



# Operator's Manual

## Wildcat



### ⚠ WARNING



Operating this ROV if you are under the age of 16 increases your chance of serious injury or death.

NEVER operate this ROV if you are not 16 or older and possess a valid driver's license.

- Do not remove this Operator's Manual from this ROV according to the guidelines and agreement with the U.S. Consumer Product Safety Commission.
- Read this manual carefully. It contains important safety information.
- Always use common sense when operating this vehicle.

2013

## **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 Arctic Cat 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 Arctic Cat for a free replacement. Contact Arctic Cat Inc., Service Department, P.O. Box 810, Thief River Falls, MN 56701, for proper registration information.

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

Training is available at [www.ROHVA.org](http://www.ROHVA.org). The ROHVA two-hour safety course helps develop safe driving habits, but it is not a "learn to drive" course. It is intended to improve awareness about ROV's and inspire a safety-minded approach to off-road recreation. Users can save their progress and stop the course at any time and pick up later where they left off. At the end of the course, they have the option of taking an ROV safety quiz to test what they have learned.

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.

### **California Proposition 65**

**⚠ WARNING**

This product contains or emits chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**Always use common sense when operating this vehicle.**

# Foreword

Congratulations and thank you from Arctic Cat Inc. for purchasing an ARCTIC CAT® Wildcat. 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 Arctic Cat dealer for assistance. Remember, only authorized Arctic Cat 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.

We also advise 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. Arctic Cat Inc. reserves the right to make product changes and improvements which may affect illustrations or explanations without notice.

You have chosen a quality Arctic Cat product 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 Arctic Cat 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 Arctic Cat Inc. 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 ARCTIC CAT PARTS, OIL, AND ACCESSORIES. Only genuine Arctic Cat 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 Arctic Cat ATV Accessory Catalog.

To aid in service and maintenance procedures on this vehicle, a Service Manual and an Illustrated Parts Manual are available through your local Arctic Cat 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 back of the seat and holding on to an available hand hold.

**TREAD LIGHTLY! OFFICIAL SPONSOR®**  
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 Arctic Cat 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.
- 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 of 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 hand hold.

## 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.

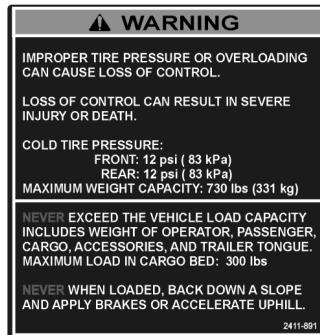
### TO AVOID SERIOUS INJURY OR DEATH:

- \* 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 back of the seat and holding on to the hand hold.
- \* 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, goggles, 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 removed.
- \* Never operate this vehicle in fast flowing water or in water deeper than the floorboard.
- \* Never operate this vehicle with the ROPS 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 side 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 make sure the doors are properly latched prior to moving the vehicle.

# Warning Labels

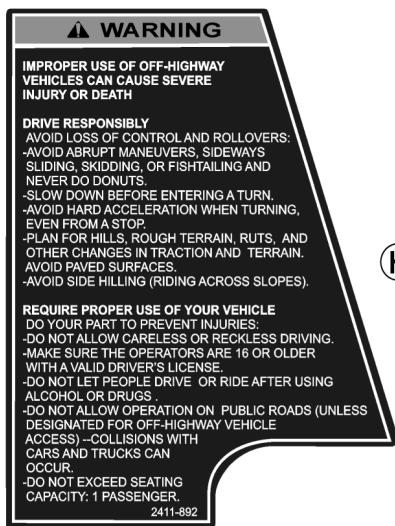
(B)



(C)



(D)



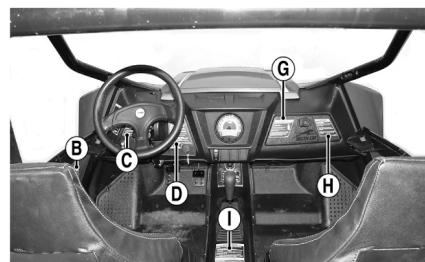
(G)



(H)



(I)



WC073B

Pour commander des Etiquettes de Mise en Garde gratuites, voyez votre détaillant de l'autorisé VTT Arctic Cat pour le numéro de pièce 1436-477.

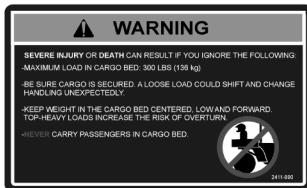


**WARNING**

Indicates a potential hazard that could result in a serious injury or death.

# Warning Labels

(A)



(E)



(F)



(J)

**TREAD LIGHTLY!**  
GIVE OTHERS A WIDE SWEEP  
• ALWAYS RESPECT THE RIGHTS OF OTHERS, protect the environment, and comply with all applicable laws and regulations.

PRE-RIDE INSPECTION PROCEDURES		STARTING PROCEDURE	
<b>T</b>	<b>TIRES AND WHEELS</b>	<b>B</b>	<b>BRAKES</b>
<b>C</b>	<b>CONTROLS AND CABLES</b>	<b>O</b>	<b>ON</b>
<b>L</b>	<b>LIGHTS AND ELECTRICAL</b>	<b>N</b>	<b>NEUTRAL</b>
<b>O</b>	<b>OIL AND FUEL</b>	<b>E</b>	<b>ENGINE</b>
<b>C</b>	<b>CHASSIS AND DRIVETRAIN</b>	<b>C</b>	<b>CHOKE</b>

1. CHECK FOR PROPER AIR PRESSURE.  
2. CHECK FOR CUTS AND GOUGES.  
3. MAKE SURE NUTS AND BOLTS ARE TIGHT.

1. IDENTIFY LOCATION OF ALL CONTROLS.  
2. THROTTLE SHOULD OPERATE SMOOTHLY AND  
3. CHECK BRAKE OPERATION, ADJUSTMENT, AND  
4. CHECK GEAR SELECTOR OPERATION.

