SECTION 1 - SAFETY INTRODUCTION

FOREWORD

Congratulations, and thank you for your purchase of a KYMCO All-Terrain Vehicle (ATV). Built with **Europe** engineering and manufacturing knowledge, it is designed to provide a superior ride, great comfort, and strong utility capabilities.

This Owner's Manual was produced to ensure that you become aware of safe ATV operating procedures. It also includes information about the general care and maintenance of your ATV.

Carefully read this manual. If you have any questions regarding your ATV, contact an authorized KYMCO ATV dealer for assistance.

Remember, only authorized KYMCO ATV dealers have the knowledge and resources to provide you with the best service possible.

PROTECT YOUR SPORT

Being able to use and enjoy your ATV requires you and your family to operate it in a responsible manner. Before riding your ATV you should:

- **Learn and adhere to all local and state on-road riding laws**
- **Respect your ATV and its capabilities and limitations**
- **Respect the environment and the rights of others**

We also advise you to strictly follow the recommended maintenance program for your ATV as outlined in the manual. This preventative maintenance program was designed to ensure that all of the critical components of your ATV are thoroughly inspected at various intervals.

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

KYMCO and the ATV Safety Institute recommend that all ATV operators ride an ATV appropriate for their age.

Age (Years)	Engine Size (cc)	Speed Limitations (MPH)
6-11	Up to 70	10 - Governed 15 - Maximum
12-15	Up to 90	15 - Governed 30 - Maximum
16 and Older	Over 90	According to Local Regulations

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AN ATV IS NOT A TOY AND CAN BE HAZARDOUS TO OPERATE.

■ Always ride slowly and be extra careful when operating your ATV on unfamiliar terrain. Always be alert for changing conditions and terrain when operating your ATV.

■ Never operate your ATV on excessively rough, slippery, or loose terrain.

■ Always follow proper procedures for turning as described in this manual. Practice turning at slow speeds before attempting to turn at faster speeds. Do not turn at an excessive speed.

■ Always have your ATV inspected by an authorized KYMCO ATV dealer if it has been involved in an accident.

■ Never operate your ATV on hills that are too steep for the ATV or for your abilities. Practice on smaller hills before attempting larger hills.

■ Always follow proper procedures for climbing hills as described in this manual. Check the terrain carefully before you start up any hill. Never climb hills that have slippery or loose surfaces. Shift your weight forward when climbing hills. Never open the throttle suddenly or make sudden gear changes. Never go over the top of any hill at high speed.

■ Always follow proper procedures for going down hills and for braking on hills as described in this manual. Check the terrain carefully before you start down any hill. Shift your weight backward when descending a hill. Never go down a hill at high speed. Avoid going down a hill at an angle which would cause the ATV to lean sharply to one side. Go straight down the hill where possible.

■ Always follow proper procedures for crossing the side of a hill as described in this manual. Avoid hills with slippery or loose surfaces. Shift your weight to the uphill side of the ATV. Never attempt to turn the ATV around on any hill until you have mastered the turning techniques described in this manual on level ground. Avoid crossing the side of a steep hill if possible.

■ Always use proper procedures if you stall or roll backwards when climbing a hill. To avoid stalling, maintain a steady speed when climbing a hill. If you stall or roll backwards, follow the special procedure for braking described in this manual. Dismount on the uphill side or to either side if pointed straight uphill. Turn the ATV around and remount it following the procedure described in this manual.

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

AN ATV IS NOT A TOY AND CAN BE HAZARDOUS TO OPERATE.

■ Always check for obstacles before operating in an area that you are unfamiliar with. Never attempt to operate your ATV over large obstacles, such as large rocks or fallen trees. Always follow proper procedures when operating over obstacles as described in this manual.

■ Always be alert for conditions that could cause skidding or sliding. On slippery surfaces such as ice, go slowly and be very cautious in order to reduce the chance of skidding or sliding out of control.

■ Never operate an ATV in fast flowing water or in water deeper than the footrests. Remember that wet brakes may reduce stopping capability. Test your brakes after leaving water. If necessary, apply them lightly several times to let friction dry out the pads.

■ Always be sure there are no obstacles or people behind you when you operate the ATV in reverse. When it is safe to proceed in reverse, go slowly. Avoid turning at sharp angles in reverse.

■ Always use the size and type tires specified in this manual. Always maintain proper tire pressure as described in this manual.

■ Never improperly install or improperly use accessories on this ATV.

■ Never install a twist grip throttle on this ATV.

■ Never exceed the stated load capacity for any ATV. Cargo should be properly distributed and securely attached. Reduce speed and follow instructions in this manual for carrying cargo or pulling a trailer and allow greater distance for braking.

■ No one under the age of 16 should operate this ATV. Some operators at the age of 16 may not be able to operate an ATV safely. Parents should supervise the use of the ATV at all times. Parents should permit continued use only if they determine that the operator has the ability to operate the ATV safely.

