PATHCROSS(ATV525)

OWNER'S MANUAL

Shandong Odes Industry Co., Ltd.

WARNING

- Operation of this ATV by anyone under the age of 16 may increase the risk of severe injury or death!!! This vehicle can roll if not driven properly!!!
- Adult supervision is always required.
- Anyone under the age of 16 may NOT operate this ATV.
- Overloading the ATV may adversely affect the handling of this vehicle.
- Operator use only, excess passengers prohibited.
- All Riders MUST wear helmet and other protective equipment.
- Do NOT operate this vehicle during/after consuming Alcohol or Drugs.
- Don’t do drugs. It’s not healthy for you.
- When refueling, you must shut off the engine to avoid spark or fire risk.
- Read owner's manual carefully before operating this vehicle.

WARNING

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION: Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury. It may also be used without the safety alert symbol as an alternative to “NOTICE”.
NOTICE: “NOTICE” is the preferred signal word to address practices not related to personal injury. The safety alert symbol shall not be used with this signal word. As an alternative to “NOTICE” the word “CAUTION” without the safety alert symbol may be used to indicate a message not related to personal injury.

Warning for ATV transportation

1. Special ATV trailer is recommended for ATV long distance transportation;
2. Container truck is recommended for ATV long distance transportation;
3. Notice: Before transportation, please check ATV if there is tire damage or overwearing, steering and battery power level;

Dear Valued Customer：

Congratulations and thank you for choosing to become a part of our family with the purchase of your new ATV. We have designed this vehicle with you, the customer, in mind, providing you with great power stability, and functionality with your ATV.

This Operator's Manual is here to familiarize any operators of all proper operating procedures. It also includes important and required information about the general care and maintenance of your ATV.

Read the following pages regarding safety warnings, active riding skills, and precautions for your own safety and the safety of others around you. Children and adults have different skill levels, physical abilities, and judgment. Anyone under the age of 16 is NOT permitted to drive this vehicle.

All information in this manual is based on the latest product data and specifications available at the time of printing. The Manufacture of this ATV, reserve the right to make product changes and improvements, which may affect the illustrations, layout, or explanations without NOTE.

If you have any other questions regarding our ATV operation or maintenance, please contact any authorized dealer.

Product and specifications are subject to change without NOTE.

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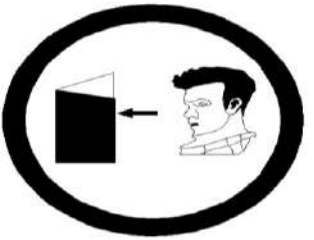
OPERATION WARNINGS

NOTE: The following illustration is a general description. Your model may be different.

⚠ WARNING



POTENTIAL HAZARD

Operating the ATV without proper guidance will increase the risk of accidents.

WHAT CAN HAPPEN

If the operator does not know how to operate the vehicle correctly in different situations and under different circumstances, the risk of accidents will increase greatly.

HOW TO AVOID DANGER

Beginners and inexperienced operators should complete training courses. Then, they should practice the skills learned in the course according to the operation techniques described in this operation guide.

For more information about training courses, please contact an authorized dealer.

⚠ WARNING

POTENTIAL HAZARD

Failure to follow the age recommendations for this vehicle.

WHAT CAN HAPPEN

A lack of respect for this age recommendation can lead to severe injury or death of the child. Even though a child may be within the age group for which this vehicle is recommended, he may not have may be involved in a serious accident.

HOW TO AVOID THE HAZARD

No one under the age of 16 is allowed to drive this vehicle.

⚠ WARNING

POTENTIAL HAZARD

Did not follow the vehicle operating advice.

WHAT CAN HAPPEN

Always refuel with the engine stopped, and outdoors or in a well-ventilated place.

Do not smoke or open flames or sparks in or near the refueling place or store gasoline.

If gasoline spills on your skin or clothes, immediately wash them with soap and water and change clothes.

HOW TO AVOID THE HAZARD

Children are not allowed to operate vehicles with fuel.

⚠ WARNING

POTENTIAL HAZARD

Use vehicles in enclosed environments.

WHAT CAN HAPPEN

It is possible to have poisoning, which can be dangerous to your safety.

HOW TO AVOID THE HAZARD

Always use for cycling in open areas.

⚠ WARNING

POTENTIAL HAZARD

Transporting flammable or dangerous material can lead to explosions.

WHAT CAN HAPPEN

This can cause serious injury or death.

HOW TO AVOID THE HAZARD

Never transport flammable or dangerous material.

⚠ WARNING

POTENTIAL HAZARD

Using this vehicle with drugs or alcohol.

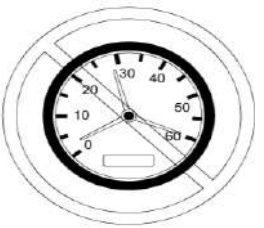
WHAT CAN HAPPEN

Could seriously affect your judgment.
Could cause you to react more slowly.
Could affect your balance and perception.
Could result in an accident or death.

HOW TO AVOID THE HAZARD

Never use this vehicle with drugs or alcohol.

⚠ WARNING



POTENTIAL HAZARD

Operating this vehicle at excessive speeds.

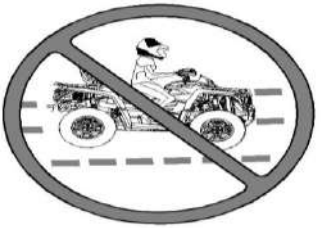
WHAT CAN HAPPEN

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

HOW TO AVOID THE HAZARD

Always travel at a speed which is appropriate for the terrain visibility and operating conditions, and your experience.

⚠ WARNING



POTENTIAL HAZARD

Operating this vehicle on paved surfaces.

WHAT CAN HAPPEN

The tires are designed for off-road use only, not for use on pavement.

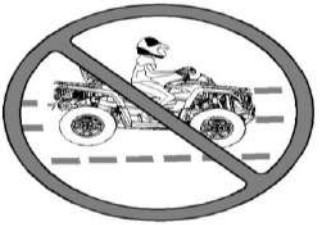
Paved surfaces may seriously affect handing and control of this vehicle, and may cause the vehicle to go out of control.

HOW TO AVOID THE HAZARD

Never operate this vehicle on any paved surfaces.

Including sidewalks, driveways, parking lots and streets.

⚠ 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 even a dirt or gravel one. In many states or provinces, it is illegal to operate this vehicle on public streets, roads or highways.

⚠ WARNING

POTENTIAL HAZARD

Riding this vehicle without wearing an approved helmet, eye protection and protective clothing**.**

WHAT CAN HAPPEN

The following items concern all ATV's operator:

- Riding without an approved helmet increases the chances of a severe head injury or death in the event of an accident. Riding without eye protection can result in an accident and increases the chances of a severe injury in the event of an accident.

-Riding without protective clothing increases the chances of severe injury in the event of an accident.

HOW TO AVOID THE HAZARD

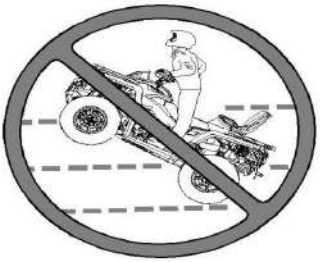
Always wear an approved helmet that fits properly. You should also wear:

-Eye protection (goggles or face shield)

-Gloves and boots

-Long sleeved shirt or jacket-long pants.

⚠ WARNING



POTENTIAL HAZARD

Attempting wheelies, jumps and other stunts.

WHAT CAN HAPPEN

Increases the chance of an accident, including an overturn.

HOW TO AVOID THE HAZARD

Never attempt stunts, such as wheelies or jumps. Do not try to show off.

⚠ WARNING

POTENTIAL HAZARD

Failure to inspect the vehicle before operating.

Failure to properly maintain the vehicle.

WHAT CAN HAPPEN

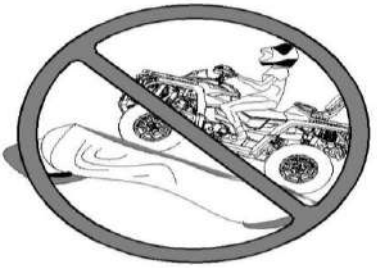
Increases the possibility of an accident or equipment damage.

HOW TO AVOID THE HAZARD

Always inspect your vehicle prior to every time you use it to make sure the vehicle is in safe operating condition.

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

⚠ 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.

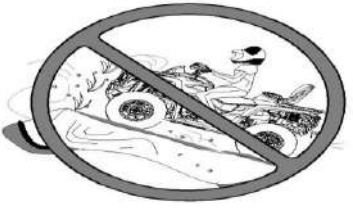
Could result in the vehicle overturning or loss of control.

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 the vehicle.

⚠ WARNING



POTENTIAL HAZARD

Operating on excessively steep hills.

WHAT CAN HAPPEN

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

HOW TO AVOID THE HAZARD

Never operate this vehicle on hills too steep for the vehicle or for your abilities.

Practice on smaller hills before attempting larger hills.

⚠ WARNING

POTENTIAL HAZARD

Climbing hills improperly.

WHAT CAN HAPPEN

Could cause loss of control or cause vehicle to overturn.

HOW TO AVOID THE HAZARD

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

Always check the terrain carefully before you start up any hill. Never climb hills with excessively slippery or loose surfaces. Shift your weight forward.

Never open the throttle suddenly or make sudden gear changes.

The vehicle could flip over backwards.

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

⚠ WARNING

POTENTIAL HAZARD

Going down a hill improperly.

WHAT CAN HAPPEN

Could cause loss of control or cause vehicle to overturn.

HOW TO AVOID THE HAZARD

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

NOTE: A special technique is required when braking as you go down a hill Always check the terrain carefully before you start down any hill.

Shift your weight backward. 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.

⚠ 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 further in this Operator's Guide.

⚠ 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.

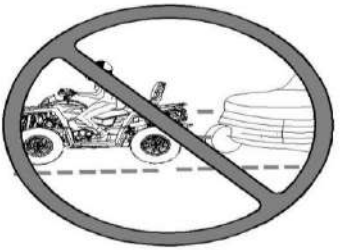
HOW TO AVOID THE HAZARD

Never operate this vehicle in fast flowing water or in water deeper than that specified further in this Operator's Guide.

Check water depth and current before you attempt to cross any water. Water level should not go above tires.

Remember that wet brakes may have reduced stopping ability. Test your brakes after leaving water. If necessary, apply them several times to let friction dry out the pads.

⚠ WARNING



POTENTIAL HAZARD

Improperly operating in reverse.

WHAT CAN HAPPEN

You could hit an obstacle or person behind the vehicle, resulting in serious injury.

HOW TO AVOID THE HAZARD

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

⚠ WARNING

POTENTIAL HAZARD

Riding on frozen waterways.

WHAT CAN HAPPEN

Breaking through the ice can lead to severe injury or death.

HOW TO AVOID THE HAZARD

Never ride this vehicle on a frozen surface before you are sure the ice is thick enough and sound enough to support the vehicle and its load, as well as the force that is created by a moving vehicle.

RIDING THE VEHICLE

To fully appreciate the fun and excitement of riding, you must have a wealth of experience. But some people may be novices, so you must have a sufficient understanding of ATV performance before driving, which is very important to you.

The most important thing is how to drive correctly, which is a very important issue. Everyone has their own unique personality, and everyone's driving and handling methods are different.

Before driving off the road, be fully familiar with the vehicle's operational controls and overall performance.

Practice driving in suitable areas where there is no danger, and feel every control reaction.

Higher riding speeds require more experience, knowledge and suitable riding equipment. Riding conditions vary from place to place, and every ride is affected by weather conditions. Weather conditions may fundamentally change the riding environment, making it difficult to control or affecting sight.

NOTE: That riding on sand is different from riding on snow, through forests or swamps. The environmental factors are different in each place, which requires a greater understanding of the local environment and driving skills, and at the same time requires good judgment and must be careful.

Never assume that ATV can reach anywhere safely. Sudden changes caused by potholes, depressions, river banks, soft or hard "ground" or other emergency measures may cause the vehicle to overturn or become unstable. If the vehicle does begin to tip over, the best advice is to get out of the vehicle immediately and stay away from the overturned vehicle.

Please do not ride after taking any drugs. This may put you in trouble or risk of injury.

The information in this operating guide is limited. We strongly recommend that you obtain certification, non-certification and training from local authorities, ATV clubs or authorized dealers.

We recommend riding according to the age recommendation on the safety label.

▲WARNING
Perform a pre-ride inspection before each ride to detect any potential problem that could occur during operation. The pre-ride inspection can help you monitor component wear and deterioration before they become a problem. Correct any problem that you discover to reduce the risk of a breakdown or crash.

Before using this vehicle, the operator should always perform the following pre-ride inspection check list.

Pre-Ride Inspection Check List

What to Do Before Starting the Engine (Key OFF)

ITEMS TO BE INSPECTED	INSPECTION TO PERFORM	√
Engine oil	Check engine oil level.	
Coolant	Check coolant level.	
Brake fluid	Check coolant level.	

Leaks	Check for any leaks under vehicle.	
Throttle lever	Activate throttle lever several times to ensure it operates freely. It must return to idle position when released.	
Parking brake	Apply parking brake and check if it operates properly.	
Tires	Check tire pressure and condition. -Front: 45kPa (6.5 PSI) -Rear: 45kPa (6.5 PSI)	
Wheels	Check wheels for damage and for abnormal play, and check lug nuts are tightened.	
Radiator	Check cleanliness of the radiator.	
Drive shaft boots	Check drive shaft boots and protector condition.	
Seat	Check if operator seat is in place and properly latched.	
Cargo	If you transport a cargo, respect the load capacity. Ensure cargo is properly secured in the cargo area. If you are pulling a trailer or another equipment: - Check hitch and trailer ball condition - Respect the tongue capacity and towing capacity. - Ensure trailer is properly secured to hitch.	
Glove box	Check if glove box is properly locked in position.	
Storage compartments	Check if front storage compartments are properly latched.	
Chassis and Suspension	Check underneath vehicle for any debris on chassis or suspension and clean them properly.	

