



# OPERATOR'S MANUAL



*Actual vehicle appearance may vary*

p/n: 2263-167  
03/21

***Prowler 500***

## **This vehicle can be hazardous to operate.**

A collision or rollover can occur quickly, even during what you think are routine maneuvers such as driving or turning on flat terrain, driving on hills, or crossing obstacles, if you fail to take proper precautions. For your safety, understand and follow all the warnings contained in this Operator's Manual and on the labels on this vehicle.

Keep this Operator's Manual with this vehicle at all times. If you lose your manual, contact the manufacturer for a free replacement. The labels should be considered permanent parts of the vehicle. If a label comes off or becomes hard to read, contact your authorized dealer for a replacement.

**FAILURE TO FOLLOW THE WARNINGS CONTAINED IN THIS MANUAL CAN RESULT IN SERIOUS INJURY OR DEATH.**

Particularly important information is distinguished in this manual by the following notations:



The Safety Alert Symbol means **ATTENTION! BE ALERT! YOUR SAFETY IS INVOLVED.**



**WARNING**

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

**CAUTION**

**CAUTION**, without the safety alert symbol, is used to address practices not related to personal injury.

■ **NOTE:**

A **NOTE** provides key information to make procedures easier or more clear.

## **FREE ROV TRAINING**

Free training is available for Recreational Off-Highway Vehicles (ROV) operators and passengers from Recreational Off-Highway Vehicle Association (ROHVA). The manufacturer recommends that you complete this course before you first use your new ROV.

This online course takes approximately two hours to complete and presents you with a certificate of accomplishment as soon as you complete the course. The course does not have to be completed all at one time. It will remember where you left off and bring you back to that point when you return.

**ALWAYS USE COMMON SENSE WHEN OPERATING THIS VEHICLE.**

Visit [www.ROHVA.org](http://www.ROHVA.org) to start your training.

# Foreword

Congratulations and thank you for purchasing an Arctic Cat vehicle. Built with American engineering and manufacturing know-how, it is designed to provide superior ride, comfort, utility, and dependable service.

This Operator's Manual is furnished to ensure that the operator is aware of safe operating procedures. It also includes information about the general care and maintenance of this vehicle.

Carefully read the following pages. If you have any questions regarding this vehicle, contact an authorized dealer for assistance. Remember, only authorized dealers have the knowledge and facilities to provide you with the best service possible.

## Protect Your Sport

- Become familiar with all local and state/provincial laws governing ROV operation,
- Respect your vehicle,
- Respect the environment, and
- Respect private property and do not trespass.

The manufacturer advises you to strictly follow the recommended maintenance program as outlined. This preventive maintenance program is designed to ensure that all critical components on this vehicle are thoroughly inspected at various intervals.

All information in this manual is based on the latest product data and specifications available at the time of printing. The manufacturer reserves the right to make product changes and improvements which may affect illustrations or explanations without notice.

You have chosen a quality vehicle designed and manufactured to give dependable service. Be sure, as the owner/operator of this vehicle, to become thoroughly familiar with its basic operation, maintenance, and storage procedures.

Read and understand the entire Operator's Manual before operating this vehicle to ensure safe and proper use. Always operate the vehicle within your level of skill and current terrain conditions.

Division II of this manual covers operator-related maintenance, operating instructions, and storage instructions. If major repair or service is ever required, contact an authorized dealer for professional service.

At the time of publication, all information and illustrations in this manual were technically correct. Some illustrations used in this manual are used for clarity purposes only and are not designed to depict actual conditions. Because the manufacturer constantly refines and improves its products, no retroactive obligation is incurred.

## Parts and Accessories

When in need of replacement parts, oil, or accessories for this vehicle, be sure to use only **GENUINE PARTS, OIL, AND ACCESSORIES**. **Only genuine parts, oil, and accessories are engineered to meet the standards and requirements of this vehicle. For a complete list of accessories, refer to the current ROV Accessory Catalog.**

To aid in service and maintenance procedures on this vehicle, a Service Manual is available through your local authorized dealer.

Operation of this vehicle is restricted to people 16 years of age and older who possess a valid driver's license. Passengers must be able to place both feet flat on the floor while keeping their back against the seat and holding onto an available handhold.

**TREAD LIGHTLY!** **OFFICIAL SPONSOR**<sup>®</sup>  
ON PUBLIC AND PRIVATE LAND

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## Division I — Safety

### This vehicle is not a toy and can be hazardous to operate.

- Always go slowly and be extra careful when operating on unfamiliar terrain. Always be alert to changing terrain conditions when operating this vehicle.
- Never operate on excessively rough, slippery, or loose terrain.
- Always follow proper procedures for turning as described in this manual. Practice turning at slow speeds before attempting to turn at faster speeds. Do not turn at excessive speed.
- Always have the vehicle checked by an authorized dealer if it has been involved in an accident.
- Never operate on hills too steep for your abilities. Practice on smaller hills before attempting larger hills.
- Always follow proper procedures for climbing hills as described in this manual. Check the terrain carefully before you start up any hill. Never climb hills with slippery or loose surfaces. Never depress the accelerator suddenly or make gear changes while moving. Never go over the top of any hill at high speed.
- Always follow proper procedures for going down hills and for braking on hills as described in this manual. Check the terrain carefully before you start down any hill. Never go down a hill at high speed. Avoid going down a hill at an angle which would cause the vehicle to lean sharply to one side. Go straight down the hill where possible.
- Always be careful when you decide to climb or descend a hill and never turn on a hill. Drive straight up or down inclines and not across them. If you must cross the side of a hill, drive slowly and stop or turn downhill if you feel the vehicle may tip over.
- Always use proper procedures if you stall or roll backward when climbing a hill. To avoid stalling, maintain a steady speed when climbing a hill. If you stall or roll backwards, follow the special procedure for braking described in this manual.
- Always check for obstacles before operating in a new area. Never attempt to operate over large obstacles, such as large rocks or fallen trees. Always follow proper procedures when operating over obstacles as described in this manual.
- Always be careful of skidding or sliding. On slippery surfaces, such as ice, go slowly and be very cautious in order to reduce the chance of skidding or sliding out of control.
- Never operate this vehicle in fast-flowing water or in water deeper than the floorboard. Remember that wet brakes may have reduced stopping capability. Test your brakes after leaving water. If necessary, apply them lightly several times to let friction dry out the pads.
- Always be sure there are no obstacles or people behind you when you operate in reverse. When it is safe to proceed in reverse, go slowly. Avoid turning at sharp angles in reverse.
- Always use the size and type tires specified in this manual. Always maintain proper tire pressure as described in this manual.
- Never improperly install or improperly use accessories on this vehicle.
- Never exceed the stated load capacity for this vehicle. Cargo should be properly distributed and securely attached. Reduce speed and follow instructions in this manual for carrying cargo or pulling a trailer and allow greater distance for braking.
- Operation of this vehicle is restricted to people 16 years of age and older who possess a valid driver's license. Passengers must be able to place both feet flat on the floor while keeping their back against the back of the seat and holding on to an available handhold.



### WARNING

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

## Safety Alert

You should be aware that THIS VEHICLE IS NOT A TOY AND CAN BE HAZARDOUS TO OPERATE. This vehicle handles differently from other vehicles, including motorcycles and cars. A collision or rollover can occur quickly, even during what you think are routine maneuvers such as turning, driving on hills, and going over obstacles, if you fail to take proper precautions.

### TO AVOID SERIOUS INJURY OR DEATH:

- \* Always read the Operator's Manual carefully and follow the operating procedures described. Pay special attention to the warnings contained in the manual and on all labels.
- \* Always wear the seat belt when operating or riding in this vehicle.
- \* Always follow these age recommendations:
  - Operation of this vehicle is restricted to people 16 years of age and older who possess a valid driver's license. Passengers must be able to place both feet flat on the floor while keeping their back against the seat and holding on to the handhold.
- \* Never carry a passenger in the cargo box of this vehicle.
- \* Never operate this vehicle on a public road, even a dirt or gravel one, because you may not be able to avoid colliding with other vehicles.
- \* Never operate this vehicle without an approved motorcycle helmet, eye protection, boots, gloves, long pants and a long-sleeved shirt or jacket.
- \* Never consume alcohol or drugs before or while operating this vehicle.
- \* Never operate this vehicle at excessive speeds. Go at a speed which is proper for the terrain, visibility conditions, and your experience.
- \* Never attempt to do wheelies, jumps, or other stunts.
- \* Always be careful when operating this vehicle, especially when approaching hills, turns, and obstacles and when operating on unfamiliar or rough terrain.
- \* Never operate this vehicle with the cargo box lifted or removed.
- \* Never operate this vehicle in fast-flowing water or in water deeper than the floorboard.
- \* Never operate this vehicle with the ROPS (Roll Over Protective Structure) removed. The ROPS provides a structure helping to limit intrusions by branches or other objects and may reduce your risk of injury in accidents.
- \* Never put your hands or feet outside the vehicle for any reason while the vehicle is in motion. Do not hold onto the ROPS or hip restraint bar. If you think or feel the vehicle may tip, do not put your hands or feet outside the vehicle as they will not be able to prevent the vehicle from tipping. Any part of your body (arms, legs, or head) outside the vehicle can be crushed by passing objects, the vehicle, or ROPS.
- \* Always fasten occupant side restraints prior to moving the vehicle.



## Hangtags

This vehicle comes with hangtags containing important safety information. Anyone who operates the vehicle should read and understand this information before riding.

**THIS HANGTAG IS NOT TO  
BE REMOVED BEFORE SALE**

**This vehicle is  
equipped with a  
speed limitation  
device to limit  
the speed to**

**15 mph**

**if the driver's  
seatbelt is not  
fully engaged.**

2261-986



### **WARNING**

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

# Important Safety Information

Anyone who operates the vehicle should read and understand this information before operating this vehicle.

## **WARNING**

**IMPROPER USE OF OFF-HIGHWAY VEHICLES CAN CAUSE SEVERE INJURY OR DEATH.**

### **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)

## **WARNING**

**IMPROPER USE OF OFF-HIGHWAY VEHICLES CAN CAUSE SEVERE INJURY OR DEATH.**

### **ALWAYS:**

- FASTEN SEAT BELTS.
- WEAR AN APPROVED HELMET AND PROTECTIVE GEAR.
- MAKE SURE ALL SIDE RESTRAINTS ARE FULLY LATCHED.
- MAKE SURE OPERATORS ARE 16 OR OLDER WITH A VALID DRIVER'S LICENSE.



### **REQUIRE PROPER USE OF YOUR VEHICLE.**

#### **DO YOUR PART TO PREVENT INJURIES:**

##### **NEVER:**

- ALLOW CARELESS OR RECKLESS DRIVING.
- LET PEOPLE DRIVE OR RIDE AFTER USING ALCOHOL OR DRUGS.
- ALLOW OPERATION ON PUBLIC ROADWAYS. SUCH USE MAY BE HAZARDOUS AND A VIOLATION OF STATE OR LOCAL LAW. VEHICLE IS FOR OFF-HIGHWAY USE ONLY.
- EXCEED SEATING CAPACITY. MAKE SURE OCCUPANTS ONLY RIDE IN DESIGNATED SEATING POSITIONS, WITH ONE PERSON IN EACH SEATING POSITION.



EACH RIDER MUST BE ABLE TO SIT WITH BACK AGAINST SEAT, FEET FLAT ON FLOOR, AND HANDS ON STEERING WHEEL OR HANDHOLD(S). STAY COMPLETELY INSIDE VEHICLE.

### **BE SURE RIDERS PAY ATTENTION AND PLAN AHEAD.**

IF YOU THINK OR FEEL THE VEHICLE MAY TIP OR ROLL, REDUCE YOUR RISK TO 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.



**ROLLOVERS HAVE CAUSED SEVERE INJURIES AND DEATH. EVEN ON FLAT, OPEN AREAS.**

**AVOID STEEP HILLS AND NEVER CLIMB HILLS WITH SLIPPERY OR LOOSE SURFACES.**

**NEVER OPERATE AT SPEEDS TOO FAST FOR YOUR SKILLS OR THE CONDITIONS.**

**LOCATE AND READ OPERATORS MANUAL BEFORE USE. CONTACT MANUFACTURER FOR FREE REPLACEMENT. FOLLOW ALL INSTRUCTIONS AND WARNINGS.**





# Warning Labels

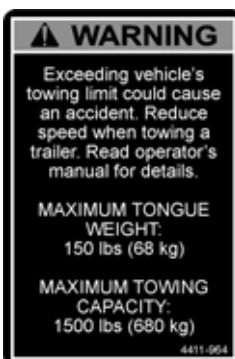


PK015C

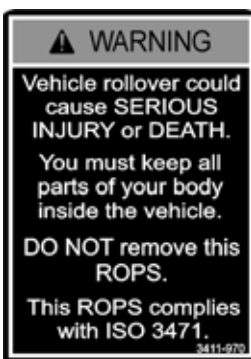
A



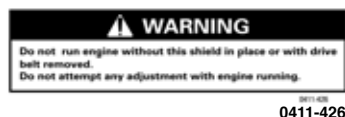
B



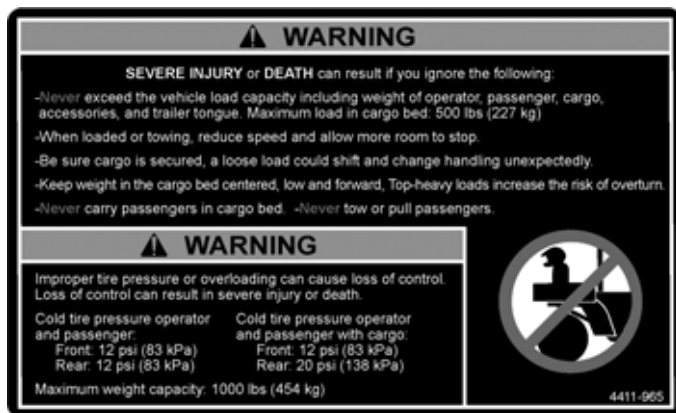
C



D



E



4411-964

3411-970

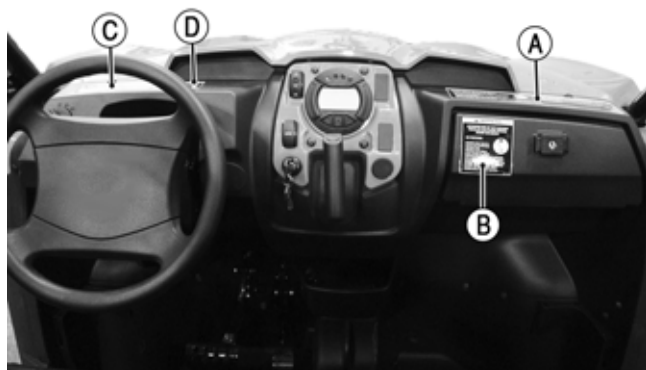
4411-965



**WARNING**

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

# Warning Labels



TXR083A

A

| <b>⚠ WARNING</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>REQUIRE PROPER USE OF YOUR VEHICLE.</b><br/>DO YOUR PART TO PREVENT INJURIES.</p> <ul style="list-style-type: none"> <li>• DO NOT ALLOW CARELESS OR RECKLESS DRIVING.</li> <li>• MAKE SURE OPERATORS ARE 16 OR OLDER WITH A VALID DRIVER'S LICENSE.</li> <li>• DO NOT LET PEOPLE DRIVE OR RIDE AFTER USING ALCOHOL OR DRUGS.</li> <li>• DO NOT ALLOW OPERATION ON PUBLIC ROADS (UNLESS DESIGNATED FOR OFF-HIGHWAY VEHICLE ACCESS) COLLISIONS WITH CARS AND TRUCKS CAN OCCUR.</li> <li>• DO NOT EXCEED SEATING CAPACITY: 1 PASSENGER (2 SEAT MODELS).</li> </ul> | <p style="text-align: center;"><b>DRIVER UNDER 16</b></p> <p><b>BE SURE RIDERS PAY ATTENTION AND PLAN AHEAD.</b><br/>IF YOU THINK OR FEEL THE VEHICLE MAY TIP OR ROLL, REDUCE YOUR RISK TO INJURY.</p> <ul style="list-style-type: none"> <li>• KEEP A FIRM GRIP ON THE STEERING WHEEL OR HANDHOLDS AND BRACE YOURSELF.</li> <li>• DO NOT PUT ANY PART OF YOUR BODY OUTSIDE OF THE VEHICLE FOR ANY REASON.</li> </ul> |

4411-962

4411-960

B

**⚠ WARNING**

**IMPROPER USE OF OFF-HIGHWAY VEHICLES CAN CAUSE SEVERE INJURY OR DEATH.**

BE PREPARED.

