it drains.
- 6. Place a drain pan under the engine crankcase.
- 7. Remove the pre-filter plug. Allow the oil to drain completely.
- 8. Wash the oil pre-filter screen with solvent to remove debris. Allow the screen to air dry.
- 9. The external oil filter is located behind the seat on the right-hand side of the rear swingarm. The screw on the oil filter should be replaced when oil is changed. With the oil drained from the crankcase, unscrew the oil filter and replace with a new one. Ensure that the oil filter gasket is properly seated, lubricated with oil and in good condition. Do not over tighten the oil filter.
- 10. Clean the pre-filter plug. Install a new sealing washer on the plug. The sealing surfaces on the plug and crankcase should be clean and free of burrs, nicks or scratches.
- 11. Reassemble the pre-filter screen and spring to the pre-filter plug.
- 12. Reinstall the pre-filter drain plug. Torque to 11 ft. lbs. (15 Nm).
- 13. Reinstall the lower chain guard.
- 14. Remove the dipstick. Add 35.5 oz. (1050 ml) of the recommended oil. Do not overfill. See the specifications section beginning on page 100 for capacities.
- 15. Reinstall the dipstick.
- 16. Start the engine. Allow it to idle for one to two minutes.
- 17. Stop the engine and inspect for leaks.
- 18. Check the oil level. Add oil as needed to bring the level to the upper mark on the dipstick.
- 19. Dispose of used oil properly.

# MAINTENANCE

## Transmission (Main Gearcase)

Always check and change the fluid at the intervals outlined in the Periodic Maintenance Chart beginning on page 57. POLARIS recommends the use of AGL Gearcase Lubricant & Transmission Fluid for this vehicle.

#### Fluid Check

The fill plug is located on the rear of the gearcase. Access the fill plug on the right-hand side of the gearcase.

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

#### 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 with a new o-ring. Torque to 14 ft. lbs. (19 Nm).
- 6. Add 25 oz. (750 ml) of the recommended fluid to the fill hole. Do not overfill.
- 7. Reinstall the fill plug.
- 8. Check for leaks.
- 9. Discard used fluid properly.



Drain Plug

## MAINTENANCE Drive Chain Lubrication

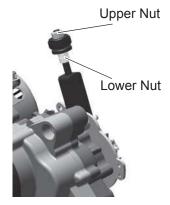
Lubricate the drive chain with POLARIS chain spray lube or an approved chain lube at the general lubrication interval specified in the Periodic Maintenance Chart beginning on page 57. Lubricate more often under severe use, such as in dirty or wet conditions. See page 102 for the part numbers of POLARIS products.

**NOTICE:** Washing the drive chain with a high pressure washer or gasoline can cause premature wear and drive chain failure. Don't use a high pressure washer or gasoline to clean the drive chain.

Adjusting or operating the vehicle with improper rear drive chain slack can result in severe damage to the transmission and drive components. Always make sure the slack is within the stated specifications.

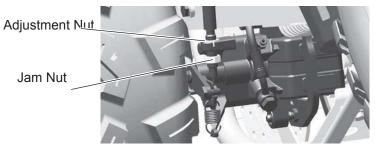
## **Drive Chain Slack Adjustment**

- 1. Loosen the upper nut.
- 2. Turn lower nut clockwise in 1/2-turn increments, then turn upper nut until tight. Follow this procedure until chain is at proper tension. Chain should have 1/4" deflection.
- 3. Repeat these steps until chain is adjusted to desired fit.



## MAINTENANCE Parking Brake Cable Freeplay Adjustment

- 1. Inspect and perform any needed service on the brake pads before adjusting parking brake cable freeplay.
- 2. Make sure the parking brake is NOT set (lever is DOWN).
- 3. Pull the brake cable back to inspect freeplay between the cable end and the caliper bracket. Freeplay should be 1/16" (1.5 mm).
- 4. To adjust freeplay, loosen the jam nut. Turn the in-line adjuster nut outward to decrease freeplay. Turn the adjuster nut inward to increase freeplay.
- 5. Tighten the jam nut against the adjuster nut.