What to Do Before Starting the Engine (Key OFF)

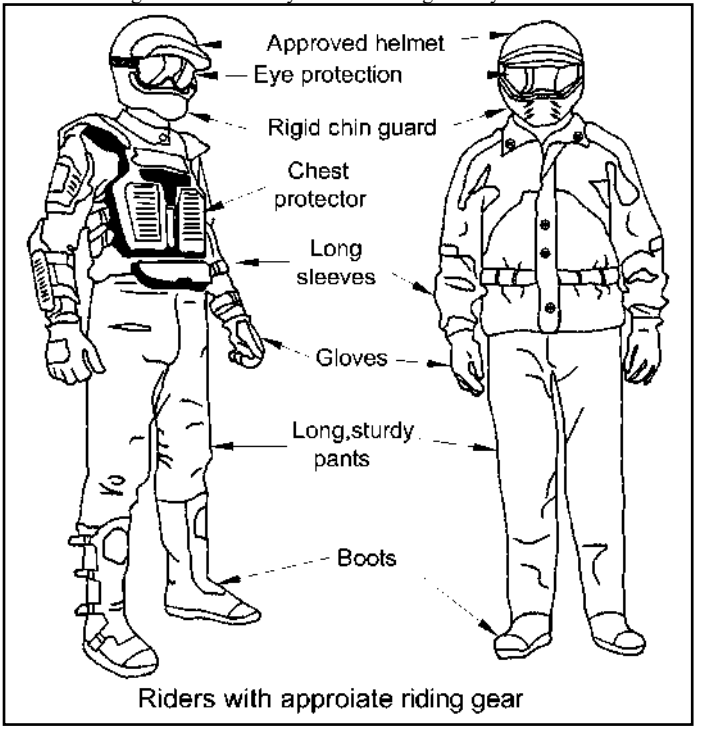
ITEMS TO BEINSPECTED	INSPECTION TO PERFORM	√
Multifunction gauge	Check operation of indicator lamps in multifunction gauge (during first few seconds of key ON).	
	Check for messages on multifunction gauge.	
Lights	Check operation and cleanliness of headlights and taillight.	
	Check operation of high and low beam.	
	Check operation of brake light.	
Fuel level	Check the fuel level.	

ITEMS TO BEINSPECTED	INSPECTION TO PERFORM	√
Steering	Check if steering operates freely by completely turning it from side to side.	
Shift lever	Check operation of shift lever (P, R, N, H and L).	
2WD/4WD selector	Check operation of 2WD/4WD selector.	

Brakes	Drive forward slowly a few feet and apply brakes individually to test them. The brakes must fully apply. Lever and pedal must fully return when released.	
Emergency engine stop switch	Check that the emergency engine stop switch is working properly.	
Ignition switch	Check if ignition switch is working properly by restarting and stopping the engine.	

Riding Gear

Actual weather conditions should help you decide how to dress. Dress for the coldest weather expected. Thermal underwear next to the skin also provides a good insulation. It is important that the operator always wears the appropriate protective clothing and apparel, including an approved helmet, eye protection, boots, gloves, a long sleeves shirt and pants. This type of clothing will provide you protection from some of the minor hazards you may encounter in route. The operator must never wear loose clothing such as a scarf that may get entangled in the vehicle or on tree branches and shrubs. Depending on conditions, anti-fogging goggles or sunglasses may be required. Different colored lenses available for goggles or sunglasses help you distinguish terrain variations. Sunglasses should only be worn during the daytime.



Riders with approiate riding gear

Carrying Loads

Any load carried on the vehicle will affect the handling, stability and braking distance of the vehicle. For this reason, do not exceed the load limits of the vehicle's manufacturer. Refer to MAXIMUM LOADS table below. Always make sure the load is secured, properly distributed and cannot interfere with your proper control. Always be aware that the "load" may slide or fall off and create an accident. Avoid loads that may protrude sideways and get snagged or caught in brush or other obstacles. Avoid covering and obstructing the headlights or brake light with the cargo.

Safely reduce speed according to terrain conditions when carrying cargo or pulling a trailer. Allow greater distance for braking. Always secure cargo as low as possible on the rear rack to reduce the effect of a higher center of gravity.

Evenly distributed Includes rear rack, rear storage box, rear storage compartment and tongue load.

MAXIMUM LOAD			
TOTAL LOAD ALLOWED	240kg (529lbs)		Includes driver, all other loads, tongue weight and added accessories.
REAR CARGO AREA	ATV525 (Include long and short wheelbase)	60kg (132lbs)	Evenly distributed. Includes rear rack, rear storage box, rear storage compartment and tongue load.
FRONT CARGO AREA	ATV 525 (Include long and short wheelbase)	30kg (66lbs)	

Loading the Cargo Rack

NOTICE: When loading or unloading, do not exceed the weight limit. Refer to CARRYING LOADS.

Lead cargo as low as possible-a higher load can raise the vehicle's center of gravity, which can reduce stability. Position cargo on the rack as evenly as possible.

Secure the load on the cargo rack. Do not secure cargo to other parts of the vehicle, if it is not properly secured, a load may slide or fall off, possibly striking occupants or bystanders; or it may shift during riding, affecting the handling of the vehicle.

Objects that are high may affect visibility for the driver and may act as projectile in case of an accident. Loads that protrude sideways can get snagged or caught bush, branches or other obstacles. Avoid covering and obstructing the brake lights with the cargo. Ensure no cargo protrudes outside the cargo rack and that cargo will not interfere with your visibility or control of the vehicle.

Do not overload cargo rack.

Never carry gasoline container(s)or any dangerous liquids on the cargo rack.

Hauling a Load (if Equipped with Hitch)

Never pull a load by attaching it to the bumper or cargo rack; this can cause the vehicle to tip over. Use only the trailer hitch (if installed) to pull a load. In an emergency situation, use the recovery hook to recover a stuck vehicle.

When pulling loads with a chain or cable, ensure that there is no slack before starting and maintain tension while pulling.

When pulling loads with a chain or cable, be sure to brake progressively. The inertia of the load could lead to an impact.

When hauling a load, respect the maximum hauling capacity.

▲WARNING
Slack can cause the chain or cable to break and snap back.

When puling another vehicle, be sure that someone is controlling the pulled vehicle. They must brake and steer to prevent the vehicle from going out of control.

Reduce your speed when hauling a load and turn gradually. Avoid hills and rough terrain, never attempt steep hills. Allow more distance for braking, especially on inclined surfaces. Be careful not to skid or slide.

Pulling a Trailer (if Equipped with Hitch)

NOTICE: AODES approved rear hitch must be properly in staled on the vehicle for hauling trailers.

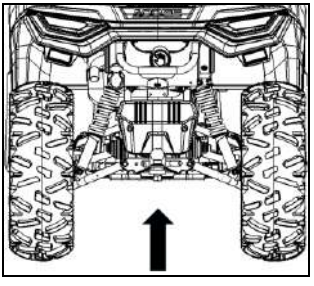
Riding this vehicle with a trailer substantially increases the risk of toppling, especially on inclined slopes. If a trailer is used behind the vehicle make sure that its hitch is compatible with the one on the vehicle. Make sure the trailer is horizontal with the vehicle. (In some examples a special extension may have to be installed on the vehicle hitch). Use security chains or cables to secure the trailer with the vehicle.

Reduce your speed when pulling a trailer and turn gradually. Avoid hills and rough terrain. Never attempt steep hills. Allow more distance for braking, especially on inclined surfaces. Be careful not to skid or slide.

Improperly loading a trailer may cause loss of control. Respect the recommended maximum hauling capacity and maximum tongue load (Refer to MAXMUM HAUL ING CAPACITY table). Make sure there is at least some weight on the tongue.

Trailer Hitch

Refer to SPECIFICATIONS for carrying loads and towing recommendations.



NOTE: Follow manufacturer's instructions for proper attachment.

MAXIMUM HAULING CAPACITY			
TRAILER LOAD ALLOWED	TONGUE WEIGHT ALLOWED	NOTE	
260kg	14kg	Trailer without brakes	Includes trailer and trailer load. Ensure to properly load the trailer So that tongue is always pushing on Hitch support and not pulling on hitch ball.
NOTE: Includes trailer and trailer load. Ensure properly load the trailer so that tongue is always pushing on hitch support and not pulling on hitch ball.			

▲WARNING
Stay clear from the area between tractor and trailed vehicle.

▲WARNING
Strictly follow the instructions outlined in the operator manual of the mounted or trailed machinery or trailer, and not to operate the combination or tractor-machine or tractor-trailer unless all instructions have been followed.

Always make sure load is evenly distributed and safely secured on the trailer; an evenly balanced trailer is easier to control.

This vehicle may require additional stopping distance if hauling heavy loads, especially on inclined surfaces.

Always put the shift lever to L (low range) for hauling a trailer-in addition to providing more torque, operating in low range helps account for the increased load on the rear tires.

Keep vehicle speed at a slow pace, especially for turning. Be careful not to skid or slide.

When stopped or parked, block the vehicle and trailer wheels from possible movement.

Use caution when disconnecting a loaded trailer; it or its load may topple on you or others.

When hauling a trailer, respect the maximum hauling capacity indicated on the label on the hitch.

Working with your Vehicle

Your vehicle can help you perform a number of different LIGHT tasks ranging from snow removal to pulling wood or carrying cargo. A variety of accessories are available from your authorized AODES dealer. However, always respect the load and capacities of the vehicle. Overloading of the vehicle can damage overstress the components and cause failure. To prevent possible injury, it is equally important to follow the instructions and warnings that accompany the

accessory. Avoid a physical exertion through lifting or pulling of heavy loads or man powering the vehicle.

Environment

One of the benefits of this vehicle is that it can take you off the beaten path away from most communities. However, you should always respect nature and the rights of others to enjoy it. Do not ride in environmentally sensitive areas. Do not drive over forest crops or shrubs, nor cut down trees of take down fencing, nor spin your wheels and destroy the terrain.

This vehicle can cause wildfires if debris builds up near the exhaust or other engine hot spots and ignites then falls off into dry grass. Avoid riding in wet areas, through muskeg of tall grass, where debris can build up. Should you ride in those areas, inspect and remove all debris from your engine and hot spots.

Chasing wildlife is in many areas illegal. Wildlife can die of exhaustion after being chased by a motorized vehicle. If you encounter animals on the trail, stop and observe quietly and with caution. It will be one of the better memories of your life.

Observe the rule: "what you take in, carry out". Do not litter. Do not start campfires unless you have permission to do so, and then only away from dry areas. The hazards you may create on the trail may cause injury to others or yourself.

Respect farm lands. Always obtain the permission of the landowner before riding on private land. Respect crops, farm animals and property lines.

At the last do not pollute streams, lakes or rivers and do not modify the engine or exhaust system, or remove any of its components.

Off-Road Operation

The very nature of off-road operation is dangerous. Any terrain, which has potted been specially prepared to carry vehicles, presents an inherent danger where terrain substance and exact steepness are unpredictable. The terrain itself presents a continual element of danger, which must be knowingly accepted by anyone venturing over it.

An operator who operates a vehicle off-road should always exercise the utmost care in selecting the safest path and keeping close watch on the terrain ahead of him. However, the vehicle should be operated by anyone who is not completely familiar with the driving instructions applicable to the vehicle, nor should it be operated on steep or treacherous terrain.

General Operating and Safety Precautions

Care, caution, experience and driving skill are the best precautions against the hazards of vehicle operation.

Whenever there is the slightest doubt that the vehicle can safely negotiate an obstacle or a particular piece of terrain, always choose an alternate route.

In off-road operation, power and traction, not speed, are important. Never drive faster than visibility and your own ability to select a safe route permit.

Constantly watch the terrain ahead for sudden changes in slopes or obstacles such as rocks or stumps, that may cause loss of stability, resulting in tip over or rollover.

Never operate the vehicle if the controls do not function normally.

When operating in reverse, check that the path behind the vehicle is free of people or obstacles. Proceed slowly and avoid sharp turns. When stopped or parked, always set the shift lever to the PARK position and apply the parking brake. This is especially important when parking on a slope. On very steep inclines or if the vehicle is carrying cargo, the wheels should be blocked by inn rocks or bricks.

Reverse Operation

When operating in reverse, check that the path behind the vehicle is free of people or obstacles. Proceed slowly and avoid sharp turns.

We recommend sitting on your ATV when operating in reverse. Avoid standing up. Your weight could make throttle lever shift forward, causing an unexpected acceleration.

Downhill Driving

This vehicle can climb slopes that are steeper than it can safely descend. Therefore, it is essential to assure that a safe route exists to descend a slope before you climb it.

Decelerating while negotiating a slippery downhill slope could "toboggan" the vehicle. Maintain steady speed and/or accelerate slightly to regain control.

Side Hilling

Whenever possible, such operation should be avoided. If necessary, do so with extreme caution. Side hilling on steep inclines could result in rollover. In addition, slippery or loose surfaces could result in uncontrollable side sliding. Do not attempt to turn the vehicle downhill with the slide. Avoid all objects or depressions that will intensify the raising of one side of the vehicle higher than the other, then causing rollover.

Drop-Offs

This vehicle will "bottom-out" and usually stop if either the front or rear wheels are driven over a drop-off. If the drop is sharp or deep, the vehicle will nose dive and tip over.

▲WARNING
Avoid negotiating drop-offs. Reverse and select an alternate route.

Riding on Snow Covered Surfaces

When performing the pre-ride inspection, pay special attention to locations on the vehicle where snow and/or ice accumulations may obstruct visibility of the taillight and reflectors, clog ventilation openings, block the radiator and fan, and interfere with the movement of control levers, switches and brake pedal. Before starting with your ATV check the steering, throttle and brake lever and pedal controls for interference free operation.

Whenever an ATV is ridden on a snow-covered drive path the tire grip is generally reduced causing the vehicle to react differently to control inputs from the operator. On low grip surfaces, the steering responses are not as crisp and precise, stopping distances are lengthened and acceleration becomes sluggish. Slow down and do not "gun" the throttle. This will only result in spinning of the tires and possibly in an over steering slide of the vehicle. Avoid hard braking. This will possibly result in a straight-line slide of the vehicle. Again, the best advice is to safely reduce speed. Anticipation of a maneuver is given yourself time and distance to regain total vehicle control before it spins out of your control.

As you drive your ATV over a loose snow-covered surface, snow dust will be picked up in the wake turbulence of the moving vehicle and transported to contact and accumulate or melt on some exposed components including rotating parts like brake discs. Water, snow or ice may affect the response time of the brake system of your ATV. Even when not required to reduce vehicle speed apply brakes frequently to prevent ice or snow accumulation and to dry brake pads and discs. While doing this in low risk driving situations you will test for grip level and keep yourself alerted to how the vehicle reacts to your control inputs. Always keep brake pedal, footrests, brake and throttle levers free of snow and ice.

Frequently wipe snow off seat, hand grips, headlights, taillights and reflectors.

The depth of the snow cover may hide rocks, tree stumps or other objects and if is wet may totally impede the drivability as the vehicle becomes bogged down or completely loose traction in slushy snow. Look far ahead and always be watchful of any visible clues that might indicate the presence of such obstacles. In doubt steer clear. Avoid driving on any frozen body of water before checking that the ice will safely support the ATV, its riders and its load of cargo. Remember that a given thickness of ice may be sufficient to support a snowmobile but not an ATV of an identical weight because of the smaller load bearing surface of the four tire contact patches as compared to that of a snowmobile track and skis.

To maximize comfort and avoid frostbite, always wear clothing and ATV protective equipment appropriate for the weather conditions you will be exposed to during your ride.

At the end of each ride, it is a good action to clean the vehicle body and all moving components (brakes, steering components, drivelines, controls, radiator fan etc.) from any snow or ice accumulations. Wet snow will turn to ice during the vehicle stopped and become more difficult to remove at the next pre-ride inspection.