- FASTEN SEAT BELTS.
- WEAR AN APPROVED HELMET AND PROTECTIVE GEAR.
- MAKE SURE ALL SIDE RESTRAINTS ARE FULLY LATCHED.
- EACH RIDER MUST BE ABLE TO SIT BACK AGAINST SEAT, FEET FLAT ON FLOOR, AND HANDS ON STEERING WHEEL OR HANDHOLD. STAY COMPLETELY INSIDE VEHICLE.

4411-961

4411-961

C

**⚠ WARNING**

**IMPROPER USE OF OFF-HIGHWAY VEHICLES CAN CAUSE SEVERE INJURY OR DEATH.**

DRIVE RESPONSIBLY

**AVOID LOSS OF CONTROL AND ROLLOVERS:**

- AVOID ABRUPT MANEUVERS, SIDEWAYS SLOWING, SKIDDING, OR FIGHTAILING 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)

4411-962

4411-962

D

**⚠ WARNING**

**LOCATE AND READ OPERATOR'S MANUAL. FOLLOW ALL INSTRUCTIONS AND WARNINGS. A FREE REPLACEMENT OPERATOR'S MANUAL FOR THIS MODEL IS AVAILABLE UPON WRITTEN REQUEST.**

**NEVER OPERATE AT SPEEDS TOO FAST FOR YOUR SKILLS OR THE CONDITIONS**

**NEVER OPERATE ON HILLS GREATER THAN 15°**

**ROLLOVERS HAVE CAUSED SEVERE INJURIES AND DEATH, EVEN ON FLAT, OPEN AREAS.**

7411-077

7411-077

8



**WARNING**

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

# Location of Parts and Controls



TXR084A



PK016A



PK015A



TXR085A

1. Accelerator Pedal
2. Brake Pedal
3. In-Dash Storage Compartment
4. Digital Gauge
5. Reverse Override Switch
6. Drive Select Switch
7. Ignition/Start Switch
8. Headlight Switch
9. Shift Lever
10. Headlights
11. Passenger Side Restraint Latch
12. Operator's Manual Location
13. Passenger Seat Belt
14. Passenger Side Restraints
15. Gas Tank Cap
16. Outboard Passenger Handhold
17. Battery
18. Under-Hood Storage Compartment
19. Fuses
20. Cargo Box Latch Handle
21. Driver Seat Belt
22. Tilt Steering Lever
23. Tool Kit
24. Driver-Side Restraint
25. Driver-Side Restraint Latch
26. Hitch Receiver
27. Tailgate Latch
28. Tailgate Storage Latch
29. Taillight/Brake Light



## WARNING

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

## Warnings

### **WARNING**

#### **POTENTIAL HAZARD**

Operating this vehicle without proper instruction.

#### **WHAT CAN HAPPEN**

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

#### **HOW TO AVOID THE HAZARD**

All operators of this vehicle must read and understand this Operator's Manual and all warning and instruction labels prior to operating this vehicle.

### **WARNING**

#### **POTENTIAL HAZARD**

Allowing anyone under age 16 to operate this vehicle.

#### **WHAT CAN HAPPEN**

Use of this vehicle by children can lead to serious injury or death of the child.

Children under the age of 16 may not have the skills, abilities, or judgment needed to operate this vehicle safely and may be involved in a serious accident.

#### **HOW TO AVOID THE HAZARD**

Only people 16 years of age or older with a valid driver's license should operate this vehicle.

### **WARNING**

#### **POTENTIAL HAZARD**

Operating or riding in the vehicle without wearing a properly secured seat belt.

#### **WHAT CAN HAPPEN**

Serious injury or death. Occupants can strike objects in the passenger compartment, fall out of the vehicle during maneuvers, or be crushed or otherwise injured in the event of an accident.

#### **HOW TO AVOID THE HAZARD**

ALWAYS WEAR YOUR SEAT BELT and require others to wear their seat belts. See the Operation/Maintenance section of this manual for more information on using your seat belt and both operator and passenger wearing an approved helmet.

### **WARNING**

#### **POTENTIAL HAZARD**

Operating this vehicle on public streets, roads, or highways.

#### **WHAT CAN HAPPEN**

You can collide with another vehicle.

#### **HOW TO AVOID THE HAZARD**

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

In many states it is illegal to operate a vehicle of this type on public streets, roads, or highways. Always check state and local laws and regulations.



## **WARNING**

### **POTENTIAL HAZARD**

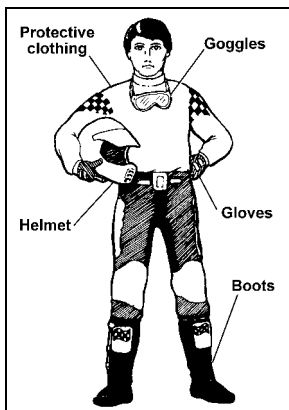
Operating or riding in this vehicle without wearing an approved helmet, eye protection, and protective clothing.

### **WHAT CAN HAPPEN**

Operating or riding without an approved helmet increases your chances of a serious head injury or death in the event of an accident.

Operating or riding without eye protection can result in an accident and increases your chances of a serious injury in the event of an accident.

Operating or riding without protective clothing increases your chances of serious injury in the event of an accident.



### **HOW TO AVOID THE HAZARD**

Always wear an approved helmet that fits properly.

You should also wear:

- Eye protection (goggles or face shield)
- Gloves
- Boots
- Long sleeved shirt or jacket
- Long pants

## **WARNING**

### **POTENTIAL HAZARD**

Operating this vehicle after or while consuming alcohol or drugs.

### **WHAT CAN HAPPEN**

Could seriously affect your judgment.

Could cause you to react more slowly.

Could affect your balance and perception.

Could result in an accident.

### **HOW TO AVOID THE HAZARD**

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

## **WARNING**

### **POTENTIAL HAZARD**

Allowing passengers to ride in the cargo box.

### **WHAT CAN HAPPEN**

Serious injury or death. This vehicle is not designed to carry passengers in the cargo box. Passengers in the cargo box can be thrown around or from the vehicle during operation or in an accident.

### **HOW TO AVOID THE HAZARD**

Do not permit passengers to ride in the cargo box. Do not install any seating in the cargo box.

 **WARNING**

**POTENTIAL HAZARD**

Operating or riding in the vehicle without occupant side restraints properly secured.

**WHAT CAN HAPPEN**

Serious injury or death. Occupants or their body parts can strike objects outside the vehicle, be crushed by the vehicle, or fall out of the vehicle during maneuvers or in the event of an accident.

**HOW TO AVOID THE HAZARD**

Do not remove the occupant side restraints. Make sure both driver and passenger occupant side restraints are secure before operating or riding in the vehicle. Stay seated with your seat belt and helmet on and keep your body completely inside the vehicle during operation. See the Operation/Maintenance section of this manual for more information.

 **WARNING**

**POTENTIAL HAZARD**

Failing to keep all parts of your body inside the passenger compartment during operation.

**WHAT CAN HAPPEN**

Serious injury or death. Body parts could strike objects outside of vehicle or be crushed in the event of a rollover or accident.

**HOW TO AVOID THE HAZARD**

Do not place your head, arms, hands, legs, or feet outside of the passenger compartment during operation. Stay seated with your seat belt and helmet on and occupant side restraints properly secured. Keep your feet and legs inboard of the foot restraints at all times. Do not attempt to stop movement or tipping of the vehicle with your hands or feet. If you feel the vehicle tipping, brace your feet flat on the floor, keep hands firmly gripping the steering wheel and handholds, and keep all body parts inside the passenger compartment.

 **WARNING**

**POTENTIAL HAZARD**

Operating this vehicle at excessive speeds.

**WHAT CAN HAPPEN**

Increases your chances of losing control of the vehicle, which can result in an accident.

**HOW TO AVOID THE HAZARD**

Always ride at a speed that is proper for the terrain, visibility, load, and operating conditions.



 **WARNING**

**POTENTIAL HAZARD**

Attempting abrupt maneuvers, sideways sliding, skidding, fishtailing, or donuts.

**WHAT CAN HAPPEN**

Increases the chance of an accident including a rollover.

**HOW TO AVOID THE HAZARD**

Never attempt abrupt maneuvers, sideways sliding, skidding, fishtailing, or donuts.  
Don't try to show off.

 **WARNING**

**POTENTIAL HAZARD**

Failure to inspect this vehicle before operating.

Failure to properly maintain this vehicle.

**WHAT CAN HAPPEN**

Increases the possibility of an accident or equipment damage.

**HOW TO AVOID THE HAZARD**

Always inspect this vehicle each time you use it to make sure it is in safe operating condition.

Always follow the inspection and maintenance procedures and schedules described in this Operator's Manual.

 **WARNING**

**POTENTIAL HAZARD**

Failure to use extra care when operating this vehicle on unfamiliar terrain.

**WHAT CAN HAPPEN**

You can come upon hidden rocks, bumps, or holes without enough time to react.

Could result in the vehicle overturning or going out of control.

**HOW TO AVOID THE HAZARD**

Go slowly and be extra careful when operating on unfamiliar terrain.

Always be alert to changing terrain conditions when operating this vehicle.

 **WARNING**

**POTENTIAL HAZARD**

Failure to use extra care when operating on rough, slippery, or loose terrain.

**WHAT CAN HAPPEN**

Could cause loss of traction or control, which could result in an accident including a rollover.

**HOW TO AVOID THE HAZARD**

Do not operate on rough, slippery, or loose terrain until you have learned and practiced the skills necessary to control this vehicle on such terrain.

Always be especially cautious on these kinds of terrain.

**⚠ WARNING**

**POTENTIAL HAZARD**

Failing to use care in turns; turning too sharply or aggressively.

**WHAT CAN HAPPEN**

The vehicle could go out of control causing a collision, tip over, or rollover.

**HOW TO AVOID THE HAZARD**

Always follow proper procedures for turning as described in this Operator's Manual. Practice turning at slow speeds before attempting to turn at faster speeds. Do not turn at excessive speed or too sharply for the conditions and for your experience level. See the Operation/Maintenance section of this manual for more information on turning on flat ground, hills, sand, ice, mud, or water.

**⚠ WARNING**

**POTENTIAL HAZARD**

Operating on steep hills.

**WHAT CAN HAPPEN**

This vehicle can overturn more easily on steep hills than on level surfaces or small hills.

**HOW TO AVOID THE HAZARD**

Never operate the vehicle on hills too steep for the vehicle or for your abilities. Practice on smaller hills before attempting larger hills.

**⚠ WARNING**

**POTENTIAL HAZARD**

Operating with the ROPS removed.

**WHAT CAN HAPPEN**

Could lead to serious injury or death.

**HOW TO AVOID THE HAZARD**

Never operate this vehicle with the ROPS removed.



**⚠ WARNING**

**POTENTIAL HAZARD**

Going down a hill improperly.

**WHAT CAN HAPPEN**

Could cause loss of control or cause the vehicle to overturn.

**HOW TO AVOID THE HAZARD**

Always follow proper procedures for going down hills as described in this Operator's Manual.

Always check the terrain carefully before you start down any hill.

Never go down a hill at high speed.

Avoid going down a hill at an angle that would cause the vehicle to lean sharply to one side. Go straight down the hill where possible.





**⚠ WARNING**

**POTENTIAL HAZARD**

Climbing hills improperly.

**WHAT CAN HAPPEN**

Could cause loss of control or cause the vehicle to overturn.



**HOW TO AVOID THE HAZARD**

Always follow proper procedures for climbing hills as described in this Operator's Manual.

Always check the terrain carefully before you start up any hill.

Never climb hills with slippery or loose surfaces.

Never open the throttle suddenly or make sudden gear changes. The vehicle could flip over backwards.

Never go over the top of any hill at high speed. An obstacle, a sharp drop, or another vehicle or person could be on the other side of the hill.

**⚠ WARNING**

**POTENTIAL HAZARD**

Crossing hills or turning on hills.

**WHAT CAN HAPPEN**

Could cause loss of control or cause the vehicle to overturn.

**HOW TO AVOID THE HAZARD**

Avoid crossing the side of a hill or turning on a hill whenever possible. Never attempt to turn the vehicle around on any hill. If you must cross the side of a hill, drive slowly and stop or turn downhill if you feel the vehicle may tip.

**⚠ WARNING**

**POTENTIAL HAZARD**

Stalling, rolling backwards, or improperly dismounting while climbing a hill.

**WHAT CAN HAPPEN**

Could result in the vehicle overturning.