# MAINTENANCE

## Parking Brake Adjustment

- 1. Inspect and perform any needed service on the brake pads before adjusting the parking brake.
- 2. Position the vehicle on a level surface. Place the transmission in neutral.
- 3. Carefully elevate the rear of the vehicle slightly. Use an appropriate lift.
- 4. Loosen the jam nut on the parking brake adjustment bolt.
- 5. While rotating the rear wheels by hand, tighten the adjustment bolt until significant brake drag is detected. Then back the adjustment bolt out 1/4 turn, or until the wheel freely spins.



6. Hold the adjustment bolt in place and tighten the jam nut securely against the lever arm.

Adjustment Bolt

- 7. Check parking brake lever movement. Verify that the rear wheels rotate freely with the parking brake off (lever in DOWN position) and that the vehicle will not move when the parking brake is applied (lever in UP position).
- 8. Verify that the park brake lever stays in the UP position when the brake is fully applied.

#### Spark Plug Spark Plug Gap/Torque

Electrode Gap	New Plug Torque	Used Plug Torque
0.6-0.7 mm	9-11 ft. lbs. (12-15 Nm)	17-20 ft. lbs. (23-27 Nm)

**NOTICE:** Using non-recommended spark plugs can result in serious engine damage. Use POLARIS-recommended spark plugs or their equivalent. See page 100.

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 71.



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

# Spark Plug Condition Normal Plug

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

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

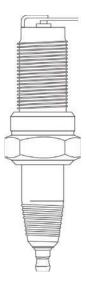
#### Wet Fouled Plug

The wet fouled insulator tip is black. A damp oil film covers the firing end. There may be a carbon layer over the entire nose. Generally, the electrodes are not worn. See your dealer for throttle body adjustments.

### MAINTENANCE Spark Plug

### Spark Plug Removal and Replacement

- 1. Use a spark plug wrench to remove the spark plug.
- 2. Inspect the spark plug each time you change the oil. The electrodes should be kept clean and free of carbon. The presence of carbon or excess oil will reduce proper engine performance. If possible, check the spark plug gap (area between electrodes) using a wire feeler gauge.
- 3. Reverse the procedure for spark plug installation. Torque to specification. See page 71.
- **NOTE:** It is advisable to replace the spark plug at least once a year to insure easy starting and good engine performance.



### Valve Adjustment Procedure

**NOTE:** In order to properly set the valves, the engine must be at TDC on the compression stroke. To find TDC on the compression stroke, roll the engine over until the intake valve closes and stops at TDC.

#### Intake Valve Clearance Adjustment

- 1. Remove the valve cover.
- 2. Verify cam lobes are pointed down.
- 3. Insert correct thickness feeler gauge between end of intake valve stem and adjuster screw.
- 4. When clearance is correct, hold adjuster screw and tighten locknut securely.
- 5. Re-check the valve clearance.
- 6. Repeat adjustment procedure if necessary until clearance is correct with locknut secured.

### MEASUREMENT

Valve Clearance 0.004" (0.10 mm)

### MAINTENANCE Valve Adjustment Procedure

#### **Exhaust Valve Clearance Adjustment**

- 1. Remove the valve cover.
- 2. Verify cam lobes are pointed down.
- 3. Insert correct thickness feeler gauge between end of exhaust valave stem and adjuster screw.
- 4. Loosen locknut and turn adjuster screw until there is a slight drag on feeler gauge.
- 5. When clearance is correct, hold adjuster screw and tighten locknut securely.
- 6. Re-check the valve clearance.
- 7. Repeat adjustment procedure if necessary until clearance is correct with locknut secured.

### MEASUREMENT

Exhaust Valve Clearance 0.0047" (0.12 mm)

### Constant Variable Transmission (CVT) System

#### A WARNING

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

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

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

- Always follow all recommended maintenance procedures. See your POLARIS dealer, or other qualified person, for service and repair assistance.
- This CVT system is intended for use on POLARIS products only. Do not install it in any other product.
- Always make sure the CVT housing is securely in place during operation.

### **CVT Drying**

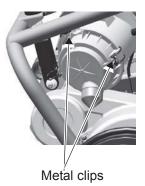
There may be some instances when water is accidently ingested into the CVT system. Use the following instructions to dry it out before operating. The drain plug is located on the bottom of the CVT cover.

