2024





RANGER XD 1500 RANGER CREW XD 1500





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.



Operating, servicing, and maintaining a passenger vehicle or off-road vehicle can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle.

For more information go to www.P65Warnings.ca.gov/passenger-vehicle.



For videos and more information about a safe riding experience with your Polaris vehicle, scan this QR Code® with your smartphone or visit: www.polaris.com/en-us/safety/



2024 Owner's Manual

RANGER XD 1500 Premium RANGER XD 1500 NorthStar Premium RANGER XD 1500 NorthStar Ultimate

RANGER CREW XD 1500 Premium RANGER CREW XD 1500 NorthStar Premium RANGER CREW XD 1500 NorthStar Ultimate Unless noted, trademarks are the property of Polaris Industries Inc.

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

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

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

Your POLARIS dealer knows your vehicle best and is interested in your total satisfaction. Your POLARIS dealership can perform all of your service needs during and after the warranty period.

For the most up-to-date owner's manual visit https://www.polaris.com/en-us/owners-manuals. 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.

🛕 DANGER

DANGER indicates a hazardous situation which, if not avoided, WILL result in death or serious injury.

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

CAUTION indicates a hazardous situation which, if not avoided, COULD result in minor to moderate injury.

NOTICE

NOTICE provides key information by clarifying instructions.

IMPORTANT

IMPORTANT provides key reminders during disassembly, assembly, and inspection of components.

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.



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INTRODUCTION TOOLS FOR SAFE RIDING

To safely operate this vehicle, it is important to become familiar with its features, controls, and characteristics. Review the Safety Briefings for this vehicle that apply to you:

- Operators
- Riders
- Owners
- Trailering the Vehicle
- · Maintaining the Vehicle

Additionally, read the product safety labels on the vehicle and follow all rules and regulations concerning the operation of this vehicle in your area.

POLARIS recommends anyone who will be operating this vehicle to take a training course. ROHVA[™] (Recreational Off-Highway Vehicle Association[™]) provides both an online safety e-course and a hands-on safety course. To access this training, visit www.rohva.org.

Other sources of safety information include the POLARIS Safety Video. The POLARIS Help Center also has additional information: https://polaris.com/en-us/self-help

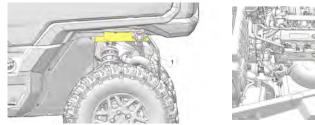
VEHICLE TESTING

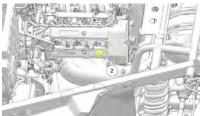
This Off-Road Vehicle was subjected to the following tests of the National Standard for Recreational Off-Highway Vehicles, ANSI®/ROHVA[™] 1-2016:

- · Maximum Speed Capability
- Service Brake Performance
- Parking Brake/Mechanism Performance
- Lateral Stability
- Pitch Stability
- Vehicle Handling
- Roll Over Protective Structure (ROPS)
- Occupant Retention System (ORS)
- Sound Level Limits

VEHICLE IDENTIFICATION NUMBERS

Record your vehicle's identification number ① and engine serial number ② in the spaces provided. Remove the spare key and store it in a safe place. The ignition switch must be replaced if all keys are lost.





Vehicle Model Number:	
Vehicle Identification Number:	
Engine Serial Number:	
Personal PIN Security Code:	

NEAR-FIELD COMMUNICATION (NFC) (IF EQUIPPED)

Some Polaris vehicles come equipped with a near-field communication (NFC) chip. The NFC chip is embedded in the Polaris emblem located at the front of the vehicle and seamlessly connects you to a digital platform of vehicle information and tools. See your dealer for more information.

IMPORTANT

Not all devices are equipped with an NFC reader. Additionally, some devices require third party applications to access NFC content. For questions regarding the NFC reader on your device, refer to the device's user manual.

On models equipped with NFC, place your smartphone directly over the Polaris emblem to do the following:

- View vehicle specific information
- · Access your Polaris Garage
- Download and view the owner's manual
- View accessory instructions
- · Watch helpful videos
- Access warranty information
- Check for service notifications

RIDE COMMAND WITH NFC

Additional NFC features are available when using the Ride Command mobile app. To access these features, do the following:

- 1. Download the Ride Command mobile app from the Apple App Store® or Google Play® store.
- 2. Create or log in to an existing account.
- 3. From the Ride Command mobile app home screen, select Add Vehicle.
- 4. On the vehicle, tap the NFC-enabled badge with the phone to scan the vehicle.
- 5. Confirm information, name your vehicle, and tap add to garage.

SYSTEM REQUIREMENTS

Refer to device manufacturer's instructions to verify NFC read capability, and/or NFC-capable add-ons.



RADIO COMPLIANCE STATEMENTS

NOTE

Some vehicle models contain radio equipment as detailed in this section.

USA RADIO COMPLIANCE

This vehicle contains the following radio equipment or components that contain radio equipment:

COMPONENT	COMPONENT ID	MANUFACTURER
Antenna, GPS, V2V	PN 4019300	Amphenol®
Display, Ride Command	PN 3286918	Trail Tech®
Connected Dongle	PN 4080566	Harman Becker®
Wireless Winch Remote	PN 2417711	Ningbo Lianda®

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CANADA RADIO COMPLIANCE

Some vehicles may contain the following radio equipment or components:

COMPONENT	COMPONENT ID	MANUFACTURER
Antenna, GPS, V2V	PN 4019300	Amphenol®
Display, Ride Command	PN 3286918	Trail Tech®
Connected Dongle	PN 4080566	Harman Becker®
Wireless Winch Remote	PN 2417711	Ningbo Lianda®

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS (s). Operation is subject to the following two conditions:

- 1. This device may not cause interference.
- 2. This device must accept any interference, including interference that may cause undesired operation of the device.

IMPORTANT

For applications that use vehicle-to-vehicle (V2V) communication, radio transmitter IC 5966A-P001 has been approved by Innovation, Science and Economic Development Canada (ISED) to operate with Polaris antenna (part number 4019300) with gain of 1 dBi. Any antenna that has a gain greater than 3 dBi is prohibited for use with this device.

SAFETY OWNER REQUIREMENTS

Improper use, maintenance, or modification of this vehicle can lead to serious injury or death.

Require proper use of your vehicle. Do not allow anyone to operate your vehicle or ride as a passenger unless they are properly instructed and you are sure they are willing to ride responsibly. To prevent unauthorized use, always remove the ignition key when the vehicle is not in use.



Any modifications or installation of non-POLARIS-approved accessories could increase the risk of injury. While you may find aftermarket products similar in design and quality to POLARIS accessories, recognize that some aftermarket accessories or modifications are not suitable because of potential safety hazards to you or others. It is never appropriate to install any additional seating.

Check with the manufacturer to determine any potential effect of a modification or accessory on the safe use of your vehicle. You are responsible for injuries related to modifications to the vehicle. Modifications or accessories may:

- Damage machine components especially modifications that increase speed or power.
- Make the vehicle less stable at higher speeds.
- Add weight, reducing the amount of cargo and total weight you can carry, and raise the vehicle's center of gravity.
- Overload the vehicle's electrical system capacity. Blowing a fuse may cause a loss of lights or engine power.
- Reduce the effectiveness of occupant protection systems, including the seatbelts and the Rollover Protective Structure (ROPS).
- Make it illegal to own or operate your vehicle. POLARIS-authorized spark arresters, mufflers, and emissions control components are mandatory for ownership or operation in many areas.
- · Void your warranty.

The vehicle ROPS, when used with the seat belts and doors, provides a structure to help protect occupants. The structure will not protect occupants in all rollovers or accidents.

For more information about safety, contact an authorized dealer or visit the Polaris website at www.polaris.com.

DRIVER AND PASSENGER QUALIFICATIONS

Make sure operators are 16 or older with a valid driver's license. Just because a teenager has a license does not mean that they will make good judgments about driving and avoid risk taking.





POLARIS recommends that you supervise younger drivers. Set rules and put limits on how, when, and where they are allowed to use this vehicle. For example, young drivers may need to have an adult in the vehicle with them and not be allowed to drive with their friends in the vehicle.

Make sure all riders fit the vehicle. Be sure that the driver and all passengers are able to:

- · sit with their backs against their seat,
- adjust the seat belt to fit properly,
- · have both feet flat on the floor, and
- have both hands on the steering wheel or on a passenger hand hold.

Do not allow children who need child safety seats or booster seats to ride in the vehicle. The vehicle is not designed to restrain automotive child safety seats.

You are responsible for your passengers. Be sure passengers are seated properly, belted, holding the passenger hand hold, and ready to brace. Unrestrained riders can fall out or be thrown around and from a moving vehicle.

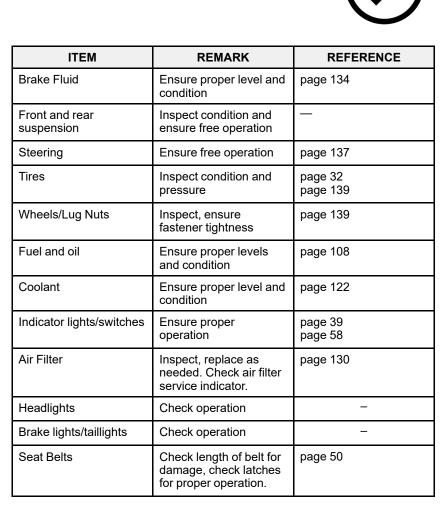
Every person must be properly seated and belted in their own seat. Two people should never be belted into a single seat belt. People belted together can crash into one another in a collision and be seriously injured. Never carry passengers in the cargo bed as they could be thrown against or out of the vehicle or come into contact with moving parts.

Do not let people drive or ride after using alcohol or drugs.

PREPARE VEHICLE FOR THE RIDE

Before starting off, always perform the Pre-Ride

Inspection. Failure to inspect and verify that the vehicle is in safe operating condition increases the risk of an accident, which can lead to serious injury or death.



SAFETY

ITEM	REMARK	REFERENCE
Vehicle Debris	Remove grass, leaves, and other flammable material or debris, especially near the exhaust system.	_
Lock adjustable steering wheel	Do not adjust the steering wheel while the vehicle is moving.	_

Improper tire maintenance can lead to loss of control and an accident, which could result in serious injury or death. To reduce your risk of injury:

- Maintain POLARIS recommended tire pressure. Check pressure before operating. Even if your vehicle has only been driven a short distance, the tire pressure readings can become higher.
- Make sure tire pressures match the specifications listed in the table below.
- Only use the size and type of tires specified for this vehicle.
- Do not operate your vehicle with worn or damaged tires.
- Always follow your tire manufacturer's instructions for maintenance.

MEASUREMENT	SPECIFICATION				
Maximum Cargo Box Load	1500 lbs (680 kg)				
Tire Pressure in PSI (kPa)	Front: 18 PSI (124.1 kPa) Rear: 18 PSI (124.1 kPa)				
Premium 3 Passenger Models Only					
Tire Pressure in PSI (kPa)	Front: 14 PSI (96.5 kPa) Rear: 18 PSI (124.1 kPa)				
Northstar 3 Passenger Models Only	1.cal. 101 31 (124.1 KFa)				
Tire Pressure in PSI (kPa)	Front: 18 PSI (124.1 kPa) Rear: 18 PSI (124.1 kPa)				
Premium 6 Passenger Models Only	Neal. 10 F SI (124.1 NFd)				
Tire Pressure in PSI (kPa)	Front: 16 PSI (110.3 kPa) Rear: 22 PSI (151.7 kPa)				
Northstar 6 Passenger Models Only					
Maximum Weight Capacity Includes weight of operator,	Premium - 2110 lb (957 kg)				
passenger, cargo, and accessories	NorthStar Premium - 1705 lb (773 kg)				
	NorthStar Ultimate - 1680 lb (762 kg) CREW Premium - 2150 lb (975 kg)				
	CREW NorthStar Premium -1665 lb (755 kg)				
	CREW NorthStar Ultimate -1640 lb (744 kg)				

PREPARE YOURSELF, PASSENGERS, AND CARGO FOR THE RIDE

Wear an approved helmet. Riding in this vehicle without wearing an approved helmet increases the risk of serious injury. For example, a helmet reduces your risk of injury from head strikes with the vehicle or other objects even if there is no crash.

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.



Use shatterproof goggles or a shatterproof helmet face shield. Such protective eyewear may reduce the risk of foreign material getting in your eyes and help prevent loss of vision.

POLARIS recommends wearing approved Personal Protective Equipment (PPE) that have markings indicating they are designed to standards such as:

- VESC 8
- V-8
- Z87.1
- CE



Additional protective clothing and gear that may be appropriate for your riding conditions includes:

- Always wear shoes when operating. Consider wearing sturdy over-the-ankle boots suitable for the terrain you will be riding in.
- Full-finger gloves can protect against wind, sun, cold, and objects. Choose gloves that fit snugly and allow fingers to move freely and grip on the steering wheel or hand holds.
- · Consider long sleeves and long pants to help protect arms and legs.
- Long-term exposure to wind and engine noise can cause permanent hearing loss. Properly worn hearing protective devices such as earplugs can help prevent hearing loss. Check local laws or the rules of the riding area you are in before wearing hearing protection to make sure its use is permitted.

Always stay completely inside the vehicle and hold the steering wheel or hand holds. Body parts outside of the vehicle can be struck by passing objects or crushed during a rollover. Do not put any part of your body outside of the vehicle for any reason. Do not hold onto the ROPS frame or put any part of your body on the door.

Riding in this vehicle without closed and latched cab doors increases the risk of serious injury or death in the event of an accident or rollover. Always make sure all cab doors are closed and latched while riding in this vehicle. Keep clear of the door area when closing the doors, as hands or feet may be pinched between the door and ROPS.

Be sure riders pay attention and plan ahead. If you think or feel the vehicle may tip or roll, reduce your risk of injury:

- · Keep a firm grip on the steering wheel or hand holds and brace yourself.
- Do not put any part of your body outside of the vehicle for any reason.

This vehicle is not designed to carry unrestrained pets. An unrestrained pet can be thrown about and injure riders, even during normal operation. When transporting pets, use a pet crate suitable for off-road use that is secured to the vehicle.

Fuels such as gasoline can be extremely flammable. To reduce the risk of serious injury or death, never carry fuel or other flammable liquids on this vehicle. Rollovers, crashes, rough riding, or changes in elevation or temperature may lead to fuel spilling or vapor release from portable containers. Hot vehicle parts can cause fires, even after the engine has been turned off.

Never exceed vehicle weight capacities. The vehicle's maximum weight capacity (including riders, cargo, and accessories) is shown in the **SPECIFICATIONS** tables in this Owner's Manual. The cargo box can support up to 1500 lbs. (680 kg) of that total. When more rider weight is added, cargo weight may need to be eliminated to stay under the maximum vehicle weight capacity limit. Overloading the vehicle or carrying cargo improperly will cause changes in stability and handling, which could cause loss of control or an accident.

Secure cargo in the cargo box as far forward, centered and as low as **possible.** When cargo cannot be positioned and secured in this way, operate with extra caution. Unsecured cargo can strike and injure riders, affect vehicle handling, and result in loss of control.

The weight of riders and cargo changes vehicle braking, handling, and stability. To avoid loss of control, turn gradually, operate at slower speeds, and avoid rougher or steeper terrain.

DRIVING GUIDELINES

Drive Responsibly. This vehicle has higher ground clearance and other features to handle rugged terrain. It can be overturned in situations where some other vehicles may not. Abrupt maneuvers or aggressive driving, even on flat, open areas, can cause loss of control, rollovers, severe injury or death. To avoid loss of control and rollovers:



- Avoid abrupt maneuvers, sideways sliding, skidding, or fishtailing, and never do donuts.
- Slow down before entering turn.
- Avoid hard acceleration when turning, even from a stop.

High speed off-road operation

Driving off-road vehicles to test the limits of your skills or abilities can be very dangerous to you, passengers, and bystanders. Basic skills for driving a car, ATV, or other off-road vehicles do not equip drivers to safely attempt high speed off-road operation. Develop your skill gradually through training, practice, and experience with the various driving modes of this vehicle and the terrain in which you are operating. Always do a low speed reconnaissance run (prerun) to become aware of anything you may encounter.

High speed off-road operation can lead to loss of control, crashes, or hard landings that can seriously injure occupants (even without rolling the vehicle or damaging it).

If you plan on using the vehicle for high speed, off-road competition, additional safety equipment may be necessary. Check the rules that apply to your competition.

Do not go over jumps — going airborne can lead to serious injury or death.

Going airborne can cause loss of control, rollovers, or crashing into the ground and may damage the vehicle. Even without crashing, landings can be hard enough to cause vehicle suspension to fully compress (e.g., bottom out). Serious injuries, including spinal injuries, can occur even if riders are properly harnessed, wearing helmets and the vehicle is not damaged and remains upright.

You may encounter slopes, "jumps", or other terrain features that could send the vehicle airborne, depending on your speed. These may be defectively designed, poorly maintained, or not suitable for this vehicle. Slow down, use extra care, and avoid going airborne. Never take this vehicle over jumps.

SAFETY

Watching someone else go over a jump or go airborne does not mean you can safely do so. Polaris cannot determine whether any jump you may encounter is appropriate for this vehicle. Any jump, even a small one, could be poorly maintained, designed, or not suitable for this vehicle and may cause serious injury or death.



Plan for hills, rough terrain, ruts, and other changes in traction and terrain. Proceed slowly and with extra care on unfamiliar terrain. Avoid paved surfaces. Sudden changes in terrain such as holes, depressions, banks, softer or harder ground, or other irregularities may cause loss of control or rollover. Give yourself time to react to rocks, bumps, or holes that may be hard to see. Operating in deep snow or tall grass may make it harder to see obstacles.

If you cannot go around an obstacle, such as a fallen tree or a ditch, stop the vehicle in a safe place. Get out to inspect the area thoroughly. Look from both your approach side and exit side. If you are reasonably confident you can continue safely, choose the path that will allow you to go straight over the obstacle to minimize the vehicle tipping sideways. Go only fast enough to maintain your momentum, but still give yourself plenty of time to react to changes in conditions. If there is any question about your ability to maneuver safely over the obstacle, you should turn around if the ground is flat and you have the room, or back up until you find a less difficult path.

Abrupt application of the accelerator pedal can cause the tires to lose traction, reducing control of the vehicle and increasing the possibility of an accident, especially while on sloped terrain or while crossing obstacles such as rocks or logs.

Avoid Operating on Public Roads (Paved or Otherwise). This vehicle does not have highway safety features that on-road vehicles may have (air bags, anti-lock brakes, stability control, etc.). If another vehicle collides with you, the likelihood of a serious injury or death may be greater. Also, you may not be able to avoid a crash or rollover if you make sudden or abrupt maneuvers such as swerving or emergency braking.

While it may be legal to drive on some public roads, it is recommended that you avoid on-road operation. If you must drive on-road, drive slowly and defensively. Use extra care. You may also need to make vehicle modifications to comply with state or local laws. In addition, refer to tire manufacturer's instructions or limitations for on-road operation, including speed limits and premature tire wear.

Improperly operating on hills can cause loss of control, rollover, or

accident, which can lead to serious injury or death. Use extra care when operating on hills. Plan for rough terrain, ruts, and other changes in traction and terrain.

Driving up hills

Check the terrain before ascending a hill and make sure it is not too slippery or loose. Engage all-wheel drive for hills. Drive straight uphill, keeping speed and throttle steady. Avoid steep hills which can cause the vehicle to overturn.

Recovering from stalling on a hill

If the vehicle loses forward speed, apply the brakes gradually and stop. Do not attempt to turn the vehicle around. Instead, shift to reverse and allow the vehicle to slowly roll straight downhill. Apply light brake pressure to control speed.

Overtopping a hill

Slow down when you reach the crest of a hill. Never blindly go over the crest of a hill or a drop off at high speed. An obstacle, a sharp drop, or another vehicle or person could be on the other side of the hill.

Driving down hills

Check the terrain before descending a hill and make sure it is not too slippery or loose. Engage all-wheel drive and proceed slowly, applying the brakes lightly. Never descend a hill with the transmission in neutral or if the engine is turned off.

Avoid side hilling (riding across slopes)

If unavoidable, proceed slowly and with extra caution. Avoid obstacles and changes in terrain that could cause the vehicle to tip or slide. If it feels like the vehicle begins to tip or slide, immediately turn downhill.

Riding near wooded areas or brush

Use extra caution when operating near trees, particularly when operating on narrow trails. Tree branches or brush can be driven into the cab striking or stabbing occupants.



Riding in snow

Always keep the brake and accelerator pedals free of snow and ice. Apply the brakes frequently to prevent ice or snow accumulation on the brake pads which can reduce brake performance.

Riding on ice

Never operate the vehicle on a frozen body of water unless you have verified that the ice can support the weight of the vehicle. Severe injury or death can result if the vehicle falls through the ice.

Riding in water / Falling into water

Operating through deep or fast-flowing water can cause loss of traction, loss of control, overturning, or being swept away in water. You can be seriously injured or killed from entrapment and drowning. Never operate the vehicle in fast-flowing water or in water that exceeds the floorboard of the vehicle. Avoid sharp drop-offs and large rocks. Choose a path that provides an entrance and exit point with gradual inclines. 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.