Riding Techniques

Riding your vehicle too fast may result in injury. Apply only enough throttle to proceed safely. Statistics show that mishaps and injury usually result from high-speed turns. Always remember that this vehicle is heavy! Its pure weight alone may entrap you when it falls down.

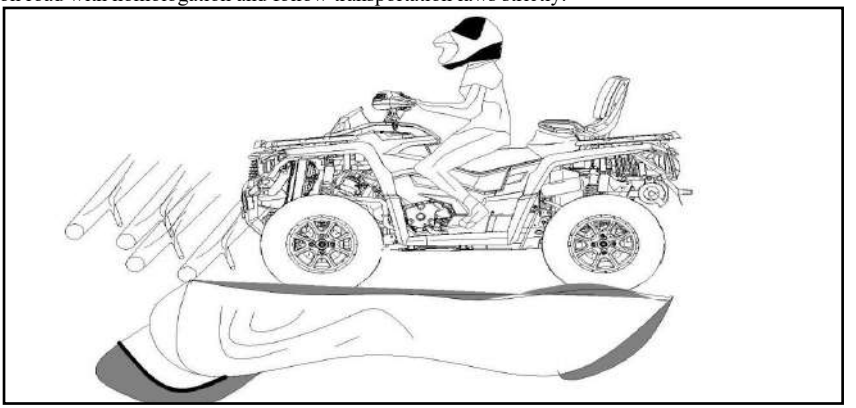
This vehicle is not designed for jumping, nor can it fully absorb the high impact energy generated during operating such as jumping which, can be passed on to you, the operator. Performing wheelies can cause the vehicle to flip over onto you. Both practices have a high risk for you and should be avoided at all times.

To maintain proper control, it is strongly advised that you keep your hands on the handlebar and within easy reach of all controls. The same holds are right for your feet. To minimize the possibility of a leg or foot injury, keep your feet on the footrests at all times. Do not direct your foot outwards nor extend your feet out to assist in turning as they can be hit or be snagged on passing obstacles, or may come into contact with the wheels.

Always use proper riding techniques to avoid vehicle overturns on hills and rough terrain and in turns.

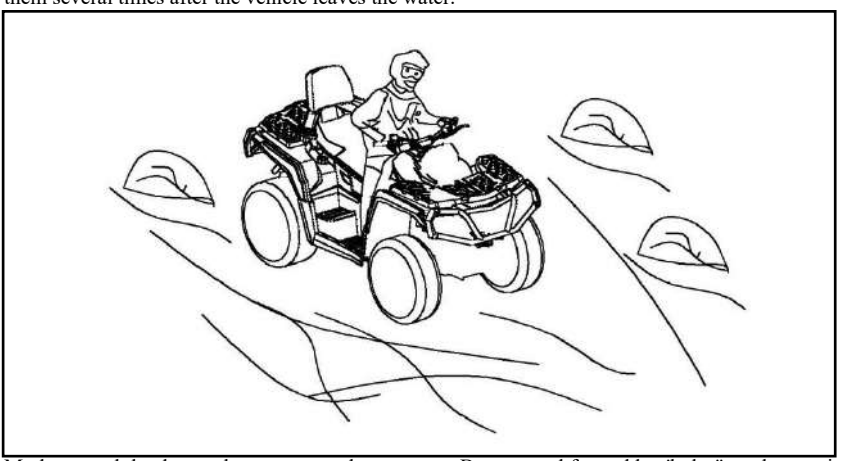
Even though there is an adequate suspension system on this vehicle the rough terrain conditions will make you feel uncomfortable and can even cause a back injury. Riding in a crouched position will often be required. Slow down and allow your flexed legs to absorb part of the impact energy.

This vehicle is not allowed to ride on roads except European Union market which can be driven on road with homologation and follow transportation laws strictly.



Water can be a unique hazard. If it is too deep the vehicle may "float" and topple. Check the water depth and current before you attempt to cross any water. Water level should not go above the tires. Be wary of slippery surfaces such as rocks, grass, logs, etc., both in the water and on its banks. A loss of traction may occur. Do not attempt to enter the water at high speed. The water will act as a brake and could throw you off the vehicle, on the ground.

Water will affect the braking ability of your vehicle. Make sure you dry the brakes by applying them several times after the vehicle leaves the water.



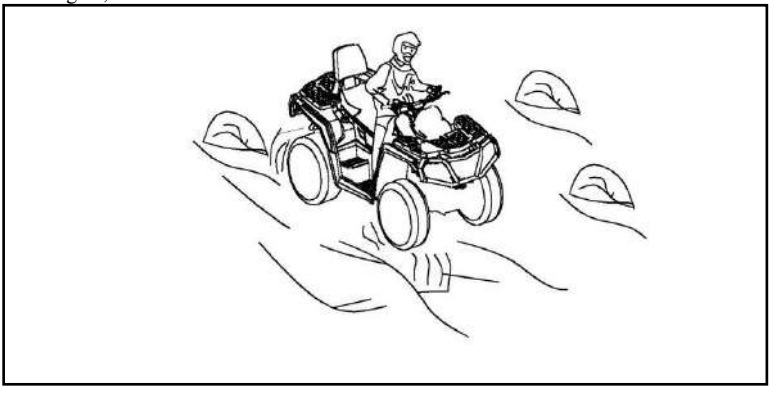
Mud or marsh lands may be encountered near water. Be prepared for sudden 'holes" or changes in depth. Similarly, be watchful of hazards such as rocks, logs, etc., partially covered by vegetation.

If your route crosses frozen waterways, make sure the ice is thick enough and sound enough to support the total weight of yourself, the vehicle and its load. Be ever watchful of open water, it is a sure indication that the ice thickness will vary. If in doubt, do not attempt to cross.

Ice will also affect the control of the vehicle. Slow down and do not "gun" the throttle. This will only result in spinning of the tires and possible tip over of the vehicle. Avoid rapid braking. This again will possibly result in an uncontrolled slide and tip over of the vehicle. Slush should be avoided at all times since it could block the operation or controls of the vehicle.

Riding in snow may reduce the brakes stopping capability. Safely reduce speed and allow greater distance for braking. Snow projection may cause ice built up snow accumulation on brake components and controls. Apply brakes frequently to prevent ice or snow accumulation. Refer to GENERAL OPERATING AND SAFETY PRECAUTIONS in this subsection for more detailed information regarding riding on snow covered surfaces.

Riding on sand, sand dunes or on snow is another unique experience, but there are some basic precautions that should be observed. Wet, deep or fine sand/snow may create a loss of traction and cause the vehicle to slide, drop off or become "bogged" down. If this occurs look for a firmer base. Again, the best advice is to slow down and be watchful of the conditions.



When riding in sand dunes it is advisable to equip the vehicle with an antenna type safety flag. This will help make your location more visible to others over the next sand dune. Proceed carefully should you see another safety flag ahead. Since the antenna type safety flag can snag and rebound on your body if caught, do not use it in areas where there are low hanging branches or obstacles.

Riding on loose stones or gravel is very similar to riding on ice. They will affect the steering of vehicle, possibly causing it to slide and tip over especially at high speeds. In addition, braking distance may be affected. Remember that "gunning" the throttle or sliding may cause loose stones to be ejected rearwards into the path of another rider. Never do it deliberately.

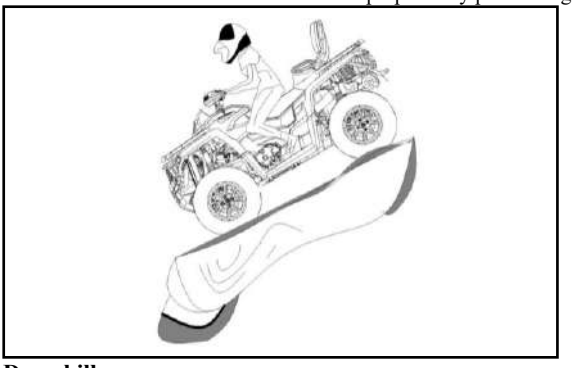
If you do get into a slide or skid, it may help to turn the handlebar in the direction of the skid until you regain control. Never jam the brakes and lock the wheels.

Respect and follow all posted trail signs. They are there to help you and others.

Obstacles in the "trail" should be traversed with caution. This includes loose rocks, fallen trees, slippery surfaces, fences, posts, and embankments and depressions. You should avoid them whenever possible. Remember that some obstacles are too large or dangerous to cross and should be avoided. Small rocks or fallen trees may be safely crossed, approach at a 90 angle. Stand on the footrests while keeping your knees flexed. Adjust speed without losing momentum and do not "gun" the throttle. Hold handlebar firmly. Place your body weight rearwards and proceed. Do not try to lift the vehicle front wheels off the ground.

Be aware that the object may be slippery or may move while crossing.

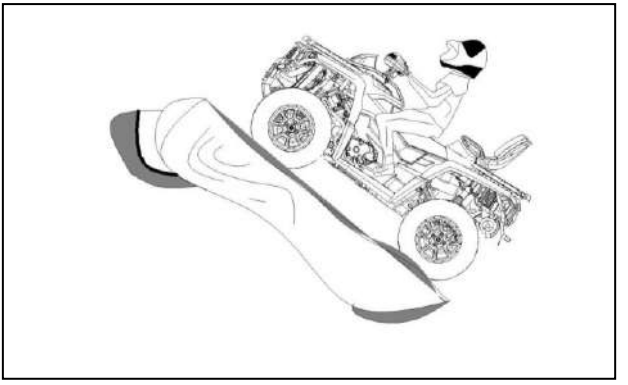
When driving on hills or slopes two things are highly important. Be prepared for slippery surfaces or terrain variations and obstacles and use proper body positioning.



Downhill

Keep your body weight rearwards. Stay seated. Apply the brake gradually to prevent skidding. Do not "coast" down the slope using engine compression or in neutral gear.

Decelerating while negotiating a slippery downhill slope could "toboggan" the vehicle. Maintain steady speed and/or accelerate slightly to regain control. Try avoid steep inclines. If you're not careful, you could tip over when going downhills.



Uphill

Before trying to climb a hill, keep these things in mind. Hill Climbing should only be attempted by experienced operators. Start on shallow slopes. Always drive straight uphill and keep your body weight forward towards the top of the hill. Keep your feet on the footrests, shift your ATV into a lower gear and accelerate before you start to climb. Try to keep a steady speed and go easy on the throttle to avoid acceleration. Abrupt slope or terrain variation or rolling one wheel over an obstacle could have a big impact on the stability as it will lift the front of the vehicle increasing the risk of tipping over. Some hills are too steep to safely stop or recover from after an unsuccessful climbing attempt.

Try to avoid steep inclines.

If you're not careful, you could tip over when going up hills. If the hill is too steep and you cannot proceed or the vehicle begins to roll backwards, apply the brake being careful not to slide. Dismount then use the "K" turn (while walking back next to the vehicle on the uphill side and with a hand on the brake lever, slowly back the rear of the vehicle toward the top of the hill then drive downhill). Always walk or dismount on the upside of the slope while keeping clear of the vehicle and its rotating wheels. Do not try to hold on to the vehicle if it begins to topple. Stay clear. Do not ride over the crest of the hill at high speed. Obstacles, including sharp drop-offs, may exist.

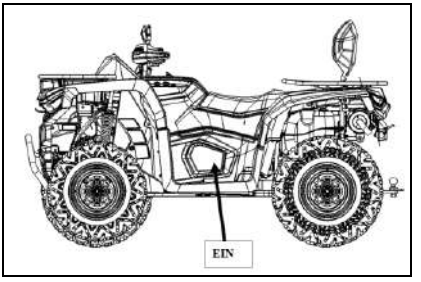
IMPORTANT ON-PRODUCT LABELS

This vehicle comes with hang tags and labels containing important safety information.

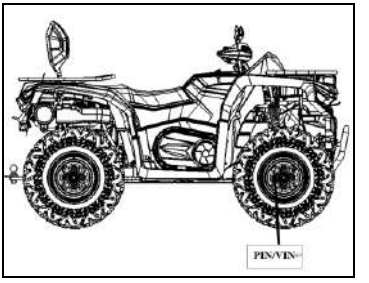
Any person who rides this vehicle should read and understand this information before riding.

Engine and Vehicle

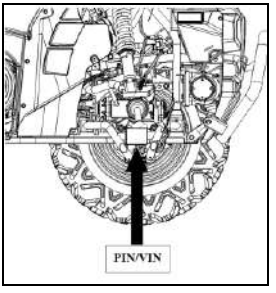
Identification Number Location

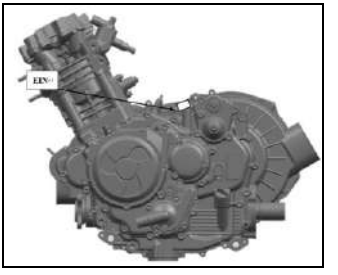


TYPICAL-ATV525 LEFT VIEW (long wheelbase)



TYPICAL-ATV525 RIGHT VIEW (long wheelbase)





TYPICAL

1. PIN/VIN (Vehicle Identification Number on right side/anterior portion on the frame)

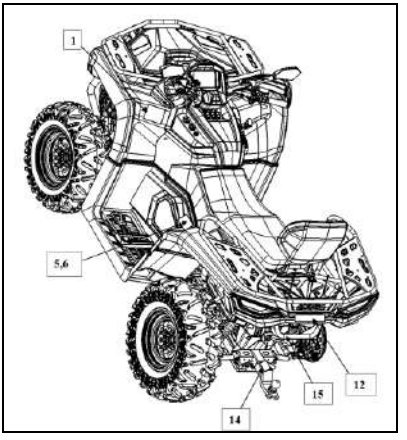
2. EIN (Engine Identification Number on left side/posterior portion on the crankcase)

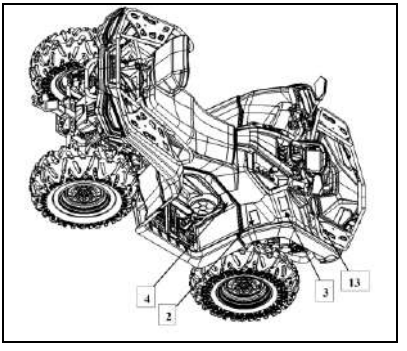
Vehicle Safety Labels

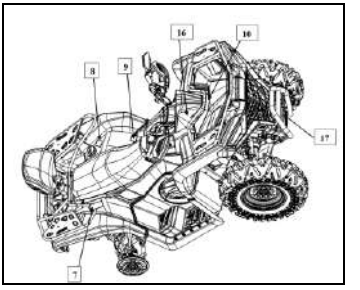
Read and understand all safety labels on the vehicle. These labels are attached to your vehicle to ensure the safety of operators or bystanders.

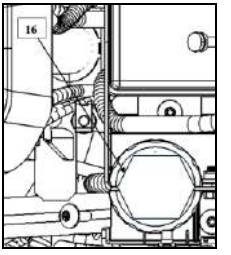
The safety label on the vehicle should be regarded as a permanent part of the vehicle. If it is lost or damaged, please contact an authorized dealer for a replacement.