- 1. Remove the drain plug. Allow the water to drain. Reinstall the drain plug.
- 2. Shift the transmission to neutral. Set the parking brake.
- 3. Start the engine. 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.
- 5. Test for belt slippage. If the belt slips, repeat the process.
- 6. Your vehicle requires service as soon as possible. Your POLARIS dealer can assist.
- **NOTICE:** Exposure to salt water will cause corrosion to metal components. If your vehicle is operated in salt water areas, rinse it off frequently with fresh water.

### MAINTENANCE Filter Systems Air Filter

Always change the air filter at the intervals outlined in the Periodic Maintenance Chart beginning on page 57. Access the air box near the right rear wheel.

- 1. To remove the air cleaning element, unlatch each metal clip holding the cover in place.
- 2. Remove the air filter element.
- 3. Clean away any oil or sediments in the air box.
- 4. Apply a commercially available chassis lubricant to the inside lip of the new air filter.
- 5. Install the new filter.
- 6. Reinstall the cover and secure the clips.
- **NOTICE:** Never operate the vehicle with the filter element removed. Dirt will enter the engine, causing rapid wear and severe damage to the engine.



### Brakes

The front and rear brakes are hydraulic disc type brakes activated by the brake pedal. See page 38.

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 79 for brake fluid information.

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



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 Inspection**

- Check the brake system for fluid 1 leaks.
- Check the brake pedal for excessive 2. travel or a spongy feel.
- Check the brake pads for wear, 3. damage and looseness.
- Inspect the brake pad wear surface 4. for excessive wear.
- 5. Change pads when the friction material is worn to .04" (1 mm).
- Check the surface condition of the 6. brake discs. Measure the thickness of the front and rear discs. Replace a disc if the thickness is less than 0.1" (2.5 mm).







Rear Disc

Front Disc

Check brake system hoses and fittings for cracks, deterioration, 7. abrasion and leaks. Tighten any loose fittings and replace any worn or damaged parts.

### 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 102 for the part numbers of POLARIS products.

A

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 neutral. Set the parking brake.
- 3. View the brake fluid level in the reservoir. The level should be between the maximum and minimum level lines. Add brake fluid as needed.
- 4. Apply the brake forcefully for a few seconds and check for fluid leakage around the fittings.

Brake Fluid Reservoir



### 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 57.

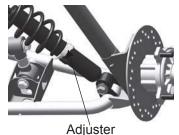
- 1. Position the vehicle on level ground.
- 2. Lightly turn the steering wheel left and right.
- 3. If there is excessive freeplay or strange noises, or the steering feels rough or "catchy," have the steering system inspected by an authorized POLARIS dealer or other qualified service facility before operating the vehicle.

### **Shock Spring Adjustment**

The front and rear shock absorber springs are adjustable to increase or decrease spring tension. There are five (5) adjustable positions on each shock.

Use a round nut wrench to rotate the adjuster. The tension of the shock spring will increase when rotated left and decrease when rotated right.

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



### **Toe Alignment**

Use the following procedure to check the toe alignment of the vehicle. The recommended toe alignment is 1/8" to 1/4" (3-6 mm) toe out.

**WARNING!** Severe injury or death can result from improper toe alignment and adjustment. Do not attempt to adjust tie rod alignment. All tie rod adjustments should be performed by an authorized POLARIS dealer or other qualified service facility.

- 1. Position the vehicle on a level surface.
- 2. Set the handlebars in a straight-ahead position and secure them in this position.
- 3. Place a chalk mark on the center line of the front tires approximately 10" (25.4 cm) from the floor, or as close to the hub/axle center line as possible. Make sure both marks are the same distance from the floor.
- 4. Measure the distance between the marks and record the measurement (1).
- 5. Move the vehicle to rotate the tires 180°. Position the wheels with the chalk marks at the rear of the tires, even with the hub/axle center line.
- 6. Measure the distance between the marks and record the measurement (2).
- 7. Subtract measurement 2 from measurement 1. The difference is the vehicle toe-out alignment.

If you discover improper alignment, see your POLARIS dealer for service.



### MAINTENANCE Tires

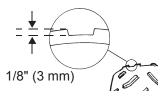
#### A WARNING

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 POLARISapproved 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.



#### Front Wheel Hub Tightening

Front wheel bearing tightness and spindle nut retention are critical component operations. All service must be performed by your authorized POLARIS dealer or other qualified service facility.