Riding on sand dunes

Use extra caution when operating on or near dunes. Be alert for changes in terrain. Never blindly go over the crest of a hill or a drop-off at high speed. An obstacle, a sharp drop, or another vehicle or a person could be on the other side of the hill.

Riding in low-visibility conditions

Use extra caution and drive slowly in conditions of reduced visibility such as fog, rain, and darkness.

Operating in low-traction environments

When operating the vehicle in low-traction environments, creep mode may result in unpredictable movements. Use extra caution when utilizing the creep function.

Plan ahead to avoid the need for evasive maneuvers, such as swerving.

Hitting an obstacle — including wildlife — you are not ready for can be dangerous. Choosing to swerve instead can be even more dangerous because it can lead to loss of control, rollover, or collisions.

When operating in areas with possibility of wildlife appearing in your path, plan ahead to avoid swerving for animals if doing so could result in collisions or rollovers. Go slowly or avoid driving during seasons or times of day when animals such as deer are more likely to cross your path without warning.

Avoid Collisions With Other Vehicles

When following another vehicle or operating in the same area as others, keep a safe distance to avoid collisions. Allow extra space when sight distances are limited by dust, snow, curves, hills, or other conditions. Plan ahead to avoid having to swerve or leave the trail to avoid a collision.

On trails, be prepared to make space for other vehicles to pass. If you need to stop on a trail, move your vehicle to the edge of the path to allow others to pass safely.

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

SAFETY



If the vehicle begins to slide downhill or you feel it may tip, turn downhill immediately and stop. Maneuver slowly and carefully until you can drive straight downhill.

Do not continue driving if your vehicle may be damaged or if you were in a crash or rollover.

Operating the vehicle while damaged or after a crash or rollover can cause loss of control, rollover, or accident, which can lead to serious injury or death. If you cannot safely transport the vehicle on your own, contact a recovery and towing service.

After any crash, rollover, or other accident, have a authorized POLARIS dealer inspect the vehicle for possible damage, including seat belts, ROPS, brakes, suspension, and steering systems.

Be prepared in case your vehicle becomes damaged or disabled, especially in remote areas. Consider in advance how to get help and stay safe until it arrives whenever you ride.

There is a recovery tow loop (1) at the front and back of the vehicle to attach a winch or strap.

Use these loops to recover this vehicle if it is stuck, to pull it onto a tow truck, trailer, or to use this vehicle to recover another vehicle. These loops are for emergency recovery only and are not for towing vehicles to another location.

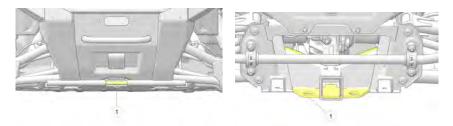
Improper recovery may lead to loss of control or vehicle damage. Only attach straps to specified locations. Do not attach to any other point on the vehicle. Only recover a vehicle of equal or lesser size and weight. When recovering a disabled vehicle, engage the transmission neutral disconnect. Do not move a disabled POLARIS RANGER faster than 10 mph (16 km/h).

NOTICE

Severe transmission damage will occur if the transmission neutral disconnect is not engaged while attempting to move a disabled vehicle. See *Transmission Disconnect/ Towing* section for important details.

NOTICE

D-Rings (if equipped) are an optional recovery location. Do not pull on the d-ring at an angle greater than 30 degrees from center.



Operating, Idling, Or Parking Near Combustible Materials

Engine, exhaust, and other vehicle components can be very hot during and after use. Do not idle or park the vehicle over anything that could contact the exhaust system and catch on fire, such as tall grass, weeds, brush, leaves, debris, or other tall ground cover. Do not let mud, grass, or other debris accumulate on the engine or exhaust system. Inspect and remove as needed.

Vehicle rollaway can cause serious injury or death. Even when stationary, the vehicle may move whenever the gear selector is not in the PARK (P) position or when the brakes are not applied. Always shift to PARK (P) when turning off the engine or leaving the vehicle. Use extra care, when leaving the vehicle on an incline is unavoidable. If leaving the vehicle unattended on a hill, block the rear wheels on the downhill side and keep children, pets and others away from the gear selector.

Before shifting into reverse, use extra care to make sure the area is clear of people or obstacles. When it's safe to proceed, back slowly.

After operation, inspect the vehicle for damage and debris to make sure the vehicle can be safely stored and operated again. Some things to inspect include:

- Debris that could catch fire, such as mud/grass near the engine or exhaust system
- Damage to the suspension, steering, or any other part of the vehicle
- Tire condition, such as tread and sidewall damage
- Shock absorber assembly condition

Be sure to have any issues checked and problems fixed before operating again.

All engine exhaust contains carbon monoxide, a deadly gas. Breathing carbon monoxide can cause headaches, dizziness, drowsiness, nausea, confusion, and eventually death. Carbon monoxide is a colorless, odorless, tasteless gas which may be present even if you do not see or smell any engine exhaust. Deadly levels of carbon monoxide can collect rapidly, and you can quickly be overcome and unable to save yourself. Also, deadly levels of carbon monoxide can linger for hours or days in enclosed or poorly ventilated areas. If you experience any symptoms of carbon monoxide poisoning, leave the area immediately, get fresh air, and SEEK MEDICAL TREATMENT.

- Do not run engine indoors. Even if you try to ventilate engine exhaust with fans or open windows and doors, carbon monoxide can rapidly reach dangerous levels.
- Do not run engine in poorly ventilated or partially enclosed areas such as barns, garages, or carports. If you start a vehicle in one of these, drive it out and close the door as soon as possible. If you drive it into one of these, turn it off as soon as possible.
- Do not run engine outdoors where engine exhaust can be drawn into a building through openings such as windows and doors.

Do not drive on rough terrain with the tip out windshield open (if equipped). With windshield in vented or fully tipped up position, do not drive on rough terrain. Do not exceed 45 mph (72 km/h) for vented position, or 15 mph (24 km/h) for fully tipped up position. Keep windshield closed and latched in all other driving conditions. Failure to do so could cause the windshield system to fail resulting in serious injury or death.

SAFETY LABELS AND LOCATIONS

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

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

SEAT BELT / DRIVER WARNING

Improper vehicle use can result in SEVERE INJURY or DEATH

Be Prepared

- · Fasten seat belt.
- · Wear an approved helmet and protective gear.
- ALWAYS use vehicle cab nets and/or doors.
- Each rider must be able to sit with back against seat, feet flat on the floor, and hands on steering wheel or handholds. Stay completely inside the vehicle.

Drive Responsibly

Avoid loss of control and rollovers:

- Avoid abrupt maneuvers, sideways sliding, skidding or fishtailing, and never do donuts.
- Slow down before entering a turn.
- Avoid hard acceleration when turning, even from a stop.
- Plan for hills, rough terrain, ruts and other changes in traction and terrain. Avoid paved surfaces.
- Avoid side-hilling (riding across slopes).

Be Sure Riders Pay Attention and Plan Ahead

If you think or feel the vehicle may tip or roll, reduce your risk of injury:

- · Keep a firm grip on the steering wheel or handholds and brace yourself.
- Do not put any part of your body outside of the vehicle for any reason.

Require Proper Use of Your Vehicle

Do your part to prevent injuries:

- Do not allow careless or reckless driving.
- Make sure operators are 16 or older with a valid driver's license.
- Do not let people drive or ride after using alcohol or drugs.

SAFETY

- Do not allow operation on public roads (unless designated for off-highway vehicle access) — collisions with cars and trucks can occur.
- · Do not exceed seating capacity: 3 Occupants.

Rollovers have caused severe injuries and death, even on flat, open areas.

SCAN CODE FOR PRODUCT AND SAFETY INFORMATION. FOLLOW ALL INSTRUCTIONS AND WARNINGS.

Part number: 7300761 (English), 7300761–F (French-Canadian)

SEAT BELT / DRIVER WARNING, CREW MODELS

Improper vehicle use can result in SEVERE INJURY or DEATH

Be Prepared

- · Fasten seat belt.
- · Wear an approved helmet and protective gear.
- · ALWAYS use vehicle cab nets and/or doors.
- Each rider must be able to sit with back against seat, feet flat on the floor, and hands on steering wheel or handholds. Stay completely inside the vehicle.

Drive Responsibly

Avoid loss of control and rollovers:

- Avoid abrupt maneuvers, sideways sliding, skidding or fishtailing, and never do donuts.
- Slow down before entering a turn.
- Avoid hard acceleration when turning, even from a stop.
- Plan for hills, rough terrain, ruts and other changes in traction and terrain. Avoid paved surfaces.
- Avoid side-hilling (riding across slopes).

Be Sure Riders Pay Attention and Plan Ahead

If you think or feel the vehicle may tip or roll, reduce your risk of injury:

- · Keep a firm grip on the steering wheel or handholds and brace yourself.
- Do not put any part of your body outside of the vehicle for any reason.

Require Proper Use of Your Vehicle

Do your part to prevent injuries:

- · Do not allow careless or reckless driving.
- Make sure operators are 16 or older with a valid driver's license.
- · Do not let people drive or ride after using alcohol or drugs.
- Do not allow operation on public roads (unless designated for off-highway vehicle access) — collisions with cars and trucks can occur.
- · Do not exceed seating capacity: 6 Occupants.

Rollovers have caused severe injuries and death, even on flat, open areas.

SCAN CODE FOR PRODUCT AND SAFETY INFORMATION. FOLLOW ALL INSTRUCTIONS AND WARNINGS.

Part number: 7300762 (English), 7300762-F (French-Canadian)

FUEL TRANSPORT WARNING

The Fuel Transport Warning is located in the cargo box.

NEVER carry fuel or other flammable liquids on this vehicle. Failure to follow this instruction could lead to serious burn injuries or death.

Part number: 7186122 (English), 7186122-F (French-Canadian)

COVER WARNING

A WARNING

AVOID SERIOUS INJURY

- Do not operate with belt and/or alternator cover removed or belt exposed.
- · Replace covers before operating vehicle.

Part number: 7300655 (English), 7300655–F (French-Canadian)

AIR FILTER CAUTION

The Air Filter Caution label is located on the air filter housing.

Use a Polaris approved air filter. The use of a non-Polaris approved air filter may cause engine damage. Before installing filter, ensure there is no dirt or debris in the clean side of the intake tube. The air filter must be properly seated before the lid is reinstalled. Please reference your owner's manual for additional information regarding air filter service.

Part Number 7182652 (English), 7182652-F (French Canadian)

SAFETY

MAXIMUM PAYLOAD/ TIRE PRESSURE WARNING

The Maximum Payload/ Tire Pressure Warning label is located in the cargo box area.

• Never carry passengers in cargo area during operation.

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. Loads should be centered and carried as low as possible in box.
- · For stability on rough or hilly terrain, reduce speed and cargo.

RANGER XD 1500	PREMIUM	NORTHSTAR PREMIUM	NORTHSTAR ULTIMATE
MAXIMUM CARGO	1500 lbs.	1500 lbs.	1500 lbs.
BOX LOAD	(680 Kg)	(680 Kg)	(680 Kg)
TIRE PRESSURE IN	FRONT 18 (124)	FRONT 14 (97)	FRONT 14 (97)
PSI (KPa)	REAR 18 (124)	REAR 18 (124)	REAR 18 (124)
MAXIMUM WEIGHT CAPACITY INCLUDES WEIGHT OF OPERATOR, PASSENGER, CARGO, AND ACCESSORIES.	2110 lbs. (957 Kg)	1705 lbs. (773 Kg)	1680 lbs. (762 Kg)

RANGER CREW XD	PREMIUM	NORTHSTAR	NORTHSTAR
1500		PREMIUM	ULTIMATE
MAXIMUM CARGO	1500 lbs.	1500 lbs.	1500 lbs.
BOX LOAD	(680 Kg)	(680 Kg)	(680 Kg)
TIRE PRESSURE IN	FRONT 18 (124)	FRONT 16 (110)	FRONT 16 (110)
PSI (KPa)	REAR 18 (124)	REAR 22 (152)	REAR 22 (152)
MAXIMUM WEIGHT CAPACITY INCLUDES WEIGHT OF OPERATOR, PASSENGER, CARGO, AND ACCESSORIES.	2150 lbs. (975 kg)	1665 lbs. (755 kg)	1640 lbs. (744 kg)

ADDITIONAL PAYLOAD INFORMATION				
PAYLOAD	MAXIMUM SPEED			
500–1500 lbs (227–680 kg) 30 mph (48 kph)				
Over 1500 lbs (680 kg) 10 mph (16 kph)				
Use Tow/Haul function when towing, hauling, or exceeding a payload of 500 lbs. (227 kg)				
Read Operation & Maintenance Manual for more detailed loading information.				

Part number: 7300778 (English), 7300778-F (French Canadian)

TIP OUT WINDSHIELD WARNING (IF EQUIPPED)

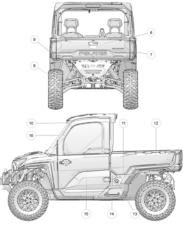
The Tip Out Windshield Warning is located on the front windshield.

With windshield in vented or fully tipped up position, do not drive on rough terrain. Do not exceed 45 mph (72 km/h) for vented position, or 15 mph (24 km/h) for fully tipped up position. Keep windshield closed and latched in all other driving conditions. Failure to do so could cause the windshield system to fail resulting in serious injury or death.

Part Number 7301002 (English), 7301002–F (French Canadian)

FEATURES AND CONTROLS COMPONENT LOCATIONS





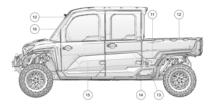
- 1) Console
- Headlights
- ③ Removable Grille
- ④ Charge Port
- (5) Radiator/ Transmission Oil Cooler/ Condenser (if equipped)
- 6 Tailgate
- Brake Light
- (8) Wheel/ Tire

- Receiver Hitch
- 10 ROPS Cab Frame
- (1) Cargo Box Release Lever (if equipped)
- Cargo Box
- ③ Fuel Cap
- 14 Side Step
- (5) Door (if equipped)
- (6) Windshield (if equipped)

COMPONENT LOCATIONS- CREW MODELS



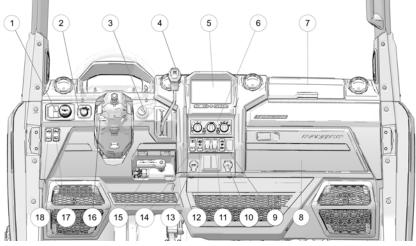




- 1 Console
- Headlights
- ③ Removable Grille
- (4) Charge Port
- (5) Radiator/ Transmission Oil Cooler/ Condenser (if equipped)
- 6 Tailgate
- ⑦ Brake Light
- ⑧ Wheel/ Tire

- Receiver Hitch
- 10 ROPS Cab Frame
- (1) Cargo Box Release Lever (if equipped)
- 12 Cargo Box
- ③ Fuel Cap
- ③ Side Step
- (15 Door (if equipped)
- (6) Windshield (if equipped)

CONSOLE



① Drive Mode/ AWD/ Differential Lock Switches

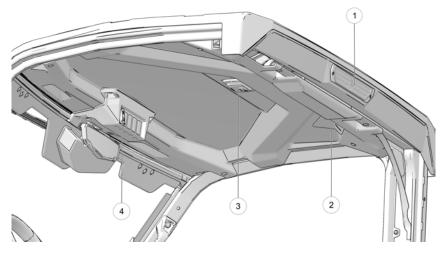
- 2 Headlight Switch
- **③** Ignition Switch
- (4) Shifter
- (5) Ride Command Display (if equipped)
- 6 HVAC Control Panel (if equipped)
- Storage Compartment
- (8) Storage Compartment
- (9) Winch Switch (if equipped)

- 1 Dual USB Outlet
- (1) Window Switches (if equipped)
- Windshield Wiper/ Washer Switch (if equipped)
- 12v Power
- (if equipped) Rear Bed 12v Aux Power Switch

(5) Transmission Neutral Disconnect (under trim cover)

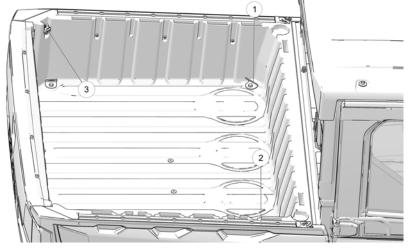
- 16 Steering Wheel Adjustment Lever
- ① Auxiliary Lights (if equipped)
- (18) Cargo Box Tilt Switch (if equipped)

ROOF COMPONENTS



- 1. Rear Work Light (if equipped)
- 2. Roof Power Fuse Access (if equipped)
- 3. Dome Light (if equipped)
- 4. Rear Work Light Switch (if equipped)

CARGO BOX COMPONENTS



- 1. Cargo Box Load Securing Point
- 2. Lock and Ride Rail
- 3. 12v Power Outlet (if equipped)

IGNITION SWITCH



The ignition switch 0 is a four-position, key-operated switch. The key can be removed from the switch when it is in the OFF position.

OFF	The engine is off. Electrical circuits are off.	
ACCESSORY	The engine is off. Powers the gauge and terminal block. Check engine and steering warning indicators will appear on the gauge in this mode, but will turn off when the vehicle is started if no issues are present. The window switches (if equipped) and power cargo box (if equipped) will be powered.	
SYSTEM ON	Electrical circuits and position lights 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.	

STEERING WHEEL

STANDARD STEERING WHEEL (IF EQUIPPED)

On models equipped with a standard steering wheel, the steering wheel can be tilted upward or downward for rider preference. Lift and hold the steering wheel adjustment lever ① while moving the steering wheel upward or downward. Release the lever when the steering wheel is at the desired position.

TELESCOPING STEERING WHEEL (IF EQUIPPED)

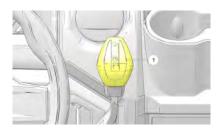
On models equipped with a telescoping steering wheel, the steering wheel can be adjusted by pressing the center adjustment lever (2) downward.

Once released, the steering wheel can be tilted up/down and telescoped in/out freely. When desired position is found, hold the steering wheel in place with one hand and pull the release lever back up with the other. The release lever will bottom against a stop when it is fully locked.

GEAR SELECTOR

To change gears, stop the vehicle, and with the engine idling, move the lever (1) to the desired gear.

- D: Drive
- R: Reverse
- P: Park



Use the Tow/ Haul function when towing, hauling, or exceeding a payload of 500 lb (226 kg). Whenever the vehicle is left unattended, always place the transmission in PARK.

TIP

Maintaining shift linkage adjustment is important to assure proper transmission function. Your authorized POLARIS dealer or other qualified person can assist in resolving any shifting problems.

NOTICE

Only change gears when the vehicle is stationary.

NOTICE

Attempting to shift to Park while the vehicle is moving may result in transmission damage. Only shift the vehicle to Park once the vehicle has come to a complete stop with the brake applied.

SWITCHES

Not all switches are present on every model.

LIGHT SWITCH

The ignition switch key must be in the ON/RUN position to operate the headlights. Rotate the switch clockwise to turn on the desired lights. Rotate the switch counter clockwise to change lights or turn the headlights off.



Position 1	Blackout mode. Headlights will be completely off, Switch Lighting/ Instrument Cluster/ Ride Command display will all dim.	
Position 2	Accent Lights	
Position 3	Low Beam Headlights	
Position 4	High Beam Headlights	

NOTICE

Blackout mode will only be active in minimal light situations.

DRIVE MODE SWITCH

The Drive Switch has four modes: All Wheel Drive (AWD), Rear Differential Lock, Turf (single rear wheel) and Ultra Turf. Press the top of the switch to engage All Wheel Drive (AWD).

NOTICE

The requested drive mode will flash on the Riders Information Center until the drive mode is engaged. When solid, the ride mode change is active.

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



For more information on drive modes, see *All Wheel Drive/ Rear Differential System* in the OPERATION section.

POLARIS TOW/ HAUL MODE SWITCH/ DRIVE MODES

The Polaris Tow/ Haul mode switch has two positions:

- Tow/ Haul
- Off

Always use tow/ haul mode for any of the following conditions:

- Operating in rough terrain or over obstacles
- · Loading the vehicle onto a trailer
- Towing heavy loads
- Snow Plowing
- · Steep Grades
- Winching
- Operating with a payload greater than 500 lb (227 kg).
- Driving frequently at low RPM or at ground speeds below 10 MPH (16 km/h)



NOTICE

Tow/ Haul Mode is the primary drive mode for RANGER XD, and is speed limited to 30 mph (48 kph).

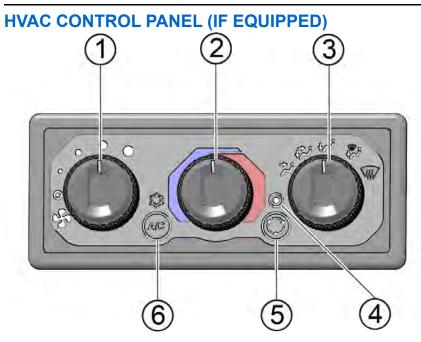
DRIVE MODES

The Tow/ Haul mode switch can also change the drive mode of the vehicle by rotating the switch. The drive mode can be changed at any time while operating the vehicle, but will not engage until correct operating conditions are met. The light next to the tow/ haul switch will flash until the mode is engaged, then turn solid once the mode is engaged.