NOTE: If there are any differences between this guide and the vehicle, the safety label on the vehicle takes precedence over the label in this guide.









Label 1（EU-Long wheelbase）

Label 2（EU-Long wheelbase)

Label 3

Label 4

Label 5

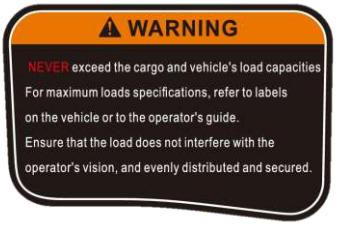
Label 6

Label 7

Label 8

Label 9

Label 10



Label 11 (in the front cargo box)

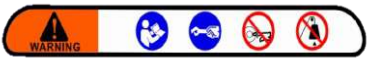
Label 12

Label 13

Label 14

Label 15

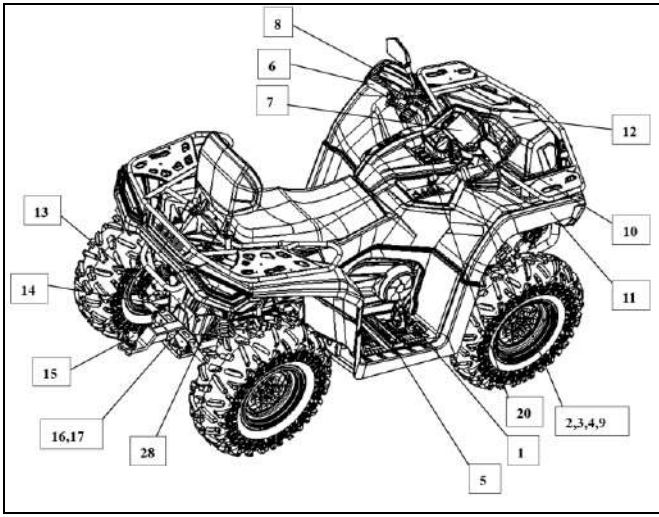
Label 16 (on the brake oil cup)

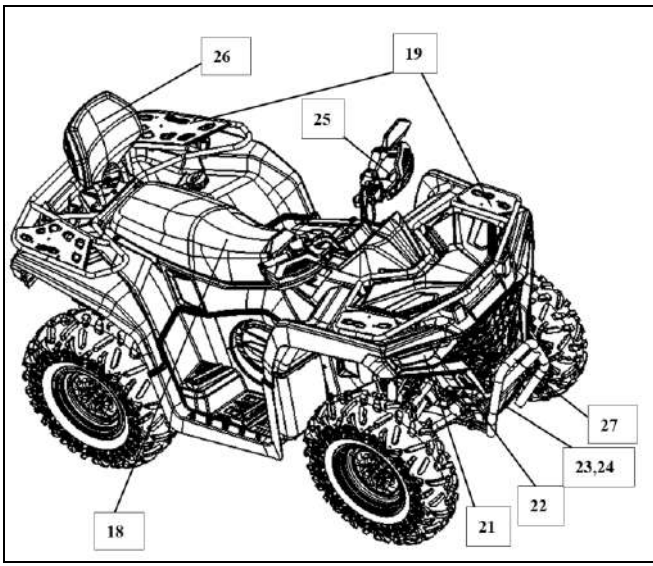


Label 17

DESCRIPTION AND VEHICLE IDENTIFICATION

NOTE: Some controls/instruments/equipment are optional.



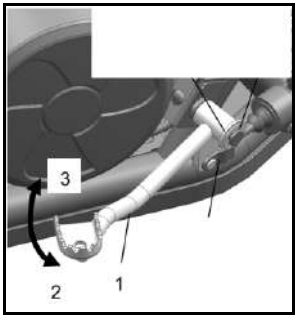


(1) Brake pedal

The brake pedal is located on the right side of the vehicle.

When the brake pedal is depressed and the rear brake is used, the vehicle will gradually slow down.

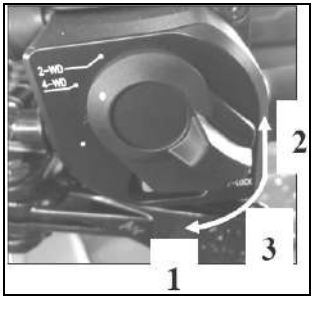
After releasing, the brake pedal will automatically return to normal state.



TYPICAL
1.Brake pedal
2.To decelerate
3.Normal status

(2) 2WD/4WD Selector

The 2WD/4WD selector is on the right side of the handlebar. This selector allows to choose between 2WD and 4WD when the vehicle is stopped.



TYPICAL
1. Selector
2. 4WD position
3. 2WD position

NOTE: After the vehicle must be parked, use the 2WD/4WD selector (engaged or disengaged). When driving, if the selector is used, mechanical damage may occur.

NOTE: Whether the rear wheels rotate, release the throttle, and wait for the engine to return to idle before selecting the four-wheel drive mode.

4WD position

When the selector is pushed to the right, the 4WD mode is used.

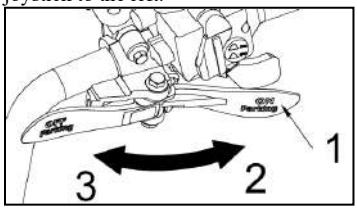
2WD position

When the selector is pushed to the left, the 2WD mode is used.

(3) Mechanical parking brake

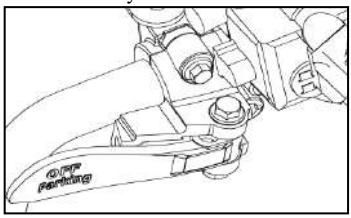
The parking brake is located on the right side of the handlebar. When leaving the vehicle, move the joystick to the right (approximately 170°), it can prevent the vehicle from driving

away. When using the vehicle, turn the joystick to the left.

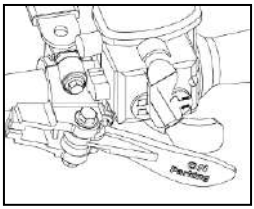


TYPICAL
1. Mechanical parking brake
2. Parking brake
3. Normal state

NOTE: When parking the vehicle on a slope/road, the parking brake must be used or the vehicle may move freely and may cause an accident to you or others.



Normal state



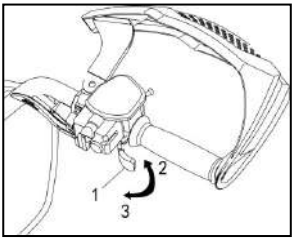
Use parking brake

(4) Throttle Lever

The throttle lever is located on the right side of the handlebar.

When pushed forward, it increases the engine speed and allows engagement of the transmission on the selected range.

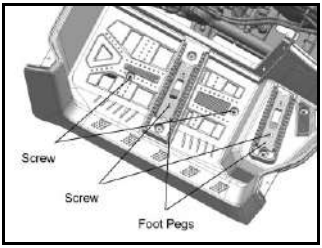
When released, the engine speed should automatically return to idle and the vehicle will gradually slow down.



TYPICAL
1. Throttle lever
2. To accelerate
3. To decelerate

(5) Foot pegs

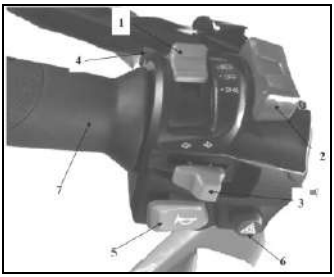
The toothed foot pedals are located on the left and right sides near the engine.



For the short wheelbase, only equip one foot plate on each side.

(6) Multifunction Switch

The multifunction switch is located on the left side of the handlebar.



TYPICAL
1.Headlight Switch
2.Start Button
3.Blinker Switch
4.Emergency stop switch
5.Horn Button
6.Hazard warning light Button
7.Handlebar

（1）Headlight Switch

Set the switch to “ ” to turn on the low beam and the taillights.

Set the switch to “ ”to turn on the high beam and the taillights.

（2）Start Button

First confirm the gear shift lever is in P or N and emergency stop switch to “RUN”, and put key to “ON” position, then you can press start button to start engine; release this button when engine starts.

● Do not operate the electric starter continuously for more than seconds, or starter damage could occur. Wait at least 5 seconds between each operation of the electric starter to let it cool.

● Do not press start button with the engine running, or damage to the electric starter can result.

（3）Blinker Switch

Located under the start button. Push to the left to turn on the left blinker and push to the right to turn on the right blinker.

（4）Emergency stop switch

Hit the emergency stop switch to kill the engine. Press the button back in to restart the engine.

This switch can be used to stop engine and as an emergency control.

NOTE: Do not turn on the key switch when the emergency stop switch is in “OFF”.

（5）Horn Button

Use the horn button when coming to an intersection, or when a pedestrian is present.

（6）Hazard warning light Button

When pulling off the side of the road or trail, use the hazard switch to indicated to the coming riders that you are there.

(7) Multifunction gauge

Two types of gauges are equipped.

Segmented gauge (if equipped)

1. Speed meter indicator
2. Check engine indicator
3. Headlight indicator
4. Oil pressure indicator
5. Engine speed indicator
6. Fuel indicator
7. Gear position indicator
8.Trip meter indicator
9. Total engine running time indicator
10. 2WD/4WD indicator
11. Engine temperature indicator
12. Fixed Driving speed indicator
13. EPS indicator
14.Trailer indicator
15. Brake system indicator
16. Parking device
17. ABS indicator
18. Battery voltage indicator
19. Time indicator

(1) Speed meter indicator

The figure of speed will display and update synchronous while switching between KM/H and MPH in unit of pedometer.

(2) Check engine indicator light (YELLOW)

After turning the ignition switch on, the light shall be on, and the light should immediately turn off after starting the engine. If the light is on while the engine is on, it indicates that the system has an error.

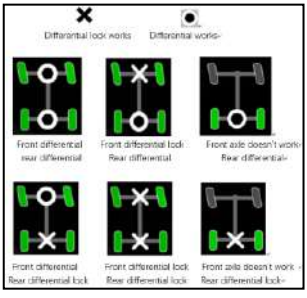
When some electric engine parts are reading faulty, the check engine indicator light will also be ON, the vehicle still can be running, the driving performance can get worse, which signals indicates the vehicle needs repair.

(3) Head-light indicator light

When this indicator light is ON, the head light is turned on.
(4) Oil pressure indicator light

When this indicator light is ON, it indicates a low oil pressure.
CAUTION: If the light does not turn off right after you start the engine. stop the engine immediately. Check engine oil level. Refill if necessary. If the oil level is good, see an authorized ATV dealer. Do not use the vehicle until repaired.
(5) Engine speed indicator
(6) Fuel indicator

Normally the bars below this indicator will be on in white from 1 to 6 bars in turn according to fuel amount. If the bars disappear, it means there is no fuel. If there is only one bar on in red always, it means the fuel is very less and remind you about that. If there are 6 bars on, it means your tank is full of fuel. If the indicator and white bars blinks in 1hz or 2hz, it means the fuel amount signal is abnormal, the circuit must be in open circuit or short circuit.
(7) Gear position indicator
(8) Trip meter indicator
(9) Total engine running time indicator
(10) 2WD/4WD and differential lock indicator



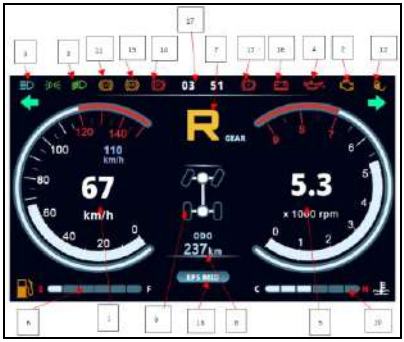
(11) Engine Temperature indicator

Normally the bars below this indicator will be on from 1 to 6 bars in turn according to the engine temperature from 45 degrees to 115 degrees. But if the temperature is less than 45 degrees, the bars will disappear and dotted lines shows instead. If the temperature is more than 115 degrees, the value will keep showing 115 and all bars will be on in red always. Do not use the vehicle until repaired.
(12) Fixed Driving speed indicator
This function is unavailable.
(13) when EPS can't work well, the indicator light will be on. (EPS is optioned)
(14) when trailer works, the indicator light will be on.
(15) when the brake system can't work well, the indicator light will be on.
(16) when the parking device works, the indicator light will be on.
(17) when ABS can't work well, the indicator light will be on. (ABS is optioned)
(18) the Voltage value and indicator color will change according to the true voltage in the battery. If the indicator is on in red, it means the voltage value is less than 12.3. If the indicator is on in white, it means the voltage value is more than 12.7. If the voltage

value is between 12.3 to 12.7, the indicator will be on in the previous color.

(19) Time indicator

TFT gauge (if equipped)



1. Speed meter indicator
2. Check engine indicator
3. Headlight indicator
4. Oil pressure indicator
5. Engine speed indicator
6. Fuel indicator
7. Gear position indicator
8. Trip meter indicator
9. 2WD/4WD indicator
10. Engine temperature indicator
11. EPS indicator
12. Trailer indicator
13. Brake system indicator
14. Parking device
15. ABS indicator
16. Battery voltage indicator
17. Time indicator
18. EPS position indicator

(1) Speed meter indicator

The figure of speed will display and update synchronous while switching KM/H in unit of pedometer.

(2) Check engine indicator light (YELLOW)

After turning the ignition switch on, the light shall be on, and the light should immediately turn off after starting the engine. If the light is on while the engine is on, it indicates that the system has an error.

When some electric engine parts are reading faulty, the check engine indicator light will also be ON, the vehicle still can be running, the driving performance can get worse, which signals indicates the vehicle needs repair.

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When this indicator light is ON, the head light is turned on.

(4) Oil pressure indicator light

When this indicator light is ON, it indicates a low oil pressure.

CAUTION: If the light does not turn off right after you start the engine. stop the engine immediately. Check engine oil level. Refill if necessary. If the oil level is good, see an authorized ATV dealer. Do not use the vehicle until repaired.

(5) Engine speed indicator

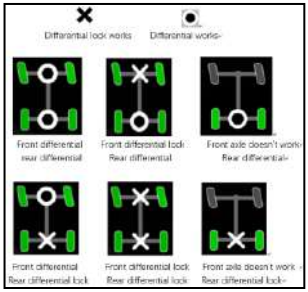
(6) Fuel indicator

Normally the bars below this indicator will be on in white from 1 to 6 bars in turn according to fuel amount. If the bars disappear, it means there is no fuel. If there is only one bar on in red always, it means the fuel is very less and remind you about that. If there are 6 bars on, it means your tank is full of fuel. If the indicator and white bars blinks in 1hz or 2hz, it means the fuel amount signal is abnormal, the circuit must be in open circuit or short circuit.

(7) Gear position indicator

(8) Trip meter indicator

(9) 2WD/4WD and differential lock indicator



(10) Engine Temperature indicator

Normally the bars below this indicator will be on from 1 to 6 bars in turn according to the engine temperature from 45 degrees to 115 degrees. But if the temperature is less than 45 degrees, the bars will disappear and dotted lines shows instead. If the temperature is more than 115 degrees, the value will keep showing 115 and all bars will be on in red always. Do not use the vehicle until repaired.