#### Front Wheel Replacement

- 1. Position the vehicle on a level surface.
- 2. Place the transmission in neutral. Set the parking brake. 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.
- 6. Remove the wheel.
- 7. Reverse Steps to install.



#### Tires Rear Wheel Replacement

**NOTE:** Do not disassemble the castle nuts when you replace the rear wheel and hub assembly.

- 1. Position the vehicle on a level surface.
- Place the transmission in neutral. Set the parking brake. Stop the engine. Block the front wheel to prevent rolling.
- 3. Loosen the four (4) lug nuts slightly.
- 4. Elevate the side of the vehicle by placing a suitable stand under the frame.



- 5. Remove the lug nuts.
- 6. Remove the wheel.
- 7. Reverse steps to install.

/. A

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. Your POLARIS dealer can assist.

#### Wheel Nut Torque Specifications

Check the wheel nut torques occasionally and when they've been loosened for service.

Location	Nut Torque
Front Wheel	30 ft-lbs (41 Nm)
Rear Wheel	30 ft-lbs (41 Nm)

### MAINTENANCE Lights Daytime Running Lights Replacement

This vehicle's daytime running lamps operate using LED lights. If they become inoperable, the entire assembly will need to be replaced by your authorized POLARIS dealer or other qualified service facility.

## Lights

### Tail Light Lamp Replacement

If the brakelight doesn't work, the light assembly may need to be replaced.

- 1. Disconnect the tail light from the harness.
- 2. Remove attachment nuts holding light assembly.
- 3. Install new light assembly and secure with attachment nuts.
- 4. Reconnect the light harness.
- 5. Start the engine to make sure the lights come on. If the lights do not operate, your POLARIS dealer can assist.



### MAINTENANCE Vehicle Immersion

**NOTICE:** If your vehicle becomes immersed, major engine damage can result if the machine is not thoroughly inspected. Take the vehicle in for service before starting the engine. Your POLARIS dealer can provide this service.

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

- 1. Move the vehicle to dry land.
- 2. Check the air box. If water is present, dry the air box and replace the filter with a new filter. Thoroughly dry the air pre-filter. See page 76.
- 3. Remove the air box drain plug to drain any water. Reinstall the drain plug securely.
- 4. Remove the spark plug.
- 5. Turn the engine over several times using the electric start.
- 6. Dry the spark plug and reinstall it, or install a new plug.
- 7. Attempt to start the engine. If necessary, repeat the drying procedure.
- 8. Take the vehicle in for service as soon as possible, whether you succeed in starting it or not. Your POLARIS dealer can provide the required service.
- 9. If water has been ingested into the transmission follow the procedure on page 75 for drying.

### Battery

#### **A**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.

#### A 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.

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 Battery Removal

- 1. Access the battery through the left rear wheel well.
- 2. On conventional batteries, remove the battery vent tube (sealed batteries do not have a vent tube).
- 3. Disconnect the black (negative) battery cable first.
- 4. Disconnect the red (positive) battery cable last.



Battery

- 5. Lift the battery out of the vehicle. Be careful not to tip a conventional battery sideways, which could spill electrolyte.
- **NOTICE:** If electrolyte spills, immediately wash it off with a solution of one tablespoon baking soda and one cup water to prevent damage to the vehicle.

### 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 91 before installing the battery.

- 1. Ensure that the battery is fully charged.
- 2. Place the battery in the battery holder.
- 3. On conventional batteries, install the battery vent tube. 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.



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

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

### MAINTENANCE Battery Battery Storage

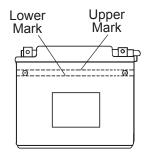
Whenever the vehicle is not used for a period of three months or more, remove the battery from the vehicle, ensure that it's fully charged, and store it out of the sun in a cool, dry place. Check battery voltage each month during storage and recharge as needed to maintain a full charge. See page 91.

**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 102 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**

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.



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.

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

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

State of Charge	Voltage	Action	Charge Time*
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

\*Using constant current charger at standard amps specified on top of battery.

#### Cleaning and Storage Washing the Vehicle

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

Before washing the vehicle, locate the CVT inlet and outlet ducts and the air box. The ducts are located under the rear wheel wells. Avoid spraying water directly toward the ducts or air box when washing the vehicle from the rear.