**HOW TO AVOID THE HAZARD**

Use proper gear and maintain steady speed when climbing a hill.

If you lose all forward speed:

Apply the brakes. Place the transmission in park after you are stopped.

If you begin rolling backwards:

Gradually apply the brakes while rolling backwards.

When fully stopped, place the transmission in park.

 **WARNING**

**POTENTIAL HAZARD**

Improperly operating over obstacles.

**WHAT CAN HAPPEN**

Could cause loss of control or a collision. Could cause the vehicle to overturn.

**HOW TO AVOID THE HAZARD**

Before operating in a new area, check for obstacles.

Never attempt to ride over large obstacles, such as large rocks or fallen trees.

When you go over obstacles, always follow proper procedures as described in this Operator's Manual.

 **WARNING**

**POTENTIAL HAZARD**

Improperly operating in reverse.

**WHAT CAN HAPPEN**

You could hit an obstacle or person behind you, resulting in serious injury or death.

**HOW TO AVOID THE HAZARD**

Before you engage reverse gear, make sure there are no obstacles or people behind you. When it is safe to proceed, go slowly.

 **WARNING**

**POTENTIAL HAZARD**

Skidding or sliding.

**WHAT CAN HAPPEN**

You could lose control of the vehicle.

You could also regain traction unexpectedly, which may cause the vehicle to overturn.

**HOW TO AVOID THE HAZARD**

Learn to safely control skidding or sliding by practicing at slow speeds and on level, smooth terrain.

On extremely slippery surfaces, such as ice, go slowly and be very cautious in order to reduce the chance of skidding or sliding out of control.

 **WARNING**

**POTENTIAL HAZARD**

Overloading the vehicle or carrying or towing improperly.

**WHAT CAN HAPPEN**

Could cause changes in handling, which could lead to an accident.

**HOW TO AVOID THE HAZARD**

Never exceed the stated load capacity for this vehicle.

Cargo should be properly distributed and securely attached.

Reduce speed when carrying cargo or pulling a trailer. Allow greater distance for braking. Always follow the instructions in this Operator's Manual for carrying cargo or pulling a trailer.

 **WARNING**

**POTENTIAL HAZARD**

Operating this vehicle through deep or fast-flowing water.

**WHAT CAN HAPPEN**

Tires may float, causing loss of traction and loss of control, which could lead to an accident.

**HOW TO AVOID THE HAZARD**

Never operate this vehicle in fast-flowing water or in water deeper than the floor-board.

Remember that wet brakes may have reduced stopping capability.

Test the brakes after leaving water. If necessary, apply them several times to dry out the pads.

 **WARNING**

**POTENTIAL HAZARD**

Operating the vehicle with improper tires or with improper or uneven tire pressure.

**WHAT CAN HAPPEN**

Use of improper tires on the vehicle, or operating the vehicle with improper or uneven tire pressure, could cause loss of control increasing your risk of accident.

**HOW TO AVOID THE HAZARD**

Always use the size and type tires specified in this Operator's Manual for this vehicle.

Always maintain proper tire pressure as described in this Operator's Manual.

 **WARNING**

**POTENTIAL HAZARD**

Operating this vehicle with improper modifications.

**WHAT CAN HAPPEN**

Improper installation of accessories or modification of the vehicle may cause changes in handling which could lead to an accident.

**HOW TO AVOID THE HAZARD**

Never modify this vehicle through improper installation or improper use of accessories. All parts and accessories added to this vehicle should be approved components designed for use on this vehicle and should be installed and used according to instructions. If you have questions, consult an authorized dealer.

 **WARNING**

**POTENTIAL HAZARD**

Failing to avoid pinch-points when lowering the cargo box.

**WHAT CAN HAPPEN**

Fingers, hands, or arms could be seriously injured when lowering the cargo box.

**HOW TO AVOID THE HAZARD**

Always be aware of and avoid lowering cargo box until everyone is clear of pinch-points.

 **WARNING**

**POTENTIAL HAZARD**

Operating through or over thick or sharp brush, timber, debris, or rocks.

**WHAT CAN HAPPEN**

Serious injury or death. Brush, branches, debris, and rocks can enter or penetrate the passenger compartment and strike occupants. Running over sharp branches, rocks, or other large objects can also cause loss of control.

**HOW TO AVOID THE HAZARD**

Be alert. Slow down. Wear all recommended protective gear specified in this Operator's Manual. Avoid operating through or over thick brush, timber, debris, or large rocks whenever possible. Watch for and avoid sharp branches, rocks, or other large objects that could impede or impact the vehicle or enter the passenger compartment.

 **WARNING**

**POTENTIAL HAZARD**

Securing a person improperly in the vehicle due to physical size.

**WHAT CAN HAPPEN**

Serious injury or death. Occupant could strike objects in the passenger compartment, fall out of the vehicle during maneuvers, or be ejected and crushed in the event of an accident.

**HOW TO AVOID THE HAZARD**

Always make sure a passenger can sit with both feet flat on the floor and their back against the seat while being able to reach any provided handholds.

 **WARNING**

**POTENTIAL HAZARD**

Operating this vehicle on paved surfaces.

**WHAT CAN HAPPEN**

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

**HOW TO AVOID THE HAZARD**

Whenever possible, avoid operating the vehicle on any paved surfaces including sidewalks, driveways, parking lots, and streets. If operating on paved surfaces is unavoidable, travel slowly (less than 10 mph [16 km/h]) and avoid sudden turns and stops.



## Division II — Operation/Maintenance Specifications

| ENGINE                                         |                                                                |
|------------------------------------------------|----------------------------------------------------------------|
| Type                                           | Four-Cycle/Liquid Cooled                                       |
| Bore x Stroke                                  | 89 mm x 71.2 mm (3.5 x 2.8 in.)                                |
| Displacement                                   | 443 cc (27.0 cu in.)                                           |
| Spark Plug Type                                | NGK CR6E                                                       |
| Spark Plug Gap                                 | 0.7-0.8 mm (0.028-0.031 in.)                                   |
| Brake Type                                     | Hydraulic Disc (front);<br>Shaft-Mounted Hydraulic Disc (rear) |
| CHASSIS                                        |                                                                |
| Length (Overall)                               | 270.3 cm (106.4 in.)                                           |
| Height (Overall)                               | 194.8 cm (76.7 in.)                                            |
| Width (Overall)                                | 143.3 cm (56.4 in.)                                            |
| Suspension Travel (Front/Rear)                 | 19 cm (7.5 in.)                                                |
| Tire Size (Front)                              | 25 x 8-12                                                      |
| Tire Size (Rear)                               | 25 x 10-12                                                     |
| Tire Inflation Pressure                        | 82.7 kPa (12 psi)                                              |
| MISCELLANEOUS                                  |                                                                |
| Dry Weight (Approx)                            | 497 kg (1095 lb)                                               |
| ROPS Tested Curb Weight                        | 997.9 kg (2200 lb)                                             |
| Gas Tank Capacity                              | 32.2 L (8.5 U.S. gal.)                                         |
| Coolant Capacity                               | 2.5 L (2.64 U.S. qt)                                           |
| Differential Capacity                          | 250 mL (8.5 fl oz)                                             |
| Rear Drive Capacity                            | 230 mL (7.8 fl oz)                                             |
| Engine Oil Capacity (Approx) (Change w/filter) | 2.4 L (2.5 U.S. qt)                                            |
| Gasoline (Recommended)                         | 87 Octane Regular Unleaded                                     |
| Engine Oil (Recommended)                       | ACX All Weather (Synthetic)                                    |
| Front Differential/Rear Drive Lubricant        | SAE-Approved 80W-90 Hypoid                                     |
| Taillight/Brake Light                          | 12V/5W/21W                                                     |
| Headlight                                      | 12V/55W/60W                                                    |
| Starting System                                | Electric                                                       |

Specifications subject to change without notice.

# Vehicle Operation

| Pre-Start/Pre-Operation Checklist |                                                                                                                                                                                                                          |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Item                              | Remarks                                                                                                                                                                                                                  |
| Brake System                      | Pedal firm — near top of travel.<br>Fluid at proper level.<br>Check for fluid leaks.                                                                                                                                     |
| Controls                          | Steering free — no binding — no excessive free-play.<br>Shift lever in park.<br>Accelerator free — no binding — returns to idle position.                                                                                |
| Fluids                            | Coolant level to bottom of radiator neck and reservoir at least half full when cold.<br>Check oil level.<br>Gas tank full of recommended gasoline.<br>Differential/rear drive at proper level.<br>Check for fluid leaks. |
| Suspension                        | Ball joints/tie rod ends free — secure.<br>Shocks not leaking — mountings secure.<br>Shock spring preload equal on left and right.<br>Components free of all debris.                                                     |
| Lights/Switches                   | Check headlight HI/LO beam — light switch to OFF.<br>Check taillight/brake light — light switch to OFF.<br>Check drive select switch — set to 2WD.                                                                       |
| Air Filter                        | Drain caps clear of all debris.<br>Ducting secure — no holes or tears.                                                                                                                                                   |
| Tires/Wheels                      | Properly inflated — tread adequate.<br>Check tires for cuts or tears.<br>Wheels secure to hubs — hubs secure to axles.<br>Check wheels for cracked or bent rims.                                                         |
| Seat Belts/Restraints             | Check condition — proper operation — proper adjustment.                                                                                                                                                                  |
| Nuts/Bolts/Fasteners              | Check for loose nuts — bolts — tighten as necessary.<br>Check fasteners — latches — ROPS.<br>Secure hood, cargo box, seats.                                                                                              |

# Vehicle Operation

## Starting the Vehicle

Always start with the vehicle on a flat, level surface. Carbon monoxide poisoning can kill you, so keep the vehicle outside while it's running. Follow these steps to start it up:

■ **NOTE:** This vehicle is equipped with a driver's seat belt sensor. If the driver's seat belt is not fastened, the vehicle speed is limited to 15 mph (24 km/h) and the seat belt indicator on the digital gauge will illuminate. The seat belt indicator will remain illuminated until the driver's seat belt is fastened.



HDX323A

1. Step into the vehicle and sit down; then fasten the operator seat belt and the passenger seat belt (if applicable) and strap on your approved helmet and require your passenger to do the same (if applicable). Check that the occupant side restraints are secured in place.

### **WARNING**

Falling from a moving vehicle could result in serious injury or death. Always fasten your seat belt securely and ensure the passenger seat belt is properly and securely fastened prior to operating or riding in this vehicle.

2. Place the transmission in park; then depress the brake pedal.

3. Turn the ignition switch clockwise to the START position; then when the engine starts, release to the RUN position. Do not increase engine RPM above idle.

### **CAUTION**

Increasing engine RPM above idle while in Park will cause belt damage.

### **CAUTION**

Do not run the starter motor for more than eight seconds per starting attempt. The starter motor may overheat causing severe starter motor damage. Allow 15 seconds between starting attempts to allow the starter motor to cool.

4. Let the engine warm up.

## Shifting

■ **NOTE:** The CVT is fully automatic and shifts as a function of engine RPM and vehicle loading.

### **CAUTION**

Always come to a complete stop before attempting to shift from one range to the other or into reverse. Always shift on level ground.



PK059A

1. To select reverse gear from park, move the shift lever forward one position until the letter "R" is displayed on the digital gauge.
2. To select neutral from reverse, move the shift lever forward one position until the letter "N" is displayed on the digital gauge.
3. To select high range from neutral, move the shift lever forward one position until the letter "H" is displayed on the digital gauge.

4. To select low range from high range, move the shift lever forward one position until the letter “L” is displayed on the digital gauge.

■ **NOTE: The high range is for normal driving with light loads. The low range is for carrying heavy loads or trailer towing. Compared to HIGH range, the LOW range position provides slower speed and greater torque to the wheels.**

### CAUTION

Always shift into low range when operating on wet or uneven terrain, when towing or pushing heavy loads, and when using a plow. Failure to follow this caution may result in premature V-belt failure or in damage to related drive system components.

5. To select park, move the shift lever completely down until the letter “P” is displayed on the digital gauge.

### CAUTION

Never increase engine speed above idle RPM when in park or belt damage will occur.

## Driving the Vehicle

Once the engine is warm, the vehicle is ready to be driven.

1. With the engine idling, press the foot brake pedal to apply the brake; then select the appropriate operating range and/or direction with the shift lever.
2. Release the foot brake pedal and press the accelerator to slowly add power to start moving.
3. To slow down or stop, release the accelerator and press the foot brake pedal as necessary to slow or stop the vehicle.

## Braking/Stopping

Always allow plenty of room and time to stop smoothly. Sometimes quick stops are inevitable, so always be prepared. Whether you're stopping slowly or stopping quickly, do this:

1. Release the accelerator; then press the foot brake pedal to apply the brake.

2. If the wheels lock, release them for a second; then apply them again. On surfaces such as ice, mud, or loose gravel, pump the brake pedal rapidly.
3. Never “ride” the brake. Even maintaining minimal pressure on the brake pedal will cause the brake pads to drag on the disc and may overheat the brake fluid.

### WARNING

Excessive repetitive use of the hydraulic brake for high speed stops will cause overheating of the brake fluid and premature brake pad wear which will result in an unexpected loss of brakes.

### WARNING

Use only manufacturer-approved brake fluid. Never substitute or mix different types or grades of brake fluid. Brake loss can result. Check brake fluid level and pad wear before each use. Brake loss can result in serious injury or death.

## Parking

Parking involves following the previous rules for braking; then:

1. After the vehicle stops, shift into park.
2. Turn off the ignition.

### WARNING

Parking on any incline can allow the vehicle to move, causing injury or damage.

### CAUTION

Parking on any incline puts excessive loads on shifting mechanisms and can cause hard shifting and/or stress on parts.

If parking on a hill or any incline is the only alternative, use caution and follow these procedures after the vehicle stops:

1. Press and hold the brake pedal.
2. Shift into park.
3. Turn off the ignition.



4. Slowly release brake pedal and verify vehicle is in park before getting out.



PK330

5. Block rear wheels on the downhill side.

## Basic Turns

Steering effort is at its lowest in two-wheel drive (2WD). Greater effort is needed when in four-wheel drive (4WD). The greatest effort is needed when in four-wheel drive and the differential (if equipped) is locked.

Slow down before entering a turn. The basic turning technique is to drive at low speed and gradually adjust the amount of steering to suit the driving surface. Do not make sudden sharp turns on any surface. Refer to the sub-sections Driving Uphill, Driving Downhill, Crossing Obstacles, Driving in Reverse, Skidding or Sliding, Crossing Water, or Crossing Roads for more information.