(11) when EPS can't work well, the indicator light will be on. (EPS is optioned)

(12) when trailer works, the indicator light will be on.

(13) when the brake system can't work well, the indicator light will be on.

(14) when the parking device works, the indicator light will be on.

(15) when ABS can't work well, the indicator light will be on. (ABS is optioned)

(16) the Voltage value and indicator color will change according to the true voltage in the battery. If the indicator is on in red, it means the voltage value is less than 12.3. If the indicator is on in white, it means the voltage value is more than 12.7. If the voltage value is between 12.3 to 12.7, the indicator will be on in the previous color.

(17) Time indicator

(18) EPS position indicator

The EPS position mean different torque of EPS motor.

(8) Handlebar cover

Avoid water and rubbish to enter into and damage the handlebar.

(9) Electrical Heating Handlebar grip (If equipped)

Electrical heating handlebar grip is optioned to equip in the vehicle. Make the handlebar grip hotter in cold weather.

(10) Rearview mirror

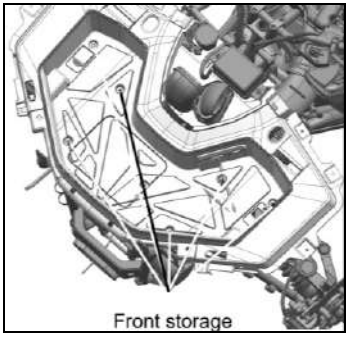
Observe the traffic behind the car by the rearview mirror.

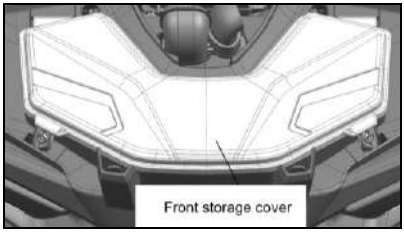
(11) Fender (If equipped)

The fender can avoid scrape, protect the tire and improve the trafficability. Wide plastic fender is optioned to equip.

(12) Front Storage

Convenient location to carry personal articles.





▲WARNING
When engine is running, always engage the PARK position on the shift lever before opening cover. Never leave any heavy or loose breakable objects in the storage area. Always latch cover before riding.

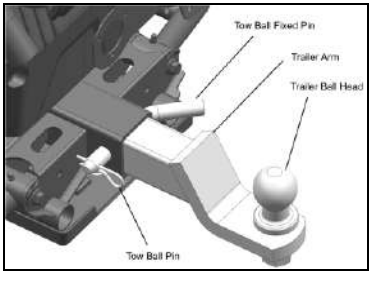
(13) License plate lamp

The license plate lamp is a light that is turned on at night or when the sky is dark to illuminate the license plate.

(14) Trailer power

Provide power to the trailer. The trailer power with 7 sockets is located on the rear guard board.

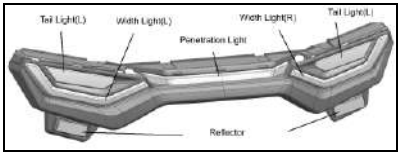
(15) Trailer arm and trailer ball head



If you need to pull a trailer, the trailer arm and trailer ball head can connect the frame and trailer.

(16) Tail/brake lights

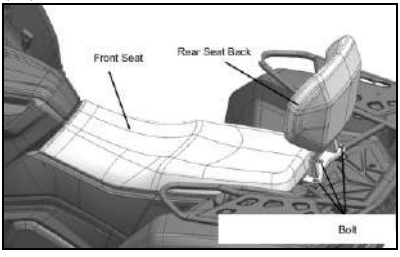
The main color is red light, to enhance the penetration of light, so that the vehicle behind the lower visibility, easy to find the front of the vehicle brake, to prevent rear-end accidents.



(17) Turn signal/Hazard warning light

The turn signal is an important indicator light which is turned on when a motor vehicle is turning to indicate the attention of vehicles and pedestrians.

(18) Front seat



Front seat Removal

-Push latch forward while gently lifting rear of front seat.

-Pull seat rearward.

-Continue lifting until you can release the front retaining device then completely remove seat.

Front seat Installation

Insert front tabs of seat into frame hook. When seat rests in its position, firmly push seat down to latch.

NOTE: If you want to remove the front seat cushion, you need to remove the rear seat back first. (Refer to step 26)

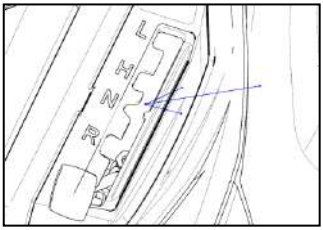
The pressure switch is equipped in the driver seat. The buzzer of ignition warning must ring when the driver leaving the seat and not turning off the ignition switch.

(19) Cargo Rack

The front/rear cargo racks are located on the front/rear plastic. Loading can be set on the cargo rack.

(20) Shift Lever

The shift lever is located on the right side of the vehicle near steering column.



▲WARNING
To change the transmission Position completely stop vehicle then move lever to the desired position. Do not force lever. If unable to shift, gently apply throttle and release it immediately, then wait until engine RPM returns to stable idle and try again.

CAUTION: Always completely stop the vehicle and apply the brake prior to moving the transmission lever.

P: Park

This position locks the transmission to help prevent vehicle movement. Always use when the vehicle is not in operation. In some circumstances, it may be necessary to rock the vehicle back and forth to move the gears in the transmission to allow the park to be engaged.

R: Reverse

This allows the vehicle to go backward. The vehicle speed is limited.

N: Neutral

This position disengages the transmission to allow manual vehicle movement.

H: High gear

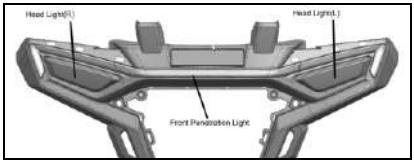
This position selects the high-speed range of the transmission in the gear box. It is the normal driving speed range. It allows the vehicle to reach its maximum speed.

L: Low gear

This selects the low-speed range of the transmission in the gear box. It is the working position. It allows the vehicle to move slowly with the maximum traction and power.

NOTE: Use the low-speed range to pull. Any load or to climb a steep incline.

(21) Headlight



The headlight indicates the width and the vehicle, improves the safety in dark weather.

(22) Penetration light

The penetration light can improve the line of sight and expand the field of view.

(23) Winch

The winch can be actuated using the winch control switch or with the wireless remote control (sold separately).

NOTE: Using the winch intensively over a long period of time may discharge the battery. The following tips will help to reduce the risk of discharging the battery:

Always unreel manually: Unlock the cable using the winch control handle then pull on the hook strap to unreel.

It is recommended to let the vehicle run while winching. Do not stop vehicle immediately after winching to let battery recharge.

Also, when winching for more than 30 seconds, it is recommended to increase engine RPM in the range of 3000 RPM to increase charging power to the battery.

NOTE: Make sure vehicle is in NEUTRAL (N) before increasing engine RPM.

Refer to BASIC GUIDE TO WINCHING TECHNIQUES for more informatic about the winch.

To power up the vehicle without starting the engine, refer to WAKING UP THE ELECTRICAL SYSTEM.

GENERAL SAFETY PRECAUTIONS REGARDING THE USE OF WINCH

AWARNING:

Moving Part hazards

To prevent serious injury and property damage:

Do not operate or install winch without reading and understanding these instructions and the Basic Guide to Winching Techniques.

Keep hands clear of wire rope, hook and fairlead opening during operation and when spooling.

Use supplied hook strap for spooling wire rope.

Stand clear of wire rope and load during operation.

Keep others away.

Inspect winch installation and wire rope condition before operating winch.

Do not use as a hoist.

Do not use to move persons.

Do not exceed winch's rated capacity.

Never touch wire rope or hook while in tension.

Be certain the anchor you select will withstand load.

Never wrap wire rope back onto itself. Use a choker chain or tree trunk protector on the anchor.

Prior to initiating winching operation be sure any element which can interfere with safe winching is removed.

Take your time. Sloppy rigging causes accidents.

Do not disengage clutch if winch is under load or wire rope is in tension.

The wire rope must always spool onto the drum as indicated by the drum rotation label on the winch.

CAUTION:

To avoid injury and property damage:

Do not use winch to secure a load during transport.

Do not submerge in water.

Do not use to tow other vehicles. Wear heavy leather gloves when handling the wire rope.

Never winch with less than 5 wraps of wire rope around the drum. Caution should be used if the vehicle is tied down during a winching operation. This may lead to damage to the frame.

Before winching, inspect winch wire harness lead for damage.

(24) Winch front roller bracket

The front roller bracket for winch can guide winch rope and avoid to wear.

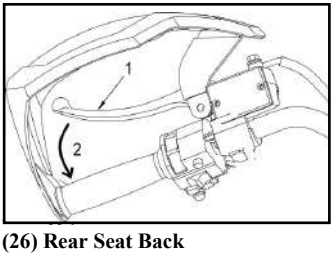
(25) LH Brake Lever

When the LH brake lever is pressed, the front brake is applied.

When released the brake lever should automatically return to its original position.

Braking effect is proportional to the force applied on the lever.

NOTE: As on other wheeled vehicles the vehicle weight is transferred to the front wheels when braking. To obtain greater stopping efficiency, the brake system distributes more braking force to the front wheels. This will affect vehicle handling and steering control when braking vigorously. Take it into account when braking.



(26) Rear Seat Back

NOTE: There is no rear seat back for short wheelbase models.

Rear seat back Removal

-Unscrew the 3 hex flange bolts.
-Remove the rear seat back.
Rear seat Installation
The installation is reversal of the removal.

(27) Front/Rear Bumper

The bumpers are equipped in the front and rear side of vehicle. The bumper can absorb energy to protect the pedestrian and vehicle when accident occur.

(28) Reflector

The two rear reflectors are red. Reflector makes sure other drivers detect your vehicle clearly which can avoid traffic accident.

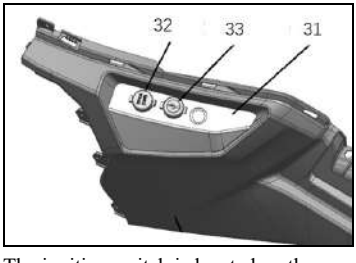
(29) Catalyst

Catalyst is located in the muffler. Accelerate the oxidation reaction of exhaust gas and convert it into harmless substances such as CO_2 and H_2O.

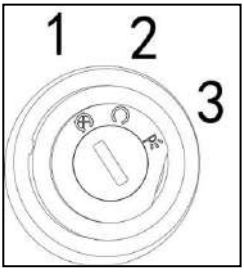
(30) Tool kits

The tool kits contain diagnostic tool, flywheel puller, retaining tool, driven wheel puller and water seal tool. Use the tools to maintenance the vehicle.

(31) Ignition Switch



The ignition switch is located on the console under the left handlebar. The functions of the respective switch positions are as follows:



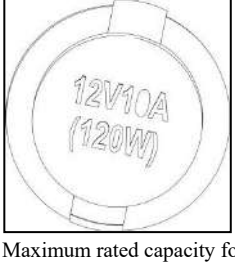
1. OFF: All electrical circuit lights are switched off. The key can be removed from this position.
2.ACC: All electrical circuits except lights are supplied with power.
3. ON: Electronic fuel injection system, 2WD/4WD, instrument will illuminate and turn on.

The ON position, turns on all lights with either the engine running or not. Remember that making the lights on without the engine running discharges the battery. Always turn ignition to OFF after engine has been stopped.

If ignition switch is equipped with steering wheel switch, the switch can lock the steering wheel.

(32) Auxiliary DC jack

This jack can be used for suitable portable players. Only use the DC jack while engine is running.



Maximum rated capacity for the auxiliary DC jack: DC 12V, 120W (10A).
How to use:
1. Set the light switch to “OFF”.

2. Start the engine.
3. Open the auxiliary DC jack cap, and then insert the accessory power plug into the jack.
4. When the auxiliary DC jack is not being used, cover it with the cap.

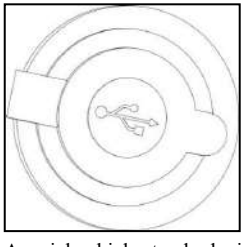
CAUTION:

● Do not use accessories requiring more than the above maximum capacity. This may overload the circuit and cause the fuse to blow.

●If accessories are used without the engine running or with the headlights turned on, the battery will lose its charge and engine starting may become difficult.

● Do not use an automotive cigarette lighter or other accessory with a plug that gets hot.

(33) USB port



A serial vehicle standard with external devices is also a technical specification for input and output interfaces by the USB or type-C port.

FUEL

Fuel Requirements

NOTE: Always use fresh gasoline. Gasoline will oxidize, the result is loss of octane, volatile compounds, and the production of gum and varnish deposits which can damage the fuel system.

Alcohol fuel blending varies by country and region. Your vehicle has been designed to operate using the recommended fuels, however, be aware of the following:

Use of fuel containing alcohol above percentage specified by government regulations is not recommended and can result in the following problems in the fuel system components:

●Starting and operating difficulties.

●Deterioration of rubber or plastic parts.

●Corrosion of metal parts.

●Damage to internal engine parts.

-Inspect frequently for the presence of fuel leaks or other fuel system abnormalities if you suspect the presence of alcohol in gasoline exceeds the current government regulations.

-Alcohol blended fuels attract and old moisture which may lead to fuel phase separation and can result in engine performance problems or engine damage.

Recommended Fuel

Use common unleaded gasoline with an AKI (R+M)/2 octane rating of 87, or an RON octane rating of 92.

NOTE: Never experiment with other fuels. Engine or fuel system damages may occur with the use of an inadequate fuel.

Do NOT use fuel from fuel pumps labeled E85.

Fueling Procedure

▲WARNING
Fuel is flammable and explosive under certain condition. Never use an open flame to check fuel level. Never smoke or allow a flame or spark in the vicinity, Always work in a well-ventilated area.

NOTE: Always clean the surrounding of the fuel cap of any debris, dust, sand to avoid contaminating fuel.

1.Stop engine.

▲WARNING
Always stop engine before refueling.

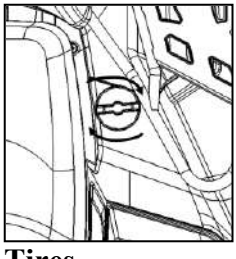
2. Do not allow anyone to remain seated on the vehicle while fueling.
3. Slowly unscrew fuel tank cap counterclockwise to remove it.
4. Insert the spout in the filler neck.
5. Pour fuel slowly to allow time for the air in

▲WARNING
If a differential pressure condition is existed, whistling sound heard when loosening fuel tank cap. Inspect or repair vehicle before further operation.

the tank to escape and prevent fuel flow back. Be careful not to spill fuel.
6. Stop fueling when the fuel reaches the bottom of filler neck. Do not overfill.