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

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

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

### MAINTENANCE Cleaning and Storage

#### Washing the Vehicle

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

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

### Washing Tips

- Avoid the use of harsh cleaners, which can scratch the finish.
- Do not use a power washer to clean the vehicle.
- Do not use medium to heavy duty compounds on the finish.

Always use clean cloths and pads for cleaning and polishing. Old or reused cloths and pads may contain dirt particles that will scratch the finish.



#### Cleaning and Storage Washing the Vehicle

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

- Wheel bearings
- Transmission seals
- CVT inlet and outlet ducts
- Air box
- Brakes
- · Cab and body panels
- · Labels and decals
- · Electrical components and wiring

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.

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

#### Polishing the Vehicle

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

#### **Polishing Tips**

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

### MAINTENANCE Cleaning and Storage 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 93.

#### Stabilize the Fuel

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

#### Air Filter / Air Box

Inspect and clean or replace the air filter. See page 76. Clean the air box. Drain the sediment tube.

#### Fluid Levels

Inspect the fluid levels. Add or change fluids as recommended in the Periodic Maintenance Chart beginning on page 57.

- Transmission fluid
- Brake fluid (change every two years and any time the fluid looks dark or contaminated)

#### Engine Oil

Change the oil. See page 66.

### 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 57.

#### Fog the Engine

- 1. Treat the fuel system with POLARIS Carbon Clean or other equivalent fuel treatment. 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 hole, use a section of clear 1/4" hose and a small plastic squeeze bottle filled with the pre-measured amount of oil.
- 3. Reinstall the spark plug. Torque to specification. See page 71.
- 4. Apply dielectric grease to the inside of the 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 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.

### MAINTENANCE Cleaning and Storage Removal from Storage

- 1. Check the battery and charge if necessary. Install it in the vehicle.
- 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 43. Tightness of the bolts, nuts and other fasteners should be checked by an authorized POLARIS dealer or other qualified service facility.
- 5. Lubricate at the intervals outlined in the Periodic Maintenance Chart beginning on page 57.

#### **Battery Maintenance**

See pages 90-92 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.

### **Transporting the Vehicle**

Follow these procedures when transporting the vehicle.

- 1. Place the transmission in neutral. Set the parking brake.
- 2. Stop the engine.
- 3. Remove the key to prevent loss during transporting.
- 4. Secure the fuel cap and seat. Ensure that the seat is attached correctly and is not loose.
- **NOTICE:** 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.
- 5. Wrap the front tie strap through the frame tubes, or attach a tie-down hook around each of the tubes.
- 6. Wrap the rear tie strap around the swing arm.



Step 5



Step 5



## SPECIFICATIONS

ACE 150 EFI		
Maximum Rider Weight	180 lbs. (81 kg)	
Maximum Weight Capacity	230 lbs. (104 kg)	
Gross Vehicle Weight	802 lbs. (364 kg)	
Dry Weight	572 lbs. (260 kg)	
Fuel Capacity	2.5 gal. (9.5 ltr)	
Engine Oil Capacity	35.5 oz. (1050 ml)	
Transmission Oil Capacity	25 oz. (750 ml)	
Overall Length	85 in. (216 cm)	
Overall Width	48 in. (122 cm)	
Overall Height	58 in. (147.3 cm)	
Wheelbase	65 in. (165 cm)	
Ground Clearance	9 in. (22.9 cm)	
Engine Type	4-Stroke	
Displacement	149 cc	
Cooling	Air + Oil	
Bore x Stroke	57.4 mm x 57.8 mm	
Alternator Output	180 watts	
Compression Ratio	9.5:1	
Starting System	Electric	
Fuel System	Electronic fuel injection	

## **SPECIFICATIONS**

ŀ	ACE 150 EFI
Throttle Body Size	32 mm
Ignition System	Electronic Control Unit
Ignition Timing	Timing non-adjustable, ECU controlled
Spark Plug / Gap	NGK CR7HSA / 0.6-0.7 mm
Front Suspension	Dual A-arm w/5.1 in. (13 cm) travel
Rear Suspension	Dual Shock swing A-arm w/6 in. (15.2 cm) travel
Lubrication System	Wet Sump
Driving System Type	Automatic Constant Variable Transmission
Final Drive	Chain
Shift Type	F/N/R
Tire Size - Front	22x7-10
Tire Size - Rear	22x10-10
Tire Pressure - Front	3 psi (20.7 kPa)
Tire Pressure - Rear	6 psi (41.4 kPa)
Brakes, Front/Rear	Foot Activated, hydraulic disc
Parking Brake	Mechanical, Rear (Lever)
Daytime Running Lights	Dual, Standard
Brake Light	Standard