The current vehicle drive mode will be displayed on the Instrument Cluster Information Center

MODE	DESCRIPTION	USE
Comfort	Allows minimized engine feedback when pressing the throttle pedal.	Low engine speeds (quiet, smooth, gentle inputs) Maneuvering tight spaces, work, light duty Limited engine braking
Standard	Allows slightly less than MAX engine feedback when pressing the throttle pedal.	Medium duty work where a little extra power is necessary. Moderate amount of engine braking
Sport	Allows MAX engine feedback when pressing the throttle pedal.	Recreational/ trail riding
Tow/ Haul	Maximizes available engine torque, speed limited to 30 mph (48 kph)	Extreme utility work, provides the most amount of engine braking available.

The following ride modes can be selected:



To operate the cab heater:

- Rotate the fan control (1) to the desired fan speed setting. The far left setting turns the fan off.
- Adjust the temperature by rotating the temperature control (2) to the desired heat setting. Rotate the control clockwise to increase heat or counter-clockwise to decrease heat.
- Rotate the position switch ③ to select the air delivery mode. These modes let you direct airflow where needed (Panel, Panel/ Floor, Floor, Floor, Defrost, Defrost).
- The recirculation switch (5) can be used to enable the HVAC system to draw air from the vehicle cab instead of outside fresh air. Enabling the recirculation button will help the AC system draw the cab temperature down colder and more quickly. When recirculation mode is active, the recirculation indicator light (4) will be illuminated.
- When the defrost mode is selected, the A/C is automatically engaged to help clear the windshield by decreasing the humidity in the air. The A/C switch (6) can be used to manually disable the A/C.
- Press the A/C switch (6) to enable the air conditioning system for cooling or defrost purposes.

WINDSHIELD WIPER/WASHER SWITCH (IF EQUIPPED)

The windshield wiper/washer switch is located on the vehicle dashboard. The windshield washer fluid reservoir is located under the hood.

Select the desired function by pressing the top or bottom of the switch. The windshield wiper/washer switch has three positions:

- WASHER ON top of switch fully pressed
- WIPER ON middle position
- OFF bottom of switch fully pressed

WINCH CONTROLS (IF EQUIPPED)

NOTE

Vehicles equipped with factory-installed winches have an automatic stop function to prevent overtightening when the winch is fully wound.

WINCH SWITCH (IF EQUIPPED)

Press the bottom of the rocker switch to spool line out from the winch. Press the top of the rocker switch to spool line in to the winch. Move the rocker switch to the center position to stop spooling.

REMOTE WINCH SWITCH (IF EQUIPPED)

To power-on or power-off the switch, press and hold the power button for 3 seconds. Press and hold the button labeled "OUT" to spool line out from the winch. Press and hold the button labeled "IN" to spool line in to the winch. The switch will automatically power-off after 30 seconds of inactivity.







AUXILIARY OUTLET

The vehicle is equipped with a 12V–10A accessory outlet on the dash. Use the outlet to power an auxiliary light or other optional accessories or lights. On CREW models, an additional outlet is located on the rear seat center console.



REAR AUXILIARY POWER OUTLET (IF EQUIPPED)

The vehicle may be equipped with a dedicated outlet for rear auxiliary power, and is located in the cargo box.

NOTICE

This outlet is not for charging the vehicle. For vehicle charging, see the Battery Trickle-Charging Outlet section.

This outlet provides auxiliary power to accessories for use with your vehicle, and can be turned on and off from inside the vehicle.



Any cord plugged into this outlet must be secured before attempting to move the vehicle. Loose cords may become tangled in moving parts resulting in possible vehicle damage and personal injury.

USB OUTLET

The vehicle is equipped with a single USB outlet in the center dash. The outlet consists of two USB terminals.



BATTERY TRICKLE-CHARGING OUTLET

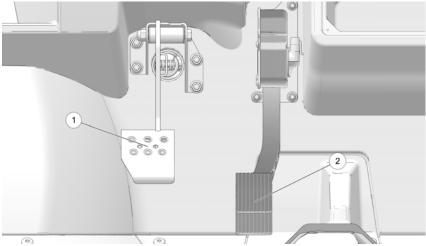
The vehicle is equipped with a dedicated outlet for trickle-charging the battery during periods of extended inactivity.

If you do not drive the vehicle for more than TWO WEEKS, Polaris recommends using a BatteryMINDer® 2012 AGM - 2 AMP charger, which can be ordered through your authorized POLARIS dealer.

Polaris provides a charging accessory with your vehicle that allows easy connection to the battery through the Battery Trickle-Charging Outlet, located on front of the vehicle.



FOOT PEDALS



BRAKE PEDAL

Depress the brake pedal 1 to slow or stop the vehicle. Apply the brakes while starting the engine.

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

- 1. Turn the ignition switch to the ON position.
- 2. Apply the brakes. The brake light should come on after a small amount of pedal travel.

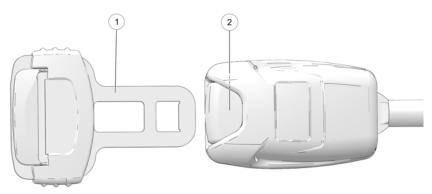
THROTTLE PEDAL

Push the throttle pedal (2) 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.

TIP

If the throttle pedal and brake pedal are applied simultaneously, engine power may be limited.

SEAT SEAT BELTS



This vehicle is equipped with three-point lap and diagonal seat belts for the operator and any passengers. Always make sure the seat belts are secured for all riders before operating. The driver's seat belt is equipped with a seat belt interlock. Vehicle speed will be limited to 15 MPH (24 km/h) if the seat belt is not secured.

NOTICE

The driver's seatbelt must be engaged for vehicle creep to function.

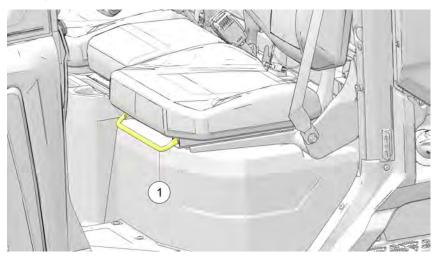
Falling from a moving vehicle could result in serious injury or death. Always fasten your seat belt securely before operating or riding in the vehicle.

To wear the seat belt properly, follow this procedure:

- For 3-point belts, pull the seat belt latch ① downward and across your chest toward the buckle at the inner edge of the seat. The belt should fit snugly across your hips and diagonally across your chest. Make sure the belt is not twisted.
- 2. Push the latch plate ① into the buckle ② until it clicks.
- 3. Release the strap, it will self tighten.
- 4. To release the seat belt, press the square red button in the buckle's center.

SEAT ADJUSTMENT

The drivers seat position is adjustable from front to rear. To adjust, pull up on the adjustment lever ① under the seat. When the desired position is found, release the adjustment lever. Rock the seat forward and backward to ensure the seat is properly locked into place.



SEAT BELT INSPECTION

A WARNING

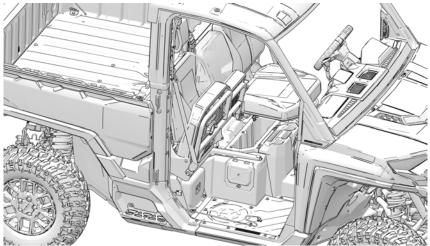
Failure to perform regular inspection can reduce the effectiveness of the seat belt during a crash and could result in serious injury or death.

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

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

SEAT AND STORAGE COMPARTMENTS

The vehicle storage compartment is located under center seat. To access the storage area, lift up on the rear of the center seat. The seat can also be folded rearward from the passenger seat by pulling up on the front of the passenger seat.

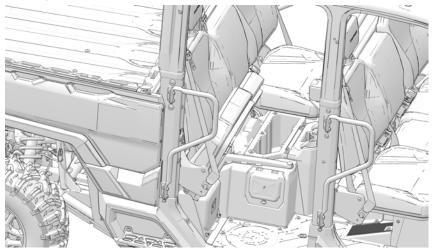


The passenger seat can be folded to allow for floor storage. To fold the front passenger seat, pull up on the front of the seat.

Always make sure all seats are properly installed and secure before operating.

SEAT AND STORAGE COMPARTMENTS, CREW MODELS ONLY

The vehicle storage compartment is located under the center seat. To access the center storage area, lift up on the rear of the center seat. The seat can also be folded rearward from the passenger seat by pulling up on the front of the passenger seat.



The rear passenger seat can be folded to allow for floor storage. To fold the rear passenger seat, pull up on the front of the seat.

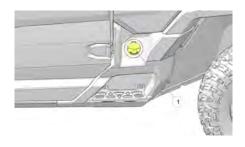
Always make sure all seats are properly installed and secure before operating.

ELECTRONIC POWER STEERING

Electronic power steering (EPS) engages when the ignition key is turned to the ON position. EPS remains engaged whether the vehicle is moving or idle. To conserve battery power, the EPS will shut down 5 minutes after the engine is stopped if the key remains in the ON position. The EPS warning indicator will illuminate to indicate the EPS has shut down. Turn the key off and on to reset the unit. If the light remains on after starting the engine, the EPS system is inoperative. See your authorized POLARIS dealer, or other qualified person, as soon as possible for repair. Continued operation could result in permanent damage to the EPS unit and increased steering effort.

FUEL CAP

The fuel tank filler cap ① is located on the left-hand side of the vehicle near the driver's seat. To close, tighten the fuel cap until it clicks twice. When refueling, always use unleaded gasoline with a minimum pump octane number of 87 octane. Do not use fuel with ethanol content greater than 10 percent, such as E-85 fuel. Compatible fuels: E5 and E10. See *Fuel Recommendations* for more information about fuel types, quality, and seasonality.



Always ensure that the fuel tank filler cap is fully tightened and secure before operating or transporting the vehicle.

NOTICE

Before refueling the vehicle, check the rubber grommet that surrounds the fuel filler ①. If this grommet is cracked, angled, or missing, replace the grommet before refueling.

ROLLOVER PROTECTIVE STRUCTURE (ROPS)

Always have your authorized POLARIS dealer thoroughly inspect the ROPS if it ever becomes damaged in any way.

No device can assure occupant protection in the event of a rollover. Always follow all safe operating practices outlined in this manual to avoid vehicle rollover.

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

HOOD LATCHES

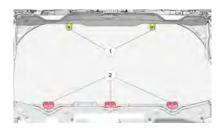
To remove the hood, rotate the hood latches ① 1/4-turn and lift the hood away from the vehicle.



REAR WINDOW PANEL (IF EQUIPPED)

WINDOW REMOVAL

- 1. Rotate the upper window latches ① counter-clockwise to release the locks.
- Tilt the upper edge of the window slightly outward and free the lower window brackets (2) from the frame, then carefully lift the window up and away from the vehicle.
- 3. Secure the upper window latches.
- To prevent damage to the window during storage, store it in an upright position in a secure area. Place the lower frame of the window on wood or another semi-soft surface.



WINDOW INSTALLATION

- 1. Rotate the upper window latches counter-clockwise to release the locks.
- From the rear of the cab, place the lower edge of the window into the window opening, hooking the lower window brackets over the frame of the vehicle inside the cab.
- 3. Align the upper edge of the window to the window opening.
- 4. Secure the upper window latches.

TRAILER HITCH BRACKET

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

To avoid injury and property damage, always heed the warnings and towing capacities.

INSTRUMENT CLUSTER

NOTICE

High water pressure may damage components. Wash the vehicle by hand or with a garden hose using mild soap. Certain products, including insect repellents and chemicals, will damage the speedometer lens and other plastic surfaces. Do not use alcohol to clean the instrument cluster. Do not allow insect sprays to contact the lens. Immediately clean off any gasoline that splashes on the instrument cluster.



- ① Speedometer
- Tachometer
- ③ Indicator Lamps

- (4) Mode Button
- ⑤ Toggle Buttons
- 6 Rider Information Center

SPEEDOMETER

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

TACHOMETER

The tachometer displays engine speed in revolutions per minute (RPM).

MODE BUTTON

Press and hold the MODE button ④ to enter or exit the settings menu. Press and release the MODE button to cycle through Area 1 modes and to select an item.

TOGGLE BUTTONS

Press and release either toggle button (5) to cycle through the options menu or Area 2 modes. Press and hold either toggle button to reset an item. See page 62.

TIP

With the ignition key off, pressing the MODE button or either toggle button will power up the Rider Information Center for 10 seconds to allow viewing of the odometer and the clock.

LAMP	INDICATES	CONDITION
MPH	Vehicle Speed	When standard mode is selected, speed displays in miles per hour.
km/h		When metric mode is selected, speed displays in kilometers per hour.
E	Coolant Temperature	This lamp illuminates to indicate an overheated engine. If the indicator flashes, the overheating condition remains, and the system will automatically reduce engine power.
Ş	Oil Pressure	This indicator illuminates to indicate low engine oil pressure. Immediately turn the engine off. Do not operate the vehicle if this warning appears. Serious engine damage could result. Your authorized POLARIS dealer or qualified person can assist.
\bigcirc	Transmission Warning	This indicator illuminates to indicate a possible transmission condition. If the indicator flashes, the system will automatically reduce engine power. If the indicator remains solid, see your authorized POLARIS dealer or qualified person for assistance.

INDICATOR LAMPS

LAMP	INDICATES	CONDITION
4!	Electric Power Steering (EPS) Warning	This indicator illuminates briefly when the key is turned to the ON position. If the light remains on, the EPS system is inoperative. See your authorized POLARIS dealer, or other qualified person, as soon as possible for repair. Continued operation could result in permanent damage to the EPS unit and increased steering effort.
≣D	High Beam	This lamp illuminates when the headlamp switch is set to high beam.
4	Helmet/Seat Belt	This lamp is a reminder to the operator to ensure all riders are wearing helmets and seat belts before operating. The driver's seat belt is equipped with a seat belt interlock. Vehicle speed will be limited to 15 MPH (24 km/h) if the seat belt is not secured.
Ċ	Check Engine	This indicator appears if an Engine Control Module (ECM) related fault occurs. Do not operate the vehicle if this warning appears. Serious engine damage could result. Your authorized POLARIS dealer or qualified person can assist.
÷÷	Check Battery	This warning usually indicates that the vehicle is operating at an RPM too low to keep the battery charged. It may also occur when the engine is at idle and high electrical load (lights, cooling fan, accessories) is applied. Drive at a higher RPM or recharge the battery to clear the warning.
	Low Fuel	This lamp illuminates when fuel level in the fuel tank is low.
	Chassis Warning	If a fault condition is detected, the light will remain on as long as the condition exists. Retrieve the error codes for diagnosis. This lamp is also known as an Amber Warning Lamp (AWL).

RIDER INFORMATION CENTER

1	AWD Indicator	This indicator shows whether turf mode, 2x4, or AWD.	
2	Fuel Gauge	The segments of the fuel gauge show the level of fuel in the fuel tank. When the last segment clears, a low fuel warning is activated. The outline of the fuel display will flash. Refuel immediately.	
3	Service Indicator	A flashing wrench symbol alerts the operator that the preset service interval has been reached. Your authorized POLARIS dealer, or other qualified person, can provide scheduled maintenance.	
4	Gear Indicator	This indicator displays gear shifter position. D= Drive Gear R = Reverse Gear P = Park = Gear Signal Error (or shifter between gears)	
5	Speed Limitation (if equipped)	This vehicle may be equipped with a maximum speed limitation function. This would be displayed on the screen as "LIM" followed by the speed. "LIM 30" for example.	

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

If the instrument cluster fails to illuminate, a battery over-voltage may have occurred and the instrument cluster may have shut off to protect the electronic speedometer. If this occurs, your authorized POLARIS dealer, or other qualified person, can provide proper diagnosis.

The information center is set to display standard units of measurement and a 12-hour clock at the factory. To change to metric and/or a 24-hour clock hold the mode button and cycle to the clock menu. Use the directional arrows to change the clock settings.



MODE INFORMATION DISPLAYS

The rider information center contains three areas that display mode information.



① Area 1 Modes	Description
Engine Temperature	Temperature of engine coolant
Vehicle Speed	Speed of vehicle
Tachometer	Engine speed (RPM)
② Area 2 Modes	Description
Odometer	The odometer records and displays the distance traveled by the vehicle.
Trip Meters (T1/T2)	A trip meter records the distance traveled by the vehicle if reset before each trip. To reset, see page 63.
Engine Hours	Total hours of engine operation since manufacture
Service Hours	A flashing wrench symbol indicates that the preset service interval has been reached.
Trip Time	Time length of vehicle operation since mode was last reset
③ Area 3 Modes	Description
Clock	The clock displays time in a 12-hour or 24-hour format. To reset, see page 62.

ACCESSING MENUS AND OPTIONS GAUGE SETTINGS MENU

Press and release the MODE button to cycle through the Area 1 modes until the desired default mode displays. See the Mode Information Displays section for details.

Press and hold the MODE button to enter the settings menu.

The OPTIONS screen will display for a few seconds.

- 1. Press and release either toggle button to cycle to the desired option.
- 2. Press MODE to select the option.
- Press either toggle button to cycle to the desired setting.
- 4. Press MODE to save and exit to the settings menu.
- 5. Press and hold the MODE button to exit the settings menu.

BACKLIGHT BRIGHTNESS

The information center backlight can be set to either blue or red.

- 1. Press and hold the MODE button to enter the settings menu.
- 2. Press either toggle button to cycle to the "BL LEVEL" option. Press MODE to select.
- 3. Press "UP" button to increase brightness. Press "DOWN" button to decrease brightness.
- 4. Press MODE to select and exit to the settings menu.

CLOCK

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



HEALEN



- 1. Press and hold the MODE button to enter the settings menu.
- Press either toggle button to cycle to the "CLOCK" option. Press MODE to select.
- Press either toggle button to cycle to the desired setting (12H or 24H). Press MODE to select.
- Press either toggle button to change each segment of the clock. Press MODE to accept a change and advance to the next segment.



DISPLAY UNITS (STANDARD/METRIC)





- 1. Press and hold the MODE button to enter the settings menu.
- 2. Press either toggle button to cycle to the desired "UNITS" option (distance, temperature or volume). Press MODE to select.
- 3. Press either toggle button to cycle to the desired setting.
- 4. Press MODE to save and exit to the settings menu.

TRIP METER

Use a trip meter to track the distance traveled during a specific trip or period of time. Reset the meter to zero before traveling.

- Press either toggle button to cycle to the desired trip meter option (T1 or T2).
- 2. Press and hold either toggle button until the meter resets to zero.



TRIP TIME

Use a trip time meter to track the travel time during a specific trip. Reset the meter to zero before traveling.

- 1. Press either toggle button to cycle to the trip time option (TT).
- 2. Press and hold either toggle button until the meter resets to zero.



ENGINE OIL LIFE (IF EQUIPPED)

NOTICE

If your vehicle is equipped with Ride Command, the engine oil life will be displayed within Ride Command.

The engine oil life percentage is calculated by the engine control module. This percentage indicates the remaining life of the engine oil.

This feature provides a convenient reminder to perform routine maintenance. Refer to the POLARIS Maintenance Schedule for recommended service intervals.

Use the following procedure to reset the engine oil life percentage.

- 1. Press and hold the MODE button to enter the settings menu.
- 2. Press either toggle button to cycle to the "Engine Oil Life" option. Press MODE to select.
- 3. Press and hold the MODE button to reset the existing value and exit.

CLUTCH OVERTEMP

During a clutch overheat condition, the display will show the following screen.



Clutch overtemp can occur by overloading the vehicle in heavy duty applications. To help cool the transmission clutch, release the accelerator for five seconds. The displayed "clutch overtemp" warning will clear automatically.

ENGINE ERROR CODES

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

If the CHECK ENGINE lamp or the EPS lamp illuminates, retrieve the active error codes from the display.

- ① Failure Mode Indicator (FMI)
- Suspect Parameter Number (SPN)
- ③ Code Count



- 1. Press and hold the MODE button to enter the settings menu.
- Press either toggle button to cycle to the "DIAGCODE" option. Press MODE to select.
- 3. More than one diagnostic code may be present. Press the toggle UP button to see if more codes are present. Press MODE to select a code.

NOTICE

If the displayed code is an engine fault code, the CHECK ENGINE lamp will blink. If the displayed code is an EPS fault code, the EPS lamp will blink.

- 4. Record the three (3) numbers displayed.
- 5. Press MODE to exit to the settings menu.

BEFORE YOU RIDE

Before riding with your new display, do the following:

- · Read this and the Ride Command User's Guide in their entirety.
- Familiarize yourself with the features and operations of the Display while the vehicle is stationary.
- Download the Polaris RIDE COMMAND App from the Apple® App Store® or Google Play® store and create your personalized account.
- Check your display to ensure you have the appropriate maps and trails visible for your area. To change or update maps/trails see page 77.
- Check *https://www.polaris.com/en-us/owners-manuals/* for the latest updates to the owner's manual.