If your vehicle ever skids sideways during a turn, steer in the direction of the skid. Also, avoid hard braking or accelerating until you have regained directional control.

## WARNING

Use care in turns — turning the steering wheel too far or too fast can result in loss of control or a rollover. Excessive speed, driving aggressively, or making abrupt maneuvers, even on flat, open areas, can cause loss of control, tipping, or rollover. Uneven terrain, rough terrain, soft surfaces, slippery surfaces, and paved surfaces can also cause a loss of control or rollover in a turn. On loose or soft surfaces, allow yourself more time and distance to turn and slow down.

## Driving Uphill

Always drive straight up the hill and always avoid inclines steeper than 15°.

1. Keep both hands on the wheel.
2. Prior to starting the climb, shift into low range, select four-wheel drive for traction, and gradually press the accelerator; then maintain a constant speed.

## WARNING

**Do not attempt to turn around on a hill.**

## WARNING

**Driving up hills improperly can cause loss of control of the vehicle resulting in serious injury or death. Use extreme care when driving in hilly terrain.**

3. If the vehicle stalls on a hill, press the foot brake pedal to apply the brake, shift into reverse, and slowly back down the hill. Do not attempt to turn around on a hill.

## WARNING

**Never operate up or down hills steeper than 15°.**



## Driving Downhill

Always drive straight down the hill and always avoid hills steeper than 15°.

1. Keep both hands on the wheel.
2. Prior to descending the hill, shift into low range and release the accelerator to allow maximum engine braking. Do not use four-wheel drive when descending a hill. Engine braking can cause the front wheels to slide reducing steering control.

■ **NOTE:** Use minimum braking (as necessary) to maintain a slow speed.

### **WARNING**

Do not attempt to turn around on a hill.

### **WARNING**

Driving down hills improperly can cause loss of control of the vehicle resulting in serious injury or death. Never drive downhill at a high rate of speed. Use extreme care when driving in hilly terrain.

## Crossing Obstacles

Crossing obstacles can be hazardous. There is always the possibility of the vehicle tipping. If you cannot go around an obstacle, follow these guidelines:

1. Stop the vehicle and place the transmission in park. Go out to inspect the obstacle thoroughly from both your approach side and the exit side. If you believe you can cross the obstacle safely, select four-wheel drive (4WD).

■ **NOTE:** Selecting the LOCK position on the differential lock control may be beneficial; however, steering effort will be increased.

2. Approach the obstacle as close as possible to 90° to minimize vehicle tipping.
3. Keep speed slow enough to maintain control but fast enough to maintain momentum.

4. Use only enough power to cross the obstacle but still give yourself plenty of time to react to changes in conditions. Crawl over the obstacle.

### **WARNING**

Striking hidden obstacles can cause serious injury or death. Reduce speed and proceed with care in unfamiliar terrain.

■ **NOTE:** If there is any question about your ability to cross the obstacle safely, you should turn around if the ground is flat and you have room or back up until you find a less difficult path.

## Driving in Reverse

When operating in reverse, avoid sharp turns and backing down a hill. When using reverse, follow these guidelines:

1. Back up slowly. It's hard to see behind you.

■ **NOTE:** Avoid sudden braking while backing up.

2. If possible, it is advisable to have someone "spotting" for you while backing up.
3. If you are unsure of what is behind the vehicle, place the transmission in park and get out and inspect the area behind.

### **WARNING**

Never activate the override while the throttle is open as a loss of control may result. Use caution when using the override switch as reverse speed can greatly increase.

## Skidding or Sliding

If you lose control after hitting sand, ice, mud, or water, follow these guidelines:

1. Turn the steering wheel into the direction of the slide.
2. Keep your foot off the brake until you're out of the skid.
3. Stop and shift into four-wheel drive.

## Crossing Water

This vehicle can only operate in water up to its floorboard. Stay away from fast moving rivers. This vehicle's tires can be buoyant. In deep water, the vehicle may lose traction due to floating.

1. Physically check the depth and current of the water, especially if you can't see the bottom. Also, check for boulders, logs, or any other hidden obstacles.
2. Keep speed slow while maintaining momentum.
3. Make sure you have a way out on the other side of the water.
4. Once you've cleared the water, briefly apply the brakes to make sure they work.

■ **NOTE:** Light pedal pressure or pumping the brakes for a short distance will aid in drying the brakes.

### **WARNING**

**Do not operate this vehicle on a frozen body of water unless you have first verified the ice is sufficiently thick to support the vehicle, cargo, and participants. The vehicle could break through the ice causing serious injury or death.**

## Crossing Roads

It may be necessary to cross a road or highway. If so, note the following guidelines:

1. Stop completely on the shoulder of the road.

2. Check both directions for traffic.
3. Crossing near a blind corner or intersection is dangerous; avoid it if at all possible.
4. Drive straight across to the opposite shoulder.
5. Take into account that this vehicle could stall while crossing; give yourself enough time to get off the road.
6. You have to assume that oncoming cars don't see you, and if they do, they won't be able to predict your actions.
7. It's illegal to cross public roads in some places. Know your local laws.

## Shutting Down Properly

This vehicle is equipped with an electronic cooling fan to aid in cooling the engine. The fan operates when coolant temperatures exceed predetermined thresholds and shuts off when coolant returns to normal temperature.

Do not shut vehicle off if the cooling fan is operating. When the fan stops, shut down vehicle.

■ **NOTE:** The vehicle should be allowed to idle until fan shuts off indicating the engine has returned to normal temperature.

### **CAUTION**

**If coolant temperature continues to increase, the vehicle should be taken to an authorized dealer for inspection.**

# General Information

## Control Locations and Functions

### Ignition Switch Key

Two keys come with this vehicle. Keep the spare key in a safe place. An identifying number is stamped on each key. Use this number when ordering a replacement key.

### Ignition Switch

The ignition switch has three positions.



PK049

**OFF position** — All electrical circuits except the accessory are off. The engine will not start. The key can be removed in this position.

■ **NOTE: The accessory plugs are powered by the battery at all times.**

**RUN position** — The ignition circuit is complete and the engine can run. The key cannot be removed in this position.

**START position** — The ignition circuit is complete and the starter is engaged. When the key is released, the switch will return to the RUN position. The key cannot be removed in this position.

■ **NOTE: This vehicle has safety interlock switches which prevent the starter motor from activating when the transmission is not in neutral. Depress and hold the brake pedal to engage starter when the transmission is not in neutral.**

### Shift Lever

This vehicle has a dual-range Constant Variable Transmission (CVT) with reverse and park.



PK059A

### Drive Select Switch



PK019

This switch allows the operator to operate the vehicle in either two-wheel drive (rear wheels) or four-wheel drive (all wheels) as well as mechanically lock the differential (if equipped) to apply equal power to both front wheels. For normal riding on flat, dry, hard surfaces, two-wheel drive should be sufficient. In situations when additional traction is necessary, four-wheel drive would be the desired choice.

To select 2WD, depress the bottom of the switch. To select 4WD, move the switch to the middle position. To engage the differential lock, slide the switch latch slightly downward while pressing the top of the switch forward.

### CAUTION

**Do not attempt to either engage or disengage the front differential while the vehicle is moving.**

■ **NOTE: When the differential lock is engaged on equipped models, the indicator light will be illuminated.**

■ **NOTE:** The differential lock is intended for use where minimum traction is available. Steering effort will increase with the front differential lock engaged. Maneuverability and handling characteristics will differ with the differential lock engaged.

## Foot Brake

The foot brake should be applied whenever braking is needed.

Apply the brake by pressing the brake pedal down.

## Steering Wheel Tilt Latch

Pull on the lever located on the bottom of the steering column and move the steering wheel to the desired position; then release the lever and make sure the steering wheel locks securely.



PK020

### **WARNING**

Make sure the steering wheel is locked securely in place before moving the vehicle, or steering wheel movement could occur causing loss of control.

## Headlight Switch



PK021

With the ignition switch in the ON position, use the headlight switch to select off, running, low, or high beam.

## Reverse Override Switch

This vehicle is equipped with a reverse speed limiter system. When additional RPM is needed in reverse, depress and hold the override switch located on the center console.

■ **NOTE:** The vehicle must be in 4WD to activate the reverse override.

### **WARNING**

Never activate the override switch while the throttle is open as a loss of control could result. Use caution when using the override switch as reverse speed can greatly increase.

## Accelerator Pedal

Press down on the pedal to increase engine RPM and vehicle speed; release the pedal to decrease engine RPM and vehicle speed.

■ **NOTE:** This vehicle is equipped with an RPM limiter that retards ignition timing when maximum RPM is approached. When the RPM limiter is activated, it could be misinterpreted as a high-speed misfire.

## Seat Latches

1. To remove the seat, raise the front of the seat and slide it forward.
2. To install the seat, slide the seat brackets under the frame rails; then press firmly on the front of the seat to engage both front seat studs into the receivers.

### **WARNING**

Make sure the seat is secure before driving the vehicle. Serious injury or death could result if the seat is not properly secured.

## Seat Belts

This vehicle is equipped with seat belts for the operator and the passenger. To fasten and release the seat belt properly, use the following procedure:

1. Place the seat belt across your lap as low as possible without twisting the belt making sure the shoulder strap is below the neck and across the chest.

### **WARNING**

**Only appropriate-sized passengers may ride in this vehicle. Passengers must be able to place both feet flat on the floor while keeping their back against the back of the seat and holding on to the handholds.**

2. Push the latch-plate into the buckle slot until it “clicks” and latches securely. The belt will retract when the buckle is released.

### **WARNING**

**Falling outside a moving vehicle could result in serious injury or death. Always fasten your seat belt securely and ensure the passenger seat belt is properly and securely fastened prior to operating or riding in this vehicle.**

## **Occupant Side Restraints**

In addition to the seat belts, there are left- and right-side restraints to restrict arms or legs from extending outside the vehicle. The restraints should always be secured when the vehicle is moving.

To secure the restraint, connect the restraint buckle to the receiving latch on the front ROPS tube. To release the restraint, squeeze the locking tabs of the restraint buckle.



PK013A

## **Tailgate Latch**



PK022A

1. To open the tailgate, pivot the latch levers outward.
2. To close the tailgate, lift up and push forward firmly; then pivot the latch levers inward

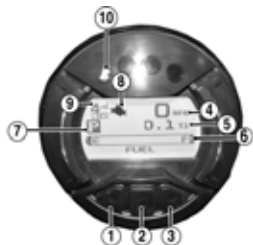
## **Cargo Box Latch Handles**



PK023

1. To raise the cargo box, pivot the latch forward; then raise the cargo box.
2. To lower the cargo box, push down firmly on the front of the box. The box will automatically lock into position.

## Digital Gauge



WT103D

1. Left Button — Shifts top display through speedometer, RPM, and clock.
2. Middle Button — Shifts middle display through speedometer, RPM, clock, odometer, trip 1, trip 2, and engine hours.
3. Right Button — Shifts bottom display through coolant temperature, battery voltage, intake air temperature, and fuel level.
4. Speedometer/Tachometer/Clock Display — Indicates approximate vehicle speed in MPH or KM/H when speedometer function is selected, RPM when tachometer function is selected, or time when clock is selected. Press the Left Button to change which parameter is being displayed. With speedometer selected, press and hold the Left Button to shift between standard (mph/miles/Fahrenheit) and metric (km/h-kilometers/Celsius).

With the clock mode selected, press and hold the Left Button to set the clock. The option of selecting the 12-hour or 24-hour clock is available; press the Left Button to alternate between the two modes. Next, press the Middle Button to set the clock. Press the Left or Right to set the hours; then press the Middle Button to set the minutes. Press the Left or Right Button to set the minutes. When the proper time has been set, press the Middle Button to return to the main digital gauge display.

5. Engine Hour Meter/Odometer/Trip Meter/Speedometer/Tachometer/Clock Display — Displays engine hours, odometer, trip meter, speedometer, tachometer, or clock. Press the Middle Button to change which parameter is being displayed. The Engine Hour Meter and Odometer cannot be reset. To reset the trip meter, select the Trip Meter; then press and hold the Middle Button until the trip meter display reads 0.

■ **NOTE:** The engine hour meter will not activate until engine speed exceeds 500 RPM.

■ **NOTE:** An item can only be displayed in this position if it is not already being displayed in the top display. To set the clock when the clock is in this position, press and hold the Middle Button; then use the procedure found in step 4.

6. Coolant Temperature/Battery Voltage/Intake Air Temperature/Fuel Level Display — Displays coolant temperature, battery voltage, intake air temperature, and fuel quantity. Press the Right Button to change which parameter is being displayed. Press and hold the Right Button to see the actual values associated with the mode selected.

### CAUTION

Continued operation with high engine temperature may result in engine damage or premature wear.

■ **NOTE:** High engine RPM, low vehicle speed, or heavy load can raise engine temperature. Decreasing engine RPM, reducing load, and selecting an appropriate transmission gear can lower the temperature.

■ **NOTE:** Debris in the engine compartment (or packed between the cooling fins of the radiator) can reduce cooling capacity. Using a garden hose, wash the radiator and the engine to remove any debris preventing air flow.

## CAUTION

Do not use a pressure washer to clean the radiator core. The pressure may bend or flatten the fins causing restricted air flow, and electrical components on the radiator could be damaged. Use only a garden hose with spray nozzle at normal tap pressure.

7. Gear Position Indicator — Indicates which gear is selected.
8. EFI Malfunction Indicator — A diagnostic code (see list below) and engine icon will be displayed on the LCD whenever an EFI error is detected. The LCD will be normal, but the code and engine icon will continue to be displayed on the LCD until the error is corrected.



WT114C

■ **NOTE:** Take the vehicle to an authorized dealer to have the error corrected and the system error reset as soon as possible.

9. Drive Select Indicator — Displays 4WD when selected by the drive select switch.
10. Seat Belt Reminder Indicator — Each time the ignition switch is turned ON, the indicator will illuminate until the driver's seat belt is fastened.



## WARNING

The seat belt indicator does not indicate that all seat belts are properly secured. It is the operator's responsibility to ensure all vehicle occupants are properly seated with seat belts secure and side restraints are properly latched. Serious injury or death could occur as a result of falling outside a moving vehicle.