1. CHECK IGNITION OPERATION.  
2. CHECK ALL LIGHTS

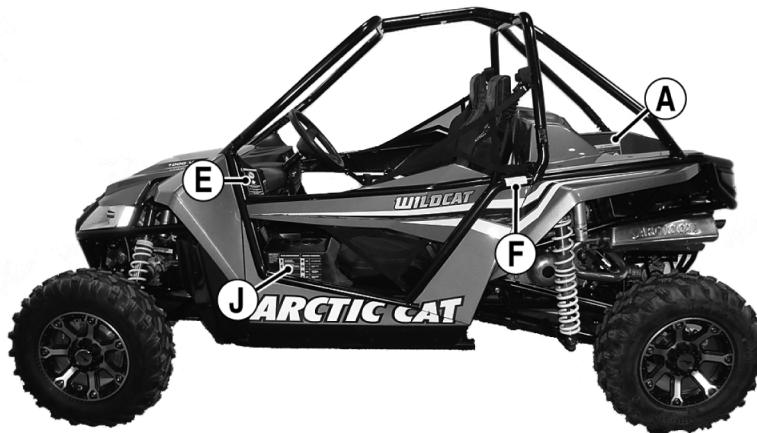
1. CHECK FUEL LEVEL.  
2. CHECK OIL LEVEL.  
3. CHECK FOR LEAKS

1. MAKE SURE ALL NUTS AND BOLTS ARE TIGHT.  
2. MAKE SURE THAT ALL VEHICLE IS REMOVED PRIOR TO TURNING ON THE IGNITION.  
3. MAKE SURE THAT VEHICLE IS LOADED PROPERLY AND NOT OVER-LOADED.

1. MAKE SURE THE TRANSMISSION IS IN NEUTRAL.  
2. TURN THE IGNITION KEY ON.

1. TURN THE IGNITION SWITCH POSITION.  
2. EFI (ELECTRONIC FUEL INJECTION).

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6



**WARNING**

Indicates a potential hazard that could result in a serious injury or death.

# Location of Parts and Controls



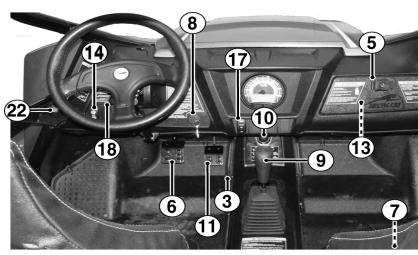
WC081A

1. Battery
2. Headlights



WC076A

3. Reverse Override Switch
4. Seat Lock Lever
5. Glove Box
6. Brake Pedal
7. Fuses
8. Ignition/Start Switch
9. Shift Lever
10. DC Power Outlet
11. Accelerator Pedal
12. Taillight/Brakelight
13. Operator's Manual Location
14. Headlight Switch
15. Driver Seat Belt
16. Passenger Seat Belt
17. Drive Select Switch
18. Tilt Steering Wheel Lever
19. Tool Kit
20. Driver Door



WC075A

21. Passenger Door
22. Door Latch
23. Passenger Grab Handle



WC077B



## WARNING

Indicates a potential hazard that could result in a serious injury or death.

# 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 or without a valid driver's license 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**

Allowing passengers to ride in the cargo bed.

### **WHAT CAN HAPPEN**

Serious injury or death. This vehicle is not designed to carry passengers in the cargo bed. Passengers in the cargo bed 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 bed. Do not install any seating in the cargo bed.

## ⚠ 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.



# Warnings

## ⚠ WARNING

### **POTENTIAL HAZARD**

Operating or riding in the vehicle without doors properly latched.

### **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 doors or operate the vehicle with doors open. Make sure both driver and passenger doors 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 doors properly latched. 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 hand holds, and keep all body parts inside the passenger compartment.

## ⚠ WARNING

### **POTENTIAL HAZARD**

Operating this vehicle at excessive speeds.

### **WHAT CAN HAPPEN**

Increases your chances or 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.

# Warnings

## ⚠ WARNING

### **POTENTIAL HAZARD**

Attempting wheelies, jumps, and other stunts.

### **WHAT CAN HAPPEN**

Increases the chance of an accident including a rollover.

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

Never attempt stunts, such as wheelies or jumps. 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

Indicates a potential hazard that could result in a serious injury or death.

# Warnings

## ⚠ 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.

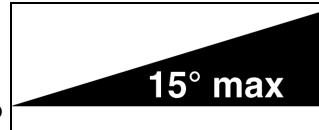
Avoid going down a hill at an angle that would cause the vehicle to lean sharply to one side. Go straight down the hill where possible.

# Warnings

## ⚠ 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.

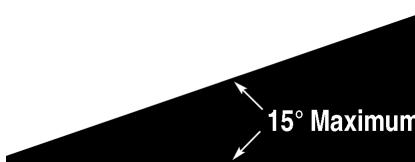
Always check the terrain carefully before you start up any hill.

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.

### **Never Operate Up Or Down Hills Steeper Than 15°**



## ⚠ 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**

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.

If you begin rolling backwards:

    Apply the brakes while rolling backwards.

    When fully stopped, place the transmission in park.

## ⚠ WARNING

Indicates a potential hazard that could result in a serious injury or death.

# Warnings

## ⚠ 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 cargo 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.

# Warnings

## ⚠ 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 floorboard.

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, in some situations, 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 genuine Arctic Cat components designed for use on this vehicle and should be installed and used according to instructions. If you have questions, consult an authorized Arctic Cat dealer.

## ⚠ WARNING

### **POTENTIAL HAZARD**

Operating the vehicle with differential lock engaged.

### **WHAT CAN HAPPEN**

The increased steering effort and reduced maneuverability caused by the locked differential could result in loss of control and an accident.

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

Never exceed 10 MPH (16 KPH) with the differential lock engaged. Always disengage the differential lock as soon as not needed for additional traction.

## ⚠ WARNING

Indicates a potential hazard that could result in a serious injury or death.