NOTICE

Trails change often, and the trail data file is only considered valid for 90 days after the release date. Please keep your trail data up to date. Download the latest trails at http://ridecommand.polaris.com.

NOTICE

Using the display for an extended period of time while the vehicle's engine is off can drain the battery.

DEVICE OPERATING REQUIREMENTS

Phone functionality is dependent on the capabilities of your cell phone.

NOTICE

Some cell phones or operating systems will not work as shown in this manual.

OVERVIEW



- ① Ride Command Buttons
- Driveline Mode
- ③ Widgets
- ④ Settings

- (5) Icon Bar
- 6 Gauge View Mode
- O Speedometer/Tachometer
- (8) Gear Status

BUTTON	DESCRIPTION	FUNCTION
63	Menu Button	Press the Menu button to access the settings. To reboot the display, press and hold for 5 seconds.
	Gauge Screen Button	Press the Gauge Screen button to select from available screens.
-	Map Button	Press the Map button to access the map, manage your rides and waypoints, and to see your friends on the map with Group Ride.
	Phone Button	Press the Phone button to access your Bluetooth® connected phone, including recent calls, contacts, dialer, and messages.
1	Audio Button	Press the Audio button to access the Radio, Weather, USB, and connected Bluetooth® music interface

RIDE COMMAND BUTTONS

BUTTON	DESCRIPTION	FUNCTION
•	Volume Decrease Button	Press the Volume Decrease button to decrease the volume. Press and hold to mute volume.
()	Volume Increase Button	Press the Volume Increase button to increase the volume.

SEAT HEATERS (IF EQUIPPED)

The seat heaters can be accessed through the Ride Command display by pressing the menu icon (1) at the top of the main screen.

3	-	CONTROLS	NOTIFICATIONS
GAUGES	CAMERAS	DISPLAY BRIGHTNESS	AUTO
GAME	MAP	OFF 🔶	AUTO
CAMERA		DRIVER SEAT PASSENGER	
IMPORT/ EXPORT	PHONE		
MUSIC			
		0	C ALL SETTINGS
C			
(

Each seat can be independently controlled by pushing on the applicable seat. Each seat also has 3 intensities, indicated by the 3 bars and indicators on the icon. To change to a lower intensity heat level, press the seat icon.

- 3 Red High
- 2 Red Medium
- 1 Red Low

To turn the seat heater off, press the icon until no red bars or indicators are present.

DRIVELINE MODE			
INDICATOR	DESCRIPTION	FUNCTION	
	2WD	When the switch is on 2X4, the vehicle is in two-wheel drive at all times.	
1	AWD	When in All-Wheel Drive, the demand drive unit will automatically engage any time the rear wheels lose traction. When the rear wheels regain traction, the demand drive unit will automatically disengage. There is no limit to the length of time the vehicle may remain in 4X4. The vehicle automatically engages 4X4 when operating in reverse if the switch is set to 4X4 position.	
	Turf Mode	When operating in TURF mode, the inside rear wheel will rotate independently from the outside wheel during turns. Operate in TURF mode only as needed to protect smooth, level surfaces from tire damage. DO NOT operate in TURF mode when climbing or descending hills, when sidehilling, or when operating on uneven, loose, or slippery terrain such as sand, gravel, ice, snow, obstacles, and water crossings. Always operate in AWD on these types of terrain.	
	Ultra Turf	When operating in Ultra turf mode, the rear wheels will rotate independently (unlocked differential). The front wheels will engage on demand similar to AWD capability. Note — This mode is recommended for use on grass or other delicate terrain where front wheel engagement is still needed.	

GAUGE SCREENS

Press the Gauge Screen button to toggle between gauge screens. The display comes loaded with two different gauge screens. Additional gauge screens can be added or deleted.

Each gauge screen is customizable and can be set up in the following configurations:

- · Four round widgets
- Two round widgets and a list of three data values
- A list of five data values

To customize your gauge screens, press the gear icon located in the lower right corner of the display.

	SCREENS	DATA
325	AMBIENT TEMP	CURRENT RIDE
13.6 · · · · · · · · · · · · · · · · · · ·	COMPASS	ENGINE TEMP
40 THE 60 MW	WATPOINT	A ELEVITION
E #	0	0

SETTINGS

From the setting menu you can view vehicle information, manage Bluetooth® devices, update display software, and more.

To access the Setting menu, press the Menu button ①.

You can also navigate to the settings menu by pressing the POLARIS logo at the top of the display screen (2). This will open the Control Panel. From the Control Panel, select the settings tab, then press the **All Settings** button located in the lower right corner of the display screen.



GAUGE VIEW MODE

Press ① to toggle between the two available gauge view modes, **Analog** and **Digital**.

While in the digital gauge view mode, press ② to invert the MPH and RPM units.



DISPLAY MODE

From the Control tab, select the display mode from the available options.

The display mode can be set to Day, Night, or AUTO mode.

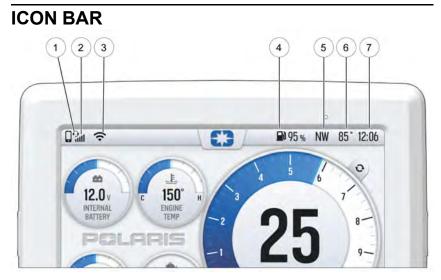
Day Mode



Night Mode



RIDE COMMAND DISPLAY (IF EQUIPPED)



ICON	DESCRIPTION	FUNCTION
1	Headset	Displays icon if headset is connected
2	Signal Strength	Displays current cell signal strength
3	Wireless Internet Signal Strength (if equipped)	Displays current wireless internet signal strength (if equipped)
4	Fuel Level	Displays current fuel capacity percentage
5	Vehicle Direction	Displays vehicle direction
6	Ambient Temperature	Displays ambient temperature
	Clock	Displays current time

UPDATE SOFTWARE

NOTICE

Before updating the Display, always export your existing rides and waypoints to a USB drive to avoid losing them.

To update the software, do the following:

ON YOUR PERSONAL COMPUTER

- 1. Go to ridecommand.polaris.com/update.
- 2. Log into your account, or create a new account.
- 3. Using the Vehicle Identification Number (VIN), add your new Polaris vehicle to your Garage.
- 4. Locate and download the latest software to a USB flash drive (8+ GB).

ON YOUR VEHICLE

- 1. Connect the USB flash drive to the USB plug in the upper glove box and power up your vehicle.
- 2. On the RIDE COMMAND display, select the Settings menu on your display by pressing the POLARIS icon at the top of the screen.
- 3. Select General Settings, then Update Software.
- 4. Select the file you wish to load (use date listed in the file name to determine most recent file).
- 5. Select Yes to restart display (restart required).

ERROR MESSAGES

If an error occurs while updating your software, perform one or all of the following actions to resolve the issue:

- 1. Remove and reconnect the USB flash drive securely.
- 2. Make sure the display files are not inside a folder on the flash drive.
- Make sure only display files are on the flash drive. Remove any other files if necessary.
- 4. Try using a different USB flash drive.

UPDATE MAPS

To update the maps on your display, do the following:

- 1. Go to *ridecommand.polaris.com/update* and download the map update to a USB flash drive.
- 2. Insert USB flash drive into the USB port on your vehicle.
- 3. Press the Update maps in the General Settings.
- 4. Select the file you want to install by pressing the corresponding down arrow icon.
- 5. This will update the display's map which will automatically restart the display once the update is complete. Do not remove the USB flash drive until the display has fully restarted.

USB HARDWARE

SOFTWARE UPDATES

For software update, POLARIS recommends using a SanDisk® or similar USB flash drive with a minimum of 4GB in available memory, formatted using the FAT32 or exFAT® file systems. For best results remove all files from the flash drive before starting the update process.

MAP UPDATES

For Map updates, a 32GB USB drive is required (USB 3.0 drive is highly recommended) USB drive must be formatted to exFAT® before copying the map file onto it.

TRAIL UPDATES

For Trail updates, a 4GB drive formatted to FAT32 can be used.

SPEED LIMITING — RIDE COMMAND — ULTI-MATE MODELS ONLY

The speed limiting function is only available on factory installed Ride Command vehicles.

NOTICE

- Speed limit set points are available from 30–60 MPH (48–96 KPH) in 5 MPH (8 KPH) increments.
- Tow/ Haul mode is limited to 30 MPH (48 KPH).
- · No speed limit set points are available in reverse.

ENABLE SPEED LIMITING

- 1. Access the settings menu by pressing the Menu button.
- 2. Press All Settings.
- 3. Select Vehicle from the left toolbar.
- 4. Select Speed Limit.
- 5. If this your first time activating Speed Limiting, you will be prompted to enter a new passcode. Enter and verify new passcode.

Please record your passcode.

- 6. Turn on the Max Speed Limit.
- 7. Set the Speed Limit by 5 mph increments.

DISABLE SPEED LIMITING

- 1. Access the settings menu by pressing the Menu button.
- 2. Press All Settings.
- 3. Select Vehicle from the left toolbar.
- 4. Select Speed Limit.
- 5. Enter the passcode and press Enter.
- 6. Turn off the Max Speed Limit.

PIN ACTIVATED SECURITY SYSTEM (P.A.S.S.) (IF EQUIPPED) — RIDE COMMAND

The optional PIN Activated Security System (P.A.S.S.) is to prevent unauthorized use. When enabled, the vehicle cannot be operated until a valid passcode has been entered using the Ride Command display screen.

ENABLE P.A.S.S.

NOTICE

After activating P.A.S.S. for the first time you must power down the vehicle and allow the electronic control module (ECM) to fully shutdown before restarting. This may take up to three minutes.

- 1. Go the settings menu by pressing the Menu button.
- 2. Select Vehicle Settings from the left toolbar.
- 3. Select Engine Start Lockout.
- 4. If this your first time activating P.A.S.S. you will be prompted to enter a new passcode. Enter and verify new passcode.

Please record your passcode.

- 5. Turn Engine Start Lockout from No to Yes.
- 6. Turn off the vehicle using the key ignition switch.

NOTICE

If the battery becomes low while the P.A.S.S. system is enabled, the gauge may show "New Vehicle Detected" after the battery has been recharged/replaced. Leave the key in the ON position to allow system reconfirmation.

DISABLE P.A.S.S.

- 1. Go the settings menu by pressing the Menu button.
- 2. Select Vehicle Settings from the left toolbar.
- 3. Select Engine Start Lockout.
- 4. Enter passcode to disable P.A.S.S.
- 5. Turn Engine Start Lockout from Yes to No.

RIDE COMMAND+ (IF EQUIPPED)

Your vehicle may come equipped with RIDE COMMAND+ technology, which gives you access to your vehicle's custom information including Vehicle Health, Vehicle Locator and Issue Diagnostics along with a variety of features via the Polaris mobile app. You will need a cellular connection to view these features.

To learn more about RIDE COMMAND+, including equipped or compatible vehicles, specific features, and to access the RIDE COMMAND+ User Guide, visit ridecommand. polaris.com/ridecommand+ or scan the QR code below:



Disclaimer: RIDE COMMAND+ only available in North America.

OPERATION

VEHICLE BREAK-IN

VEHICLE BREAK-IN PERIOD

The break-in period for your new vehicle is the first 25 hours of operation, or the time it takes to use the first 2 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 will result in more efficient performance and longer life for the engine. Perform the following procedures carefully.

NOTICE

Excessive heat build-up during the first 3 hours of operation will damage close-fitted engine parts and drive components. Do not operate at full throttle or high speeds during the first 3 hours of use.

ENGINE AND DRIVETRAIN BREAK-IN

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

BRAKE BURNISHING

It is recommended that a burnishing procedure be performed on new vehicles or after installation of new brake pads or rotors. This helps to conform the pads to the rotor surface and achieve optimum braking performance.

Test drive the machine and gradually accelerate to more than 20 mph. Apply light to moderate pressure to the brake pedal to slow the vehicle to roughly 5 mph. Repeat this process 10–30 times, allowing 30 seconds between brake applications for the system to cool down.

IMPORTANT

Do not stop aggressively and do not slow to a complete stop during the burnishing process. After brake burnishing is complete, drive the vehicle to cool the brake pads and rotors.

NOTICE

The burnishing process may cause there to be brake dust on the wheels and calipers. This is normal. When the system has cooled, use a rag and soapy water (no harsh chemicals) to clean off the dust.

OPERATING GUIDELINES STARTING THE ENGINE

- 1. Position the vehicle on a level surface outdoors or in a well ventilated area.
- 2. Sit in the driver's seat and fasten the seat belt. Secure the cab doors or nets (if equipped).
- 3. Place the transmission in PARK.
- 4. Apply the brakes. Do not press the throttle pedal while starting the engine.
- 5. Turn the ignition key past the ON/RUN position to START. The vehicle will engage the starter till the engine starts.

If the engine does not start, return the ignition switch to the OFF position. Repeat steps 4 and 5 until 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.

USING TOW/ HAUL MODE

Tow/ Haul mode is the primary driving range for the RANGER. Whenever the vehicle is left unattended, always place the transmission in PARK.

Always engage Tow/ Haul mode for any of the following conditions.

- Payload greater than 500 lbs (226 kg)
- · Operating in rough terrain or over obstacles
- Plowing snow
- · Loading the vehicle onto a trailer
- Towing heavy loads greater than 500 lbs (226 kg)
- Driving slowly under 10 MPH (16 km/h)
- Climbing hills

NOTICE

Payload is defined as any weight added to the vehicle beyond the vehicles curb weight. This includes:

- Passengers
- Cargo
- · Accessories not included in standard vehicle (Winches, light bars, roof)
- · Gear (Protective gear, coolers, accessories)

COLD WEATHER OPERATION

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

FUEL RECOMMENDATION

Polaris recommends using fresh Unleaded 87 Octane TOP TIER DETERGENT GASOLINE® containing up to 10% ethanol purchased during the season of vehicle usage. This fuel will provide the best engine performance (starting, run quality, fuel economy, and power) and durability.

Octane Rating

Polaris recommends a minimum of 87 Octane (R+M/2) rated gasoline. Using lower octane gasoline could result in engine damage.

Ethanol Content

Polaris recommends gasoline containing up to 10% ethanol (E10). Higher levels of ethanol (ex. E15 and E85) may result in engine damage.

Detergent Gasoline

Polaris recommends TOP TIER DETERGENT GASOLINE® to keep the engine cleaner by reducing carbon deposits, which will help maintain engine performance and durability. Refer to *www.toptiergas.com* for a list of TOP TIER DETERGENT GASOLINE® retailers. Alternatively, the logo shown below on the retailer's fuel pump will confirm that TOP TIER DETERGENT GASOLINE® is being dispensed.



If TOP TIER DETERGENT GASOLINE® is not available, adding Polaris Carbon Clean to the fuel tank at every oil change will help reduce carbon deposits.

Seasonal Blends

Polaris recommends using gasoline that is purchased during the season the vehicle is being used, especially summer vs. winter. Between seasons, refineries typically change the gasoline blend to avoid temperature induced engine performance issues. Winter blend gasoline improves engine starting in cold weather and summer blend gasoline helps prevent vapor lock issues in hot weather.

STOPPING THE ENGINE

- 1. Release the throttle pedal completely and brake to a complete stop.
- 2. Place the transmission in PARK.
- 3. Turn the key to the OFF position.
- 4. Slowly release the brake pedal and make sure the transmission is in PARK before exiting the vehicle.

A rolling vehicle can cause serious injury. Always place the transmission in PARK before stopping the engine.

CREEP

With the driver's seat belt engaged and the driver sitting securely in the driver's seat this vehicle will creep in DRIVE and REVERSE. This added creep behavior helps with low speed drivability and makes for a smoother power delivery. At any time if the user is not intending to move the vehicle, the brake shall be applied and vehicle placed back into park. The vehicle should always be placed in park before unbuckling seatbelt or exiting the vehicle.

NOTICE

The vehicle will disengage hill assist (referenced below) if the seat belt is released or if driver's weight is not on the seat, including as you exit the vehicle. When hill assist is disengaged, the vehicle can move freely.

To re-engage the creep function, press the throttle pedal, brake pedal, or shift from Park to Drive.

The riders information center will prompt operator to "shift to park" if creep is engaged and vehicle speed is zero after a small amount of time.

HILL ASSIST

Hill assist allows for easier maneuvering and improved control when stopping and starting on hills. In limited conditions, it may enable the vehicle to hold position when driving over obstacles or on hills. Never rely solely on hill assist to prevent the vehicle from moving on a hill.

NOTICE

Vehicle payload and trailer weight affect the angle of hill on which vehicle may hold.

OPERATION

Vehicle rollaway can cause serious injury or death. Even when stationary, the vehicle may move whenever the gear selector is not in the PARK (P) position or when the brakes are not applied. Always shift to PARK (P) when turning off the engine or leaving the vehicle. Use extra care, when leaving the vehicle on an incline is unavoidable. If leaving the vehicle unattended on a hill, block the rear wheels on the downhill side and keep children, pets and others away from the gear selector.

Hill assist is not designed to hold the vehicle at a standstill on a hill. When stopped on a hill, depress the brake pedal to maintain vehicle control or shift to PARK (P). Failure to do so may result in the vehicle moving.

The vehicle will disengage hill assist if the seat belt is released or if the driver's weight is not on the seat, including as you exit the vehicle. When hill assist is disengaged, the vehicle can move freely.

Hill assist may not prevent the vehicle from moving on a hill under all conditions. Always be prepared to depress the brake pedal to prevent the vehicle from moving.

BRAKING

1. Release the throttle pedal completely.

NOTICE

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

- Stop the vehicle on a level surface. When parking inside a garage or other structure, be sure that the structure is well ventilated and that the vehicle is not close to any source of flame or sparks, including any appliance with pilot lights.
- 2. Place the transmission in PARK.
- 3. Turn the engine off.
- 4. Engage the parking brake (if equipped).
- 5. Slowly release the brake pedal and make sure the transmission is in PARK before exiting the vehicle.
- 6. Remove the ignition key to prevent unauthorized use.

ALL WHEEL DRIVE/REAR DIFFERENTIAL SYSTEM

If your model is equipped with a lockable differential, you can choose to operate with an open differential or a closed differential.

ENGAGING AWD

- 1 All-Wheel Drive (AWD)/ Ultra Turf
- ② Differential Unlock (Turf Mode)



Press the top of the switch ① to engage All Wheel Drive (AWD) or Ultra Turf. The 4X4 indicator illuminates in the rider information center to indicate that the vehicle is in AWD. When the AWD switch is on, the front gearcase will automatically engage any time the rear wheels lose traction. When the rear wheels regain traction, the front gearcase will automatically disengage. There is no limit to the length of time the vehicle may remain in AWD.

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

DISENGAGING AWD

Press the All Wheel Drive (AWD) button to disengage AWD. If the button is pushed while the front hubs are driving, they will not release until the rear wheels regain traction.

In some situations, the front gearcase may remain locked after pushing the top ① button. If this occurs, you may notice increased steering effort and some vehicle speed restriction. Perform the following procedure to unlock the front gearcase.

To disengage AWD, do the following:

- 1. Stop the vehicle.
- 2. Push the All Wheel Drive (AWD) button.
- 3. Shift into Reverse and drive backwards for approx.10 ft (3.3m).
- If the front gearcase remains locked after following these instructions, see your authorized POLARIS dealer or other qualified service person for service.

LOCKING THE REAR DIFFERENTIAL

Press the Differential Lock button (2) to lock the differential and operate in 2WD. Locking the differential in slippery or low traction conditions helps improve traction. When the rear differential is locked, both rear wheels rotate at the same speed.

OPERATION

UNLOCKING THE REAR DIFFERENTIAL (TURF MODE)

When operating in TURF mode, the inside rear wheel will rotate independently from the outside wheel during turns. Operate in TURF mode only as needed to protect smooth, level surfaces from tire damage. DO NOT operate in TURF mode when climbing or descending hills, when sidehilling, or when operating on uneven, loose, or slippery terrain such as sand, gravel, ice, snow, obstacles, and water crossings. Always operate in AWD on these types of terrain.

WARNING

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

NOTICE

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

To unlock the differential, push the unlock button 2.

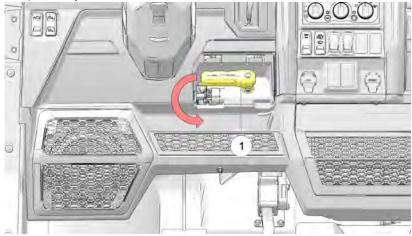
TRANSMISSION NEUTRAL DISCONNECT

NOTICE

Disconnect Transmission to Tow or Pull the Vehicle. Even at low speeds, attempting to tow or pull this vehicle can damage the transmission.

TO AVOID DAMAGE:

- 1. Place vehicle in Park while on flat ground and remove the NEUTRAL cover.
- 2. Rotate the NEUTRAL Disconnect handle ① counterclockwise by 90 degrees and pull until you hear an audible click.



NOTICE

Do not tow a disabled POLARIS RANGER faster than 10 mph (16 km/h)

To reconnect the transmission:

- 1. Ensure the vehicle is in PARK.
- 2. Turn the NEUTRAL Disconnect handle clockwise 90 degrees until it is back in it's original position, then push handle till seated.
- 3. Replace NEUTRAL Disconnect handle cover.
- 4. Cycle the ignition switch to re-engage the transmission.