## Diagnostic Trouble Codes

| Display | Fault Description                                    | Display  | Fault Description                                    |
|---------|------------------------------------------------------|----------|------------------------------------------------------|
| C0063   | Tilt Sensor Circuit High                             | P0266    | Cylinder #2 Fuel injector Balance/Open               |
| C0064   | Tilt Sensor Circuit Low/SG/Open                      | P0336    | Crankshaft Angle Sensor Synchronization              |
| C1263   | Backup/Reverse-Light Circuit Open                    | P0337    | Crankshaft Angle Sensor Circuit/SG                   |
| C1264   | Backup/Reverse-Light Circuit High                    | P0339    | Crankshaft Angle Sensor Intermittent/Erratic         |
| C1265   | Backup/Reverse-Light Circuit Low/SG                  | P0340    | Camshaft Angle Sensor Synchronization                |
| C1400   | Fuel Level Sender Open                               | P0341    | Camshaft Angle Sensor Circuit/SG                     |
| C1418   | Memory Power Failure                                 | P0342    | Camshaft Angle Sensor Intermittent/Erratic           |
| P0030   | O2 Heater Intermittent/Open                          | P0480    | Fan-Primary/Right Relay Control Circuit              |
| P0031   | O2 Heater Low/SG                                     | P0481    | Fan-Secondary/Left Relay Control Circuit High        |
| P0032   | O2 Heater High/SP                                    | P0482    | Fan-Secondary/Left Relay Control Circuit Low/SG/Open |
| P0107   | MAP Sensor Circuit Low/SG/Open                       | P0483    | Fan-Secondary/Left Relay Control Circuit             |
| P0108   | MAP Sensor Circuit High/SP                           | P0484    | Fan-Primary/Right Relay Control Circuit High         |
| P0112   | Intake Air Temp Sensor Circuit Low/SG                | P0485    | Fan-Primary/Right Relay Control Circuit Low/SG/Open  |
| P0113   | Intake Air Temp Sensor Circuit High/Open             | P0500    | Vehicle Speed-Sensor                                 |
| P0114   | Intake Air Temp Sensor Circuit Intermittent          | P0508    | Idle Air Control System Circuit Low/SG               |
| P0116   | Engine Coolant Temp Sensor Circuit Range/Performance | P0509    | Idle Air Control System Circuit High/Open            |
| P0117   | Engine Coolant Temp Sensor Circuit Low/SG            | P0520    | Engine Oil Sensor/Switch                             |
| P0118   | Engine Coolant Temp Sensor Circuit High/Open/SP      | P0562    | System Voltage Low                                   |
| P0119   | Engine Coolant Temp Sensor Circuit Intermittent      | P0563    | System Voltage High                                  |
| P0121   | Throttle Position Sensor Range/Performance           | P0601    | ECM CAN Communication Shutdown                       |
| P0122   | Throttle Position Sensor Circuit Low/SG              | P0615    | Starter Relay Circuit                                |
| P0123   | Throttle Position Sensor Circuit High                | P0616    | Starter Relay Circuit Low                            |
| P0130   | O2 Sensor Intermittent/Open                          | P0617    | Starter Relay Circuit High                           |
| P0131   | O2 Sensor Low/SG or Air-Leak                         | P0630    | VIN Not Programmed or Incompatible                   |
| P0132   | O2 Sensor High/SP                                    | P0642    | Sensor Power Circuit Low                             |
| P0171   | O2 Feedback Below Minimum Correction                 | P0643    | Sensor Power Circuit High                            |
| P0172   | O2 Feedback Exceeds Maximum Correction               | P2300    | Ignition Coil #1 Primary Circuit Low/SG/Open         |
| P0219   | Engine Over-Speed Condition                          | P2301    | Ignition Coil #1 Primary Circuit High                |
| P0231   | Fuel Pump Relay Circuit Low/SG/Open                  | P2303    | Ignition Coil #2 Primary Circuit Low/Open            |
| P0232   | Fuel Pump Relay Circuit High                         | P2304    | Ignition Coil #2 Primary Circuit High                |
| P0233   | Fuel Pump Relay Circuit                              | P2531    | Ignition Switch Circuit Low                          |
| P0261   | Cylinder #1 Fuel injector Circuit Low/SG             | P2532    | Ignition Switch Circuit High                         |
| P0262   | Cylinder #1 Fuel injector Circuit High               | FUEL OFF | Tilt Sensor Activation Code                          |
| P0263   | Cylinder #1 Fuel injector Balance/Open               |          |                                                      |
| P0264   | Cylinder #2 Fuel injector Circuit Low/SG             |          |                                                      |
| P0265   | Cylinder #2 Fuel injector Circuit High               |          |                                                      |

## Oil Level Stick

There is an oil level stick for checking the engine oil level. To check the oil level, use the following procedure:

■ **NOTE:** The vehicle should be on level ground when checking the engine oil level.

1. Remove the seat.
2. Unscrew the oil level stick (located on the right-side of the engine) and wipe it with a clean cloth.



PK024A

3. Install the oil level stick.

■ **NOTE:** The oil level stick should be threaded in for checking purposes.

4. Remove the oil level stick; the engine oil level should be within the operating range.



GZ461A

## CAUTION

Do not overfill the engine with oil. Always make sure the oil level is within the operating range but not above the FULL mark.

5. Add oil to the oil level stick opening until proper operating level is achieved.
6. Install the seat making sure it is securely latched.

## Load Capacity Ratings Chart

This vehicle must always be loaded in accordance with the Load Capacity Ratings chart. Under no circumstances should the Vehicle Load Capacity rating ever be exceeded.

### ⚠ WARNING

Overloading this vehicle could result in loss of control resulting in serious injury or death.

| Item                               | Specifications |      |
|------------------------------------|----------------|------|
|                                    | (lb)           | (kg) |
| Vehicle Load Capacity              | 1000           | 454  |
| Front Storage Compartment (max)    | 25             | 11   |
| Tongue Weight                      | 150            | 68   |
| Cargo Weight (max)                 | 500            | 227  |
| Rear Tongue and Cargo Weight (max) | 650            | 295  |
| Towing Capacity                    | 1500           | 680  |

**Vehicle Load Capacity** — Total weight of operator, passenger, trailer tongue weight, accessories, cargo, and storage compartments.

**Tongue Weight** — Weight on trailer tongue.

**Accessory Weight** — Winch, gun scabbard brackets, snow plow, etc.

**Rear Tongue and Cargo Weight** — Total weight on trailer tongue and cargo box.

**Towing Capacity** — Total weight of trailer and all cargo in the trailer.

## Trailering and Towing



PK327A

This vehicle is equipped with a rear frame-mounted receiver for a standard 5.1 cm (2 in.) receiver hitch. The standard receiver hitch must be purchased separately.

### **WARNING**

**Make sure that the load in the trailer is properly secured and will not shift while moving. Also, do not overload the trailer.**

When loading a trailer properly, two items are critical: Gross Trailer Weight (the weight of the trailer plus cargo) and Trailer Tongue Weight.

### **WARNING**

**Never exceed any of the vehicle weight restrictions.**

Trailer Tongue Weight is the downward force exerted on the hitch by the trailer coupler when the trailer is fully loaded and the coupler is at its normal towing height. Refer to the Load Capacity Ratings chart for tongue weight information.

Always maintain a slow speed when trailering and towing and avoid sudden accelerations, quick maneuvers, and sudden stops. Braking distance will be affected when towing a trailer. When towing a trailer, always maintain slow speed and allow more stopping distance than when not towing a trailer.

### **WARNING**

**Driving this vehicle without extra caution when towing a trailer will be hazardous. Trailer towing can affect the handling and braking of the vehicle. Tow only at low speeds and never exceed 10 mph (16 km/h). Avoid sudden accelerations and stopping of the vehicle. Do not make quick maneuvers. Avoid uneven surfaces and do not tow on hills.**

### **WARNING**

**Never tow people in or on any device except when towing a disabled vehicle with operable brakes and steering or on a trailer designed for passengers that has a rigid tow bar.**

## Transporting

When transporting, the vehicle must be in its normal operating position (on all four wheels) and the following procedure must be used:

1. Place the transmission in park.

### **CAUTION**

**Failure to place the transmission in park could allow the vehicle to roll off the trailer in the event of tie-down strap failure.**

2. Secure the vehicle with load rated hold-down straps.



PK083A



PK327

■ **NOTE:** Suitable hold-down straps are available from your authorized dealer. Ordinary rope is not recommended because it can stretch under load.

### CAUTION

If using additional hold-down straps in any other areas, care must be taken not to damage the vehicle.

### CAUTION

Always buckle the side restraints when transporting to prevent buckle damage to body panels.

## Gasoline—Oil—Lubricant Filling Gas Tank

### ⚠ WARNING

Always fill the gas tank in a well-ventilated area. Never add gasoline to the gas tank near any open flames or with the engine running or hot. **DO NOT SMOKE** while filling the gas tank.

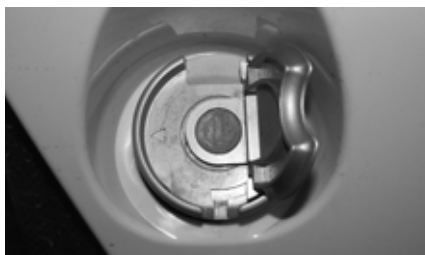
Since gasoline expands as its temperature increases, the gas tank must be filled to its rated capacity only. Expansion room must be maintained in the tank particularly if the tank is filled with cold gasoline and then moved to a warm area.

Allow the engine to cool before filling the gas tank. Care must be taken not to overfill the tank. If overfilled, gas may leak onto the engine creating a fire hazard.

### ⚠ WARNING

**Do not over-flow gasoline when filling the gas tank. A fire hazard could materialize. Always allow the engine to cool before filling the gas tank.**

1. To remove the gas tank cap, flip the lid down; then rotate the cap counterclockwise 1/4 turn.



PK061

2. After filling the tank, position the lid toward the right side of the filler neck and rotate the lid 1/4 turn clockwise to secure. Flip the lid up.

### ⚠ WARNING

**Do not overfill the gas tank.**

## Recommended Gasoline

The recommended gasoline to use in this vehicle is 87 minimum octane regular unleaded. In many areas, oxygenates are added to the gasoline. Oxygenated gasolines containing up to 10% ethanol or 5% methanol are acceptable gasolines.

When using ethanol-blended gasoline, it is not necessary to add a gasoline anti-freeze since ethanol will prevent the accumulation of moisture in the fuel system.

### CAUTION

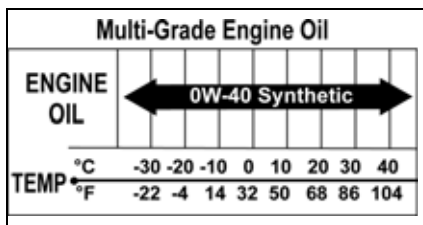
**Do not use white gas. Only approved gasoline additives should be used.**

## Recommended Engine/ Transmission Oil

### CAUTION

Any oil used in place of the recommended oil could cause serious engine damage. Do not use oils which contain graphite or molybdenum additives. These oils can adversely affect clutch operation. Also, not recommended are racing, vegetable, non-detergent, and castor-based oils.

The recommended oil to use is ACX All Weather Synthetic engine oil, which has been specifically formulated for use in this engine. Although ACX All Weather Synthetic engine oil is the only oil recommended for use in this engine, use of any API-certified SM 0W-40 oil is acceptable.



OILCHARTJ

## Recommended Front Differential/Rear Drive Lubricant

■ **NOTE:** The manufacturer recommends the use of genuine lubricants.

The recommended front differential/rear drive lubricant is SAE-approved 80W-90 hypoid. This lubricant meets all of the lubrication requirements of this vehicle.

### CAUTION

Any lubricant used in place of the recommended lubricant could cause serious front differential/rear drive damage.

## Engine Break-In

After the completion of the break-in period, the engine oil and oil filter should be changed. Other maintenance after break-in should include checking of all prescribed adjustments and tightening of all fasteners. At the discretion and expense of the owner/operator, the vehicle may be taken to an authorized dealer for this initial service.

New vehicles and engines require a "break-in" period. The first month is most critical to the life of this vehicle. Proper operation during this break-in period will help ensure maximum life and performance from this vehicle.

During the first 10 hours of operation, always use less than 1/2 throttle. Varying the engine RPM during the break-in period allows the components to "load" (aiding the engine/transmission component mating process) and then "unload" (allowing components to cool). Although it is essential to place some stress on the engine components during break-in, care should be taken not to overload the engine too often. Do not pull a trailer during the break-in period.

When the engine starts, allow it to warm up properly. Idle the engine several minutes until the engine has reached normal operating temperature. Do not idle the engine for excessively long periods of time.

## Burnishing Brake Pads

Brake pads must be burnished to achieve full braking effectiveness. Braking distance will be extended until brake pads are properly burnished.

### ⚠ WARNING

**Do not attempt sudden stops or put yourself into a situation where a sudden stop will be required until the brake pads are properly burnished.**

1. Choose an area sufficiently large to safely accelerate to 30 mph (48 km/h) and to brake to a stop.
2. Accelerate to 30 mph (48 km/h); then release the accelerator pedal and press brake pedal to decelerate to 0-5 mph (0-8 km/h).
3. Repeat procedure 20 times.

## General Maintenance

■ **NOTE: Proper maintenance of this vehicle is important for optimum performance. Follow the Maintenance Schedule and all ensuing maintenance instructions/information.**

If, at any time, abnormal noises, vibrations, or improper functioning of any component of this vehicle is detected, **DO NOT OPERATE THE VEHICLE.** Take the vehicle to an authorized dealer for inspection and adjustment or repair.

A repair shop or person of the owner's choosing may maintain, replace, or repair emission-control devices and systems.

If the owner/operator does not feel qualified to perform any of these maintenance procedures or checks, take the vehicle to an authorized dealer for professional service.