# Warnings

## **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 hand holds.

# DIVISION II - OPERATION/ MAINTENANCE

## Specifications

ENGINE	
Type	Four-Cycle/Liquid Cooled V-Twin
Bore x Stroke	92 mm x 71.6 mm (3.62 x 2.82 in.)
Displacement	951 cc (58 cu in.)
Spark Plug Type	NGK CPR8E
Spark Plug Gap	0.5-0.6 mm (0.019-0.024 in.)
Brake Type	Four Wheel Hydraulic Disc
CHASSIS	
Length (Overall)	304.8 cm (120 in.)
Height (Overall)	167.0 cm (65.8 in.)
Width (Overall)	162.6 cm (64 in.)
Suspension Travel (Front)	43.2 cm (17 in.)
Suspension Travel (Rear)	45.7 cm (18 in.)
Tire Size (Front)	26 x 9R14
Tire Size (Rear)	26 x 11R14
Tire Inflation Pressure	0.84 kg/cm <sup>2</sup> (12 psi)
MISCELLANY	
Dry Weight (Approx)	616 kg (1359 lb)
ROPS Tested Curb Weight	975 kg (2150 lb)
Gas Tank Capacity	33.3 L (8.8 U.S. gal.)
Coolant Capacity	3.3 L (3.5 U.S. qt)
Differential Capacity	275 ml (9.3 fl oz)
Rear Drive Capacity	250 ml (8.5 fl oz)
Engine Oil Capacity (Approx)	2.6 L (2.8 U.S. qt)
Gasoline (Recommended)	87 Octane Regular Unleaded
Engine Oil (Recommended)	Arctic Cat ACX All Weather (Synthetic)
Front Differential/Rear Drive Lubricant	SAE Approved 80W-90 Hypoid
Taillight/Brakelight	LED High Intensity
Headlight	LED High Intensity
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. Fluid at proper level. Check for fluid leaks.
Controls	Steering free - no binding - no excessive free-play. Shift lever in park. Accelerator free - no binding - returns to idle position.
Fluids	Coolant level to bottom of radiator neck. Check oil level. Gas tank full of recommended gasoline. Differential/rear drive at proper level. Check for fluid leaks.
Suspension	Ball joints/tie rod ends free - secure. Shocks not leaking - mountings secure. Shock spring pre-load equal on left and right. Components free of all debris.
Lights/Switches	Check headlight HI/LO beam - light switch to OFF. Check taillight/brakelight - light switch to OFF. Check drive select switch - set to 2WD.
Air Filter	Drains clear of all debris. Ducting secure - no holes or tears.
Tires/Wheels	Properly inflated - tread adequate. Check tires for cuts or tears. Wheels secure to hubs - hubs secure to axles. Check wheels for cracked or bent rims. Verify wheel lug nut tightening torque.
Seat Belts/Restraints	Check condition - proper operation - proper adjustment.
Nuts/Bolts/Fasteners	Check for loose nuts - bolts - tighten as necessary. Check fasteners - latches - ROPS. Secure hood and 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:

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 doors are secured and latched.

### **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. Shift into park.
3. Depress the brake pedal.
4. 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.**

5. Let the engine warm up.

## Shifting the Transmission

This vehicle is equipped with a constant variable transmission (CVT) coupled to a dual-range transmission with reverse and park. To shift the transmission, follow these steps.

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

1. To select high range from park, move the shift lever forward through reverse and neutral until the letter "H" is displayed on the gauge.



WC093

2. To select low range from high range, move the shift lever forward one position until the letter "L" is displayed on the gauge.



WC094

**■ 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.**

## Vehicle Operation

- To select reverse gear from park, move the shift lever forward one position until the letter "R" is displayed on the gauge.



- To select neutral from park, move the gear shift forward two positions until the letter "N" is displayed on the gauge.



### CAUTION

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

- To select park, move the shift lever completely rearward until (P) illuminates on the gauge and (P) appears in the gear position indicator on the gauge.



## Driving the Vehicle

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

- 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.
- Release the foot brake pedal and press the accelerator to slowly add power to start moving.
- 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:

- Release the accelerator; then press the foot brake pedal to apply the brake.
- 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.
- 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 Arctic Cat 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.

# Vehicle Operation

## Parking

Parking involves following the previous rules for braking; then:

1. After the vehicle stops, shift into park; then turn off the ignition.
2. If you have to park on a hill, block the 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 is locked. Never exceed 10 mph (16 kph) with the lock control in the LOCK position.

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 hills 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

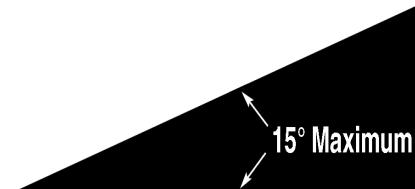
**Do not attempt to turn around on a hill.**

### ⚠ 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.

## 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 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.**

# Vehicle Operation

## ⚠ 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 set the parking brake. 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 greatly 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.

## 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.**

# Vehicle Operation

## 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.

## Cold Weather Driving

■ NOTE: Check that all control levers and the pedals move freely. Make sure the floorboard is free of ice and snow.

### ⚠ WARNING

For your personal safety, it is very important to wear the type and amount of cold-weather clothing according to the coldest anticipated temperatures.

1. With the transmission in neutral, move the vehicle forward and backward to check that the wheels roll freely. If the vehicle will not roll, the tires may be frozen to the ground or the brake pads may be frozen to the discs.

2. If the tires are frozen to the ground, pour warm water around them to melt the ice.

### CAUTION

Before riding, manually move the vehicle forward and backward to make certain that all wheels roll freely.

3. If the brakes are frozen, use a suitable heating device to thaw out the brakes.

### CAUTION

Do not attempt to free frozen brakes by pouring warm water on the brake pads and housings.

■ NOTE: After the brakes thaw, dry them by applying them several times while riding slowly.

■ NOTE: After riding through water, mud, snow, or slush, it is important to dry both brake systems before parking the vehicle.

### ⚠ WARNING

Go slowly and be extra careful when riding on snow-covered or ice-covered terrain. Always be alert to changing terrain conditions when operating the vehicle.

### ⚠ WARNING

Do not operate this vehicle on a frozen body of water. The vehicle could break through the ice causing serious injury or death.

4. Practice driving in an open snow-covered or ice-covered area at slow speeds before driving on snow-covered or ice-covered trails.
5. Learn how the vehicle responds to steering and braking on the type of terrain to be encountered on the ride.

# General Information

## Vehicle Identification Numbers

This vehicle has two identification numbers: Vehicle Identification Number (VIN) and Engine Serial Number (ESN).

The VIN is located on the upper left front frame tube above the left front wheel.



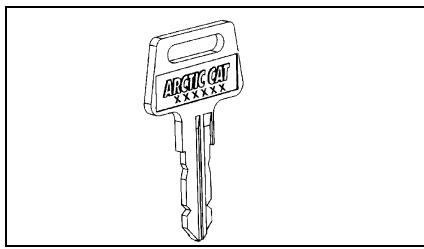
WC068

The ESN is located on the left-rear side of the upper crankcase.

These numbers are required by the dealer to complete warranty claims properly. No warranty will be allowed by Arctic Cat if the VIN or ESN is removed or mutilated in any way.