HAULING CARGO

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

Never exceed the stated load capacity for this vehicle.

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

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

Always load the cargo box with the load as far forward and as low as possible. When operating over rough or hilly terrain, reduce speed and cargo to maintain stable driving conditions.

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

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

OPERATE ONLY WITH STABLE AND SAFELY ARRANGED LOADS. When handling off-centered loads that cannot be centered, securely fasten the load and operate with extra caution.

Always attach the tow load to the hitch point designated for your vehicle. HEAVY LOADS CAN CAUSE BRAKING AND CONTROL PROBLEMS. Use extreme caution when applying brakes with a loaded vehicle. Avoid terrain or situations that may require backing downhill.

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

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

If the vehicle is capable, never exceed 30 MPH (48 km/h) if total payload exceeds 500 lbs. (226 kg).

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

OPERATION

ADDITIONAL PAYLOAD INFORMATION

PAYLOAD	MAXIMUM SPEED	
500–1500 lbs. (227–680 kg)	30 mph (48 kph)	
Over 1500 lbs. (680 kg)	10 mph (16 kph)	

Use Tow/Haul function when towing, hauling, or exceeding a payload of 500 lbs. (227 kg)

NOTICE

The cargo box carrying capacity is 1500 lb (680 kg).

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

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

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

OPERATION

TOWING LOADS

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

Always follow these precautions when towing:

- 1. Never load more than 350 lbs. (159 kg) tongue weight on the towing bracket.
- When towing a disabled vehicle, place the disabled vehicle's transmission in neutral. Do not operate the vehicle faster than 10 MPH (16 km/h) when towing.
- 3. Towing a trailer increases braking distance. Do not operate the vehicle faster than 10 MPH (16 km/h) when towing.
- 4. Do not tow more than the recommended weight for the vehicle.
- 5. Attach a trailer to the trailer hitch bracket only. Do not attach a trailer to any other location, which could result in loss of control of the vehicle.
- 6. The total load (operator, accessories, cargo and weight on hitch) must not exceed the maximum weight capacity of the vehicle.

MODEL	TOTAL TOWED LOAD WEIGHT (LEVEL GROUND)	TOTAL TOWED LOAD WEIGHT (15° GRADE)	TOTAL HITCH VERTICAL WEIGHT	MAXIMUM TOWING SPEED
All <i>RANGER</i> <i>XD</i> 1500 models	3500 lbs. (1588 kg)	1200 lbs. (544 kg)	350 lbs (159 kg)	10 MPH (16 km/h)

DUMPING THE CARGO BOX (NON-ELECTRIC MODELS ONLY)

To dump the cargo box, do the following:

- 1. Select a level site to dump the cargo box. Do not attempt to dump or unload the vehicle while parked on an incline.
- 2. Apply the brakes.
- 3. Shift the gear selector to the Park position.
- 4. Turn the key to the off position.
- 5. Dismount vehicle.
- 6. Open the tailgate.
- 7. Stand clear and pull up on the cargo box release lever.
- 8. Lift the front of the cargo box to dump the cargo.
- 9. Lower the cargo box and push down securely to latch.
- 10. Close the tailgate.

Operating the vehicle while the cargo box is raised could result in severe injury. The box could close unexpectedly and cause injury to the driver or passenger. The rear tires will also catch the rear of a raised box, damaging the vehicle and creating hazardous driving conditions. Never operate this vehicle with the cargo box in the raised position.

DUMPING THE CARGO BOX (ELECTRIC MODELS ONLY)

To dump the cargo box, do the following:

- 1. Select a level site to dump the cargo box. Do not attempt to dump or unload the vehicle while parked on an incline.
- 2. Apply the brakes.
- 3. Shift the gear selector to the Park position.
- 4. Open the tailgate.
- 5. Stand clear of the cargo box.

6. Press the raise button on the cargo box switch.

Ensure the area between the cargo box and the vehicle frame is clear before lowering the cargo box. Serious injury may occur.

- Press the lower button on the cargo box switch to lower the box back to it's original position.
- 8. Close the tailgate.

WARNING

Operating the vehicle while the cargo box is raised could result in severe injury. The box could close unexpectedly and cause injury to the driver or passenger. The rear tires will also catch the rear of a raised box, damaging the vehicle and creating hazardous driving conditions. Never operate this vehicle with the cargo box in the raised position.

EMISSION CONTROL SYSTEMS

NOISE EMISSION CONTROL SYSTEM

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

OPERATION ON PUBLIC LANDS IN THE U.S.A.

Your vehicle has a spark arrester that was tested and qualified to be in accordance with the USFS standard 5100-1D. 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 *https://ecfr.federalregister.* gov/current/title-43/subtitle-B/chapter-I/part-420.

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 inside of the lower left frame tube (below driver's foot area).

ELECTROMAGNETIC INTERFERENCE

This vehicle complies with the EMC requirements of UN ECE Regulation 10.

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 OVERVIEW

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 law 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 law.

Owners are responsible for performing the scheduled maintenance identified in this owner's manual. Careful periodic maintenance will help keep your vehicle in safe, reliable condition. 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 191. 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. Maintenance intervals in the following chart are based upon average riding conditions and an average vehicle speed of approximately 10 miles per hour. Vehicles subjected to severe use must be inspected and serviced more frequently.

POLARIS MAINTENANCE SCHEDULE

The intervals shown are based on vehicles operated under normal conditions.

Each interval is given in hours and miles (kilometers). Items should be serviced at whichever interval comes first.

Continue to reference the following maintenance schedules at the given intervals as hours and miles (kilometers) increase on the vehicle.

Vehicles subjected to severe use must be serviced at 50% of the stated interval. Examples of Severe Use: Frequent immersion in mud, water, or sand, constant high RPM use, prolonged low-speed heavy load operation, extended idle, and short trip cold weather operation.

Air Filter	Inspect; replace as needed. Ensure proper installation of filter and airbox cover. Inspect ducts and screens; clean as necessary. Reset Air Filter Indicator if air filter is replaced.	
Alternator Belt	Inspect; replace as needed.	
Battery	Check terminals; terminals should be tight and free of corrosion. Clean, test, and replace as necessary.	
Brake System	Inspect for fluid leaks. Inspect brake pad wear; replace as needed.	
Cooling System	Inspect for cracks / leaks; replace parts as needed.	
Engine Oil and Filter	Change the engine oil and filter.	
Front/ Rear Gearcase Fluid	Change fluid.	
Fuel System*	Cycle key to pressurize fuel pump; check for leaks at fuel system connections, check for leaks at fill cap. Replace parts as needed.	
Induction System	Inspect for cracks or leaks; replace as needed	
HVAC Cabin Filters / Evaporator	Inspect; replace as needed. Clean evaporator if excessively dirty.	
General Lubrication	Locate all applicable fittings and grease. Inspect, clean, and lubricate door latches and check arms.	

EVERY 12 MONTHS/ 200 HOURS/ 2000 MILES (3200 KM)

EVERY 12 MONTHS/ 200 HOURS/ 2000 MILES (3200 KM)

Shocks	Inspect for leaks or damage; replace as needed	
Spark Plugs	Inspect; replace as needed.	
Steering Components	Inspect; replace as needed.	
Suspension Components / Alignment*	Inspect front and rear suspension bushings, and ball joints for loose or worn components; replace as needed. Adjust suspension where applicable.	
Wheel Bearings	Inspect; replace as needed.	
Wiring Harness / Connections	Inspect for wear, routing, and retention; adjust; clean as needed.	
* Have an authorized Polaris dealer or other qualified person perform these services.		

MAINTENANCE

Vehicles subjected to severe use must be serviced at 50% of the stated interval. Examples of Severe Use: Frequent immersion in mud, water, or sand, constant high RPM use, prolonged low-speed heavy load operation, extended idle, and short trip cold weather operation.

Every 4000 miles (6400 km) / 400 Hours / 24	Spark Arrester	Remove tailpipe to inspect spark arrester; clean as needed; replaced if damaged.	
Months	Exhaust System	Inspect for cracks/ leaks; replace parts as needed.	
	Alternator Belt*	Replace.	
Every 6000 miles (9650	Valve Clearance*	Inspect; adjust as needed.	
km) / 600 Hours	Transmission Oil and Filter*	Change the transmission oil and filter.	
Every 24 months / 2years	Brake Fluid	Change fluid.	
Every 60 months / 5 years	Coolant	Change fluid.	
* Have an authorized Polaris dealer or other qualified person perform these services.			

ADDITIONAL MAINTENANCE INTERVALS

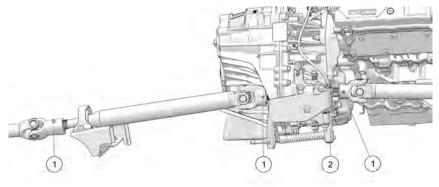
LUBRICATION RECOMMENDATIONS

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

ITEM	LUBE	METHOD
Engine Oil	PS-4 5W-50 4-Cycle Oil	Add to proper level on dipstick. See page 107.
Brake Fluid	DOT 4 Brake Fluid	Maintain level between fill lines. See page 134.
Transmission Oil	VT3 Transmission Oil	See page 113.
Demand Drive Fluid (Front Gearcase)	Demand Drive Fluid	See page 116.
Prop Shaft/ Shift Linkage	U-Joint Grease	4 fittings — See page 104.
Rear Drive Fluid (Rear Gearcase)	Angle Drive Fluid Synthetic 80W140	See page 118.

LUBRICATION — DRIVESHAFT AND SHIFTER

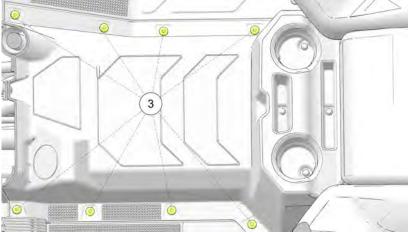
There are 3 grease zerks located on the driveshafts (1), and one on the transmission shifter (2). Before greasing, make sure to clean each zerk to avoid dirt contamination.



FRONT DRIVESHAFT

To reach the front driveshaft grease zerk ①:

1. Remove the 11 fasteners ③ and driveshaft tunnel. Two additional fasteners are located under the middle seat, and one fastener in the front.



- 2. Spin the driveshaft till the grease zerk is exposed.
- 3. Clean the grease zerk. Add 2 squeezes of grease.

MIDSHAFT

To reach the midshaft grease zerk ①:

- 1. Remove the mid vehicle skid plate.
- 2. Spin the driveshaft till grease zerk is exposed.
- 3. Clean the grease zerk. Add 2 squeezes of grease

REAR DRIVESHAFT

To reach the rear driveshaft grease zerk ①:

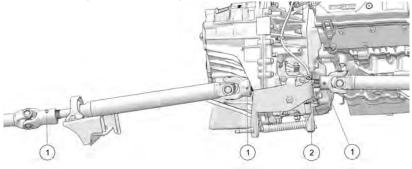
- 1. Find the rear driveshaft grease zerk through the drivers side rear wheel well.
- 2. Spin the driveshaft till grease zerk is exposed.
- 3. Clean the grease zerk. Add 2 squeezes of grease

MAINTENANCE

SHIFTER LINKAGE

To reach the shifter grease zerk 2:

1. Find the shifter grease zerk through the drivers side rear wheel well.



2. Clean the grease zerk. Add 2 squeezes of grease

ENGINE OIL

Always check and change the oil at the intervals outlined in the POLARIS Maintenance Schedule. Always use the recommended engine oil. Always change the oil filter whenever changing oil.

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 authorized POLARIS dealer can assist.

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

OIL RECOMMENDATIONS

POLARIS recommends the use of POLARIS PS-4 5W-50 4-Cycle Oil or a similar oil. Refer to the Specifications section for capacities.

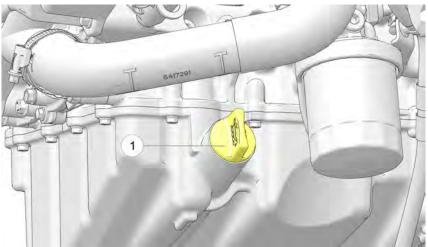
Oil may need to be changed more frequently if POLARIS PS-4 engine oil is not used. Follow the manufacturer's recommendations for ambient temperature operation. See the Polaris Products section for part numbers.

NOTICE

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

MAINTENANCE

OIL CHECK



The oil dipstick/ oil fill is located on the right side engine. Access the dipstick from under the box or through the passenger wheel well.

To check the oil, do the following:

- 1. Position vehicle on a level surface and place the transmission in PARK.
- 2. Stop the engine and allow it to cool down before removing the dipstick. Remove the key from ignition.
- 3. Raise the cargo box. Turn the dipstick counter clockwise. Remove the dipstick and wipe it dry with a clean cloth.
- 4. Reinstall the dipstick and turn it clockwise until snug.

NOTICE

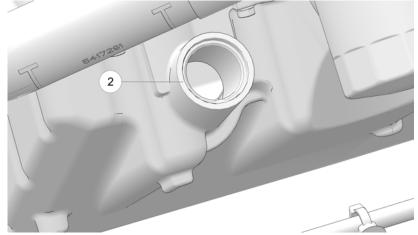
Make certain the dipstick is threaded all the way into the dipstick tube to keep the depth of the dipstick consistent.

- 5. Remove the dipstick and check the oil level.
- 6. Add the recommended oil as necessary to bring the oil level within the SAFE range on dipstick using a funnel. Do not overfill (see *NOTICE* below).

NOTICE

A rising oil level between checks during cold weather operation can indicate contaminants such as gas or moisture collecting in the crankcase. If the oil level is over the upper mark, change the oil immediately.

7. With the cargo box raised, add engine oil through dipstick hole 2.



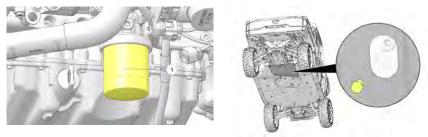
8. When finished, reinstall dipstick. Lower the cargo box and secure in position.

ENGINE OIL AND FILTER REPLACEMENT

Always change engine oil and filter at the intervals outlined in the POLARIS Maintenance Schedule. Always change the oil filter① whenever changing the engine oil.

The engine oil dipstick/ oil fill is located on the right side of the engine. Access the oil dipstick and oil fill by either tilting the cargo box or removing the passenger inner wheel well shield.

The crankcase drain plug is located on the bottom of the crankcase. Access the drain plug through the skid plate access hole located directly under the crankcase.



- 1. Position vehicle on a level surface and place the transmission in PARK.
- 2. Stop the engine and allow it to cool down. Remove the key from the ignition.
- 3. Clean the area around the crankcase drain plug.

Use caution when performing this procedure. Do not allow hot engine oil to come into contact with skin, as serious burns may result.

- 4. Place a drain pan under the engine crankcase and remove the drain plug. Allow the oil to drain completely.
- 5. Remove all cargo from the cargo box.

Always remove all cargo from the cargo box before lifting the box to access the engine.

- 6. Raise the cargo box to its maximum raised position
- 7. Using the Oil Filter Wrench, turn the oil filter ① counter-clockwise to remove it.

- 8. Using a clean dry cloth, clean the filter sealing surface on the engine crankcase.
- 9. Lubricate the O-ring on the new oil filter with a film of fresh engine oil. Check to make sure the O-ring is in good condition. Install it to specification.

TORQUE

Oil Filter Turn by hand until filter O-ring contacts sealing surface, then turn an additional 3/4 turn.

10. Reinstall the engine crankcase drain plug. Torque drain plug to specification.

TORQUE

Crankcase Drain Plug 16 ft-lbs (22 N·m)

NOTICE

The sealing surface on the drain plug should be clean and free of burrs, nicks or scratches.

- 11. Remove the oil dipstick. Fill engine with recommended engine oil.
- 12. Verify the transmission is still in PARK.
- 13. Start the engine and allow it to idle for 30 seconds.
- 14. Stop the engine and inspect for oil leaks. Wait at least 15 seconds before removing the dipstick.
- 15. Rotate the dipstick in a counter clockwise direction and wipe it dry with a clean cloth.
- 16. Reinstall the dipstick in a clockwise direction till snug.

NOTICE

Make certain the dipstick is threaded all the way into the dipstick tube to keep the depth of the dipstick consistent.

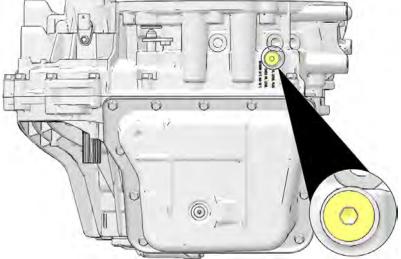
- 17. Remove the dipstick and check the oil level.
- 18. Add the recommended oil as necessary to bring the oil level within the SAFE range on dipstick. Do not overfill.
- 19. Reinstall the dipstick in a clockwise direction till snug.

- 20. Dispose of used oil and filter properly.
- 21. Reset the oil life monitor. See the Rider Information Center section.

TRANSMISSION FLUID LEVEL CHECK

LEVEL INSPECTION

- 1. In a well ventilated area, start the engine and allow the unit to idle for a minimum of ten seconds.
- 2. With the engine still running, shift the gear lever into each position (P-R-D) for a minimum of five seconds before changing gears.
- 3. Move the gear level into the "D" position.
- 4. Release the foot brake and drive the unit to reach an engine speed no higher than 2500 rpms.
- 5. Drive the unit around for approximately five minutes or until the transmission reaches 140° F (60° C).
- 6. Park the unit on flat ground.
- 7. While still idling and stationary, shift the unit into the "R" position and hold for ten seconds.
- 8. Shift the unit into the "P" position and leave idling.
- 9. With the engine still running, remove the oil level inspection plug and allow the oil to drain in a suitable container.



10. A minimum of **0.2 liters** of oil should flow out of the inspection plug. See table for next step based off amount fluid collected from step 9.

FLUID AMOUNT COLLECTED	ACTION	
Less than 0.2 liters	Add approximately 0.5 liters of fluid to transmission and repeat steps 1–10.	
Equal or greater than 0.2 liters	Proceed to step 11.	

- 11. Shut the engine off.
- 12. Reinstall oil level plug with new sealing ring.

TORQUE

Transmission Oil Level Plug:15 ft-lbs (21 N·m)

GEARCASES

GEARCASE SPECIFICATION CHART

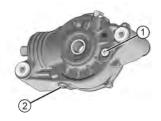
GEARCASE	LUBRICANT	CAPACITY	FILL PLUG TORQUE	DRAIN PLUG/ LEVEL CHECK PLUG TORQUE	
Demand Drive Unit (Front Gearcase)	Demand Drive Fluid	10.1-11.8 oz. (300-350ml)*	8-10 ft. lbs. (11-13.6 Nm)	11 ft. lbs. (15 Nm)	
Rear Gearcase	Angle Drive Fluid Synthetic 80W140	20.3 oz. (600 ml)*	10-14 ft. lbs. (13.6-19 Nm)	10-14 ft. lbs. (13.6-19 Nm)	
*If your vehicle is equipped with high mounted intakes: 9.3 oz. (275 ml)					

DEMAND DRIVE (FRONT GEARCASE) DEMAND DRIVE OIL CHECK

Always check and change the demand drive fluid at the intervals outlined in the POLARIS Maintenance Schedule. Maintain the oil level even with the bottom thread of the fill plug hole. Refer to the Gearcase Specifications Chart for recommended lubricants, capacities and torque specifications.

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

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



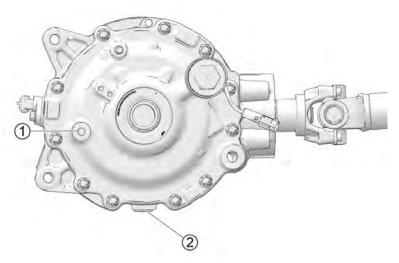
DEMAND DRIVE OIL CHANGE

- 1. Support the vehicle securely with a jackstand.
- 2. Remove the front tire on the passenger's side for ease of access (optional).
- 3. Remove the fill plug.
- 4. Place a drain pan under the drain plug (1) on the bottom right-hand side.
- 5. Remove the drain plug. Drain the oil.
- 6. Clean and reinstall the drain plug. Torque to specification.
- 7. Add the recommended fluid to the bottom of the fill plug hole. Do not overfill.
- 8. Reinstall the fill plug. Torque to specification.
- 9. Check for leaks.
- 10. Discard used oil properly.

REAR GEARCASE

Always check and change the rear gearcase oil at the intervals outlined in the POLARIS Maintenance Schedule beginning on page 100. Maintain the oil level even with the bottom thread of the fill plug hole.

Refer to the Gearcase Specifications Chart for recommended lubricants, capacities and torque specifications. See page 115 for the part numbers of POLARIS products.



OIL CHECK

The rear gearcase fill plug 1 is located on the right side of the rear gearcase.