■ **NOTE: The following instructions and information refer to specific items in the maintenance and care of this vehicle.**

| Maintenance Schedule                                                                                            |        |                                                 |                                     |                           |                           |
|-----------------------------------------------------------------------------------------------------------------|--------|-------------------------------------------------|-------------------------------------|---------------------------|---------------------------|
| Item                                                                                                            | Page   | Initial 100 mi.<br>(160 km)                     | Every 100 mi.<br>(160 km)           | Every 300 mi.<br>(482 km) | Every 500 mi.<br>(804 km) |
| Battery                                                                                                         | 41     | I                                               | I                                   |                           |                           |
| * Engine nuts and bolts                                                                                         | —      | I                                               |                                     |                           | I                         |
| * Valve clearance                                                                                               | —      | I                                               |                                     |                           | I                         |
| Spark plug                                                                                                      | 44     | I                                               |                                     |                           | I                         |
|                                                                                                                 | 19     | Replace every 4000 miles (6436 km) or 18 months |                                     |                           |                           |
| Liquid cooling system                                                                                           | 37     | I                                               | Inspect every time before operating |                           |                           |
| Gas hoses                                                                                                       | 40     | I                                               | Inspect every time before operating |                           |                           |
| Engine/transmission oil and filter                                                                              | 38     | R                                               |                                     | R**                       |                           |
| Air filter                                                                                                      | 44     | I                                               |                                     | I                         |                           |
| Gear lubricant<br>(front differential/rear drive)                                                               | 38     | R                                               |                                     | I                         | I                         |
|                                                                                                                 |        |                                                 |                                     |                           |                           |
| V-belt                                                                                                          | 45     | I                                               |                                     |                           | I                         |
| Spark arrester/muffler                                                                                          | 46     |                                                 |                                     |                           | C                         |
| Tires/air pressure                                                                                              | 19, 46 | I                                               | Inspect every time before operating |                           |                           |
| * Brake components                                                                                              | 39     | I                                               | Inspect every time before operating |                           |                           |
| Brake fluid                                                                                                     | 39     | I                                               | Inspect every time before operating |                           |                           |
| Brake hoses                                                                                                     | 39     | I                                               | Inspect every time before operating |                           |                           |
| * Steering                                                                                                      | —      | I                                               | Inspect every time before operating |                           |                           |
| * Suspension (Ball joint boots, drive axle boots front and rear, tie rods, differential and rear drive bellows) | —      | I                                               | Inspect every time before operating |                           |                           |
| * Chassis nuts and bolts                                                                                        | —      | I                                               | T                                   |                           |                           |
| Wheel lug nuts                                                                                                  | 46     | T                                               | I                                   | T                         |                           |
| Frame/welds/racks                                                                                               | —      | I                                               |                                     |                           | I                         |
| Electrical connections                                                                                          | —      | I                                               |                                     |                           | I                         |
| Headlight/taillight/brake light                                                                                 | 47, 19 | I                                               | Inspect every time before operating |                           |                           |
| Air filter drains                                                                                               | —      | I                                               | Inspect every time before operating |                           |                           |
| Accelerator pedal                                                                                               | 27     | I                                               | Inspect every time before operating |                           |                           |
| ROPS                                                                                                            | 50     |                                                 | Inspect every time before operating |                           |                           |
| Occupant side restraints                                                                                        | 50     |                                                 | Inspect every time before operating |                           |                           |

I = Inspect and clean, adjust, lubricate, replace as necessary; T = Tighten; R = Replace; C = Clean

\* Dealer maintenance

\*\* When using ACX All Weather Synthetic oil, oil change interval can be increased to every 1000 miles (1609 km) or every 12 months.

## Liquid Cooling System

■ **NOTE:** Debris in the engine compartment or packed between the cooling fins of the radiator can reduce cooling capability. Using a garden hose, wash the radiator to remove any debris preventing air flow.

### CAUTION

Do not use a pressure washer to clean the radiator core. The pressure may bend or flatten the fins causing restricted air flow, and electrical components on the radiator could be damaged. Use only a garden hose with spray nozzle at normal tap pressure.

The cooling system capacity can be found in the specification chart. The cooling system should be inspected daily for leakage and damage. If leakage or damage is detected, take the vehicle to an authorized dealer for service. Also, the coolant level should be checked periodically.

### CAUTION

Continued operation of the vehicle with high engine temperature may result in engine damage or premature wear.

■ **NOTE:** High engine RPM, low vehicle speed, or heavy load can raise engine temperature. Decreasing engine RPM, reducing load, and selecting an appropriate transmission gear can lower the temperature.

When filling the cooling system, use a coolant/water mixture which will satisfy the coldest anticipated weather conditions of the area in accordance with the coolant manufacturer's recommendations.

While the cooling system is being filled, air pockets may develop; therefore, remove the bleed plug on the coolant pipe at the front of the engine allowing trapped air to escape. When pure coolant (no air) flows from the bleed hole, install the bleed plug, tighten securely, and then fill the cooling system to the bottom of the stand pipe in the radiator neck. Run the engine for five minutes after the initial fill; then shut off the engine and recheck coolant level.

■ **NOTE:** Use a good quality, biodegradable glycol-based, automotive-type antifreeze.

### WARNING

Never check the coolant level when the engine is hot or the cooling system is under pressure.

### CAUTION

After operating the vehicle for the initial 5-10 minutes, stop the engine, allow the engine to cool down, and check the coolant level. Add coolant as necessary.

## Shock Absorbers

Each shock absorber should be visibly checked weekly for excessive fluid leakage (some seal leakage may be observed but it does not indicate the shock is in need of replacement), cracks or breaks in the lower case, or a bent shock rod. If any one of these conditions is detected, replacement is necessary.

■ **NOTE:** When the vehicle is operated in extremely cold weather (-23° C/-10° F or colder), a small amount of leakage may be present. Unless the leakage is excessive, replacement is not necessary.

This vehicle is equipped with adjustable shock absorbers to allow for different driving and loading conditions.

Adjustments can be made with a special spanner wrench to increase or decrease coil spring tension.

To adjust the spring force, loosen the lock collar; then rotate the preload adjustment sleeve with a suitable spanner wrench until desired spring tension is achieved.

■ **NOTE:** For normal operating conditions, we recommend the preload settings be set to full-soft on all four shock absorbers.



PK082

■ **NOTE:** Before attempting to adjust suspension, clean dirt and debris from the threads and remove load from the suspension; then use the spanner wrench to adjust the preload.

## General Lubrication

### Cables

None of the cables require lubrication; however, it is advisable to lubricate the ends of the cables periodically with a good cable lubricant.

### Engine/Transmission Oil and Filter

■ **NOTE:** Refer to the recommended oil viscosity chart (on page 35) in this manual for the proper engine oil.

Change the engine oil and oil filter at the scheduled intervals. The engine should always be warm when the oil is changed so the oil will drain easily and completely.

1. Park the vehicle on level ground.
2. Remove the seat.
3. Loosen the oil level stick. Be careful not to allow contaminants to enter the opening.



PK024A

4. Remove the drain plug from the bottom of the engine and drain the oil into a drain pan.
5. Using the oil filter wrench and a ratchet handle (or a socket or box-end wrench), remove the old oil filter and dispose of properly. Do not re-use oil filter.

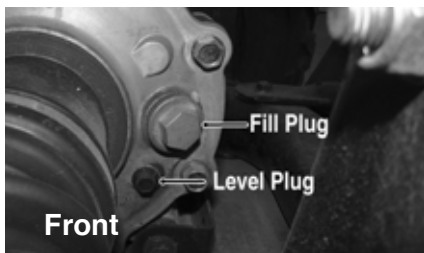
■ **NOTE:** Clean up any excess oil after removing the filter.

6. Apply oil to the new filter O-ring and check to make sure it is positioned correctly; then install the new oil filter. Tighten securely.
7. Install the engine drain plug and tighten it securely. Pour the recommended oil into the level stick opening. Install the level stick.
8. Start the engine (while the vehicle is outside on level ground) and allow it to idle for a few minutes.
9. Turn the engine off and wait approximately one minute. Recheck the oil level.
10. Inspect the area around the drain plug and oil filter for leaks.
11. Install the seat making sure it is securely latched.

### Front Differential/Rear Drive Gear Lubricant (Inspecting/Changing)

Inspect and change the gear lubricant in each according to the Maintenance Schedule. When changing the lubricant, use the appropriate hypoid oil and use the following procedure:

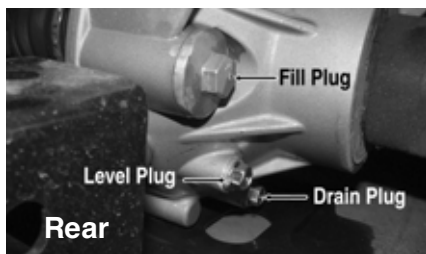
1. Place the vehicle on level ground.
2. Remove each check plug.



Front

PK027A

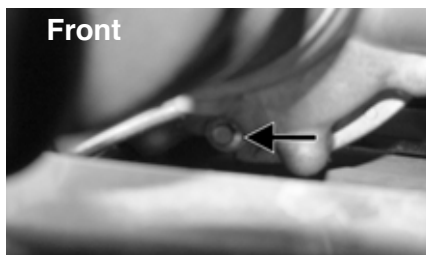




PK028A

■ **NOTE:** The lubricant level should be visible at the check plug threads.

3. Drain the oil into a drain pan by removing the drain plug from each gear case.



PK029A

4. After all the oil has been drained, install the drain plugs and tighten to 45 in.-lb (5 N-m).

### CAUTION

Inspect the oil for any signs of metal filings or water. If found, take the vehicle to an authorized dealer for servicing.

5. Pour recommended oil into each fill hole.
6. Install the fill plugs and tighten to 16 ft-lb (21.8 N-m).

## Hydraulic Brake

### ⚠ WARNING

Be sure to inspect the hydraulic brake system before each use. Always maintain brakes according to the Maintenance Schedule.

## Brake Fluid



PK030A

1. Check the brake fluid level in the brake fluid reservoir. The fluid level must be maintained between the MAX and MIN level marks. If the level in the reservoir is low, add DOT 4 brake fluid.

■ **NOTE:** The brake fluid reservoir is located on top of the master cylinder under the front body panel.

2. Press the brake pedal several times to check for firmness.
3. If the pedal is not firm, the system must be bled.

■ **NOTE:** Take the vehicle to an authorized dealer for this service.

### CAUTION

Be careful not to spill any fluid when filling the brake fluid reservoir. Wipe away spilled fluid immediately.

## Brake Hoses

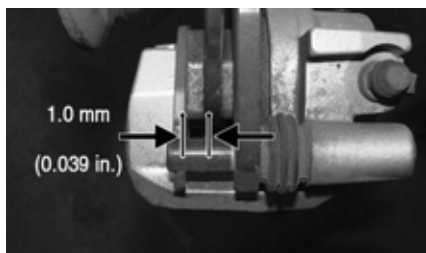
Carefully inspect the hydraulic brake hoses for cracks or other damage. If found, take the vehicle to an authorized dealer to have the brake hoses replaced.

## Brake Pads

The clearance between the brake pads and brake discs is adjusted automatically as the brake pads wear. The only maintenance that is required is replacement of the brake pads when they show excessive wear. Check the thickness of each of the brake pads as follows:

1. Remove a front wheel.
2. Measure the thickness of each brake pad.

3. If thickness of either brake pad friction material is less than 1.0 mm (0.039 in.), take the vehicle to an authorized dealer to have brake pads replaced.



PK004A

4. Install the wheel and tighten the wheel nuts in 20 ft-lb (27.2 N-m) increments to a final torque of 45 ft-lb (61.2 N-m) (steel wheel), 60 ft-lb (81.6 N-m) (aluminum wheel w/black nuts), or 80 ft-lb (108.8 N-m) (aluminum wheel w/chrome nuts).

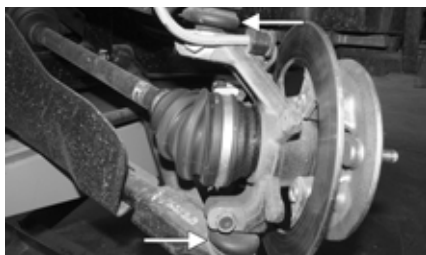
## Gas Hoses

Inspect the gas hoses. Damage from aging may not always be visible.

## Protective Rubber Boots

The protective boots should be inspected periodically according to the Maintenance Schedule.

### Ball Joint Boots (Upper and Lower/Right and Left)



PK005A

1. Secure the vehicle on a support stand to elevate the front wheels.
2. Remove both front wheels.
3. Inspect the four ball joint boots for cracks, tears, or perforations.

4. Check the ball joint for free-play by grasping the steering knuckle and turning it from side to side and up and down.
5. If boot damage is present or ball joint free-play seems excessive, contact an authorized dealer for service.

### Tie Rod Boots (Inner and Outer/Right and Left)

1. Secure the vehicle on a support stand to elevate the front wheels.
2. Remove both front wheels.
3. Inspect the tie rod boots for cracks, tears, or perforations.
4. Check the tie rod end free-play by grasping the tie rod near the end and attempting to move it up and down.



PK006A

5. If boot damage is present or tie rod end free-play seems excessive, contact an authorized dealer for service.

### Drive Axle Boots



PK006B

1. Inspect all drive axle boots for cracks, tears, or perforations.
2. If boot damage is present, contact an authorized dealer for service.

## Battery

The battery is located under the seat on the driver's side.



PK050A

After being in service, batteries require regular cleaning and recharging in order to deliver peak performance and maximum service life. The following procedures are recommended for cleaning and maintaining lead-acid batteries. Always read and follow instructions provided with battery chargers and battery products.

■ **NOTE:** Refer to all warnings and cautions provided with the battery or battery maintainer/charger.

Loss of battery charge may be caused by ambient temperature, ignition OFF current draw, corroded terminals, self discharge, frequent start/stops, and short engine run times. Frequent winch usage, snowplowing, extended low RPM operation, short trips, and high amperage accessory usage are also reasons for battery discharge.

## Maintenance Charging

■ **NOTE:** Use of the CTEK Multi US 800 or the CTEK Multi US 3300 for maintenance charging is recommended. Maintenance charging is required on all batteries not used for more than two weeks or as required by battery drain.

1. When charging a battery in the vehicle, be sure the ignition switch is in the OFF position.

■ **NOTE:** Be sure to maintain the fluid of the battery at the UPPER LEVEL. Use only distilled water when adding fluid to these batteries.

2. Clean the battery terminals with a solution of baking soda and water.

3. Be sure the charger and battery are in a well-ventilated area and ensure the battery charger cables will not contact any battery acid. Be sure the charger is unplugged from the 110-volt electrical outlet.
4. Connect the red terminal lead from the charger to the positive terminal of the battery; then connect the black terminal lead of the charger to the negative terminal of the battery.

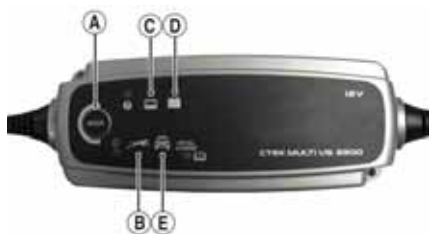
■ **NOTE:** Optional battery charging adapters are available from your authorized dealer to connect directly to your vehicle from the recommended chargers to simplify the maintenance charging process. Check with your authorized dealer for proper installation of these charging adapter connectors.

5. Plug the battery charger into a 110-volt electrical outlet.
6. If using the CTEK Multi US 800, there are no further buttons to push. If using the CTEK Multi US 3300, press the Mode button (A) at the left of the charger until the Maintenance Charge Icon (B) at the bottom illuminates. The Normal Charge Indicator (C) should illuminate on the upper portion of the battery charger.