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

## Ignition Switch Key



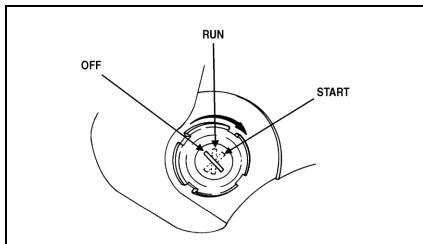
ATV-0055

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.

## Control Locations And Functions

### Ignition Switch

The ignition switch has three positions.



ATV-0056A

**OFF** position — All electrical circuits except 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 in gear. Depress and hold the brake pedal to engage starter when the transmission is not in park or neutral.**

### Shift Lever

This vehicle has a dual-range automatic transmission with reverse and park.



WC021

## Drive Select Switch



WC096A

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 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.



WC096B

### CAUTION

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

**■ NOTE: When the differential lock is engaged, the LOCK icon will be illuminated on the LCD.**

### WARNING

The differential lock is intended for use where minimum traction is available. **NEVER EXCEED 10 MPH (16 kph)** with the front differential lock engaged. Maneuverability and handling characteristics will differ with the differential lock engaged. Control loss can result in serious injury or death.

## Foot Brake

The foot brake is the only service brake, and it should be applied whenever braking is needed.

Apply the brake by pressing the brake pedal down.

## Steering Wheel Tilt Lever

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



WC039A

### 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.**

## Seat Belt Reminder Indicator

Each time the ignition switch is turned ON, the indicator will illuminate on the speedometer for 8-10 seconds to remind occupants to secure their seat belts.



WC034C

## ⚠️ **WARNING**

The seat belt indicator is only a reminder and automatically extinguishes after 8-10 seconds. It does not indicate that seat belts are properly secured. It is the operator's responsibility to ensure all vehicle occupants are properly seated with seat belts secure and doors are properly latched. Serious injury or death could occur as a result of falling outside a moving vehicle.

## **Park Indicator Light**

When the transmission is in park, the indicator will illuminate on the speedometer.



WC035A

## **Headlight Switch**



WC085

Use the headlight switch to select the high or low headlight beam. When the switch is in the HI position, the high beam will illuminate. When the switch is in the LO position, the low beam will illuminate.

## **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.

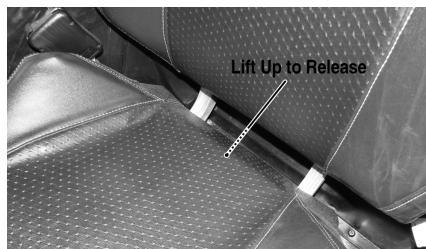
## **Accelerator Pedal**

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, lift up on the latch release (located at the rear of the seat); then raise the rear of the seat and tilt it forward.



WC017A

2. To lock the seat into position, place the front of the seat into the seat retainers and push down firmly on the rear of seat. The seat should automatically lock into position.



## WARNING

Make sure the seats are secure before driving the vehicle. Serious injury or death could result if the seats are 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 hand holds.

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.

### Doors

In addition to the seat belts, there are left- and right-side doors. The doors should always be properly latched when the vehicle is moving.

To secure the door, swing the door in until the latch and mating tab engage and lock. To release the door, depress the button in the latch mechanism.



### Power Steering

This vehicle was produced with an Electronic Power Steering (EPS) system to reduce steering effort and driver fatigue over a broad range of operating conditions.

The EPS system engages when the ignition switch is turned to the ON position and disengages after approximately five minutes (to conserve battery power) if the engine is not running.

This system is entirely maintenance-free: no adjustment or servicing is required. There are no fluids to check or change, and the EPS system is entirely self-contained and sealed to protect it from the elements.

The EPS system is battery system powered; therefore, the battery must be in good condition and fully charged. Power delivery and overload protection is provided by an EPS relay and 30-amp fuse located under the passenger seat in the Power Distribution Module (PDM).

The system is self-monitored and will display a malfunction code on the LCD gauge/speedometer should an EPS system control circuit problem occur. Do not operate the vehicle with an EPS malfunction code displayed.

■ **NOTE: Turn the key switch to the OFF position then back to the ON position to reset the malfunction code. If the code continues to be displayed, take your vehicle to an authorized Arctic Cat Dealer for EPS system servicing before resuming operation.**

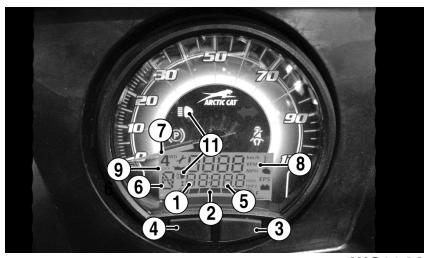
## **CAUTION**

Never operate this vehicle with an EPS code indicated on the LCD gauge/speedometer. This indicates a malfunction in the EPS system control circuit and could result in a loss of power steering assist.

In the event of electrical power failure, the EPS system becomes disabled (similar to an automobile with the engine shut off). Steering effort increases but steering control can be maintained.

## **LCD Gauge**

1. Clock/Hour Meter - The clock function indicates time in the 12 hour mode; the hour meter indicates the total time the vehicle has run and cannot be reset to zero.



WC034A

- A. With the ignition switch ON, press and release the Right Button (3) until the clock is displayed in (1); then press and hold the Right Button (3) in until the clock display starts flashing (approximately 2 seconds).
- B. Press and release the Right Button (3) to set minutes and press and release the Left Button (4) to set hours.

■ NOTE: Approximately four seconds after releasing either Button, the LCD will return to normal operation.

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

2. Fuel Level Indicator - Indicates approximate amount of gasoline in the gas tank.

■ NOTE: When the bottom segment flashes, approximately 3.8 L (1.0 U.S. qal.) of gasoline remains in the tank.

3. Right Button - Shifts the bottom segments through five modes: odometer, trip 1, trip 2, engine hours, and clock.

4. Left Button - Used to switch from speedometer function to tachometer function on the speedometer/tachometer gauge.

5. Odometer/Trip Meter (#1 and #2) - Odometer registers the total distance the vehicle has traveled. Trip meters can register two distances (for instance, #1 could register trip distance and #2 could register distance between stops). The trip meters can be reset while the odometer only registers accumulated miles/kilometers.

■ NOTE: To select odometer (ODO), trip #1 (T1), or trip #2 (T2), press and release the Right Button (3) until the desired display illuminates in the LCD. To reset the trip displays, hold the Right Button (3) down when the desired trip is displayed.