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

OIL CHANGE

- 1. Support the vehicle securely with a jackstand.
- 2. Remove the rear tire on the passenger side (optional).
- 3. Remove the fill plug.
- 4. Place a drain pan under the drain plug (2) on the bottom right-hand side.
- 5. Remove the drain plug. Drain the oil.
- 6. Clean and reinstall the drain plug. Torque to specification.
- 7. Add the recommended fluid to the bottom of the fill plug hole. Do not overfill.
- 8. Reinstall the fill plug. Torque to specification.
- 9. Check for leaks.
- 10. Discard used oil properly.

SPARK PLUGS

SPARK PLUG RECOMMENDATIONS

Refer to the Specifications section for the recommended spark plug type for your vehicle. Always torque spark plugs to specification.

NOTICE

Using non-recommended spark plugs can result in serious engine damage. Always use POLARIS-recommended spark plugs or their equivalent.

SPARK PLUG GAP/TORQUE

ELECTRODE GAP	NEW OR USED PLUG TORQUE
0.9–1.0 mm	8.6 ft-lbs (12 N⋅m)

SPARK PLUG INSPECTION

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.

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

To inspect the spark plugs, do the following:

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

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.

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

WET FOULED PLUG

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

COOLING SYSTEM

The engine coolant level is controlled or maintained by the recovery system. The recovery system components are the expansion tank, pressure cap, and connecting hose.

As coolant operating temperature increases, the coolant expands which builds pressure in the system. The coolant level in the bottle may rise. As coolant temperature decreases, the coolant contracts and relieves the pressure in the system.

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

ADDING OR CHANGING COOLANT

POLARIS recommends the use of POLARIS Antifreeze 50/50 Premix. This antifreeze is already premixed and ready to use. Do not dilute with water.

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

Any time the cooling system has been drained for maintenance or repair, replace the coolant with fresh Antifreeze 50/50 Premix. If the recovery bottle has run dry, the level in the radiator should be inspected. Add coolant as needed.

RADIATOR AND COOLING FAN

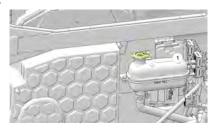
Always check and clean the screen and radiator fins at the intervals outlined in the POLARIS Maintenance Schedule. Do not obstruct or deflect air flow through the radiator by installing unauthorized accessories in front of the radiator or behind the cooling fan. Interference with the radiator air flow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

NOTICE

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

ENGINE COOLANT LEVEL

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



- 1. Lift the cargo box.
- 2. View the coolant level through the side of the expansion tank.
- 3. If coolant level is low, slowly remove the radiator cap ①.

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

4. Use a funnel and slowly add coolant as needed.

TIP

This procedure is required only if the cooling system has been drained for maintenance and/or repair. If the reservoir bottle has run dry, the complete cooling system must also be inspected.

 Reinstall the pressure cap. Use of a non-standard pressure cap will not allow the recovery system to function properly. Your authorized POLARIS dealer can provide the correct replacement part.

RADIATOR/ COOLER/ CONDENSER CLEANING

Always check and clean the screen and radiator/ oil cooler/ condenser fins at the intervals outlined in the POLARIS Maintenance Chart. Do not obstruct or deflect air flow through the radiators by installing unauthorized accessories in front of the radiators or behind the cooling fan. Interference with the radiator air flow can lead to overheating and consequent engine damage.

NOTICE

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

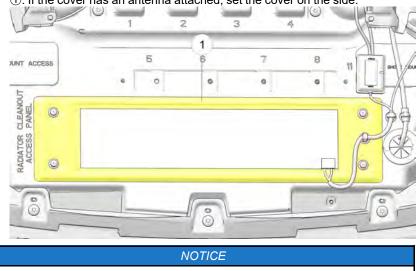
Dirt and mud in the radiators reduces the effectivity of the vehicles coolers. If the vehicle has dirt, mud, or debris in the coolers, follow the steps below to help clean them.

1. Let the vehicle cool for a sufficient amount of time.

The vehicles coolers operate at high temperatures that may cause burns or injury if contacted. Use caution around high temperature components.

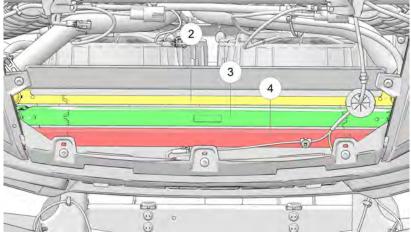
- 2. Turn the key to the OFF position. Remove the key from the ignition.
- 3. Remove the front grille of the vehicle by pushing down on the two grille tabs and pull the top of the grille toward the front of the vehicle. See *Condenser Access* section below for additional information on front grille removal.
- 4. Thoroughly soak the coolers with low pressure water. Do not use a pressure washer.

5. Remove the four pushlock fasteners, and remove the radiator cleanout cover ①. If the cover has an antenna attached, set the cover on the side.



Do not pinch or kink the antenna cable.

6. Insert a thin air or water wand with a 90 degree flow capability between the radiator (2) and transmission cooler (3). Blow air or water towards the rear of the vehicle to clean out the radiator. Blow air or water forwards to clean out the transmission cooler.



NOTICE

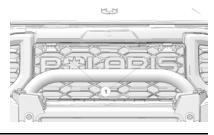
Do not wedge or force the wand between the coolers. Damage to the coolers may result. If dirt/mud/debris inhibits a smooth insertion of the wand, additional water and soaking may be needed.

- Insert the same 90 degree wand between the transmission cooler 3 and the condenser 4 (if equipped). Blow air/ water towards the front of the vehicle to clean the condenser.
- Using a low pressure water source, clean off the lower debris shroud of dirt/ mud/ debris.
- 9. This procedure can be repeated until the coolers are free of dirt/mud/debris.

CONDENSER ACCESS

To access the condenser, do the following:

- Remove the front grille of the vehicle by pushing down on the two grille tabs ① and pull the top of the grille toward the front of the vehicle.
- 2. When cleaning is complete, reinstall the front grille and ensure it is snapped into place.



AIR CONDITIONING

Only licensed and certified professionals are allowed to check and maintain AC refrigerant levels. Your authorized POLARIS dealer or qualified professionals can assist.

HVAC FRESH AIR INTAKE FILTER CLEANING

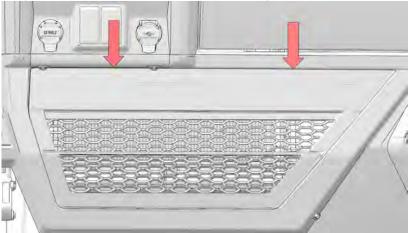
The HVAC Fresh Air Intake filter is located below the hood.

- 1. Loosen the worm gear clamp that secures the filter. Remove the filter from the vehicle.
- 2. Clean the filter with low air pressure. Check for damage, replace if damaged or excessively dirty.

HVAC RECIRCULATION FILTER CLEANING

The HVAC Recirculation filter is located beneath the dash in the HVAC airbox.

1. Using an interior trim tool, remove the HVAC filter trim. Start from the top (3 tabs) then remove the two below it on the outer edges.



- 2. When the top and side tabs have all released from the console, pull up on the trim panel to remove.
- 3. Remove the recirculation filter from the housing.
- 4. Clean the filter with low pressure air. Check for damage, replace if damaged or excessively dirty.

HVAC EVAPORATOR CLEANING

The HVAC Evaporator is located beneath the dash in the HVAC airbox.

- 1. Using a interior trim tool, remove the HVAC filter trim. Start from the top (3 tabs) then remove the two below it on the outer edges. Pull the trim panel up to disengage the two lower locating tabs from the console panel.
- 2. Remove the recirculation filter from the housing.
- 3. Inspect the evaporator. If it is excessively dirty, clean the evaporator with low pressure water or air.
- 4. Inspect the condensate drain. The condensate drain must be clear of all debris to ensure proper system function.

NOTICE

If the condensate drain is not clear, remove debris from the airbox and flush with water until clear. If the drain does not clear, see your authorized POLARIS dealer.

VEHICLE IMMERSION

NOTICE

Never operate the vehicle in fast-flowing water or in water that exceeds the floorboard level of the vehicle.

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 authorized POLARIS dealer can provide this service.

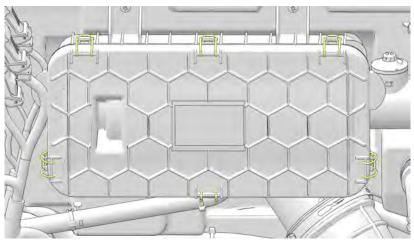
If it's impossible to take your RANGER to a authorized POLARIS dealer before starting it, follow the steps outlined below:

- 1. Move the vehicle to dry land or at the very least, to water below the floorboard.
- Dry any water present in the air box. Filter replacement is required if water is present.
- 3. Remove the fuse center covers. If water is present, dry the fuse center completely before attempting to start the vehicle.
- 4. Remove the spark plugs. Turn the engine over several times using the electric start.
- 5. Dry the spark plugs and reinstall, or replace with new plugs.
- 6. Attempt to start the engine. If necessary, repeat the drying procedure.
- Take the vehicle in for service as soon as possible, whether you succeed in starting it or not. Your authorized POLARIS dealer can provide the required service.

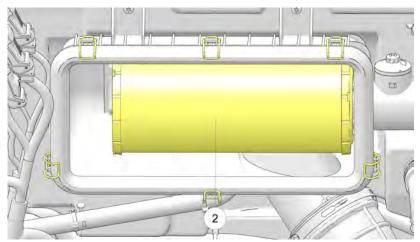
FILTER SYSTEMS AIR FILTER REPLACEMENT

Inspect the air filter at the intervals outlined in the POLARIS Maintenance Schedule. In extremely dusty conditions, air filter replacement will be required more often. The Air Filter Service Indicator ③ (if equipped) will give you a general condition of your air filter.

- 1. Tilt the rear cargo box to access the airbox.
- 2. Release the six airbox cover latches and remove the cover to access the air filter element.



3. Remove the air filter element 2.



4. Inspect the airbox for oil or water deposits. Wipe away any deposits with a clean shop towel.

NOTICE

If the filter has been soaked with fuel or oil it must be replaced. DO NOT attempt to clean the air filter.

5. Place the air filter into the airbox. Reposition the airbox cover and install the six retaining latches.

NOTICE

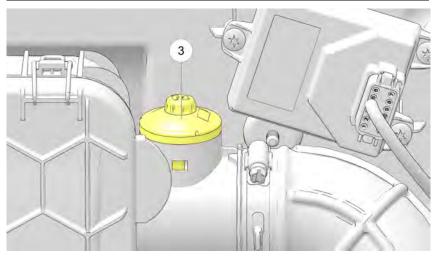
Make sure the airbox cover is properly seated when reassembling the airbox.

AIR FILTER SERVICE INDICATOR (IF EQUIPPED)

The air filter service indicator is located next to the vehicles airbox in the intake tube. The indicator displays a visual representation of the air filter condition. Three colors will be shown:

- Red Service Now
- Yellow Service Soon
- Green Filter is Good

MAINTENANCE



To reset the indicator, turn the top of the indicator back to green.

NOTICE

Always check your air filter at recommended service intervals.

SPARK ARRESTER

- · Never operate the vehicle without the spark arrester.
- Remove any combustible materials from the area.

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

- Never run the engine in an enclosed area. Exhaust contains poisonous carbon monoxide gas that can cause loss of consciousness or death in a very short time.
- Do NOT perform service on the spark arrester while the system is HOT. Exhaust system temperatures can reach extreme temperatures. Allow components to cool sufficiently before proceeding.
- Do not stand behind or in front of the vehicle while purging the exhaust system.
- Never go under the vehicle while it is inclined.
- · Wear eye protection and gloves while servicing.

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

- 1. Turn off engine and allow exhaust to cool sufficiently.
- 2. Remove the spark arrester from the tailpipe of the muffler.
- 3. Remove any debris from spark arrester and the tailpipe.
- 4. Inspect spark arrester for holes in mesh screen. Replace as needed.
- 5. Replace spark arrester and torque bolt to specification.

TORQUE

Spark Arrester Bolt 7.4 ft-lbs (10 N·m)

BRAKES

The front and rear brakes are power assisted hydraulic disc type brakes. The engine must be running to activate the power assist. Press down on the brake pedal to engage the brakes.

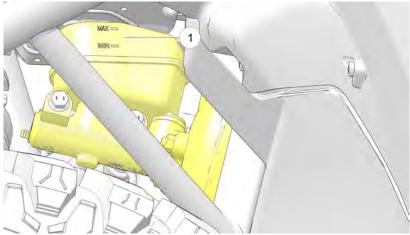
BRAKE FLUID

Inspect the brake system routinely. Inspect the level of the brake fluid before each operation.



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.

- 1. Position the vehicle on a level surface and turn off the engine.
- 2. View the brake fluid level ① at the reservoir in the front driver's side wheel well. The level should be between the upper (MAX) and lower (MIN) level lines.



- 3. If the fluid level is lower than the minimum (MIN) level line, remove the master cylinder cap and add brake fluid to the upper (MAX) line.
- 4. Apply the brake forcefully for a few seconds and check for fluid leakage around the fittings.

MAINTENANCE

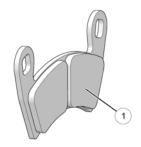
BRAKE INSPECTION

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

Brake components get hot with prolonged use and can cause burns. Wear protective gloves when inspecting the brakes.

The stiffness of the brake pedal will be different with the engine running and the engine off.

- 1. Check the brake system for fluid leaks.
- 2. Check the brake pedal for excessive travel or a spongy feel.
- 3. Check the friction pads for wear, damage and looseness.
- Check brake discs for signs of cracks, excessive corrosion, warping or other damage. Clean any grease using an approved brake cleaner or alcohol.
- Check for any leaks on the vacuum hose assembly to the brake booster and around the brake booster assembly.
- Inspect the brake disc and pad wear surface ① for excessive wear. Change pads when worn to 0.030" (0.762 mm), or the thickness of a credit card.



STEERING WHEEL INSPECTION

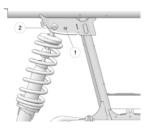
Check the steering wheel for specified freeplay and smooth operation at the intervals outlined in the POLARIS Maintenance Schedule section.

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

SUSPENSION ADJUSTMENT

The front and rear shock positions can be adjusted to provide stiffer suspension and higher ride height.

- 1. Lift the vehicle so that no weight is on the suspension system.
- 2. Remove the lower shock mounting bolts.
- 3. Remove the top shock mounting bolt from the inside mounting position ①.
- 4. Reposition the shocks to the outside mounting hole (2).
- Reinstall the shock mounting bolt. Torque to 120 ft-lbs (163 N⋅m).



CAM ADJUSTMENT

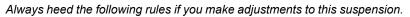
Adjust the front and rear shock absorber springs by rotating the adjustment cam either clockwise or counter-clockwise to increase or decrease spring tension.

NOTICE

The vehicle must be raised to make this adjustment. Make sure there is not any vehicle weight on the shock when making adjustments. The adjustment tab must be in the valley of the cam adjuster or the cam adjuster may move from it's intended adjustment position.

(2)

- 1 Softest adjustment setting
- Stiffest adjustment setting



1

- Always return the suspension to the lowest (softest) setting after the load is removed from the vehicle. The increased suspension height will negatively impact vehicle stability when operating without a load.
- Always apply the same adjustment setting to both the left and right side of the machine. The front and rear of the machine do not need to be equal.
- When plowing, set the front suspension to the stiffest setting. When carrying heavy loads in the cargo box, set the rear suspension to the stiffest setting.

NOTICE

After adjustment, ensure the tabs are aligned to one of the five detents in the cam adjuster. Tab alignment on one of the angled surfaces is incorrect and may canus damage to the shock or cam adjuster.

TIRES

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 in (3 mm) or less. Improper tire inflation or the use of non-standard size or type of tires may adversely affect vehicle handling, which could result in vehicle damage or personal injury. Always maintain proper tire pressure. Always use POLARIS approved size and type of tires for this vehicle when replacing tires.

TIRE TREAD DEPTH

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

AXLE AND WHEEL NUT TORQUE SPECIFICATIONS

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

Lug Nut (Aluminum Wheels)	Front and Rear	120 ft-lbs (163 Nm)
Front Axle Nut	Front	177 ft. lbs. (240 N⋅m)
Rear Axle Nut	Rear	89 ft. lbs. (120 N·m)

WHEEL REMOVAL

- 1. Position the vehicle on a level surface.
- 2. Apply the brakes. Set the park brake. Turn the key off.
- 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. Remove the wheel.

WHEEL INSTALLATION

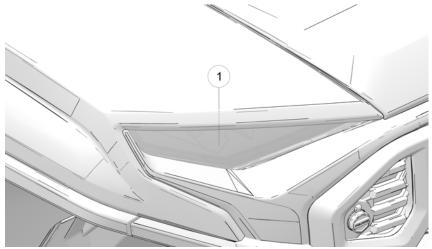
Improperly installed wheels can adversely affect tire wear and vehicle handling, which can result in serious injury or death. Always ensure that all nuts are torqued to specification. Do not service axle nuts that have a cotter pin installed. Your dealer can assist.

- 1. Place the transmission in PARK.
- 2. Place the wheel on the hub with the valve stem toward the outside and rotation arrows on the tire pointing toward forward rotation.
- 3. Attach the wheel nuts and tighten till snug.
- 4. Carefully lower the vehicle to the ground.
- In a star pattern, torque the wheel nuts to specification using a non-impact torque tool. Use the correct size wheel nut socket and do not exceed the wheel nut recommended torque value.

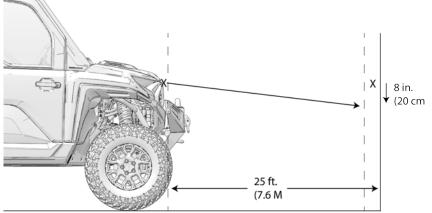
LED LIGHTS

Poor lighting can result in reduced visibility when driving. Headlight and taillight lenses become dirty during normal operation. Clean lights frequently and replace failed (or failing) lights promptly. Do not operate this vehicle at night or in low light conditions until the headlight is replaced. Always make sure lights are adjusted properly for best visibility.

The vehicle is equipped with integrated LED lights. In the event of a failure, the entire assembly ① must be replaced.



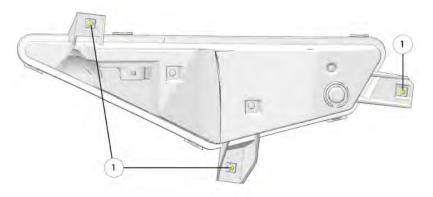
HEADLIGHT BEAM ADJUSTMENT



To adjust the headlight beam, do the following:

- 1. Ensure the tire pressure of all tires is at recommended levels.
- 2. Place the vehicle on a level surface with the headlight approximately 25 ft. (7.6 m) from a dark wall.
- 3. Measure the distance from the floor to the center of the headlight and make a mark on the wall at the same height.
- 4. Apply the brakes. Start the engine. Turn on the low-beam headlights.
- 5. Observe the headlight aim. The most intense part of the headlight beam should be aimed 8" (20 cm) below the mark placed on the wall. Include the weight of a rider on the seat while performing this step.

6. If a headlight needs adjustment, locate the three adjustment screws ① at the back of each headlight (one on top, two on the bottom).



NOTE The top headlight adjuster can be accessed from under the hood. The lower headlight adjustment screw can be accessed through the wheel well.

7. Rotate the adjustment screw to adjust the headlight as needed.

BRAKE LIGHTS

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

To check the brake lights, do the following:

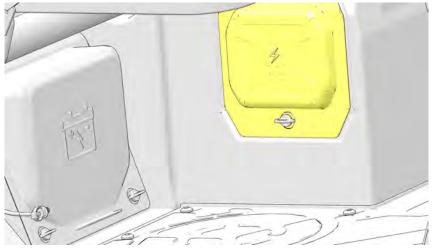
- 1. Turn the key to the ON position.
- Depress the brake pedal. The brake light should come on after about 0.4 in (10 mm) of pedal travel. If the light doesn't come on, check the electrical connector to the brake lamp.

NOTICE

There are no serviceable components in the brake light assembly.

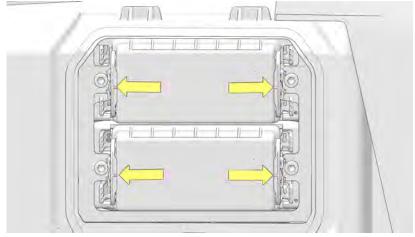
FUSES

If the engine stops or will not start, or if you experience other electrical failures, a fuse may need replacement. Locate and correct any short circuits that may have caused the blown fuse, then replace the fuse. To access the fuse box, remove the access panel under the passenger seat. For CREW vehicles, the access panel is located under the rear passenger seat. Spare fuses are provided in the glove box. If you suspect that a fuse or relay may not be working properly, your authorized POLARIS dealer can assist.



To access the fuse boxes, do the following:

- 1. Turn the quarter turn fastener counter clockwise to unlock the fuse box cover. Remove the cover.
- 2. Pull the two yellow fuse box retainer locks out towards the side of the vehicle.



3. Squeeze the two fuse box retainer locks, and remove the fuse box cover.

There are two additional fuses located in the **Battery Compartment** in line with the positive battery cable–150A and 225A.