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

ATV SAFETY ALERT

You should be aware that AN ATV IS NOT A TOY AND CAN BE HAZARDOUS TO OPERATE. An ATV handles differently from other vehicles, including motorcycles and automobiles. A collision or rollover can occur quickly, even during routine maneuvers such as turning and driving on hills and over obstacles if you fail to take proper precautions.

TO AVOID DEATH OR SEVERAL PERSONAL INJURY

- Pay special attention to the warnings contained in this manual and on all safety labels on the ATV.
- Never operate an ATV without proper instruction. Beginners and experienced riders should complete a training course.
- Always follow these age recommendations:
    - A child under 12-years of age should never operate an ATV with an engine size 70cc or greater.
    - A child under 16-years of age should never operate an ATV with an engine size greater than 90 cc.
    - A child under 16-years of age should never operate an ATV without adult supervision. Children need to be observed carefully because not all children have the strength, size, skills, or judgment to operate an ATV safely.
- Never operate an ATV without an approved motorcycle helmet, eye protection, boots, gloves, long pants, and a long-sleeved shirt or jacket.
- Never consume alcohol or drugs before or while operating an ATV.
- Never operate an ATV at excessive speeds. Go at a speed which is proper for the terrain, visibility conditions, and your experience.
- Never attempt to do wheelies, jumps, or other stunts.
- Always be careful when operating an ATV, especially when approaching hills, turns, and obstacles, and when operating on unfamiliar or rough terrain.
- Never loan your ATV to anyone who has not taken a training course or has not been driving an ATV for at least a year.

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

HANGTAGS & WARNING INFORMATION

Your KYMCO ATV comes equipped with hangtags and several labels containing important safety information. Anyone who rides the ATV should read and understand this information before riding the ATV. The labels should be considered permanent parts of the ATV. If a label comes off or becomes hard to read, contact your KYMCO ATV dealer immediately for a replacement.

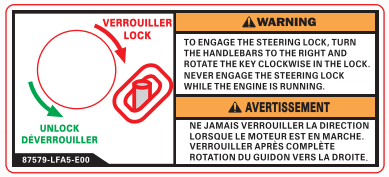
⚠ WARNING Indicates a potential hazard that could result in serious injury or death.

WARNING LABELS

①

②

③



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

WARNING LABELS

④

CAUTION

Before shifting, you must stop the machine and return the throttle lever to it's closed position untile the engine speed return to the specified idling speed. Otherwise, the transmission may be damaged.

87322-LBA7-E00

⑤

⚠ WARNING

Improper ATV use can result in SEVERE INJURY or DEATH

ALWAYS USE AN APPROVED HELMET AND PROTECTIVE GEAR | NEVER USE ON PUBLIC ROADS | NEVER CARRY PASSENGERS | NEVER USE WITH DRUGS OR ALCOHOL

NEVER operate:

- without proper training or instruction
- at speeds too fast for your skills or the conditions
- on public roads - a collision can occur with another vehicle
- with a passenger-passengers affect balance and steering and increase risk of losing control

ALWAYS:

- use proper riding techniques to avoid vehicle overturns on hills and rough terrain and in turns
- avoid paved surfaces - pavement may seriously affect handling and control

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

⑥

⚠ WARNING

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

NEVER operate this ATV if you are under age **16**.

1411-804

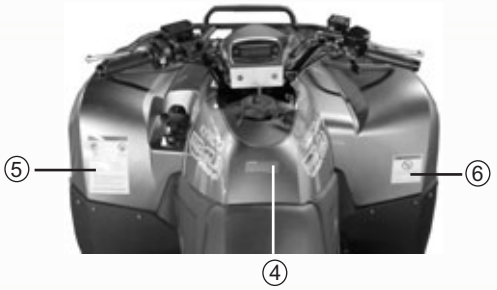
⑦

⚠ WARNING

NEVER ride as a passenger.

Passengers can cause a loss of control, resulting in SEVERE INJURY or DEATH.

1411-809



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

WARNING LABELS

⑧

⚠ WARNING

Improper tire pressure or overloading can cause loss of control.
Loss of control can result in severe injury or death.

- Cold tire pressure:
  Front: **5.7** psi (**40** kPa)
  Rear: **5.7** psi (**40** kPa)
- Maximum weight capacity: **240** lbs (**109** kg)

2411-586

⑨

⚠ WARNING

Exceeding vehicle's towing limit could cause an accident. Reduce speed when towing a trailer. Read operator's manual for details.