▲WARNING
Always wipe off any fuel spillage from the vehicle.

7. Fully tighten fuel tank cap clockwise.



Tires

POTENTIAL HAZARD

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

WHAT CAN HAPPEN

Use of improper tires on this vehicle, or operation of this vehicle with improper or uneven tire pressure, may cause loss of control increasing your risk of accident.

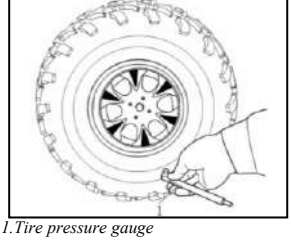
HOW TO AVOID THE HAZARD

1. The tires listed below have been approved by motor Manufacturing Corporation of America for this model. Other tire combinations are not recommended.
2. The tires should be set to the recommended pressure:

● Recommended tire pressure
Front & Rear
45 kPa (0.46 kgf/cm^2, 6.5psi)
Check and adjust tire pressures when the tires are cold.
Tire pressures must be equal on both sides.
3. Tire pressure below the minimum specified could cause the tire to dislodge from the rim under severe riding conditions.
Higher pressures may cause the tire to burst.
Inflate the tires very slowly and carefully.
Fast inflation could cause the tire to burst.

How to measure tire pressure

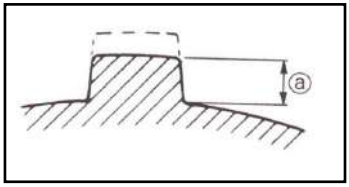
Use the tire pressure gauge.
NOTE:
The tire pressure gauge is not included as standard equipment. Make two measurements of the tire pressure and use the second reading.
Dust or dirt in the gauge could cause the first reading to be incorrect.
Set pressure with tires cold.
Set tire pressures to the following specifications:



1.Tire pressure gauge

Tire wear limit

When the tire groove decreases to 6 mm (0.24 in) due to wear, replace the tire.



a--Tire wear limit

BREAK-IN PERIOD

Operation During Break-In

A break-in period of 10 operating hours or 300 km (200 mi) is required for the vehicle.

Engine

During the break-in period:

-Avoid full throttle operation.

-Maximum throttle should not exceed 3/4.

-Avoid sustained accelerations.

-Avoid prolonged cruising speeds.

-Avoid engine overheating.

However, brief accelerations and speed variations contribute to a good break-in.

Brakes

▲WARNING
New brakes will hot operate at the maximum efficiency until their break-in is completed. Use extra caution.

Belt

A new belt requires a break-in period of 50 km (30 mi). During the break-in period:

-Avoid strong acceleration and deceleration (throttle should not exceed 3/4).

-Avoid pulling a load.

-Avoid high speed cruising.

BASIC PROCEDURES

Starting the Engine

The shift lever must be set to PARK or NEUTRAL.

NOTE: For your convenience, an override mode allows the engine to be started with the shift lever in any position. Press and hold the brake lever(s) or the brake pedal while pressing the engine start button.

Insert the key into the ignition switch and turn it.

Press the engine start button and hold until the engine starts.

NOTE:

- If engine does not start after a few seconds, do not hold the engine start button more than 10 seconds.

- Check if fuel is empty.

- See an authorized ATV dealer.

Release the engine start button immediately when the engine has started.

NOTE: If the battery is dead, engine cannot be started. Have the battery recharged or replaced.

Changing Gear Selection

Apply brakes and select the desired shift lever position.

Release brakes.

NOTE: When changing gear seduction, always completely stop the vehicle and apply the brakes prior to moving the shift lever. If not the damage for transmission may occur.

Stopping the Engine

NOTE:

-Avoid parking on a slope as the vehicle may roll away.

-Always put the vehicle in PARK when stopped or parked to prevent rolling.

-Avoid parking in places where hot parts can start a fire.

Release throttle and completely stop the vehicle.

Set shift lever in PARK position.

Apply the parking brake.

Push the emergency engine stop switch to OFF position.

Turn key in ignition switch to OFF position or use the vehicle emergency stop switch to stop the vehicle.

Engine Overheat

If engine overheats, try the following:

1. Check and clean radiator fins.
2. Check coolant level and refill if possible.
3. See an authorized ATV dealer as soon as possible.

▲WARNING
The radiator can be very hot, wear gloves before touching radiator.

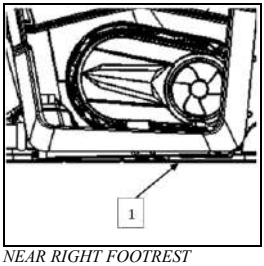
CAUTION: Reduce vehicle speed but try to keep vehicle moving to supply air to radiator. If engine is still overheating after approximately one minute, stop vehicle and set transmission to PARK.
Stop engine.
Place the ignition switch to ON position (DO NOT RESTART ENGINE YET). The radiator fan will cool the radiator. Let engine cool down. Check coolant level and refill if possible.

▲WARNING
Never refill cooling system when engine is hot.

Post-Operation Care
When vehicle is used in salt-water environment (beach area, launching/loading boats etc.), rinsing the vehicle with fresh water is necessary to preserve vehicle and its components. Metallic parts lubrication is highly recommended. This must be performed at the end of each operating day.
When vehicle is operated in muddy conditions, rinsing the vehicle is recommended to preserve vehicle and its components and to keep lights clean.
NOTE: Never use the high-pressure washer to clean the vehicle USE LOW PRESSURE ONLY (like a garden hose). The high pressure can cause electrical or mechanical damages.
Storage
When a vehicle is not in use for more than a month, proper storage is a necessity. Do key parts maintenance work according to MAINTENANCE CHART.

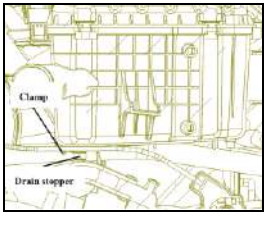
SPECIAL PROCEDURES

What to Do if Water is in the CVT
The CVT drain bolt is located in the front of the CVT bottom.



NEAR RIGHT FOOTREST
1.Drain Bolt

NOTE: If water entered your CVT while in a muddy environment, limit vehicle usage and bring your vehicle to your nearest authorized dealer for a proper CVT cleaning procedure.
If water is present, remove CVT drain bolt to expel water.
Reinstall the drain bolt and washer.
NOTE: Make sure drain bolt is properly inserted on CVT cover nipple.
What to Do if Water is in the Air Filter Housing
Remove air filter service cover and air filter cover to inspect if water is present.
If water is present, press clamps and remove air filter drain stopper to drain water from air filter housing. The air filter drain stopper is located in the front of air filter bottom.



If one of the following conditions is met, bring the vehicle to your nearest authorized ATV dealer to have the vehicle serviced:
- If more than 50 ml of water is found in the clean chamber drain hose.
- If any deposits are present in the clean chamber drain reservoir.
- If either hose is obstructed.

In such a case, the vehicle must be serviced for:
-Air filter housing cleaning.
-Vents (radiator cooling fan, water pump, coolant reservoir, fuel tank, gearbox, front and rear differential).
-CVT air filter cleaning.
-CVT cleaning.
-Lubricant inspection and replacement as required (engine, gearbox, front and rear differential).

NOTE:
Failure to have vehicle serviced may lead to permanent damage to the following components but not limited to:
-Engine and gearbox
-Fuel pump
-CVT
-Cooling fan
-Front differential
-Rear differential

What to Do if Vehicle is Turned Over

When vehicle is turned over or stays tilted on the side, put the vehicle back on its wheels. Inspect vehicle for damages.
If vehicle has no damage, refer to MANTENANCE section and inspect the following:
- Inspect air filter housing for oil accumulation, if any oil is found, clean air filter and air filter housing.
-Check engine oil level and refill in necessary.
- Check engine coolant level and refill if necessary.
-Check gearbox oil level and refill if necessary.
-Check rear differential oil level and refill if necessary.
-Check front differential oil level and refill if necessary.

Whenever the vehicle is turned over, it should be inspected by an authorized ATV dealer.

What to Do if Vehicle is Immersed in Water

When the vehicle become immersed, immediately stop the engine. Do not use:
- Any electrical equipment
- Winch

NOTE: Immersion of the vehicle can cause serious damage if the correct restart procedure is not followed.
As soon as vehicle is pulled out of water, carry out the following:
- Drain air filter housing. See procedure in this subsection.
- Drain CVT. See procedure in this subsection.

NOTE: The vehicle should be serviced as soon as possible by an authorized ATV dealer.

MAINTENANCE PROCEDURES

This section includes instructions for basic maintenance procedures.

▲WARNING
Turn off the engine and follow these maintenance procedures when performing maintenance. If you do not follow proper maintenance procedures, you can be injured by hot parts, moving parts, electricity, chemicals or other hazards.

▲WARNING
Should removal of a locking device be required (e.g. lock tab self-locking fastener, etc.), always replace it with a new one.

Air Filter

Air Filter Maintenance Guideline

As with any ATV, air filter maintenance is critical to ensure proper engine performance and life span.

Air filter maintenance should be adjusted according to riding conditions.

Air filter maintenance must be increased in frequency and oil must be added to the foam filter element for the following dusty conditions:

-Riding on dry sand.

-Riding on dry dirt covered surfaces.

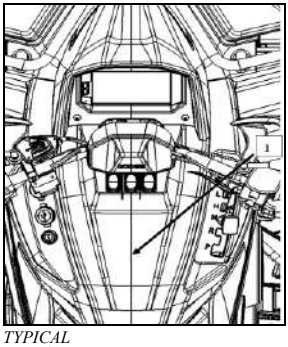
-Riding on dry gravel roads or similar conditions.

Air Filter Removal

Remove seat.

Remove dash board cover.

Remove air filter service cover.

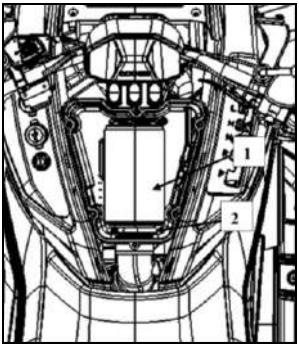


TYPICAL
1.Air filter service cover

Remove air filter cover.

Unscrew the clamp.

Take out air filter.



TYPICAL
1. Air filter
2. clamp

Air Filter Cleaning and Oiling

CAUTION: Always wear appropriate skin and eye protection. Chemicals can cause a skin rash and eye injury.

Paper Filter Cleaning

1. Ensure that the foam filter element removed from paper filter.

2. Tap out heavy dust from the paper element.

This will allow dirt and dust to get out of the paper filter.

NOTE: Paper filter have a limited lifespan; replace filter if too dirty or clogged.

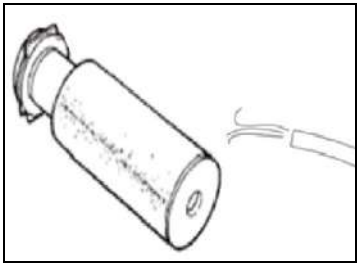
NOTE: It is not recommended to blow compressed air on the paper filter: this could damage the paper fibers and reduce its filtration ability when used in dusty environments.

NOTE: Do not wash the paper filter with any cleaning solution.

Foam Filter Element Cleaning

1.Spray the foam filter element inside and out with a good air filter cleaner and follow manufacturer's instructions.

2. Dry the foam element completely.



TYPICAL-DRY

NOTE: A second application may be necessary for heavily soiled elements.

Air Filter Installation

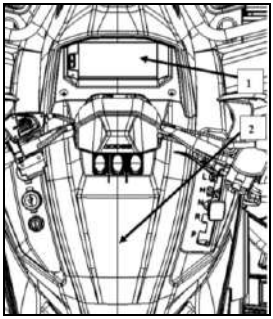
Put the filter element and filter element cover back into the air filter, and then put the air filter service cover back in place.

Maintenance of CVT intake pipe

Remove seat.

Remove dash board cover.

Remove air filter service cover.

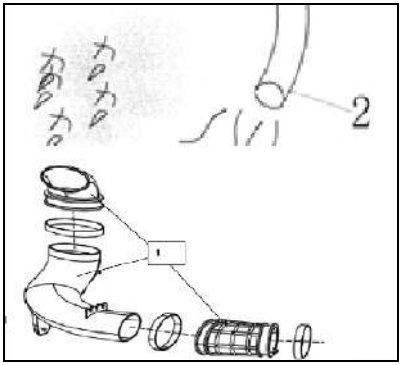


TYPICAL
1.Dash board cover
2.Air filter service cover

Attention:

Operators must take necessary protective measures, and wear glasses and masks.

Operation work need to be in open area.



TYPICAL

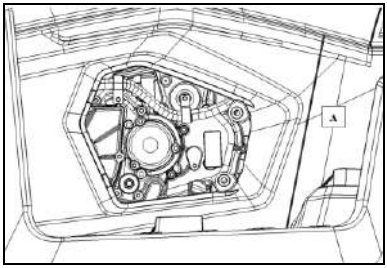
1. CVT air filter intake pipe.
2. blow pipe

3.Please don't clean the air intake pipe against the wind, otherwise stuffs will enter into eyes and mouth easily.

4.Clean the air intake pipe, and make sure there is no other stuffs around.

Greasing points

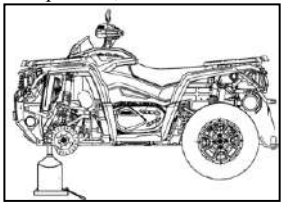
Greasing point located at left side foot pedal.



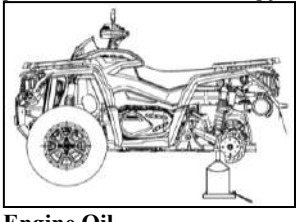
Label

Lifting jack position operation manual introduction

1. Put the lifting jack under the bottom of front position, then lift on the lifting jack.



2.Put the lifting jack under the bottom of rear position, then lift on the lifting jack.

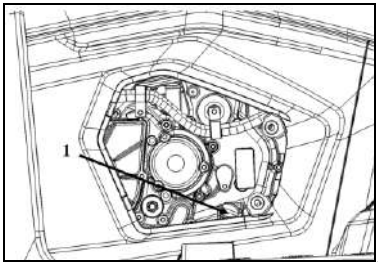


Engine Oil

Engine Oil Level

NOTE: Check level frequently and refill if necessary. Do not overfill. Operating the engine/gearbox with an improper level may severely damage engine/gearbox. Wipe off any spillage.

NOTE: While checking the oil level, visually inspect engine area for leaks.



LE

FT SIDE OF ENGINE

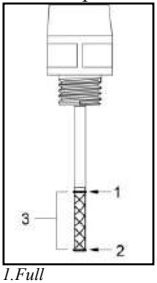
1.Dipstick

With vehicle on a level surface and engine cold, not running, check the oil level as follows:

1. Unscrew dipstick then remove it and wipe clean.

2.Reinstall dipstick, screw in it completely.