PREMIUM / CREW MODELS

FUSE SIZE	FEATURE SUPPORTED
15A	Lights
10A	Aux and Tail
5A	HVAC Control
10A	Wiper
10A	Headlight
15A	Fuel
7.5A	Clutch
FUSE SIZE	FEATURE SUPPORTED
7.5A	Coil 1
7.5A	Coil 2 and 3

MAINTENANCE

FUSE SIZE	FEATURE SUPPORTED
20A	Audio Amp
10A	Charge
30A	Engine Fan 2
40A	Roof Pulse
25A	Right Windows
10A	EFI
15A	VCM
10A	Ассу
7.5A	Chassis 2
25A	Left Windows
5A	Unswitched ECU
15A	ТСМ
15A	Power PRT Bed
40A	EPS
25A	HVAC
30A	Engine Fan 1

NORTHSTAR PREMIUM / CREW MODELS

FUSE SIZE	FEATURE SUPPORTED
7.5A	Coil 1
7.5A	Coil 2 and 3
20A	Audio Amp
10A	Charge
30A	Engine Fan 2
40A	Roof Pulse
25A	Rear Windows CB
10A	EFI

MAINTENANCE

FUSE SIZE	FEATURE SUPPORTED
15A	VCM
10A	Shift Lock
7.5A	Ассу
25A	Chassis 2
5A	Left Windows
15A	Unswitched ECU
15A	ТСМ
15A	Power PRT Bed
40A	EPS
25A	HVAC
30A	Engine Fan 1

BATTERY

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

Antidote:

External: Flush with water.

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

Eyes: Flush with water for 15 minutes and get prompt medical attention. Batteries produce explosive gases. Keep sparks, flame, cigarettes, etc. away. Ventilate when charging or using in an enclosed space. Always shield eyes when working near batteries. KEEP OUT OF REACH OF CHILDREN.

Your vehicle has a low-maintenance flooded battery. It does not require refilling.

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.

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

BATTERY MAINTENANCE AND CHARGING

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.

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. Check the battery voltage with a voltmeter or multimeter. A fully charged battery will register 12.8 V or higher. If the voltage falls below 12.5V, charge it immediately, or the battery runs the risk of sulfation and reduced battery life.

If you do not drive the vehicle for more than TWO WEEKS, Polaris recommends using a BatteryMINDer® 2012 AGM - 2 AMP charger (PN 2830438), which can be ordered through your authorized POLARIS dealer.

The vehicle is equipped with a dedicated outlet for trickle-charging the battery during periods of extended inactivity. No other outlet on the vehicle can be used for vehicle charging purposes. See the component location diagrams in this manual for more information. During charging, place the charger outside of the vehicle and protect it from moisture.

If you plan to store the vehicle for ONE MONTH or longer, remove the battery from the vehicle, then store the battery in a cool and dry location. Continue to maintain the battery with the BatteryMINDer® 2012 AGM - 2 AMP charger.

When using an automatic charger other than a BatteryMINDer® 2012-AGM - 2 AMP charger, refer to the charger manufacturer's instructions for recharging.

If using a <u>constant current charger</u> (instead of BatteryMINDer® 2012 AGM - 2 AMP charger), use the guidelines below. Always verify battery condition before and 1-2 hours after the end of charging.

STATE OF CHARGE	VOLTAGE (DC)	ACTION	CHARGE TIME*
100%	12.8-13.0 volts	None, check monthly	None required
75%-100%	12.6-12.8 volts	May need slight charge, if no charge given, check in 2 weeks	3-6 hours
50%-75%	12.3-12.6 volts	Needs charge	5-11 hours
25%-50%	12.0-12.3 volts	Needs charge	At least 13 hours

MAINTENANCE

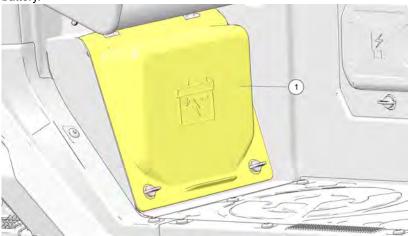
STATE OF CHARGE	VOLTAGE (DC)	ACTION	CHARGE TIME*
0%-25%	12.0 volts or less	Needs charge	At least 20 hours
* Using AGM specific charger at standard amps specified on top of battery			

BATTERY REMOVAL

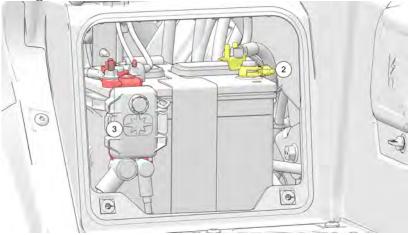
Improperly connecting or disconnecting battery cables can result in an explosion and cause serious injury or death. When removing the battery, always disconnect the negative (black) cable first. When reinstalling the battery, always connect the negative (black) cable last.

To remove the battery, do the following:

1. Remove the battery lid ① under the rear most passenger seat to access the battery.



2. Disconnect the black (-) battery cable ② first. Disconnect the red (+) battery cable ③ last.



- 3. Remove the battery hold-down strap.
- 4. Lift the battery out of the vehicle. Be careful not to tip a flooded 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 INSTALLATION

- 1. Ensure that the battery is fully charged.
- 2. Place the battery in the battery holder.
- 3. Coat the terminals with dielectric grease or petroleum jelly.
- 4. Connect and tighten the red (positive) cable first.

TORQUE

49 in-lbs (5.5 N·m)

5. Connect and tighten the black (negative) cable last.

TORQUE 40 in-lbs (4.5 N⋅m)

- 6. Install the battery hold-down strap and tighten the screws.
- 7. Verify that cables are properly routed.
- 8. Reinstall the battery compartment cover.

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.

TIP

Battery charge can be maintained by using a Polaris battery trickle charger or by charging about once a month to make up for normal self discharge. The battery trickle charger can be left connected during the storage period, and will automatically charge the battery if the voltage drops below a predetermined point.

CLEANING AND STORAGE WASHING THE VEHICLE

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

NOTICE

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

NOTICE

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

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

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

WASHING TIPS

- Avoid the use of harsh cleaners, which can scratch the finish.
- Do not use 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.
- 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.

If a high pressure water system is used for cleaning, exercise extreme caution. The maximum pressure should not exceed 4000 PSI, 2.5 GPM with a 40° pressure washer nozzle. Make sure to keep the pressure washer nozzle 23.6 in (60 cm) from the vehicle. The water may damage components and could remove paint and labels. Avoid directing the water stream at the following items:

- Wheel bearings
- Radiator
- Transmission seals
- Brakes
- Door seals (if equipped)

- · Cab and body panels
- Labels and decals
- · Electrical components and wiring
- · Air intake components
- Window seals (if equipped)
- · Throttle and shift cables and controls

If an informational or graphic label becomes illegible or comes off, contact your authorized POLARIS dealer, or other qualified person, to obtain a replacement. Replacement safety labels are provided by POLARIS at no charge.

WASHING TIPS- NORTHSTAR MODELS ONLY

When cleaning the machine, avoid spraying water into the HVAC vents. Damage to the HVAC system may result.

CLEANING THE SKID PLATES

Mud and debris can become trapped under the skid plate of the vehicle. If the skids plates have accumulated an excessive amount of mud or other material, a water source may be used to help clean the skid plate areas.

NOTE

Excessive mud or debris accumulation may cause shifting or other drivability issues. If the vehicle fails to shift correct from PARK to Drive or from DRIVE to PARK, check the skids plates for mud and other material accumulation.

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.

STABILIZE THE FUEL

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

OIL AND FILTER

Change the oil and filter. See the Engine Oil section.

AIR FILTER / AIR BOX

Replace the air filter. See Maintenance Chapter. Clean the air box.

FLUID LEVELS

Inspect the fluid levels. Add or change fluids as recommended in the POLARIS Maintenance Schedule.

- Engine Oil
- Demand Drive fluid (front gearcase)
- Angle Drive fluid (rear gearcase)
- Transmission fluid
- Brake fluid (change every two years and any time the fluid looks dark or contaminated)
- Coolant (test strength/fill)

INSPECT AND LUBRICATE

Inspect all cables and lubricate all areas of the vehicle as recommended in the POLARIS Maintenance Schedule.

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 plugs and add 1–1.5 oz. (29.5–44 cc.) of engine oil. To access the plug holes, use a section of clear 6 mm (1/4") hose and a small plastic squeeze bottle filled with the pre-measured amount of oil. Do this carefully! If you miss the plug holes, oil will drain from the spark plug cavities into the hole at the front of the cylinder head, and appear to be an oil leak.
- 3. Reinstall the spark plugs. Torque to specification.
- 4. Apply dielectric grease to the inside of each spark plug cap. *Do not reinstall the cap onto the plug at this step*.
- 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. Reinstall the spark plug caps.
- 7. If POLARIS fuel system additive is not used, fuel tank, fuel lines, and injectors should be completely drained of gasoline.

STORAGE AREA / COVERS

Be sure the storage area is well ventilated. Cover the vehicle with a genuine POLARIS cover or similar that allows for adequate airflow. Do not use plastic or coated material, as these materials do not allow enough ventilation to prevent condensation and may promote corrosion and oxidation.

REMOVAL FROM STORAGE

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

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

TRANSPORTING THE VEHICLE

Follow these procedures when transporting the vehicle.

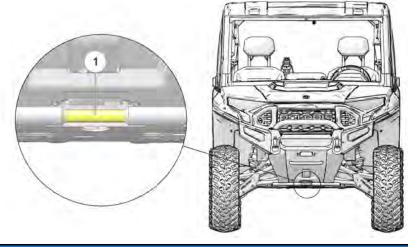
- 1. Apply the brakes.
- 2. Place the transmission in PARK. Stop the engine.
- 3. Slowly release the brake pedal and make sure the transmission is in PARK before exiting the vehicle.
- 4. Remove the key to prevent loss during transporting.
- 5. Secure the fuel cap and seat. Ensure that the seat is attached correctly and is not loose.

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

- 6. Secure the front tip out windshield (if equipped) in the closed position.
- 7. Close and latch all doors (if equipped) and tailgate.
- 8. Using suitable straps or rope, always secure the vehicle to the trailer using the designated tie down points (front and rear).

Front Tie-Down Location

① Front tie-down points

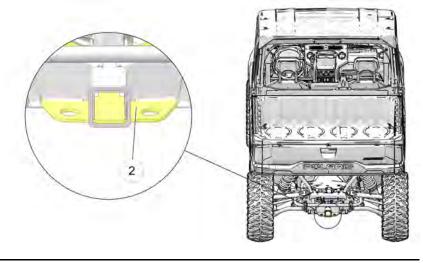


NOTICE

D-Rings (if equipped) are an optional recovery location. Do not pull on the d-ring on an angle greater than 30 degrees from center.

Rear Tie-Down Locations

Rear tie-down points



SPECIFICATIONS RANGER XD 1500 PREMIUM

DESCRIPTION	SPECIFICATION
Maximum Weight Capacity (includes weight of operator, passenger, cargo, accessories)	2110 lb (957 kg)
Dry Weight*	2473 lb (1122 kg)
GVW (Gross Vehicle Weight)	4600 lbs. (2087 kg)
Fuel Capacity	13.6 gal (51.5 L)
Engine Oil Capacity	4.25 qt (4 L)
Coolant Capacity	9.2 qt (8.7 L)
Overall Length	137 in (348 cm)
Overall Width	64 in (163 cm)
Overall Height	78 in (198 cm)
Wheelbase	95 in (241 cm)
Cargo Box Dimensions (Inside)	43.4 x 56 x 13.4 in (110.2 x 142.2 x 34 cm)
Ground Clearance	15 in (38 cm)
Min. Turning Radius	185 in (470 cm)
Towing Capacity	3500 lb (1588 kg)
Hitch Tongue Capacity	350 lb (159 kg)
Max. Cargo Box Load	1500 lb (680 kg)
Engine	4-Stroke DOHC Triple Cylinder
Displacement	1498 cc

DESCRIPTION	SPECIFICATION
Bore x Stroke (mm)	93 mm x 73.5 mm
Alternator Output	140A @ 3000 RPM
Compression Ratio	11:1
Starting System	Electric
Fuel System	Electronic Fuel Injection
Ignition Timing	ECU Controlled 38° +/- 3° @ 3000 RPM
Spark Plug/ Gap	IMR7F / 0.9–1.0 mm
Lubrication System	Wet Sump
Cooling	Liquid
Front Suspension	Dual A-Arm 12 in (30.5 cm) Travel
Rear Suspension	Dual A-Arm, IRS 12 in (30.5 cm) Travel
Ignition System	Digital CDI
Shift Type	Single Lever (D/R/P)
Drive Ratio - Front	3.25:1
Drive Ratio — Rear	3.07:1
Tire Size - Front	29 x 9R14; PRO ARMOR X-TERRAIN
Tire Size - Rear	29 x 11R14; PRO ARMOR X-TERRAIN
Tire Pressure - Front	18 PSI (124.1 kPa)
Tire Pressure - Rear	18 PSI (124.1 kPa)
Brakes, Front/Rear	Foot activated and power assisted, 4 wheel hydraulic disc with dual-bore front and rear calipers
Hood Headlights	LED
Taillights	LED
Brake Light	LED

*Dry weight is also listed on the Certificate of Origin for your vehicle in the Shipping Weight field. The dry weight is estimated based on the manufactured weight of the vehicle minus any serviceable fluids and may also exclude the weight of factory installed accessories not essential to the vehicle's basic operation as outlined in the ANSI®/ROHVASM 1-2016 standard.

RANGER XD 1500 NORTHSTAR PREMIUM/ ULTIMATE

DESCRIPTION	SPECIFICATION
Maximum Weight Capacity (includes weight of operator, passenger, cargo, accessories)	1705 lb (773 kg)
Dry Weight*	2800 lb (1270 kg)
GVW (Gross Vehicle Weight)	4600 lbs. (2087 kg)
Fuel Capacity	13.6 gal (51.5 L)
Engine Oil Capacity	4.25 qt (4 L)
Coolant Capacity	10.2 qt (9.7 L)
Overall Length	137 in (348 cm)
Overall Width	64 in (163 cm)
Overall Height	78 in (198 cm)
Wheelbase	95 in (241 cm)
Cargo Box Dimensions (Inside)	43.4 x 56 x 13.4 in (110.2 x 142.2 x 34 cm)
Ground Clearance	15 in (38 cm)
Min. Turning Radius	185 in (470 cm)
Towing Capacity	3500 lb (1588 kg)
Hitch Tongue Capacity	350 lb (159 kg)
Max. Cargo Box Load	1500 lb (680 kg)
Engine	4-Stroke DOHC Triple Cylinder
Displacement	1498 cc
Bore x Stroke (mm)	93 mm x 73.5 mm

DESCRIPTION	SPECIFICATION
Alternator Output	140A @ 3000 RPM
Compression Ratio	11:1
Starting System	Electric
Fuel System	Electronic Fuel Injection
Ignition Timing	ECU Controlled 38° +/- 3° @ 3000 RPM
Spark Plug/ Gap	IMR7F / 0.9–1.0 mm
Lubrication System	Wet Sump
Cooling	Liquid
Front Suspension	Dual A-Arm 12 in (30.5 cm) Travel
Rear Suspension	Dual A-Arm, IRS 12 in (30.5 cm) Travel
Ignition System	Digital CDI
Shift Type	Single Lever (D/R/P)
Drive Ratio - Front	3.25:1
Drive Ratio — Rear	3.07:1
Tire Size - Front	30 x 10R15; KENDA® CROSS TRAIL
Tire Size - Rear	30 x 11R15; KENDA® CROSS TRAIL
Tire Pressure - Front	14 PSI (96.5 kPa)
Tire Pressure - Rear	18 PSI (124.1 kPa)
Brakes, Front/Rear	Foot activated and power assisted, 4 wheel hydraulic disc with dual-bore front and rear calipers
Hood Headlights	LED
Taillights	LED
Brake Light	LED

*Dry weight is also listed on the Certificate of Origin for your vehicle in the Shipping Weight field. The dry weight is estimated based on the manufactured weight of the vehicle minus any serviceable fluids and may also exclude the weight of factory installed accessories not essential to the vehicle's basic operation as outlined in the ANSI®/ROHVASM 1-2016 standard.

RANGER CREW XD 1500 PREMIUM

DESCRIPTION	SPECIFICATION
Maximum Weight Capacity (includes weight of operator, passenger, cargo, accessories)	2150 lb (975 kg)
Dry Weight*	2905 lb (1318 kg)
GVW (Gross Vehicle Weight)	5035 lbs. (2284 kg)
Fuel Capacity	13.6 gal (51.5 L)
Engine Oil Capacity	4.25 qt (4 L)
Coolant Capacity	10.4 qt (9.8 L)
Overall Length	164 in (416.6 cm)
Overall Width	64 in (163 cm)
Overall Height	78 in (198 cm)
Wheelbase	127 in (323 cm)
Cargo Box Dimensions (Inside)	43.4 x 56 x 13.4 in (110.2 x 142.2 x 34 cm)
Ground Clearance	15 in (38 cm)
Min. Turning Radius	233 in (592 cm)
Towing Capacity	3500 lb (1588 kg)
Hitch Tongue Capacity	350 lb (159 kg)
Max. Cargo Box Load	1500 lb (680 kg)
Engine	4-Stroke DOHC Triple Cylinder
Displacement	1498 cc
Bore x Stroke (mm)	93 mm x 73.5 mm
Alternator Output	140A @ 3000 RPM

DESCRIPTION	SPECIFICATION
Compression Ratio	11:1
Starting System	Electric
Fuel System	Electronic Fuel Injection
Ignition Timing	ECU Controlled 38° +/- 3° @ 3000 RPM
Spark Plug/ Gap	IMR7F / 0.9–1.0 mm
Lubrication System	Wet Sump
Cooling	Liquid
Front Suspension	Dual A-Arm 12 in (30.5 cm) Travel
Rear Suspension	Dual A-Arm, IRS 12 in (30.5 cm) Travel
Ignition System	Digital CDI
Shift Type	Single Lever (D/R/P)
Drive Ratio - Front	3.25:1
Drive Ratio — Rear	3.07:1
Tire Size - Front	29 x 9R14; PRO ARMOR X-TERRAIN
Tire Size - Rear	29 x 11R14; PRO ARMOR X-TERRAIN
Tire Pressure - Front	18 PSI (124.1 kPa)
Tire Pressure - Rear	18 PSI (124.1 kPa)
Brakes, Front/Rear	Foot activated and power assisted, 4 wheel hydraulic disc with dual-bore front and rear calipers
Hood Headlights	LED
Taillights	LED
Brake Light	LED

*Dry weight is also listed on the Certificate of Origin for your vehicle in the Shipping Weight field. The dry weight is estimated based on the manufactured weight of the vehicle minus any serviceable fluids and may also exclude the weight of factory installed accessories not essential to the vehicle's basic operation as outlined in the ANSI®/ROHVASM 1-2016 standard.

RANGER CREW XD 1500 NORTHSTAR PREMI-UM/ ULTIMATE

DESCRIPTION	SPECIFICATION
Maximum Weight Capacity (includes weight of operator, passenger, cargo, accessories)	1665 lb (755 kg)
Dry Weight*	3323 lb (1507 kg)
GVW (Gross Vehicle Weight)	5035 lbs. (2284 kg)
Fuel Capacity	13.6 gal (51.5 L)
Engine Oil Capacity	4.25 qt (4 L)
Coolant Capacity	11.4 qt (10.8 L)
Overall Length	164 in (416.6 cm)
Overall Width	64 in (163 cm)
Overall Height	78 in (198 cm)
Wheelbase	127 in (323 cm)
Cargo Box Dimensions (Inside)	43.4 x 56 x 13.4 in (110.2 x 142.2 x 34 cm)
Ground Clearance	15 in (38 cm)
Min. Turning Radius	233 in (592 cm)
Towing Capacity	3500 lb (1588 kg)
Hitch Tongue Capacity	350 lb (159 kg)
Max. Cargo Box Load	1500 lb (680 kg)
Engine	4-Stroke DOHC Triple Cylinder
Displacement	1498 cc
Bore x Stroke (mm)	93 mm x 73.5 mm

DESCRIPTION	SPECIFICATION
Alternator Output	140A @ 3000 RPM
Compression Ratio	11:1
Starting System	Electric
Fuel System	Electronic Fuel Injection
Ignition Timing	ECU Controlled 38° +/- 3° @ 3000 RPM
Spark Plug/ Gap	IMR7F / 0.9–1.0 mm
Lubrication System	Wet Sump
Cooling	Liquid
Front Suspension	Dual A-Arm 12 in (30.5 cm) Travel
Rear Suspension	Dual A-Arm, IRS 12 in (30.5 cm) Travel
Ignition System	Digital CDI
Shift Type	Single Lever (D/R/P)
Drive Ratio - Front	3.25:1
Drive Ratio — Rear	3.07:1
Tire Size - Front	30 x 10R15; KENDA® CROSS TRAIL
Tire Size - Rear	30 x 11R15; KENDA® CROSS TRAIL
Tire Pressure - Front	16 PSI (110.3 kPa)
Tire Pressure - Rear	22 PSI (151.7 kPa)
Brakes, Front/Rear	Foot activated and power assisted, 4 wheel hydraulic disc with dual-bore front and rear calipers
Hood Headlights	LED
Taillights	LED
Brake Light	LED

*Dry weight is also listed on the Certificate of Origin for your vehicle in the Shipping Weight field. The dry weight is estimated based on the manufactured weight of the vehicle minus any serviceable fluids and may also exclude the weight of factory installed accessories not essential to the vehicle's basic operation as outlined in the ANSI®/ROHVASM 1-2016 standard.