800A

■ **NOTE:** The maintainer/charger will charge the battery to 95% capacity at which time the Maintenance Charge Indicator (D) will illuminate and the maintainer/charger will change to pulse/float maintenance. If the battery falls below 12.9 DC volts, the charger will automatically start again at the first step of the charge sequence.



3300C

■ **NOTE:** Not using a battery charger with the proper float maintenance will damage the battery if connected over extended periods.

## Charging

■ **NOTE:** Use of the CTEK Multi US 800 or the CTEK Multi US 3300 for battery maintenance charging is recommended.

1. Be sure the battery and terminals have been cleaned with a baking soda and water solution.
2. Be sure the charger and battery are in a well-ventilated area and ensure the battery charger cables will not contact any battery acid. Be sure the charger is unplugged from the 110-volt electrical outlet.
3. Connect the red terminal lead from the charger to the positive terminal of the battery; then connect the black terminal lead of the charger to the negative terminal of the battery.
4. Plug the charger into a 110-volt electrical outlet.
5. By pushing the Mode button (A) on the left side of the charger, select the Normal Charge Icon (E). The Normal Charge Indicator (C) should illuminate on the upper left portion of the charger.
6. The battery will charge to 95% of its capacity at which time the Maintenance Charge Indicator (D) will illuminate.

■ **NOTE:** For optimal charge and performance, leave the charger connected to the battery for a minimum 1 hour after the Maintenance Charge Indicator (D) illuminates. If the battery becomes hot to the touch, stop charging. Resume after it has cooled.

7. Once the battery has reached full charge, unplug the charger from the 110-volt electrical outlet.

■ **NOTE:** If, after charging, the battery does not perform to operator expectations, bring the battery to an authorized dealer for further troubleshooting.

## Jump-Starting

■ **NOTE:** Jump-starting a vehicle with a dead battery is not recommended but rather removing the battery, servicing it, and correctly charging it; however, in an emergency, it may be necessary to jump-start a vehicle. If so, use the following procedure to carefully and safely complete this procedure:

### **WARNING**

Improper handling or connecting of a battery may result in serious injury including acid burns, electrical burns, or blindness as a result of an explosion. Always remove rings and watches.

1. On the vehicle to be jump-started, remove the battery cover and any terminal boots.

### **WARNING**

Any time service is performed on a battery, the following must be observed: keep sparks, open flame, cigarettes, or any other flame away. Always wear safety glasses. Protect skin and clothing when handling a battery. When servicing battery in enclosed space, keep the area well-ventilated. Make sure battery venting is not obstructed.

2. Inspect the battery for any signs of electrolyte leaks, loose terminals, or bulging sides. Leaking or bulging battery cases may indicate a frozen or shorted battery.

## **WARNING**

If any of these conditions exist, **DO NOT** attempt a jump-start, boost, or charge the battery. An explosion could occur causing serious injury or death.

3. Inspect the vehicle to be used for jump-starting to determine if voltage and ground polarity are compatible. The vehicle must have a 12-volt DC, negative ground electrical system.

## **CAUTION**

**Always make sure the electrical systems are of the same voltage and ground polarity prior to connecting jumper cables. If not, severe electrical damage could occur.**

4. Move the vehicle to be used for the jump-start close enough to ensure the jumper cables easily reach; then shift into neutral, set and lock the brakes, shut off all electrical accessories, and turn the ignition switch OFF.

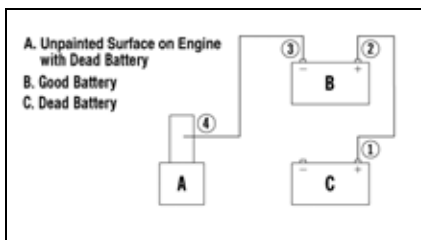
■ **NOTE:** Make sure all switches on the vehicle to be jump-started are turned OFF.

5. Disconnect all external accessories such as cell phones, GPS units, and radios on both vehicles.

## **CAUTION**

**Failure to disconnect electronic accessories during jump-starting may cause system damage due to power spikes.**

6. Attach one clamp of the positive (red) jumper cable to the positive (+) terminal (1) of the dead battery (C) being careful not to touch any metal with the other clamp; then attach the other clamp of the positive (red) jumper cable to the positive (+) terminal (2) of the good battery (B).



0744-527

■ **NOTE:** Some jumper cables may be the same color but the clamps or ends will be color-coded red and black.

7. Attach one clamp of the negative (black) jumper cable to the negative (-) terminal (3) of the good battery (B); then attach the other clamp of the negative (black) jumper cable (4) to an unpainted metal surface (A) on the engine or frame well away from the dead battery and fuel system components.

## **WARNING**

**Never make the final connection to a battery as a spark could ignite hydrogen gases causing an explosion of the battery resulting in acid burns or blindness.**

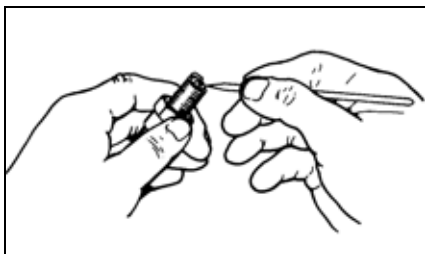
8. Stand well away from the dead battery and start the vehicle with the good battery. Allow the vehicle to run for several minutes applying some charge to the dead battery.
9. Start the vehicle with the dead battery and allow it to run for several minutes before disconnecting the jumper cables.
10. Remove the jumper cables in opposite order of hook-up (4, 3, 2, 1). Be careful not to short cables against bare metal.

■ **NOTE:** Have the battery and electrical system checked prior to operating the vehicle again.

## Spark Plug

This vehicle comes equipped with a specified spark plug. See the specifications chart for the correct spark plug. A light brown insulator indicates that the plug is correct. A white or dark insulator indicates that the engine may need to be serviced. Consult an authorized dealer if the plug insulator is not a light brown color. To help prevent cold weather fouling, make sure to thoroughly warm up the engine before operating.

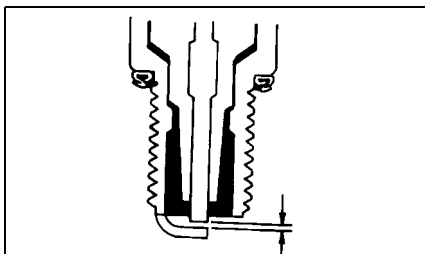
To maintain a hot, strong spark, keep the plug free of carbon.



ATV-0051

Before removing the spark plug, be sure to clean the area around the spark plug. If you do not, dirt could enter engine when removing or installing the spark plug.

Adjust the gap (see specifications chart) for proper ignition. Use a feeler gauge to check the gap.



ATV-0052

A new spark plug should be tightened 1/2 turn once the washer contacts the cylinder head. A used spark plug should be tightened 1/8-1/4 turn once the washer contacts the cylinder head.

## Air Filter/Housing Drain

The air filter inside the air filter housing must be kept clean to provide good engine power and gas mileage. If the vehicle is used under normal conditions, service the filter at the intervals specified. If operated in dusty, wet, or muddy conditions, inspect and service the filter more frequently. Use the following procedure to remove the filter and inspect and/or clean it:

### CAUTION

**Failure to inspect the air filter frequently if the vehicle is used in dusty, wet, or muddy conditions can damage the engine.**

■ **NOTE:** To access the air filter, the seat must be removed.

1. Remove dirt and debris from around the filter housing.
2. Unsnap the seven spring-clips and remove the air filter cover; then loosen the clamp securing the air filter.



PK008A

3. Remove the Phillips screw to separate the air filter holders from the air filter.



PK321

4. Slide out the air filter screen; then separate the inner and outer air filter elements to thoroughly clean.



PK322



PK009

5. Place each element in a pan larger than the elements and spray all sides generously with cleaning solvent. Let sit approximately three minutes.
6. In a pan larger than each element, with a mild detergent (dish soap) and water, wash all the dirt and oil off by squeezing the element not twisting it (wringing out or twisting the filter can cause damage).

■ **NOTE:** Foam Filter Cleaner and Foam Air Filter Oil Aerosol are available.

7. Rinse off any remaining soap.
8. Remove any excess water from the element by matting with a towel.
9. Allow each element to dry completely. Place the outer element over the inner air filter element.
10. Spray oil generously onto air filter and work the oil into the element.
11. Squeeze the element to remove excess oil.

### CAUTION

A torn air filter can cause damage to the engine. Dirt and dust may get inside the engine if the element is torn. Carefully examine the element for tears before and after cleaning it. Replace the element with a new one if it is torn.

12. Clean any dirt or debris from inside the filter housing.
13. Inspect the drain cap beneath the main housing for debris and for proper sealing.

14. Insert the air filter screen into the inner element; then secure the air filter holders with the Phillips screw.
15. Install the air filter cover and secure with the clamp. Install the air filter cover and secure with the spring-clips. Install the seat and make sure it is securely latched.

### Draining V-Belt Cover

■ **NOTE:** If the vehicle has been driven through water, the V-belt cover must be drained of any water.

1. Place the vehicle on a level surface.
2. Remove the drain bolt from the cover (located on the bottom of the V-belt cover) and allow the water to drain out.

■ **NOTE:** The drain bolt can be accessed through the bottom of the skid plate.

3. Shift the range lever to the neutral position; then start the engine.

### CAUTION

Do not attempt to clear water with the vehicle in park. The transmission is locked and belt or clutch damage could occur.

4. Increase and decrease engine RPM several times to "blow out" any water; then stop the engine.
5. Install the drain bolt and tighten securely.

■ **NOTE:** The V-belt and clutches should be inspected every 500 miles (804 km) and the belt replaced (if necessary).

## Tires

### **WARNING**

Always use the size and type of tires as specified. Refer to the specifications chart for proper tire inflation pressure, and always maintain proper tire inflation pressure.

### **Tire Tread Condition**



0732-649

The use of worn-out tires on this vehicle is very dangerous. A tire is considered to be worn out when the depth of the tread is less than 3 mm (1/8 in.). Be sure to replace the tires before reaching this minimum specification.

### **WARNING**

The use of worn-out tires is dangerous and can increase the risk of an accident.

### **Tire Replacement**

This vehicle has low-pressure tubeless tires. Air is sealed by the contact surfaces of the inner wheel rim and the tire bead. If either the inner wheel rim or tire bead is damaged, air may leak. Be extremely careful not to damage these areas when replacing tires.

It is very important to use the proper tools when repairing or replacing tires to prevent damage to the tire bead or wheel rims. If proper tools and related items are not available, have this maintenance performed by an authorized dealer or a qualified tire repair shop.

### **CAUTION**

When breaking the tire bead loose from the wheel, be extremely careful not to damage the inner wheel surface or the tire bead.

### **WARNING**

Use only approved tires when replacing tires. Failure to do so could result in unstable operation.

### **Tubeless Tire Repair**

Should a leak or flat tire occur due to a puncture, the tire may be repaired using a plug-type repair. If the damage is from a cut or if the puncture cannot be repaired using a plug, the tire must be replaced. When operating the vehicle in areas where transportation or service facilities are not readily available, it is strongly recommended to carry a plug-type repair kit and a tire pump along.

### **Wheels**

1. Park the vehicle on level ground and engage the differential lock.
2. Loosen the lug nuts on the wheel to be removed.
3. Elevate the vehicle.
4. Remove the lug nuts.
5. Remove the wheel.
6. Install the wheel and install the lug nuts.
7. Install the wheel and tighten the wheel nuts in 20 ft-lb (27.2 N-m) increments to a final torque of 45 ft-lb (61.2 N-m) (steel wheel), 60 ft-lb (81.6 N-m) (aluminum wheel w/black nuts), or 80 ft-lb (108.8 N-m) (aluminum wheel w/chrome nuts).
8. Remove the jack.

### **Muffler/Spark Arrester**

The muffler has a spark arrester which must be periodically cleaned. At the intervals shown in the Maintenance Schedule, clean the spark arrester using the following procedure:

### **WARNING**

Wait until the muffler cools to avoid burns.

1. Remove the cap screws securing the spark arrester assembly to the muffler.





PK010

2. Using a suitable brush, clean the carbon deposits from the screen taking care not to damage the screen.

■ **NOTE:** If the screen or gasket is damaged in any way, it must be replaced.

3. Install the spark arrester assembly and secure with the cap screws. Tighten to 50 in.-lb (5.6 N-m).

## Light Bulb Replacement

### CAUTION

Use only specified bulbs indicated in the Specifications chart as replacement bulbs.

■ **NOTE:** The bulb portion of the headlight is fragile. **HANDLE WITH CARE.** When replacing the headlight bulb, do not touch the glass portion of the bulb. If the glass is touched, it must be cleaned with a dry cloth before installing. Skin oil residue on the bulb will shorten the life of the bulb.

To replace the headlight bulb, use the following procedure:

1. Rotate the back of the headlight bulb counterclockwise, disconnect the wiring harness, and discard the bulb.



PK062A

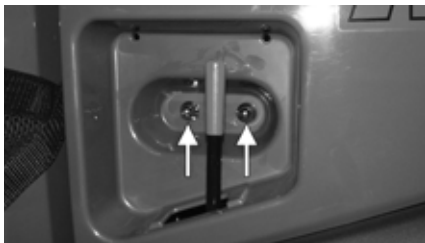
2. Connect the new headlight bulb to the wiring harness and insert into headlight assembly. Turn clockwise to secure the bulb.
3. Adjust the headlight (see Checking/Adjusting Headlight Aim in this sub-section).

### CAUTION

When replacing the headlight bulb, be careful not to touch the glass portion of the bulb. Grasp the new bulb with a clean cloth.

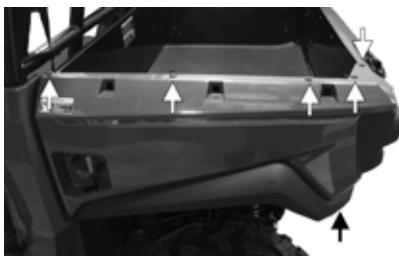
To replace the taillight/brake light, use the following procedure:

1. Disconnect the taillight/brake light connector.
2. Remove the two nuts and cap screws securing the steel tie-down to the cargo box.



PK063A

3. Remove the six plastic screws securing the rear fender to the cargo box. Remove the rear fender.



TXR004A

4. Remove the taillight/brake light socket by rotating the socket counterclockwise. Rotate the bulb counterclockwise to remove from socket.