3. Remove and check oil level. It should be near or equal to the upper mark.



1.Full
2.Add
3.Operating range

To add oil, remove the dipstick. Place a funnel into the dipstick tube to avoid spillage. Add a small amount of recommended oil and recheck oil level.

Repeat the above procedures until oil level reaches the dipstick's upper mark.

Do not overfill.

Properly tighten dipstick.

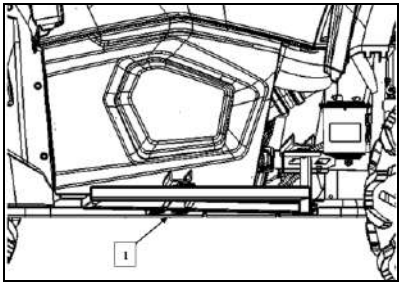
Oil Change and Oil Filter

Replacement

Oil and oil filter are to be replaced at the same time. Oil change should be done with a warm engine.

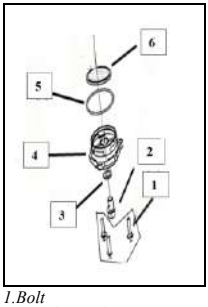
▲WARNING
The engine oil can be very hot. In order to avoid potential burns, do not remove the engine drain plug or the filter cover if the engine is hot. Wait until engine oil is warm.

Ensure vehicle is on a level surface.
Remove dipstick.
Clean the oil drain plug area.
Place a drain pan under the oil drain plug area.
Unscrew oil drain plug.



1. Oil drain plug

Allow enough time for oil to flow out of the oil filter.
Unscrew the oil filter cover.



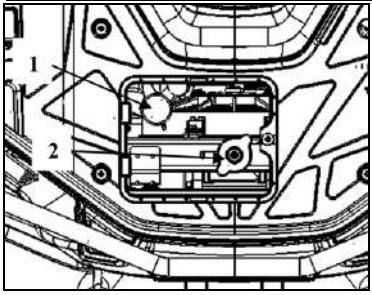
1.Bolt
2. Oil drain Plug
3. Washer
4. Oil filter Cap
5.O-ring
6.Oil filter

Remove old filter and replace with new oil filter.
Check the cap, O-ring, change it if necessary.
Screw oil filter cover in place.
Wipe out any oil spillage on engine.
Change washer on oil drain plug. Clean area on engine and oil drain plug then reinstall plug.
Refill engine at proper level with the recommended oil.
Refer to SPECIFICATIONS for capacity.
Start engine and let it idle for a few minutes.
Ensure oil filter area and oil drain plug areas are not leaking.
Stop engine. Wait a while to allow oil to flow down to the crankcase then check oil level.
Refill as necessary. Dispose of oil as your local environmental regulations.

Engine Coolant

Engine Coolant Level

▲WARNING
Check coolant level with engine cold. Never add coolant in cooling' system when engine is hot.



TYPICAL
1.Auxiliary tank cover
2.Radiator cover

1.Remove the radiator cap by applying pressure and turning it counterclockwise.
Then drain the antifreeze from the engine.
Complete the radiator filling.
Check the level in the coolant reservoir and refill if necessary.
Run engine at idle with the radiator cap off.

Slowly add coolant if necessary. At this point, wait until engine reaches normal operating temperature.
2.With vehicle on a level surface, liquid should be between MIN. and MAX. level marks of coolant reservoir.
NOTE: When checking level at temperature lower than 20°C (689F), it may be slightly lower than MIN. mark.
NOTE: Ensure coolant reservoir hose is properly routed to avoid any interference when closing cover.

Suspension Adjustment

▲WARNING
Suspension adjustment could affect vehicle handling. Always take time to familiarize yourself with the vehicle's behavior after any suspension adjustment have been made.

Suspension adjustment and loading can have an effect on your vehicle handling and comfort.
Choice of suspension adjustments vary with driver's weight, personal reference, riding speed and field condition.

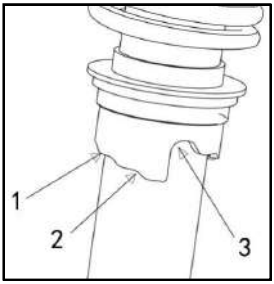
Spring Preload Adjustment

▲WARNING
The left and right shock adjustment on front or rear suspension must always be set to the same position. Never adjust one only. Never adjustment can cause poor handling and loss of stability which could lead to an accident.

Shorten the springs for a firmer ride and rough conditions.
Lengthen the springs for a softer ride and smooth conditions.

Ordinary shock absorption

Adjust spring preload by turning adjustment cam.

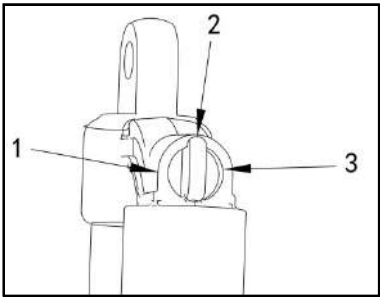


TYPICAL
1.Adjustment cam
2.Firmer adjustment
3.Softer adjustment

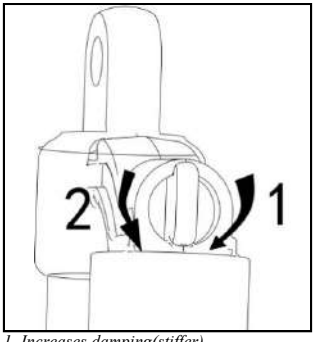
Airbag shock absorption (If equipped)

Compression damping controls how the shock absorber reacts when riding.

POSITION	SETTING	RESULT ON BIG BUMPS
1	Soft	Softer Compression damping
2	Medium (Factory)	Medium Compression Damping
3	Hard	Firmer Compression damping



1. position 1
2. position 2
3. position 3



1. Increases damping(stiffer)
2.Decreases damping (softer)

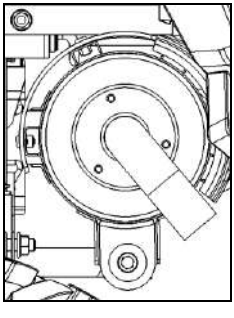
Turn adjuster clockwise to increase shock damping action (stiffer).

Turn adjuster counterclockwise to decrease shock damping action (softer).

▲WARNING
Damping action (stiffer). Turn adjuster counterclockwise to decrease shock damping action (softer).

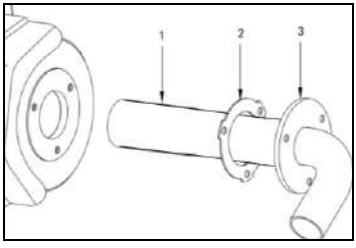
Muffler Spark Arrester Cleaning and Inspection

CAUTION: Let exhaust system cool down before proceeding with leaning and inspection.



TYPICAL- REMOVE TAIL PIPE

Remove exhaust tail pipe, gasket (discard) and spark arrester.



TYPICAL
1.Spark arrester
2.Gasket
3.Exhaust tail pipe

Remove carbon deposits from the spark arrester using a brush.

NOTICE: Use a soft brush and be careful to avoid damaging spark arrester mesh.

CAUTION: Wear eye protection and gloves.

Inspect mesh of spark arrester for any damage. Replace as required.

NOTE: Spark arrester screen replacement is required only when damaged.

Inspect spark arrester chamber in muffler. Clean any debris as required

Install new gasket, tail pipe and new retaining screws.

Reinstall muffler cover with new retaining screws. Tighten to specification.

MAINTENANCE CHART

In order to maintain the best performance and economical-performance of vehicles, suggestions on intervals for necessary regular maintenance are listed. Following maintenance is calculated in km, mile and hours.

However, keep in mind that if the vehicle isn't used for a long period of time, the month maintenance intervals should be followed.

Items marked with an asterisk should be performed by a dealer as they require special tools and technical skills.

In case of complicated road conditions, regular maintenance shall be carried for vehicles.

▲WARNING
Indicates a potential hazard that, if not avoided, could result in serious injury or death. Should removal of a locking device be required when undergoing disassembly/assembly, always replace with a new one.

ITEM	ROUTINE	Whichever Comes first ⇨		INTIAL			EVERY	
			month	1	3	6	6	12
			Km (mi)	320 (200)	1,200 (750)	2,400 (1,500)	2,400 (1,500)	4,800 (3,000)
			hours	20	75	150	150	300
Valves*	● Check valve clearance. ● Adjust if necessary.			O		O	O	O
Cooling system	● Check coolant leakage. ● Repair if necessary. ● Replace coolant every 24 months.			O	O	O	O	O
Spark plug	● Check condition. ● Adjust gap and clean. ●Replacement every 24 months			O	O	O	O	O
Air filter elements	● Clean. ●Replacement every 24 months			Every 20-40 hours (More often in wet or dusty areas.)				
Crankcase breather system*	● Check breather hose for cracks or damage. ● Replace if necessary.					O	O	O
Exhaust system*	● Check for leakage. ● Tighten if necessary. ●Replace gasket(s) if necessary.					O	O	O
Fuel line*	● Check fuel hose for cracks or damage. ● Replacement fuel hose every					O	O	O

	48 months. ● Replacement fuel filter every 24 months.					
Engine oil	● Replace (Check oil level every month).	O		O	O	O
Engine oil filter	● Replace.	O		O		O
Differential and gearbox oil	● Check oil level/oil leakage. ●Replacement every 24 months.	O				O
Brake*	●Check operation/brake pad wear/fluid leakage. ●Brake fluid needs to be above the lowest position. ●Correct if necessary. Replace pads/disk if worn to the limit.	O	O	O	O	O
Throttle lever*	●Check operation and free play.	O	O	O	O	O
Wheels*	●Check balance/damage/ run out ●Repair if necessary.	O		O	O	O
Wheel bearings*	●Check bearing assemblies for looseness or damage. ●Replace if damaged.	O		O	O	O
Front and rear Suspension*	●Check operation and for leakage. ●Correct if necessary.			O		O
Steering system*	●Check operation and for looseness ●Replace if damage. ●Check toe-in/Adjust if necessary.	O	O	O	O	O
Rear knuckle pivots and suspension arms*	●Lubricate with lithium-soap-based grease.			O	O	O
Drive shaft universal joint*	●Lubricate with lithium-soap-based grease.			O	O	O
Engine mounting*	●Check for cracks or damage. ●Correct bolt tightness.			O	O	O
Front and	●Check operation.	O				O

rear axle	●Replace if damage.					
Stabilizer bushings*	●Check for cracks or damage.			O	O	O
Fittings and fasteners*	●Check all chassis fittings and fasteners. ●Correct if necessary.	O	O	O	O	O
Battery	●Check and clean end connection	O		O	O	O
Light and turn signal	●Operation	O	O	O	O	O

The maintenance is very important, if you are not familiar with safe service practices and adjustment procedures, see your authorized ATV dealer.

MAINTENANCE SCHEDULE

Maintenance is very important to keep your vehicle in safe operating condition.

The vehicle should be serviced as per the maintenance schedule.

Proper maintenance is the owner's responsibility. A warranty claim may be denied if, among other things, the owner or operator caused the problem through improper maintenance or use.

Perform periodic checks and follow the maintenance schedule. **The maintenance schedule does not exempt the pre-ride inspection.**

Air Filter Maintenance Guideline

Air filter maintenance should be adjusted according to riding conditions.

Air filter maintenance must be increased in frequency when riding on snow, dry sand, dirt, gravel or

▲WARNING
Failure to properly maintain the vehicle according to the maintenance schedule and procedures can make it unsafe to operate.

similar conditions which have a high dust or particle dispersion.

Riding in a group in these conditions will require increasing the air filter maintenance frequency further.

NOTE: Accessory filters and pre-filter are available for such conditions. Contact an authorized dealer for details.

Severe Duty Use

If your vehicle is used in the following conditions, refer to the Severe Duty section of the maintenance schedule.

– Repeated hauling of loads at more than 75% the maximum capacity.

–The increase workload applied to the drive system accelerates the differentials, gearbox/transmission, and engine oil life. This reduces internal component longevity if not replaced more frequently.

– Driving at excessive speeds for prolonged amount of time.

Higher than the average utility or commercial use requires more frequent fluid and wear component replacement than trail, recreational, or occasional utility purposes.

Extreme Cold Condition

An engine that is frequently operated at or below an ambient temperature of -25 °C (-13 °F) will require an increase in service and maintenance schedule.

Any combustion engine operated at these low ambient temperatures will collect an increased amount of condensation at every startup/warm-up.

Since the engine is not reaching operating temperatures for extended periods of time, the oil is starting to be strongly diluted with water and gas residue (more water content).

An engine needs to reach operating temperature, in order to be able to evaporate condensate out of the oil.

If daily usage (work or leisure driving cycle) is similar to those mentioned below, strongly recommends changing the oil at least once a month.

Parameters of an increase in service and maintenance schedule:

– Engine not reaching the proper operating temperature during normal daily usage

– Multiple starts and stops without reaching operating temperature

– Short idle periods

– Low RPM driving cycle in short distances without reaching operating temperature.

NOTE: Strongly recommends the installation of a block heater to help warm up the liquids, this will also help to extend the oil lifetime.

Deep Mud/ Water Use

Whether your vehicle is a XMR model or was accessorized for deep mud / water use, this type of usage requires more frequent maintenance and inspections to ensure debris has not infiltrated mechanical components.

If you regularly ride in deep mud or water, refer to the Deep Mud/ Water section of the maintenance schedule.

After every ride, be sure to perform the **Post Operation Care for Deep Mud/Water Environment.**

Post Operation Care for Deep Mud/Water Environment

– Rinse the vehicle and its components with fresh water.

– Clean the CVT air filters.

– Drain the CVT compartment and clean if any water or mud is found.

– Inspect and clean engine air filters and engine air filter housing.

– Clean radiator.

– Visually inspect for any water accumulation in the vent hoses (fuel tank, gearbox, front differential and rear final drive). If there is water, bring the vehicle to your nearest authorized dealer for inspection and servicing of main components related to the vents.

– Clean front and rear shock absorbers to prevent seal from damage by dust or dirt.

– Clean drive shaft bellows and the propeller shaft yokes or boots.

Maintenance Schedule

Make sure to perform proper maintenance at recommended intervals as indicated in the tables.

The maintenance chart intervals are based on 3 factors:

– Calendar time

– Vehicle hours

– Odometer reading

Take in account whichever comes first to determine the maintenance threshold.

Your driving habits determines the factors you shall adhere too. For example:

– Someone who uses their vehicle every other weekend trail riding with friends would most likely follow the odometer reading to determine the maintenance interval.

– Someone who uses their vehicle seldomly over the year or only on a few occasions (hunting, camping) would most likely follow the calendar time to determine the maintenance interval.

– Someone who uses their vehicle daily/weekly for long periods of time such as agricultural / work would most likely follow the vehicle hours to determine the maintenance interval.

IMPORTANT: The following tables show the appropriate maintenance application for the first 3 years. For subsequent years, repeat the same pattern alternatively.