POLARIS PRODUCTS LUBRICANTS / SERVICE PRODUCTS

PRODUCT	SIZE (QUANTITY)	PART NUMBER
Fogging Oil	12 fl oz (355 mL) aerosol	2870791
	1 qt (0.95 L)	2871517
	1 qt (0.95 L)	2876244
PS-4	2 qt (1.90 L)	2877490
	1 gal (3.8 L)	2876245
	1 qt (0.95 L)	2878920
	2 qt (1.90 L)	2878922
PS-4 Extreme Duty	1 gal (3.8 L)	2878919
	1 qt (0.95 L)	2889395
	1 gal (3.8 L)	2889396
Transmission Fluid	1 gal (3.8 L)	8567501
Angle Drive Fluid	1 qt (0.95 L)	2889280
Pump for Gallon Jug	_	2870465
Demand Drive	1 qt (0.95 L)	2877922
Demand Drive	2.5 gal (9.5 L)	2877923
Antiference / Orelant	1 qt (0.95 L)	2880514
Antifreeze / Coolant	1 gal (3.8 L)	2880513
Grease Gun Kit, Premium All Season	—	2871312
	Four 3 fl oz (89 mL) packs	2871322
All Season Grease	14 fl oz (414 mL) cartridge	2871423
Premium Starter Grease	—	2871460
U-Joint Grease	3 fl oz (89 mL) tube	2871515
0-Joint Grease	14 fl oz (414 mL) cartridge	2871551
Dielectric Grease (Nyogel®)		2871329
Carbon Clean	12 fl oz (355 mL) bottle	2871326
Fuel Stabilizer	16 fl oz (473 mL)	2870652
	2.5 gal (9.5 L)	2872280

POLARIS PRODUCTS

PRODUCT	SIZE (QUANTITY)	PART NUMBER
DOT 4 Brake Fluid		2872189
Loctite® 565 Thread Sealant	—	2871956
BatteryMINDer® 2012 AGM - 2 AMP Charger	_	2830438

TROUBLESHOOTING ENGINE DOES NOT TURN OVER

POSSIBLE CAUSE	SOLUTION
Low battery voltage	Recharge the battery.
Loose battery connections	Check all connections and tighten.
Loose solenoid connections	Check all connections and tighten.
Loose electronic control box connections	Inspect, clean, reinstall connectors.
Vehicle not in PARK	Move shifter to the PARK position.

ENGINE BACKFIRES

POSSIBLE CAUSE	SOLUTION
Weak spark from spark plug	Inspect, clean and/or replace spark plug
Incorrect spark plug gap or heat range	Set gap to specs or replace plug
Old or non-recommended fuel	Replace with fresh recommended fuel
Incorrectly installed spark plug wires	Your authorized POLARIS dealer can assist
Mechanical failure	Your authorized POLARIS dealer can assist
Loose ignition connections	Check all connections and tighten
Water present in fuel	Replace with fresh recommended fuel

ENGINE PINGS OR KNOCKS

POSSIBLE CAUSE	SOLUTION
Poor quality or low octane fuel	Replace with recommended fuel
Incorrect spark plug gap or heat range	Set gap to specs or replace plug

ENGINE RUNS IRREGULARLY, STALLS OR MISFIRES

POSSIBLE CAUSE	SOLUTION
Fouled or defective spark plug	Inspect, clean and/or replace spark plug
Worn or defective spark plug wires	Your authorized 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
Water present in fuel	Replace with new fuel
Low battery voltage	Recharge battery to 12.8 VDC. Check alternator belt.
Incorrect fuel	Replace with recommended fuel
Clogged air filter	Inspect and clean or replace
Clogged intake pre-filter	Inspect and clean (with soapy water) or replace
Other mechanical failure	Your authorized POLARIS dealer can assist

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 authorized 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; Check the alternator belt; Check alternator output voltage
Incorrect fuel	Replace with fresh recommended fuel
Clogged air filter	Inspect and clean or replace
Clogged intake pre-filter	Inspect and clean (with soapy water) or replace

TROUBLESHOOTING

POSSIBLE CAUSE	SOLUTION
Other mechanical failure	Your authorized POLARIS dealer can assist
Overheated engine	Clean radiator screen and core, clean engine exterior, and check coolant level. Your dealer authorized POLARIS dealer can assist.
Overfilled transmission fluid level	Check transmission fluid level.

WARRANTY LIMITED WARRANTY

POLARIS Industries Inc., 2100 Highway 55, Medina, MN 55340 (POLARIS) gives a ONE YEAR LIMITED WARRANTY on all components of your POLARIS vehicle against defects in material or workmanship. Laws and regulations in your jurisdiction may give extra protection. POLARIS further warrants that the spark arrester in this product will meet the efficiency requirements of USFS standard 5100-1D 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. 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. Initial dealer preparation and set-up of your vehicle is very important in ensuring trouble-free operation.

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 damage to any vehicle, component, or part as a result of being structurally altered or electrically, 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; surface imperfections caused by external stress, heat, cold or contamination; operator error or abuse; improper component alignment, tension, adjustment; snow, water, dirt or other foreign substance ingestion/contamination; improper maintenance; modified components; use of aftermarket or unapproved components, accessories, or attachments; use of unapproved software or calibration; unauthorized repairs; or repairs made after the warranty period expires or by an unauthorized repair center.

This warranty excludes the expected reduction in range or capacity that the high-voltage battery pack may experience as a result of time and usage. However, a high-voltage battery pack that exhibits a capacity reduction in excess of 20% of the published nominal capacity is covered under the limited warranty. The reduction would need to be verified by an authorized dealer by checking the battery management system (BMS) log data.

This warranty excludes non-recoverable high-voltage battery packs. It is the owner's responsibility to ensure the state of charge (SoC) of the high-voltage battery is maintained properly and never fully depleted. If the high-voltage battery charge becomes fully depleted, the high-voltage battery can cease operating permanently (also known as non-recoverable)

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
- Steering components
- 12–Volt Battery
- Light bulbs/Sealed beam lamps
- Lubricants

- · Finished and unfinished surfaces
- Bushings
- · Hydraulic components and fluids
- Circuit breakers/Fuses
- · Electronic components
- Sealants
- Coolants
- · Bearings

LUBRICANTS AND FLUIDS

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:

You are responsible for presenting your vehicle to an authorized POLARIS dealer as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. However, any damage caused to the product by you or any non-authorized third party may void this warranty. Warranty or Service Bulletin repairs must be done by an authorized POLARIS dealer, or other qualified person authorized by POLARIS.

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, or other qualified person authorized by POLARIS. 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 to register your product in your new country. We recommend that you register your product at a local authorized POLARIS dealer promptly after you move.

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. However, we encourage you to promptly register your product at your local authorized POLARIS dealer to receive safety information and notice 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 vehicle is equipped with windshield, remove windshield, or tilt windshield up. Remove any hardware attached to ROPS right-hand A-pillar.

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 recalls. 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. Dealership contacts can be found via this website, if needed:

www.polaris.com/en-us/contact

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 Owner Connections:

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

French: 1-800-268-6334

To report a safety defect to Transport Canada, you may either fill out an online defect complaint form at their website: English: http://www.tc.gc.ca/recalls French: http://www.tc.gc.ca/rappels Or contact their Defect Investigations and Recalls Division by calling toll-free 1-800-333-0510 (Canada) or 819-320-4300 (in the Gatineau-Ottawa area on internationally).

U.S.A. EPA EMISSIONS LIMITED WARRANTY

This emission control system limited warranty is in addition to the POLARIS standard limited warranty for your vehicle.

YOUR WARRANTY RIGHTS AND OBLIGATIONS

POLARIS is required to warrant that the Large Spark Ignition engine in this vehicle, including all parts of its emission-control system, are (1) designed, built, and equipped so they conform at the time of sale to the ultimate purchaser and each subsequent purchaser with the requirements of 40 CFR Part 1048 and (2) free from defects in materials and workmanship that may keep them from meeting the requirements of Part 1048. POLARIS must warrant the emission control system on your engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your engine.

Where an emission-related warrantable condition exists, POLARIS will repair your off-road LSI engine at no cost to you including diagnosis, parts and labor. 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.

MANUFACTURER'S WARRANTY COVERAGE

In the 49-states other than California, the off-road LSI engine emission-related warranty for exhaust emission controls is valid for 3 years or 750 hours, whichever occurs first, except for High-Cost warranted parts. High-Cost warranted parts are warranted for 5 years or 1050 hours, whichever occurs first. If any emission-related part on your engine is defective, the part will be repaired or replaced by POLARIS.

The off-road LSI engine emission-related warranty for evaporative emission controls is valid for at least two years.

The warranty periods in California are provided in the separate California Emission Control Warranty Statement.

OWNER'S WARRANTY RESPONSIBILITIES

As the off-road LSI engine owner, you are responsible for the performance of the required periodic maintenance listed in your owner's manual. POLARIS recommends that you retain all receipts covering maintenance on your off-road LSI engine, but POLARIS cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of required periodic maintenance.

Non-critical emissions related maintenance includes items such as the scheduled spark plug changes and valve clearance adjustments recommended in the Maintenance Chart of this Owner's Manual. Non-critical emissions related maintenance steps are not necessary to keep the emission-related warranty valid.

As the off-road LSI engine owner, you should however be aware that POLARIS may deny you warranty coverage under the federal regulations, if the failure was caused by the owner's or operator's improper maintenance or use, by accidents for which the manufacturer has no responsibility, or by acts of God. Your off-road LSI engine is designed to operate on gasoline. You are responsible for initiating the warranty process. Present your off-road LSI engine as soon as a problem exists. The warranty repairs should be completed by a POLARIS dealer or third-party repair shop as expeditiously as possible.

The warranty period begins when the engine is placed into service. Any warranted part that is not scheduled for replacement as required maintenance in the written instructions shall be warranted for the warranty period defined above. If any such part fails during the period of warranty coverage, it shall be repaired or replaced by POLARIS. Any such part repaired or replaced under the warranty shall be warranted for the remaining warranty period. Any warranted part that is scheduled only for regular inspection in the written instructions shall be warranted for the warranty period defined above. Any such part repaired or replaced under the warranty shall be warranted for the warranty period.

The maintenance schedule contained in your Owner's Manual may prescribe inspections of the exhaust and fuel systems at intervals within the 1500-hour useful life of the engine. If the inspections of these systems during the warranty period indicate the need to repair or replace components of the exhaust system (which includes the catalyst) or the fuel system (which includes the fuel injectors), these components shall be repaired or replaced by POLARIS free of charge to you.

Any warranted part that is scheduled for replacement as required maintenance in the written instructions shall be warranted for the period of time prior to the first scheduled replacement point for that part. If the part fails prior to the first scheduled replacement, the part shall be repaired or replaced by POLARIS. Any such part repaired or replaced under warranty shall be warranted for the remainder of the period prior to the first scheduled replacement point for the part.

POLARIS shall be liable for damages to other engine components proximately caused by a failure under warranty of any emission-related warranted part.

LSI EXHAUST & EVAPORATIVE EMISSION CONTROL SYSTEM WARRANTY PARTS

WARRANTY

Your emission control system includes the parts listed below for exhaust and evaporative emissions. Emission-related components also include any other part whose primary purpose is to reduce emissions or whose failure would commonly increase emissions without significantly degrading engine/equipment performance.

The emission-related warranty covers these components even if a company other than POLARIS produces the component for POLARIS. The emission-related warranty does not cover components whose failure would not increase an engine's emissions of any regulated pollutant.

For exhaust emissions, emission-related components include any engine parts related to the following systems: Air-Induction System, Fuel System, Ignition System, Exhaust Gas Recirculation Systems, Aftertreatment Devices, Crankcase Ventilation Valves, Sensors, and Electronic Control Units.

For evaporative emissions, the following parts are considered emission-related components: Fuel Tank, Fuel Cap, Fuel Line, Fuel Line Fittings; Clamps*, Pressure Relief Valves*, Control Valves*, Control Solenoids*, Electronic Controls*, Vacuum Control Diaphragms*, Control Cables*, and Control Linkages* (*as related to the evaporative emission control system); Purge Valves, Vapor Hoses, Liquid/Vapor Separator, Carbon Canister, Canister Mounting Brackets, and Carburetor Purge Port Connector.

High-cost warranted parts are those parts covered by the emission-related warranty with a replacement cost exceeding a limit value established by the EPA regulations. The replacement cost includes the retail cost of the part plus labor and standard diagnosis. The high-cost limit value for Model Year 2024 engines is \$740. This value is updated annually.

EMISSION CONTROL SYSTEM WARRANTY EXCLUSIONS

This limited warranty excludes failures not caused by a defect in material or workmanship. This limited warranty does not cover damage due to accidents, abuse or improper handling, maintenance or use. This limited warranty also does not cover any engine that has been structurally altered, or when the vehicle has been used in racing competition. This limited warranty also does not cover physical damage, corrosion or defects caused by fire, explosions or other similar causes beyond the control of POLARIS. Owners are responsible for performing the scheduled maintenance identified in the owner's manual. POLARIS may deny warranty claims for failures that have been caused by the owner's or operator's improper maintenance or use, by accidents for which POLARIS has no responsibility, or by acts of God.

REMEDIES FOR BREACH OF EMISSION CONTROL SYSTEM WARRANTY

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.

QUESTIONS REGARDING YOUR EMISSIONS WARRANTY

If you have any questions regarding your emissions warranty rights and responsibilities, you should contact POLARIS Customer Assistance at 1-800-POLARIS (1-800-765-2747) or at 1-800-268-6334 for French Language support. In California, you may also contact the California Air Resources Board.

CALIFORNIA EMISSIONS 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), and they must also have a 50-state emission control label. The POLARIS 50-state vehicles are designed and built with features that distinguish them from 49-state vehicles, including the emissions label. 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.

Polaris warrants to the ultimate purchaser and each subsequent purchaser that the engine is:

(1) Designed, built, and equipped so as to conform at the time of sale with all applicable regulations adopted by the California Air Resources Board pursuant to its authority in Chapters 1 and 2, Part 5, Division 26 of the Health and Safety Code; and

(2) Free from defects in materials and workmanship which cause the failure of a warranted part to be identical in all material respects to the part as described in the Polaris application for certification for a period of 3 years or 2,500 hours, whichever occurs first, and

(3) Free from defects in materials and workmanship which cause the failure of a high-cost warranted part to be identical in all material respects to the part as described in the Polaris application for certification, for a period of 5 years or 3,500 hours of operation, whichever occurs first.

CALIFORNIA EMISSION CONTROL WARRANTY STATEMENT: YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board (CARB) and POLARIS are pleased to explain the emission control system warranty on the Model Year 2024 off-road large spark-ignition engine in your vehicle. In California, new off-road large spark-ignition (LSI) engines must be designed, built and equipped to meet the State's stringent anti-smog standards. POLARIS must warrant the emission control system on your engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your engine. The warranty period begins on the date the engine or equipment is delivered to an ultimate purchaser.

Your emission control system may include parts such as the carburetor, regulator or fuel-injection system, ignition system, engine computer unit (ECM), catalytic converter and air induction system. Also included may be sensors, hoses, belts, connectors and other emission-related assemblies. Where a warrantable condition exists, POLARIS will repair your LSI engine at no cost to you including diagnosis, parts and labor.

MANUFACTURER'S WARRANTY COVERAGE IN CALIFORNIA:

Your Model Year 2024 off-road large spark-ignition engine is warranted in California for 3 years or 2,500 hours, whichever occurs first (warranty period). High-Cost warranted parts are warranted for 5 years or 3500 hours, whichever occurs first. A High-Cost warranted part is an emissions-related part with a replacement cost, including the retail cost of the part plus labor and standard diagnosis, equal to or greater than a value prescribed annually by CARB. The limit value for Model Year 2024 engines is \$740. If any emission-related part on your engine is defective within the applicable warranty period, the part will be repaired or replaced by POLARIS.

OWNER'S WARRANTY RESPONSIBILITIES IN CALIFORNIA:

As the off-road LSI engine owner, you are responsible for the performance of the required maintenance listed in your owner's manual. POLARIS recommends that you retain all receipts covering maintenance on your off-road engine, but POLARIS cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the off-road large spark-ignition engine owner, you should however be aware that POLARIS may deny you warranty coverage if your off-road large spark-ignition engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications. Your engine is designed to operate on gasoline. Use of any other fuel may result in your engine no longer operating in compliance with California's emissions requirements. You are responsible for initiating the warranty process. The CARB suggests that you present your off-road large spark-ignition engine to a POLARIS dealer as soon as a problem exists. The warranty repairs should be completed by the dealer as expeditiously as possible.

If you have any questions regarding your warranty rights and responsibilities, you should contact POLARIS Customer Assistance at 1-800-POLARIS (1-800-765-2747). French: 1-800-268-6334.

CALIFORNIA EMISSIONS WARRANTY INTERPRETATION

The California Emissions Warranty for this Large Spark Ignition Engine must be interpreted as prescribed in Section 2435(c), Title 13, of the California Code of Regulations:

(1) Any warranted part that is not scheduled for replacement as required maintenance in the Owner's Manual, and (2) any part scheduled only for regular inspection and any part subject to an "inspect and replace as needed" specification in the Owner's Manual is warranted for 3 years or 2,500 hours, whichever occurs first. If any such part fails during the period of warranty coverage, it will be repaired or replaced by POLARIS at no charge to the owner at a warranted for the remaining warranty period.

(3) Any warranted part that is scheduled for replacement as required maintenance in the Owner's Manual is warranted for the period of time prior to the first scheduled replacement point for that part. If the part fails prior to the first scheduled replacement, the part will be repaired or replaced by POLARIS at no charge to the owner at a warranty station. Any such part repaired or replaced under warranty must be warranted for the remainder of the period prior to the first scheduled replacement point for the part.

(4) Repair or replacement of any warranted part under the warranty provisions of this article will be performed at no charge to the owner at a warranty station.

(5) Warranty services or repairs will be provided at all Polaris dealers authorized to conduct service.

(6) The owner will not be charged for diagnostic labor that leads to the determination that a warranted part is in fact defective, provided that such diagnostic work is performed at a warranty station.

(7) POLARIS is liable for damages to other engine components proximately caused by a failure under warranty of any warranted part.

(8) Throughout the engine's warranty period described above, POLARIS will maintain a supply of warranted parts sufficient to meet the expected demand for such parts.

(9) Any replacement part, as defined in Section 1900(b)(13), Title 13, of the California Code of Regulations, may be used in the performance of any maintenance or repairs and will be provided without charge to the owner. It is not necessary for replacement parts to be the same brand or by the same manufacturer as the original part sold with the engine. Such use does not reduce the POLARIS warranty obligations.

(10) Add-on or modified parts, as defined in Section 1900(b)(1) and (b)(10), Title 13, of the California Code of Regulations that are not exempted by the Air Resources Board may not be used. The use of any non-exempted add-on or modified parts will, at the discretion of POLARIS, be grounds for disallowing a warranty. POLARIS is not liable to warrant failures of warranted parts caused by the use of a non-exempted add-on or modified part.

The following statement on non-critical emissions related maintenance is in addition to the above interpretations prescribed in Section 2435(c), Title 13, of the California Code of Regulations. Non-critical emissions related maintenance steps are not necessary to keep the emission-related warranty valid. Non-critical emissions related maintenance includes items such as the scheduled spark plug changes and valve clearance adjustments recommended in the Maintenance Chart of this Owner's Manual.

CALIFORNIA LSI ENGINE EMISSIONS WARRANTY PARTS LIST

Fuel Metering System: fuel injection system, air/fuel ratio feedback and control system, cold start enrichment system;

Air Induction System: intake manifold or air intake system, air mass sensor assembly;

Exhaust Gas Recirculation (EGR) System: EGR valve body, and carburetor spacer if applicable; EGR rate feedback and control system.

Air injection System: air pump or pulse valve, valves affecting distribution of flow, distribution manifold

Catalyst or Thermal Reactor System: catalytic converter, exhaust manifold;

Positive Crankcase Ventilation (PCV) System: PCV Valve, oil filler cap;

Ignition Control System: engine control module (ECM), ignition module(s);

Miscellaneous items Used in Above Systems: vacuum, temperature, and time sensitive valves and switches, sensors used for electronic controls; hoses, belts, connectors, assemblies, clamps, fittings, tubing, sealing gaskets or devices, and mounting hardware; pulleys, belts and idlers.

MAINTENANCE LOG MAINTENANCE LOG

Use the following chart to record periodic maintenance.

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

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

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