6. Gear Position Indicator - Indicates which gear is selected.
7. Speed/Tach Indicator - Indicates approximate vehicle speed in MPH or KM/H when speedometer function is selected or RPM when tachometer function is selected.
8. Speed Function Display - Displays which speed function (MPH, RPM, KM/H) is being indicated by the Speed/Tach indicator.

- **NOTE:** The speed and tach functions may be switched from needle to digital by pressing the Left Button (4).

9. Differential Lock Indicator - Displays LOCK when the differential lock has been engaged.
10. Drive Select Indicator - Displays 4WD when selected by the drive select switch or when the differential lock is engaged.
11. High Beam Indicator - The High Beam icon will appear only when the lights are on high beam.

12. EFI Malfunction Indicator - A malfunction code and engine icon will be displayed on the LCD whenever an electronic fuel injection malfunction code is detected. The LCD and speedometer/tachometer will be normal, but the malfunction code and engine icon will continue to be displayed on the LCD until the malfunction is corrected.

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



WC034B

13. Battery Condition Indicator - The battery icon will flash on the LCD whenever a low voltage (<9 DC volts) or high voltage (>16 DC volts) is detected at the ECU.

14. Temperature Indicator - The high temperature icon will appear if the engine overheats. After 30 seconds, the temperature icon will continue to illuminate and a code will be flashing. The icon should not be visible during normal operation.

■ **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

Arctic Cat does not recommend using 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.

15. Electronic Power Steering (EPS) Indicator - Illuminates when there is a malfunction in the power steering control circuit. A code will also be flashing.

16. Seat Belt Indicator - Illuminates for approximately eight seconds after ignition switch is turned ON.

17. Park Indicator - Illuminates when Park is selected in the transmission.

■ **NOTE: A (P) will also illuminate in the gear position indicator (6).**

## Electric Fuel Pump

An electric fuel pump is mounted in the gas tank to deliver gasoline to the fuel injector. The fuel pump operates when the ignition switch is turned to the ON or START position.

## Gas Hoses

Replace the gas hose every two years. Damage from aging may not always be visible.

## 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.**

## WARNING

Use caution when removing oil level stick. Exhaust components may be extremely hot.

1. Unscrew the oil level stick and wipe it with a clean cloth.
2. Install the oil level stick.
- **NOTE: The oil level stick should be threaded in for checking purposes.**
3. 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.**

### Load Capacity Ratings

This vehicle must always be loaded in accordance with the Load Capacity Ratings chart. Under no circumstances should the Vehicle Load Capacity or the Gross Vehicle Weight (GVW) rating ever be exceeded.

### WARNING

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

Arctic Cat Load Capacity Ratings		
Item	Specifications	
	(lb)	(kg)
Vehicle Load Capacity	730	331
Rear Cargo Weight (max)	300	136.1

**Vehicle Load Capacity** - Total weight of operator, passenger, accessories, and rear cargo.

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

**Storage Compartment Weight** - Total weight in the storage compartment.

### Transporting

When transporting, Arctic Cat recommends that the vehicle be in its normal operating position (on all four wheels) and the following procedure be used.

1. Place the transmission in park.
2. Secure the vehicle with load rated hold-down straps.



WC079A



WC081B

■ **NOTE: Suitable hold-down straps are available from your Arctic Cat 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.**

## Gasoline-Oil-Lubricant 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% methanes are acceptable gasolines.

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

### CAUTION

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

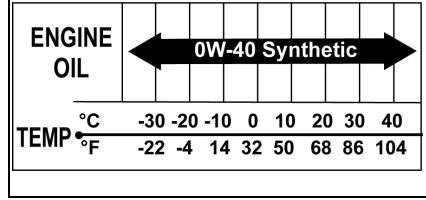
## Recommended Engine/ Transmission Oil

### 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 Arctic Cat ACX All Weather synthetic engine oil, which has been specifically formulated for use in this Arctic Cat engine. Although Arctic Cat 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.

### Multi-Grade Engine Oil



**■ NOTE:** If the vehicle will be operated under severe conditions (heavy pulling or loading, extremely high ambient air temperatures, or extended high-speed operation), Arctic Cat recommends installing an engine oil cooler kit if not so equipped. For additional information, see your local authorized Arctic Cat dealer.

## Recommended Front Differential/Rear Drive/ Differential Lubricant

**■ NOTE:** Arctic Cat recommends the use of genuine Arctic Cat 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.

## Filling Gas Tank

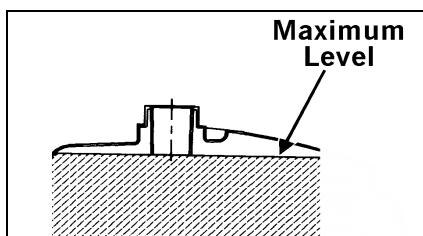
### WARNING

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.

### Maximum Level



ATV0049D

## **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.**

Tighten the gas tank cap securely after filling the tank.

## **WARNING**

**Do not overfill the gas tank.**

## **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 Arctic Cat 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 assure maximum life and performance from this vehicle.

During the first 10 hours of operation, always use less than  $\frac{1}{2}$  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.**

To properly burnish the brakes, use following procedure:

1. Choose an area sufficiently large to safely accelerate to 30 mph and to brake to a stop.
2. Accelerate to 30 mph; then press brake pedal to decelerate to 0-5 mph.
3. Repeat procedure twenty times.

## **Suspension/Axle CV Joint Break In**

It is important during the first ten hours of operation to operate the vehicle where the suspension is flexing for proper break in of axle and suspension components. Avoid high speed operation on flat surfaces or roads.

# General Maintenance

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

**■ NOTE: Proper maintenance procedures for each item can be found on the corresponding page indicated.**

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 Arctic Cat dealer for inspection and adjustment or repair.