## **POLARIS PRODUCTS**

Part Number	Description			
	Engine Lubricant			
2870791	Fogging Oil (12 oz. Aerosol)			
	Gearcase / Transmission Lubricants			
2878068	AGL Full Synthetic Gearcase Lubricant & Transmission Fluid (qt./.95 I)			
2878069	AGL Full Synthetic Gearcase Lubricant & Transmission Fluid (gal./3.8 l)			
2872348	Chain Lube, Aerosol			
Grease / Specialized Lubricants				
2871312	Grease Gun Kit, All Season Grease			
2871322	All Season Grease (3 oz./89 ml cartridge)			
2871423	All Season 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			

## TROUBLESHOOTING

### **Drive Belt Wear/Burn**

Possible Cause	Solution
Driving at low RPM or ground speed	Drive at a higher speed.
Insufficient warm-up at low ambient temperatures	Warm the engine at least 5 minutes. With the transmission in neutral, apply small amount of 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.
Belt slippage from water or snow ingestion into the CVT system	Dry out the CVT (see page 75). <i>Prevent water from</i> <i>entering the CVT inlet and outlet ducts (see page 93)</i> . Inspect clutch seals for damage if repeated leaking occurs.
Clutch malfunction	Your POLARIS dealer can assist.
Poor engine performance	Check for fouled plug or foreign material in gas tank or fuel lines. Your POLARIS dealer can assist.
Wrong or missing belt	Install the recommended belt.
Improper break-in	Always break in a new belt and/or clutch. See page 41.

### 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

#### Engine Turns Over, Fails to Start

Possible Cause	Solution
Out of fuel	Refuel
Water is present in fuel	Drain the fuel system and refuel
Old/non-recommended fuel	Replace with fresh recommended fuel
Fouled/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	Your POLARIS dealer can assist.
Clogged fuel filter	Your POLARIS dealer can assist.
Low battery voltage	Recharge the battery to 12.8 VDC
Mechanical failure	Your POLARIS dealer can assist.

#### **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/non-recommended fuel	Replace with fresh recommended fuel
Incorrectly installed spark plug wires	Your POLARIS dealer can assist.
Incorrect ignition timing	Your POLARIS dealer can assist.
Mechanical failure	Your POLARIS dealer can assist.
Loose ignition connection	Check all connections and tighten
Water present in fuel	Replace with fresh recommended fuel
Exhaust system leak	Your POLARIS dealer can assist.

## TROUBLESHOOTING

#### **Engine Pings or Knocks**

Possible Cause	Solution
Poor quality or low octane fuel	Replace with recommended fuel
Incorrect ignition timing	Your POLARIS dealer can assist.
Incorrect spark plug gap/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/replace spark plug
Worn or defective spark plug wires	Your POLARIS dealer can assist.
Incorrect spark plug gap/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/plugged fuel tank vent line	Inspect and replace
Incorrect fuel	Replace with recommended fuel
Clogged air filter	Inspect and clean or replace
ETC malfunction	Your POLARIS dealer can assist.
Other mechanical failure	Your POLARIS dealer can assist.
Possible Lean Fuel Cause	Solution
Low or contaminated fuel	Add/change fuel, clean fuel system
Low octane fuel	Replace with recommended fuel
Clogged fuel filter	Your POLARIS dealer can assist.
Incorrect fuel	Replace with recommended fuel
Possible Rich Fuel Cause	Solution
Fuel is very high octane	Replace with lower octane fuel
Stopping/starting without adequate warm-up	Allow engine to warm up before operating and/or stopping
Incorrect fuel	Replace with recommended fuel
Clogged air filter	Inspect and clean or replace

### 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	Your POLARIS dealer can assist.
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
Electronic throttle control malfunction	Your POLARIS dealer can assist.
Other mechanical failure	Your POLARIS dealer can assist.