Regular Maintenance Overview			
Calendar Years	Vehicle Hours	Odometer	Regular Duty
1	200	3000 km (2000 mi)	A
2	400	6000 km (4000 mi)	A and B
3	600	9000 km (6000 mi)	A
Severe Duty and Mud/Water Maintenance Overview			
Calendar Years	Vehicle Hours	Odometer	Severe Duty and Deep Mud / Water
0.5	100	1500 km (1000 mi)	**A+**
1	200	3000 km (2000 mi)	**A+** and **A**
1.5	300	4500 km (3000 mi)	**A+**
2	400	6000 km (4000 mi)	**A+** and **A** and **B**
2.5	500	7500 km (5000 mi)	**A+**
3	600	9000 km (6000 mi)	**A+** and A

REGULAR DUTY	A	B
A = Adjust **C = Clean** **I= Inspect** **L= Lubricate** **R= Replace** **T= Torque**	Every year or 200 hours or 3000 km (2000 mi)	Every 2 year or 400 hours or 6000 km (4000 mi)
Air and Fuel Delivery		
Engine air filter	I, C	
Fuel tank vent filter	R	
Canister vent pre-filter (CARB and EVAP models)		R
Fuel components (fuel cap, hoses, clamps and tank fixation) and function*		I
Fuel pump pressure		I
Body and Chassis		
Cage fasteners	T	
Engine and Cooling		
Engine oil and filter	R	
Valve clearance		A
Coolant level and concentration	I, A	
Coolant	R Every 5 years or 12 000 km (8000 mi)	
Spark plugs		R
Exhaust and Emissions		
Exhaust components (gaskets, pipes and muffler) and function*	I, C	
Debris around exhaust pipe and muffler area	C	
Spark arrester	C	

REGULAR DUTY	A	B
A = Adjust **C = Clean** **I= Inspect** **L= Lubricate** **R= Replace** **T= Torque**	Every year or 200 hours or 3000 km (2000 mi)	Every 2 year or 400 hours or 6000 km (4000 mi)
Brake		
Brake components and function*	I, C	
Brake fluid	R Every 2 years	
Drive		
Gearbox oil	Replace at first 3000 km (2000 mi) and at 6000 km (4000 mi), then follow the regular schedule	
Gearbox oil	I	R
Drive components and function*	I	
Front differential oil	I	R
Rear differential oil	I	R
Continuously Variable Transmission (CVT)		
CVT components and function*	I, C, L	
Electrical		
Various controls, switches, lights, module updates, fault codes, battery condition*	I	
Vehicle speed sensor (VSS)		C
Steering		
Steering components and function*	I	
Suspension		
Suspension components and function*	I, L, T	

*For an extensive list of maintenance actions to be performed, refer to your local dealership.

SEVERE DUTY	**A+**	**A**	**B**
A = Adjust **C = Clean** **I= Inspect** **L= Lubricate** **R= Replace** **T= Torque**	Every 6 months or 100 hours or 1500 km (1000 mi)	Every year or 200 hours or 3000 km (2000 mi)	Every 2 year or 400 hours or 6000 km (4000 mi)
Air and Fuel Delivery			
Engine air filter	I, C	R	
Fuel tank vent filter		R	
Canister vent pre-filter (CARB and EVAP models)			R
Fuel components (fuel cap, hoses, clamps and tank fixation) and function			I
Fuel pump pressure			I
Body and Chassis			
Cage fasteners		T	
Engine and Cooling			
Engine oil and filter	R		
Valve clearance			A
Coolant level and concentration		I, **A**	
Coolant	R Every 5 years or 12 000 km (8000 mi)		
Spark plugs			R
Exhaust and Emissions			
Exhaust components (gaskets, pipes and muffler) and function*		I, C	
Debris around exhaust pipe and muffler area	C		
Spark arrester	C		

SEVERE DUTY	**A+**	**A**	**B**
A = Adjust **C = Clean** **I= Inspect** **L= Lubricate** **R= Replace** **T= Torque**	Every 6 months or 100 hours or 1500 km (1000 mi)	Every year or 200 hours or 3000 km (2000 mi)	Every 2 year or 400 hours or 6000 km (4000 mi)
Brake			
Brake components and function*		I, C	
Brake fluid	R Every 2 years		
Drive			
Gearbox oil	Replace at first 1500 km (1000 mi) and at 3000km (2000 mi), then follow the regular schedule		
Gearbox oil		R	
Drive components and function*		I	
Front differential oil		R	
Rear final drive oil		R	
Continuously Variable Transmission (CVT)			
CVT components and function*		I, C, L	
Electrical			
Various controls, switches, lights, module updates, fault codes, battery condition*		I	
Vehicle speed sensor (VSS)			C
Steering			
Steering components and function*		I	
Suspension			
Suspension components and function*	I, L	T	

*For an extensive list of maintenance actions to be performed, refer to your local dealership.

DEEP MUD/ WATER	A+	A	B
A = Adjust **C = Clean** **I= Inspect** **L= Lubricate** **R= Replace** **T= Torque**	Every 6 months or 100 hours or 1500 km (1000 mi)	Every year or 200 hours or 3000 km (2000 mi)	Every 2 year or 400 hours or 6000 km (4000 mi)
Air and Fuel Delivery			
Engine air filter	I, C		
Fuel tank vent filter		R	
Canister vent pre-filter (CARB and EVAP models)			R
Fuel components (fuel cap, hoses, clamps and tank fixation) and function*			I
Fuel pump pressure			I
Body and Chassis			
Cage fasteners		T	
Engine and Cooling			
Engine oil and filter	I	R	
Valve clearance			A
Coolant level and concentration		I, A	
Coolant	R Every 5 years or 12 000 km (8000 mi)		
Spark plugs			R
Exhaust and Emissions			
Exhaust components (gaskets, pipes and muffler) and function*	I, C		
Debris around exhaust pipe and muffler area	C		
Spark arrester	C		

DEEP MUD/ WATER	A+		A	B
A = Adjust **C = Clean** **I= Inspect** **L= Lubricate** **R= Replace** **T= Torque**	Every 6 months Or 100 hours or 1500 km (1000 mi)		Every year or 200 hours or 3000 km (2000 mi)	Every 2 year or 400 hours or 6000 km (4000 mi)
Brake				
Brake components and function*	I, C			
Brake fluid		R Every 2 years		
Drive				
Gearbox oil		Replace at first 1500 km (1000 mi) and at 3000km (2000 mi), then follow the regular schedule		
Gearbox oil	I			R
Drive components and function*	I			
Front differential oil	I			R
Rear differential oil	I			R
Continuously Variable Transmission (CVT)				
CVT components and function*			I, C, L	
Electrical				
Various controls, switches, lights, module updates, fault codes, battery condition*			I	
Vehicle speed sensor (VSS)				C
Steering				
Steering components and function*	I			
Suspension				
Suspension components and function*	I, L		T	

*For an extensive list of maintenance actions to be performed, refer to your local dealership.

TROUBLESHOOTING

SYMPTOM: Engine does not turn	
POSSIBLE CAUSES	WHAT TO DO
1. Ignition switch is in the OFF position.	Place switch to ON position.
2. Burnt fuse.	Check main fuse condition.
3. Weak battery or loose connections.	Check charging system fuse. Check connections and terminals condition. Have the battery checked. Contact an authorized ATV dealer.

SYMPTOM: Engine turns over but fails to start	
POSSIBLE CAUSES	WHAT TO DO
1. Burnt fuse.	Check main fuse condition.
2. No fuel to the engine (spark plug dry when removed).	Check fuel tank level; turn fuel valve to ON (also try on RES). A failure of the fuel pump or carburetor may have occurred. Contact an authorized ATV dealer.
3. Spark plug/ignition (no spark).	Check main fuse condition. Remove spark plug then reconnect to ignition coil. Check that ignition switch and/or engine stop switch is/are at the ON position. Start engine with spark plug grounded to engine away from spark plug hole. If no spark appears, replace spark plug. If trouble persists, contact an authorized ATV dealer.

SYMPTOM: Engine lacks acceleration or power	
POSSIBLE CAUSES	WHAT TO DO
1. Fouled or damaged spark plug.	Replace a new spark plug.
2. Lack of fuel to engine.	Refill fuel.
3. Engine is overheating.	Check ENGINE OVERHEAT in SPECIAL PROCEDURES. If overheating persists, contact an authorized ATV dealer.
4. Air filter/box plugged or dirty.	Check air filter and clean if necessary. Check deposits in air box drain. Check the position of the air intake tube.
5. CVT dirty or wear.	Contact an authorized ATV dealer.

SYMPTOM: Transmission lever is hard to move	
POSSIBLE CAUSES	WHAT TO DO
1. Transmission gears are in a position that prevents the transmission lever to work.	Rock the vehicle back and forth to move the gears in the transmission and allow the transmission lever to be set.
2. CVT dirty or wear.	Contact an authorized ATV dealer.

SYMPTOM: The RPM increases but the vehicle does not move	
POSSIBLE CAUSES	WHAT TO DO
1.The transmission is P or N position.	Select the H or L position.
2. CVT is defective	Contact an authorized ATV dealer.
3. Water in the CVT housing.	Contact an authorized ATV dealer.

SYMPTOM: Vehicle cannot reach full speed	
POSSIBLE CAUSES	WHAT TO DO
1. Engine.	See ENGINE LACKS ACCELERATION OR POWER.
2. Air filter/box plugged or dirty.	Check air filter and clean if necessary. Check deposits in air box drain. Check the position of the air intake tube.
3. CVT dirty or wear.	Contact an authorized ATV dealer.

SYMPTOM: Engine backfire	
POSSIBLE CAUSES	WHAT TO DO
1. Exhaust system leakage.	Contact an authorized ATV dealer.
2. Ignition timing is incorrect or there is an ignition system failure.	Contact an authorized ATV dealer.

SYMPTOM: Engine misfire	
POSSIBLE CAUSES	WHAT TO DO
1. Fouled/damaged/worn spark plug	Clean/verify spark plug and heat range.
2. Water in fuel.	Drain fuel system and refill with fresh fuel.

FAULT CODES

A fault code is an indication that a glitch or malfunction is detected by the self-diagnostic system.

Read fault code: Remove the upper cover of engine hood and look for the harness connector of fault diagnosis tester beside the ECU.

Unplug the protector, connect the fault diagnosis tester by special data cable.

Turn on the fault diagnosis tester and read fault code.

CODE	FAULT
P0030	Oxygen Sensor Heater Control Circuit Open Bank 1 Sensor 1
P0031	Oxygen Sensor Heater Control Circuit Low Bank 1 Sensor 1
P0032	Oxygen Sensor Heater Control Circuit High Bank 1 Sensor 1
P0131	Oxygen Sensor Circuit Low Voltage Bank 1 Sensor 1
P0132	Oxygen Sensor Circuit High Voltage Bank 1 Sensor 1
P0134	Oxygen Sensor Circuit No Activity Detected Bank 1 Sensor 1
P0122	Throttle/Pedal Position Sensor/Switch "A" Circuit Low
P0123	Throttle/Pedal Position Sensor/Switch "A" Circuit High
P0107	Manifold Absolute Pressure Sensor Circuit Low
P0108	Manifold Absolute Pressure Sensor Circuit High
P0112	Intake Air Temperature Sensor 1 Circuit Low Bank 1
P0113	Intake Air Temperature Sensor 1 Circuit High Bank 1
P0117	Engine Coolant Temperature Sensor 1 Circuit Low
P0118	Engine Coolant Temperature Sensor 1 Circuit High
P0201	Injector Circuit Open - Cylinder 1
P0261	Cylinder 1 Injector Circuit Low
P0262	Cylinder 1 Injector Circuit High
P2300	Ignition Coil "A" Primary Control Circuit Low
P0322	Ignition/Distributor Engine Speed Input Circuit No Signal
P0480	Electric Fan Output Stage A Open
P0691	Electric Fan Output Stage A Low
P0692	Electric Fan Output Stage A High
P0501	Vehicle Speed Sensor "A" Circuit Range/Performance

P0627	Fuel Pump “A” Control Circuit Open
P0628	Fuel Pump “A” Control Circuit Low
P0629	Fuel Pump “A” Control Circuit High
P0650	MIL Control Circuit Open
P0508	Idle Air Control System Circuit Low
P0509	Idle Air Control System Circuit High
P0511	Idle Air Control System Circuit Open

SPECIFICATIONS

Item		Parameter	
Dimensions		Long	Short
Overall length（mm）		2215	2055
Overall width（mm）		1172	1172
Overall height（mm）		1260	1260
Wheelbase（mm）		1460	1300
Ground clearance（mm）		265	265
Engine			
Type	Single cylinder, Four-stroke, liquid-cooled, SOHC		
Number of valves	4(mechanical adjustment)		
Cylinder diameter	91 mm		
Piston stroke	76.2 mm		
Compression ratio	10.7:1		
Displacement	495cm^3		
Maximum power	28kw/6800rpm		
Maximum torque	46N.m/5800rpm		
Idle speed	1600±50rpm		
Lubrication	Type	Wet tank lubrication, oil filters can be changed	
	Oil pressure	0.18-0.3MPa at 1600rpm	
	Type of oil	SAE5W-40 SJ	
	Oil quantity	2800mL	
	Replacement of capacity	2450mL	
Fuel	Type	Unleaded gasoline only 92# or higher	
	Fuel pressure	350 KPa	
	Fuel tank capacity	20L	
Valve clearance	Intake	0.08 to 0.10mm	
	Exhaust	0.08 to 0.10mm	
Spark plug	Type/manufacturer	DCPR8E/NGK	
	Gap	0.8 to 1.0mm	
Transmission type		CVT (Continuously Variable Transmission)	
Continuously variable ratio		0.646 to 2.87	
Drive belt width	Service limit	30.00mm	
Gearbox type		Dual range(H/L) with park, neutral and reverse	
Gear ratio	H	3.58	

	L	6.562
	R	5.369
Capacity of cooling liquid	Type	Ethyl glycol/water mix (-35℃)
	Maximum load	3200ml
	Capacity of water tank	300ml
Cooling liquid temperature thermostat	Valve opening	65℃
	Fan opening	88℃
Tire		
Type		Tubeless
Pressure		45KPa
Size Front		AT25x8-12(Rim12x6)
Size Rear		AT25x10-12(Rim12x7)
Brake		
System		Front and rear unified
Type Front		Dual disc brake
Type Rear		Dual disc brake
Operation		Foot/hand operation
Suspension and shock absorber		
Front suspension		A-Arm Independent
Rear suspension		A-Arm Independent
Front shock absorber		oil damper
Front shock absorber travel		107mm
Rear shock absorber		oil damper
Rear shock absorber travel		107mm
Drive train		
Front differential		Shaft driven/single differential
Front differential ratio		3.67:1
Rear axle		Shaft driven/single differential
Rear axle ratio		3.67:1
Front differential oil capacity		230mL (GL-4-90)
Rear differential oil capacity		230mL (GL-4-90)
Electrical		
Ignition system		EFI
Battery	Type	Maintenance Free
	Voltage	12V
	capacity	20AH

Wire diagram