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

Maintenance Schedule					
Item	Page	Initial 100 miles	Every 100 miles	Every 300 miles	Every 500 miles
Battery	39	I	I		
* Engine nuts and bolts	—	I			I
* Valve clearance	—	I			I
Spark plugs	42	I			I
	42	Replace every 4000 miles (6436 km) or 18 months			
Liquid cooling system	35	I	Inspect every time before operating		
Gas hoses	29	I	Inspect every time before operating		
	29		Replace every 2 years		
Engine/transmission oil and filter	36	R		R**	
Air filter	43	I		I	
Gear lubricant (front differential - rear drive)	37	I		I	
	37		Replace every 4 years		
V-Belt	43	I			I
Spark arrester/muffler	44				C
Tires/air pressure	44/17	I	Inspect every time before operating		
* Brake components	38	I	Inspect every time before operating		
Brake fluid	38	I	*Replace every 2 years		
Brake hoses	38	I	*Replace every 4 years		
* 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	44	T		T	
Frame/welds/racks	—	I			I
Electrical connections	—	I			I
Headlight/taillight-brakelight	45/46	I	Inspect every time before operating		
Air filter/drains	43	I	Inspect every time before operating		
Accelerator pedal	26	I	Inspect every time before operating		
ROPS	47		Inspect every time before operating		

I = Inspect and clean, adjust, lubricate, replace as necessary

T = Tighten R = Replace C = Clean

\* = Dealer maintenance

\*\*When using Arctic Cat ACX All Weather synthetic oil, oil change interval can be increased to every 1,000 miles or every year.

## 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

Arctic Cat does not recommend using 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 Arctic Cat 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 of 50/50.

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.



WC090A

■ 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.

## Oil Cooler

■ NOTE: The oil cooler is located above and to the rear of the front right wheel.



WC047

■ NOTE: Dirt and debris must be cleaned from the cooling fins regularly to ensure proper engine oil cooling.

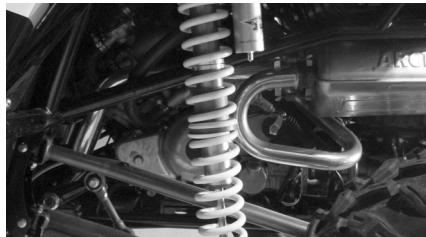
### CAUTION

Continued operation of the ATV 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.

## 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.



WC044

■ **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.

The shock absorbers on this vehicle are Walker/Evans racing shocks with adjustable damping and spring pre-load to accommodate many driving conditions and styles.

### CAUTION

The shocks are factory filled with high pressure gas. Do not remove the valve caps or gas leakage may occur damaging the shock.

To adjust damping, rotate the knob on the shock reservoir in the desired direction (hard or soft).

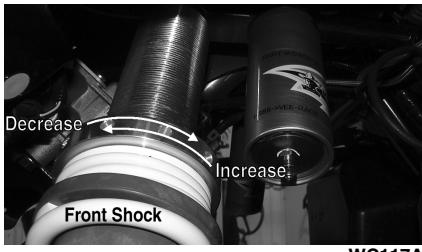


WC115

To adjust preload (stiffness), adjust the spring preload nuts clockwise to stiffen or counterclockwise to soften.



WC112A



WC117A

■ **NOTE:** Before attempting to adjust suspension, clean dirt and debris from the sleeve and remove load from the suspension; then use an appropriate spanner wrench to adjust the sleeve to the desired position.

### CAUTION

Continuous high speed operation of this vehicle with excessive spring pre-load (suspension maintained at full extension) may result in CV boot damage

## 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 31) 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. Loosen the oil level stick. Be careful not to allow contaminants to enter the opening.
3. Remove the drain plug from the bottom of the engine and drain the oil into a drain pan.
4. 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.

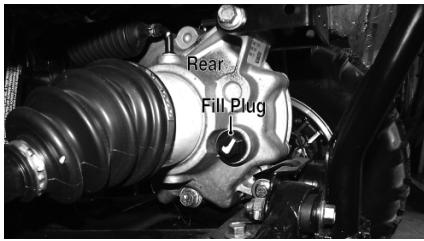
**■ NOTE: Clean up any excess oil after removing the filter.**

5. Apply oil to the new filter seal ring and check to make sure it is positioned correctly; then install the new oil filter. Tighten securely.
6. Install the engine drain plug and tighten it securely. Pour the recommended oil in the filler hole. Install filler plug.
7. Start the engine (while the vehicle is outside on level ground) and allow it to idle for a few minutes.
8. Turn the engine off and wait approximately one minute. Recheck the oil level.
9. Inspect the area around the drain plug and oil filter for leaks.

### 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 oil fill plug.



WC020A

3. Drain the oil into a drain pan by removing in turn the drain plug from each.



CF107A



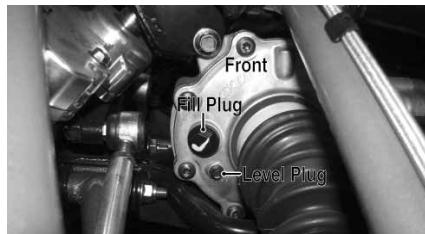
CF106A

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

#### CAUTION

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

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



WC019A

## Hydraulic Brake

### ⚠ WARNING

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

## Brake Fluid



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 above and to the rear of the front left wheel.

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 Arctic Cat dealer for this service.

### CAUTION

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

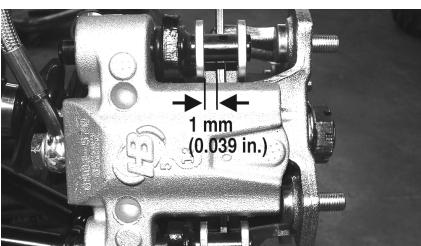
## Brake Hoses

Carefully inspect the hydraulic brake hoses for cracks or other damage. If found, take the vehicle to an authorized Arctic Cat 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 is less than 1.0 mm (0.039 in.), take the vehicle to an authorized Arctic Cat dealer to have brake pads replaced.



4. Install the wheel and using a torque wrench, tighten the lug nuts in 20 ft-lb increments using a crisscross pattern to 80 ft-lb.

## Protective Rubber Boots

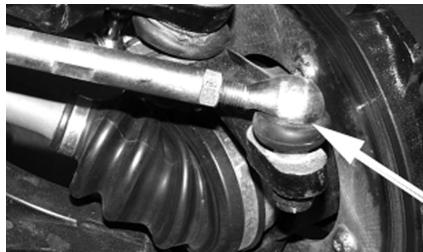
The protective boots should be inspected periodically according to the Maintenance Schedule.

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



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 Arctic Cat dealer for service.

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



CC792

1. Secure the vehicle on a support stand to elevate the front wheels.
2. Remove both front wheels.
3. Inspect the four 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.
5. If boot damage is present or tie rod end free-play seems excessive, contact an authorized Arctic Cat dealer for service.