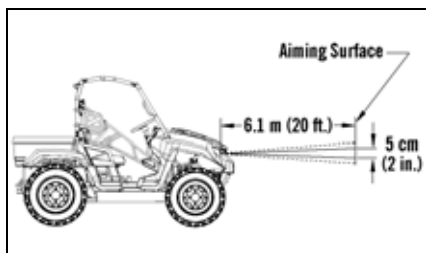
PK328

5. To install the taillight/brake light, insert the bulb into the socket and turn clockwise. Insert the socket into the taillight assembly and turn clockwise.
6. Place the rear fender onto the cargo box and secure with the six plastic screws. Secure the tie-down with the two nuts and cap screws.
7. Connect the taillight/brake light connector.

## Checking/Adjusting Headlight Aim

The headlights can be adjusted vertically. The geometric center of the HIGH beam light zone is to be used for aiming.

1. Position the vehicle on a level floor so the headlights are approximately 6.1 m (20 ft) from an aiming surface (wall or similar aiming surface).



0748-733

■ **NOTE:** There should be an average operating load on the vehicle when adjusting the headlight aim.

2. Measure the distance from the floor to the midpoint of each headlight.
3. Using the measurements obtained in step 2, make horizontal marks on the aiming surface.

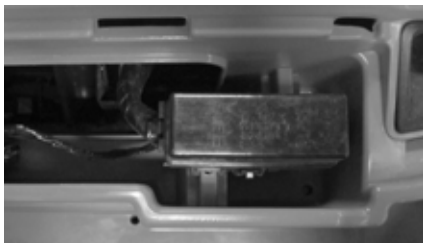
4. Make vertical marks which intersect the horizontal marks on the aiming surface directly in front of the headlights.
5. Switch on the lights. Make sure the HIGH beam is on. **DO NOT USE LOW BEAM.**
6. Observe each headlight beam aim. Proper aim is when the most intense beam is centered on the vertical mark 5 cm (2 in.) below the horizontal mark on the aiming surface.
7. Loosen the headlight adjustment screw; then adjust the headlight up or down as required. Tighten the headlight adjustment screw.



PK081A

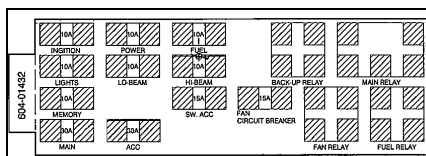
## Fuses

The fuses are located under the front access panel. If there is any type of electrical system failure, always check the fuses first.



PK012

■ **NOTE:** To remove the fuse, compress the locking tabs on either side of the fuse cover and lift out.



UTV-253

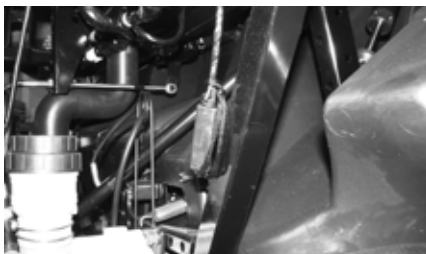
## CAUTION

Always replace a blown fuse with a fuse of the same type and rating. If the new fuse blows after a short period of use, consult an authorized dealer immediately.

## Electrical Output Terminals

Three output terminals for electrical accessories are located on the wiring harness. An accessory plug is located on the dash board.

■ **NOTE:** The rear output terminal is located above the bottom frame rail behind the right rear tire. The front output terminal is located behind the left front fender well. A third output terminal is located under the seat.



PK067A

## CAUTION

Always use electrical accessories less than 180W.

## Storage Compartments/Tools

A basic tool kit (located in the glove box) is provided with this vehicle. Maintain the tool kit with the vehicle at all times.

■ **NOTE:** There are a total of three storage compartments.

1. To access the front storage compartment, lift up firmly on the front of the cover to remove. To install, align the tabs of the storage cover into the front panel slots.



PK084

2. To open the glove box (if unlocked), squeeze the locking tabs together and pivot the lid downward or insert the key and rotate 1/8 turn counter-clockwise and pivot the lid downward. To lock the glove box, close the lid, insert the key, and rotate it 1/4 turn clockwise. Remove the key.



PK085

3. To open the tailgate compartment, pull outward on the locking lever and allow the tailgate storage cover to pivot downward. To secure the tailgate storage cover, pivot the cover upward and press firmly on both left and right hands sides.



TXR005

## Seat Belts

Inspect the seat belts for frayed or torn edges. Check that the belts extend and retract smoothly and fully without binding or catching. Check that the latch plate locks securely in place in the buckle and releases when the button is pressed. Wash off any dirt and make sure the retractors are free of debris. Do not grease or oil the retractors.

## Occupant Side Restraints

Inspect the occupant side restraints for frayed edges, cuts, or separation of seams. Wash off any dirt and make sure the latch straps lock securely into the receiver located on the front ROPS tube.



PK013A

## ROPS

Inspect the Rollover Protection Structure (ROPS) for any deformation, twisting, cracking, missing or damaged fasteners, loose fasteners, modification to the production form, missing ROPS label, unauthorized repair or welding, and/or improper installation. If any of these circumstances are discovered, do not operate and immediately bring the vehicle to an authorized dealer for service.

## Preparation for Storage

Use the following procedure to prepare the vehicle for storage:

### CAUTION

**Prior to storing this vehicle, it must be properly serviced to prevent rusting and component deterioration.**

1. Clean the vehicle thoroughly by washing dirt, oil, grass, and other foreign matter from the entire vehicle. Allow the vehicle to dry thoroughly. DO NOT get water into any part of the engine or air intake.
2. Either drain the gas tank or add a fuel stabilizer to the gas in the gas tank.
3. Clean the interior of the air filter housing.
4. Plug the hole in the exhaust system with steel wool.
5. Apply light oil to the plungers of the shock absorbers.

6. Tighten all nuts, bolts, cap screws, and screws. Care must be taken that all calibrated nuts, cap screws, and bolts are tightened to specifications.

7. Fill the cooling system to the bottom of the stand pipe in the radiator neck with properly mixed coolant.

8. Disconnect the battery cables (negative cable first); then remove the battery, clean the battery posts and cables, and store in a clean, dry area.

■ **NOTE: For storage, use a battery maintainer or make sure the battery is fully charged (see Battery section in this manual).**

9. Store the vehicle indoors in a level position.

### CAUTION

**Avoid storing outside in direct sunlight and avoid using a plastic cover as moisture will collect on the vehicle causing rusting.**

## Preparation after Storage

Taking this vehicle out of storage and correctly preparing it will ensure many hours of trouble-free riding. Use the following procedure:

1. Clean the vehicle thoroughly.
2. Remove the steel wool from the exhaust system.
3. Check all control wires and cables for signs of wear or fraying. Replace if necessary.
4. Change the engine/transmission oil and filter.
5. Check the coolant level and add properly mixed coolant as necessary.
6. Charge the battery; then install. Connect the battery cables making sure to connect the positive cable first.
7. Check the entire brake systems (fluid level, pads, etc.), all controls, headlights, taillights, brake lights, and headlight aim; adjust or replace if necessary.
8. Check the tire pressure. Inflate to recommended pressure as necessary.
9. Tighten all nuts, bolts, cap screws, and screws making sure all calibrated nuts, cap screws, and bolts are tightened to specifications.
10. Make sure the steering moves freely and does not bind.
11. Check the spark plug. Clean or replace as necessary.
12. Check the air filter and the air filter housing. Clean or replace as necessary.

### **CAUTION**

**Before installing the battery, make sure the ignition switch is in the OFF position.**

## **Warranty Procedure/Owner Responsibility**

At the time of sale, an ROV Rider Training Certificate and Owner Registration form is to be completed by the selling dealer and consumer. The receipt of the form by the Company is a condition precedent to warranty coverage. It is the selling dealer's responsibility to retain and/or submit appropriate copies of the form to the appropriate place(s) to initiate warranty coverage.

The dealer will furnish to the consumer a signed copy of the form which must be presented to the dealer when requesting warranty service. The registration form is the consumer's proof of ownership and warranty eligibility. The form is used by the dealer to validate the warranty claim. Retain your copy of the form and keep it in a safe place.

When warranty repair is suspected, the vehicle should be taken to the selling dealer, who has the primary responsibility to perform warranty repairs. Subject to the limitations set forth in the Limited Warranty, in the event the selling dealer has ceased to do business, you have moved, or you are in a location away from your selling dealer, warranty may be performed by any authorized dealer.

The authorized dealer will examine the vehicle or part to determine if, in the dealer's opinion, a warrantable condition exists. If a warrantable condition appears to exist, the dealer will repair or replace, at the Company's option, free of charge, including any related labor costs, all parts that are found to be warrantable and any other parts which the warrantable part caused to be damaged. You, the owner, will then be asked to sign a warranty form to ensure the Company that the warranty work was actually performed.

It is the owner's responsibility to maintain and service the vehicle in accordance with this Operator's Manual. To protect yourself and your vehicle, follow all safety and service tips. The Company will NOT warrant repairs required as a result of not performing standard operator maintenance, storage procedures, and service as outlined in the Operator's Manual.

Should you have any questions concerning the warranty, contact an authorized dealer.

# **U.S. EPA Emission Control Statement/Warranty Coverage — ROV (U.S. Only)**

## **STATEMENT/WARRANTY**

Textron Specialized Vehicles (TSV) warrants to the original retail purchaser, and each subsequent purchaser, that all U.S. EPA-certified TSV vehicles are designed, built, and equipped to conform to all U.S. EPA Emission Control Regulations. Please read the following information completely.

Your authorized dealer will repair or replace any defective emission-related component at no cost to you during the warranty period. You may have non-warranty service performed by any repair establishment that uses equivalent components. The regulations provide significant civil penalties for tampering that causes your vehicle to no longer meet U.S. EPA emission standards.

TSV further warrants that the engine and its emission-related components are free from defects in materials or workmanship that could cause the engine to fail to comply with applicable regulations during the warranty period.

If you have any questions about this information, or the emission warranty coverage statement, contact your authorized dealer.

## **WARRANTY PERIOD**

The emission warranty period for this vehicle begins on the same date as the standard warranty coverage and continues for 30 months, 5000 kilometers (3107 miles), or 500 hours, whichever comes first.

## **COMPONENTS COVERED**

I. 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.

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

Aftertreatment devices.

Crankcase ventilation valves.

Sensors.

Electronic control units.

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

Fuel Tank.

Fuel Cap.

Fuel Line.

Fuel Line Fittings.

Clamps\*.

Pressure Relief Valves\*.

Control Valves\*.

Control Solenoids\*.

Electronic Controls\*.

Vacuum Control Diaphragms\*.

Control Cables\*.

Control Linkages\*.

Purge Valves.

Vapor Hoses.

Liquid/Vapor Separator.

Carbon Canister.

Canister Mounting Brackets.

Carburetor Purge Port Connector.

\*As related to the evaporative emission control system.

## **OWNER'S RESPONSIBILITIES**

The owner of any vehicle warranted under this Emission Control Statement is responsible for the proper maintenance and use of the vehicle as stated in the Operator's Manual. Proper maintenance generally includes replacement and service, at the owner's choosing, such items as air filter, oil and oil filter, or any other part, item, or device related to emissions control as specified in the Operator's Manual. It is the owner's responsibility to ensure that the vehicle is used in a manner for which it was designed.

**For U.S. EPA Emission Control Warranty coverage questions, contact Textron Specialized Vehicles at 218-681-9851.**



## **Change of Address, Ownership, or Warranty Transfer**

Arctic Cat keeps on file the current name and address of the owner of this vehicle. This allows us to reach the current owner with any important safety information which may be necessary to protect customers from personal injury or property damage. Please make sure a copy of this form is completed and returned to us. if you move or if the vehicle is sold to another party.

This form may also be used to transfer the unused portion of the original warranty to a second party. In order to transfer warranty, fill out this form completely; then return a copy of this form to us. We will then process the application and issue warranty for the balance of the time remaining of the original warranty. Warranty coverage is only available in the country in which the original retail purchase occurs to the original retail purchaser resident in that country or to a transferee resident in that country of the balance of the remaining warranty.

- ☐ Address Change
- ☐ Ownership Change
- ☐ Warranty Transfer

### **CHANGE OF ADDRESS/OWNERSHIP/WARRANTY TRANSFER TO:**

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State (Province) \_\_\_\_\_

Zip Code (Postal Code) \_\_\_\_\_

Phone (     ) \_\_\_\_\_

Email \_\_\_\_\_

Year and Model \_\_\_\_\_

Vehicle Identification Number (VIN) \_\_\_\_\_

Fold Back

**CHANGE OF ADDRESS/OWNERSHIP**

Place  
Stamp  
Here

ARCTIC CAT  
PRODUCT SERVICE AND WARRANTY DEPT.  
PO BOX 810  
THIEF RIVER FALLS MN 56701

## Maintenance Record

[illegible]

# Identification Numbers Record

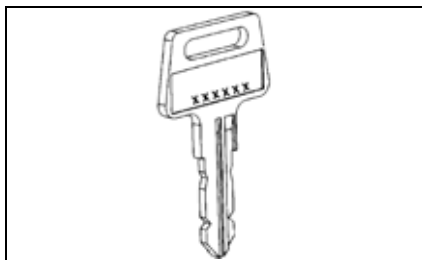
This vehicle has two identification numbers: Vehicle Identification Number (VIN) and Engine Serial Number (ESN). These numbers are required by the dealer to complete warranty claims properly. No warranty will be allowed if the VIN or ESN is removed or mutilated in any way.

Always provide the name, VIN, and ESN when contacting an authorized dealer for parts, service, accessories, or warranty. If a complete engine must be replaced, ask the dealer to notify the manufacturer for correct registration information.

Record the Vehicle Identification Number and Engine Serial Number in the spaces provided to assist you in ordering parts from your authorized dealer or for reference in case this vehicle is stolen.

## 1. KEY IDENTIFICATION NUMBER:

The key identification number is stamped on the key. Record this number in the space provided for reference if you ever need a new key.



ATV-0055B

## 2. VEHICLE IDENTIFICATION NUMBER:

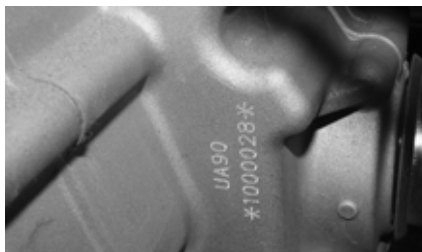
The VIN is located behind the front right tire.



PK047

## 3. ENGINE SERIAL NUMBER:

The ESN is located on the front-right side of the crankcase.



PK048



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