# LIMITED WARRANTY

POLARIS Industries Inc., 2100 Highway 55, Medina, MN 55340 (POLARIS) gives a SIX MONTH 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

### Warranty Coverage And Exclusions:

### Limitations Of Warranties And Remedies

#### 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.

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 SIX MONTH 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.

### 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.

#### For questions call POLARIS Customer Assistance:

United States & Canada: 1-800-POLARIS (1-800-765-2747) French: 1-800-268-6334

## WARRANTY U.S.A. EPA Emissions Limited Warranty

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

The warranty period for off road vehicles 100cc or greater emissions-certified vehicles starts on the date of purchase by original retail purchaser and continues for a period of 500 hours of engine operation, 5000 kilometers (3100 miles) of vehicle travel, or 30 calendar months from the date of purchase, whichever comes first. The warranty period for ATVs less than 100cc emissions-certified vehicles starts on the date of purchase by original retail purchaser and continues for a period of 250 hours of engine operation, 2500 kilometers (1550 miles) of vehicle travel, or 30 calendar months from the date of purchase, whichever comes first. This EPA emissions warranty period is extended for at least as long as the standard factory warranty that Polaris provides on the vehicle as a whole. The EPA emissions warranty period does not further extend if you purchase additional warranty coverage in the form of a service contract or other paid warranty extension, but emission-related parts may be covered subject to the terms of any such paid service contract or paid warranty extension.

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

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

Air-induction systemFuel system

- Ignition system
- Exhaust gas recirculation systems

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

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

### U.S.A. EPA Emissions Limited Warranty

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

- Fuel Tank
- Fuel Cap
- Fuel Line
- Fuel Line Fittings
- Clamps\*
- Pressure Relief Valves\*
- Control Valves\*
- Control Solenoids\*
- Electronic Controls\*

- Vacuum Control Diaphragms\*
- Control Cables\*
- Control Linkages\*
- Purge Valves
- Vapor Hoses
- · Liquid/Vapor Separator
- Carbon Canister
- · Canister Mounting Brackets
- Carburetor Purge Port Connector
- \*As related to the evaporative emission control system.

Emission-related components also include any other part whose only purpose is to reduce emissions or whose failure will increase emissions without significantly degrading engine/equipment performance. The exclusive remedy for breach of this limited warranty shall be, at the exclusive option of POLARIS, repair or replacement of any defective materials, components or products. THE REMEDIES SET FORTH IN THIS LIMITED WARRANTY ARE THE ONLY REMEDIES AVAILABLE TO ANY PERSON FOR BREACH OF THIS WARRANTY, POLARIS SHALL HAVE NO LIABILITY TO ANY PERSON FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY DESCRIPTION, WHETHER ARISING OUT OF EXPRESS OR IMPLIED WARRANTY OR ANY OTHER CONTRACT, NEGLIGENCE OR OTHER TORT OR OTHERWISE. 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.

ALL IMPLIED WARRANTIES (INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) ARE LIMITED IN DURATION TO THE WARRANTY PERIOD DESCRIBED HEREIN. POLARIS DISCLAIMS ALL EXPRESS WARRANTIES NOT STATED IN THIS WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply if it is inconsistent with the controlling state law.

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

# WARRANTY U.S.A. EPA Emissions Limited Warranty

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

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

### California Residents

Certain POLARIS Off-Road Vehicles are available in 49-state and 50-state versions. Only the 50-state models are certified for sale in California. The 50-state models available for sale in California are identified by the letter "B" in the ninth position of the model number (e.g., R16RTE87B). The POLARIS 50-state models are designed and built with features such as a reduced cargo box capacity. Any modifications to these features may be a violation of the applicable California regulations and may void this limited emissions warranty offered by the manufacturer.

If you have any questions regarding your warranty rights and responsibilities, please contact POLARIS Customer Assistance:

United States & Canada: 1-800-POLARIS (1-800-765-2747) French: 1-800-268-6334

# **MAINTENANCE LOG**

Use the following chart to record periodic maintenance.

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

# **MAINTENANCE LOG**

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

# **MAINTENANCE LOG**

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

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For your nearest Polaris dealer, call 1-800-POLARIS (765-2747) or visit www.polaris.com

> Polaris Industries Inc. 2100 Highway 55 Medina, MN 55340