### Drive Axle Boots



WC110A

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

### Battery

The battery is located in a compartment between the seats. To access the battery, remove the seats; then remove the four fasteners and remove the battery access cover.



WC026A

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 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

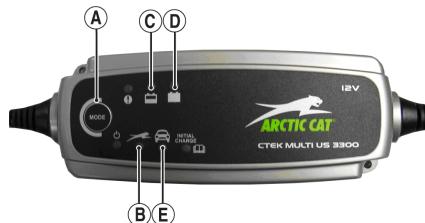
**■ NOTE: Arctic Cat recommends the use of the CTEK Multi US 800 or the CTEK Multi US 3300 for battery maintenance charging. Maintenance charging is required on all batteries not used for more than two weeks or as required by battery drain.**

1. When charging a battery in the vehicle, be sure the ignition switch is in the OFF position.
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 Arctic Cat dealer to connect directly to your vehicle from the recommended chargers to simplify the maintenance charging process. Check with your authorized Arctic Cat 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.

**■ 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.**



3300A

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

## Charging

**■ NOTE: Arctic Cat recommends the use of the CTEK Multi US 800 or the CTEK Multi US 3300 for battery maintenance charging.**

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. Using 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 Arctic Cat dealer for further troubleshooting.**

### **Jump-Starting**

**■ NOTE: Arctic Cat does not recommend jump-starting a vehicle with a dead battery but rather to remove the battery, service it, and correctly charge 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 being 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.

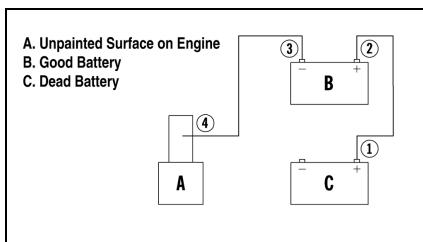
**■ NOTE: Make sure all switches on the vehicle to be jump-started are turned OFF.**

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 Plugs

This vehicle comes equipped with specified spark plugs. See the specifications chart for the correct spark plugs. 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 Arctic Cat 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.

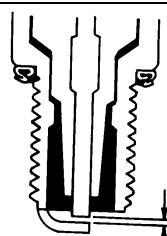
To maintain a hot, strong spark, keep the plug free of carbon.



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

When installing the spark plug, be sure to tighten it securely. 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

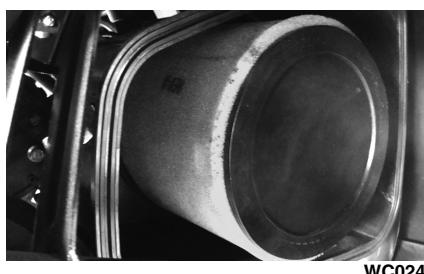
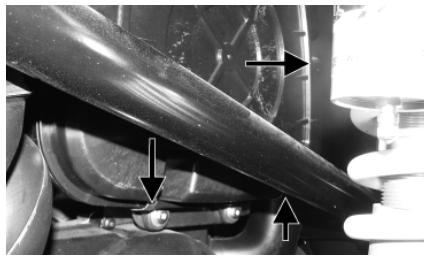
The air filter inside the air filter housing must be kept clean to provide good engine power and gas mileage. If the vehicle is used under normal conditions, service the filter at the intervals specified. If operated in dusty, wet, or muddy conditions, inspect and service the filter more frequently. 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: The air filter is located above and in front of the rear right wheel.**

1. Remove dirt and debris from around the filter housing.
2. Unsnap the five spring-clip fasteners and remove the air filter cover.



■ **NOTE: Foam Air Filter Cleaner and Foam Air Filter Oil are available from Arctic Cat.**

4. Squeeze the element by pressing it between the palms of both hands to remove excess solvent. Do no twist or ring the element or it will develop cracks.
5. Dry the element.
6. Put the element in a plastic bag; then pour in air filter oil and work the oil into the element.
7. 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.**

8. Clean any dirt or debris from inside the filter housing.
9. Inspect the drain beneath the main housing for debris and for proper sealing.
10. Install the air filter and cover.

## 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 and allow the water to drain out.
3. Shift the transmission to the neutral position; then start the engine.
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.

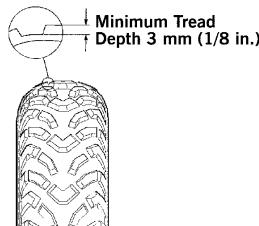
■ **NOTE:** The V-belt and pulleys should be inspected every 500 miles and the belt replaced (if necessary).

## 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 Arctic Cat dealer or a qualified tire repair station.

### 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 Arctic Cat 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, shift into park, 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 using a torque wrench, tighten the lug nuts in 20 ft-lb increments using a crisscross pattern to 80 ft-lb.

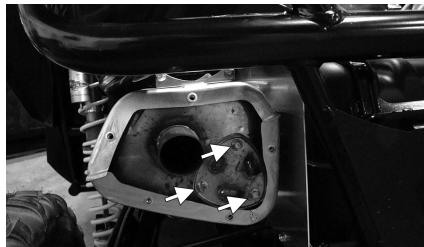
### Muffler/Spark Arrester

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.

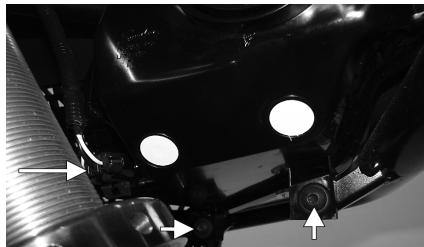
### ⚠ WARNING

**Wait until the muffler cools to avoid burns.**

1. Remove the screws securing the rear heat shield section; then remove the three cap screws securing the spark arrester.



WC136C

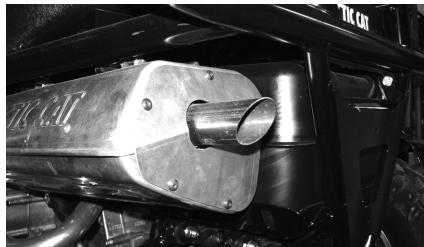


WC111A

- 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.**

- Install the spark arrester assembly and secure with the cap screws. Tighten to 60 in.-lb.
- Secure the rear heat shield section with the five screws.



WC008

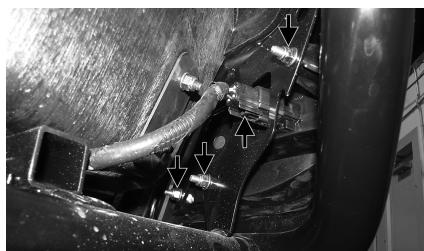


WC107A

- Install the new headlight assembly and connect the wiring harness.
- Adjust the headlight using the Checking/Adjusting Headlight Aim instructions in this section.

To replace the taillight/brakelight assembly, use the following procedure.

- Disconnect the taillight/brakelight connector; then remove the lock nuts securing the assembly to the mounting bracket.



WC099A

## Light Replacement

**■ NOTE: The LED's are not replaceable. The entire assembly must be replaced as a component.**

To replace the headlight assembly, use the following procedure.

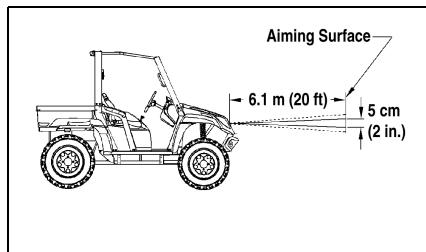
- Remove the wiring harness connector from the back of the headlight.
- Remove the three mounting screws; then remove the headlight assembly.

- Remove the taillight/brakelight assembly.
- Install the new taillight/brakelight assembly and secure with the nuts. Tighten securely; then connect the electrical 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 vertical 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).



**■ 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 mid-point of each headlight.
3. Using the measurements obtained in step 2, make horizontal marks on the aiming surface.
4. Switch on the lights. Make sure the HIGH beam is on. DO NOT USE LOW BEAM.
5. Observe each headlight beam aim. Proper aim is when the most intense beam is 5 cm (2 in.) below the horizontal mark on the aiming surface.
6. Adjust each headlight until correct aim is obtained by turning the screw with a 4 mm wrench counterclockwise to raise or clockwise to lower the beam.



## Fuses

The fuses are located in a power distribution module under the passenger seat. If there is any type of electrical system failure, always check the fuses first.

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

10	10	10	FUEL	FAN-LEFT	EFI	P/N 2411-883
IGN	EFI	MEMORY				
10	10	10				
LIGHTS	HI-BEAM	FUEL				
15	15	15				
SW ACC	FAN-LEFT	FAN-RIGHT	EPS	FAN-RIGHT		
30	30	30	EPS			
MAIN	ACC					POWER

2411-883

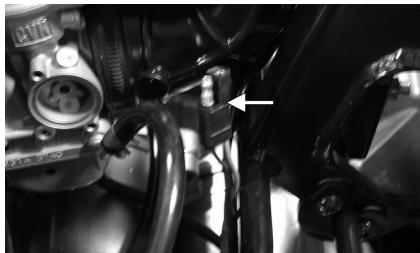
## CAUTION

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 Arctic Cat dealer immediately.

## Electrical Output Terminals

Two output terminals for electrical accessories are located on the front and rear wiring harnesses. One accessory plug is located on the center console.

**■ NOTE: The rear output terminal is located beneath the radiator near the right-side of the throttle body. The front output terminal is located beneath the dash board in front of the speedometer/LCD gauge.**



PR049A

## Doors and Nets

Inspect the doors for broken or bent tubes, hinges, or latches. Make sure the latches engage and lock securely.



WC037

## CAUTION

**Always use electrical accessories less than 180W.**

## Glove Box/Tools

This vehicle has a glove box in the dashboard.

A basic tool kit (located under the operator seat) is provided with this vehicle. Maintain the tool kit with the vehicle at all times.

## 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.

Inspect the nets for fraying or tearing. Replace the nets if damaged.

## 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, immediately bring the vehicle to an authorized Arctic Cat dealer for service.

# Preparation For Storage

Arctic Cat recommends the following procedure to prepare the vehicle for storage. An authorized Arctic Cat dealer should perform this service; however, the owner/operator may perform this service if desired.

## CAUTION

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

1. Clean the seat cushions with a damp cloth and allow to dry.
2. 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.
3. Either drain the gas tank or add a fuel stabilizer to the gas in the gas tank. Remove the air filter housing cover and air filter. Start the engine and allow it to idle; then using Arctic Cat Engine Preserver, rapidly inject the preserver into the air filter opening for a period of 10 to 20 seconds. Install the air filter and housing cover.

## CAUTION

**If the interior of the air filter housing is dirty, clean the area before starting the engine.**

4. Plug the hole in the exhaust system with a clean cloth.
5. Apply light oil to the upper steering shaft bushing and plungers of the shock absorbers.
6. Tighten all nuts, bolts, cap screws, and screws. Make sure rivets holding components together are tight. Replace all loose rivets. 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 assure many miles and hours of trouble-free riding. Arctic Cat recommends the following procedure.

1. Clean the vehicle thoroughly.
2. Clean the engine. Remove the cloth 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, taillight, brakelight, 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 plugs. Clean or replace as necessary.
12. Follow the recommendations found in the pre-start inspection.

## CAUTION

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

## Maintenance Record

## **NOTES**

# Identification Numbers Record

## ⚠ WARNING

Indicates a potential hazard that could result in serious injury or death.



### 1. KEY IDENTIFICATION NUMBER:

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

### 2. VEHICLE IDENTIFICATION NUMBER:

### 3. ENGINE SERIAL NUMBER:

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



# WARNING

Improper use can result in **SEVERE INJURY or DEATH**



ALWAYS USE  
AN APPROVED  
HELMET AND  
PROTECTIVE  
GEAR

NEVER USE  
ON PUBLIC  
HIGHWAYS

OPERATORS  
MUST BE 16  
YEARS OLD  
OR OLDER AND  
HAVE VALID  
DRIVER'S LICENSE

NEVER USE  
WITH DRUGS  
OR ALCOHOL

## NEVER USE:

- before reading the Operator's Manual carefully.
- at speeds too fast for your skills or the conditions.
- on public highways where a collision with cars or trucks can occur.
- operate through water deeper than floorboard level or fast flowing water.

## ALWAYS:

- use proper driving techniques to avoid overturns on hills and rough terrain and in turns.
- wear your seat belt and require others to wear their seat belt.
- keep arms and legs inside the structure.

Operators must be 16 years or older and have a valid driver's license, and minors must be supervised by an adult.

Vehicle Capacity: 1 Operator, 1 Passenger with seat belts

**LOCATE AND READ OPERATOR'S MANUAL  
FOLLOW ALL INSTRUCTIONS AND WARNINGS**