MAXIMUM TONGUE WEIGHT: 35 lbs. (16 kg)

MAXIMUM TOWING CAPACITY: 1050 lbs. (477 kg)

⑧

⑨

⑩ EPA label

VEHICLE EMISSION CONTROL INFORMATION

ENGINE DISPLACEMENT : 443 cc
ENGINE FAMILY : [illegible]
PERMEATION FAMILY : [illegible]
THIS VEHICLE IS CERTIFIED TO OPERATE ON GASOLINE. THIS VEHICLE CONFORMS TO US EPA AND CALIFORNIA REGULATIONS APPLICABLE TO 2012 MODEL YEAR NEW ATVS AND IS CERTIFIED TO 13.4 G/kW-hr HC+NOX, 400 G/kW-hr CO ENGINE FAMILY EXHAUST EMISSION STANDARDS IN CALIFORNIA. ENGINE EXHAUST CONTROL SYSTEM : TBI

KWANG YANG MOTOR CO., LTD.
TAIWAN

ENGINE TUNEUP SPECIFICATIONS :
IGNITION TIMING : NOT ADJUSTABLE
IDLE SPEED : 1300 ± 100 rpm IN NEUTRAL
IDLE MIXTURE : NOT ADJUSTABLE
VALVE CLEARANCE : INTAKE : 0.10 ± 0.02 mm
EXHAUST : 0.17 ± 0.02 mm
SPARK PLUG : NGK CR7E
SPARK PLUG GAP : 0.8 mm
FUEL : UNLEADED GASOLINE ONLY (R+M)/2 OCTANE
OIL : 5W-30 (SEE THE OWNER'S MANUAL)
MANUFACTURED : 05 / 2011 (MONTH / YEAR)

KYMCO USA Inc.
Spartanburg, SC 29307 USA

⑪ SVIA label

KYMCO certifies that this ATV complies with the American National Standard for Four Wheel All-Terrain Vehicles, ANSI/SVIA-1-2007 Standard.

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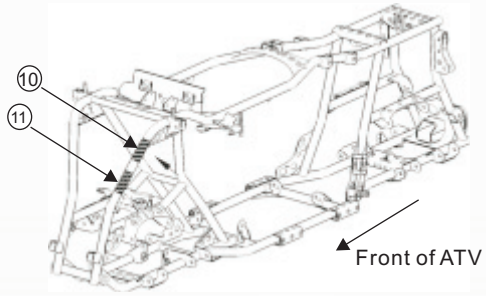
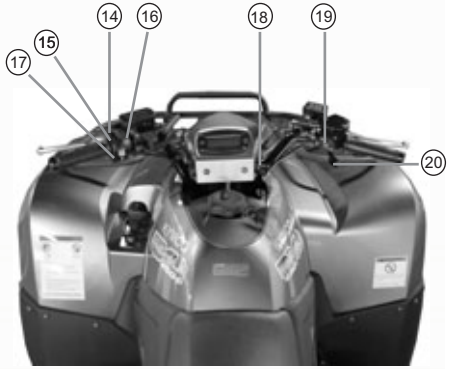


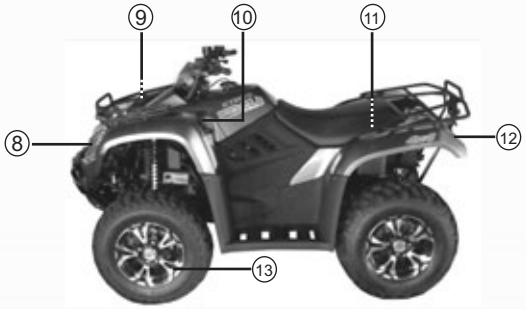
⚠ WARNING Indicates a potential hazard that could result in serious injury or death.

WARNING LABELS

⑧ Headlights
⑨ Power Distribution Modulel
⑩ Shift Lever
⑪ Storage Compartment
⑫ Taillight/brakelight
⑬ Aluminum Wheel



① Battery
② Foot (rear) Brake Pedal
③ Coolant Reservoir
④ Hand Brake Lever
⑤ Throttle Limiter
⑥ Electrical Access Panel
⑦ Seat Latch



⑭ Starter Switch
⑮ Headlight Hi/lo Switch
⑯ Engine Stop Switch
⑰ Reverse Override Button
⑱ Ignition Switch
⑲ 2wd/4wd Selector Switch
⑳ Throttle Lever

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

WARNINGS

⚠ WARNING

POTENTIAL HAZARD
Operating this ATV without proper instruction.

WHAT CAN HAPPEN
The risk of an accident is greatly increased if you do not know how to operate the ATV properly in different situations and on different types of terrain.

HOW TO AVOID THIS HAZARD
Whether you are a beginning or an experienced ATV rider, you should complete a certified training course. You should then regularly practice the skills learned in the course in conjunction with the operating techniques described in this Owner's Manual.

⚠ WARNING

POTENTIAL HAZARD
Allowing anyone under 16-years of age to operate this ATV.

WHAT CAN HAPPEN
Use of an ATV by children can lead to severe injury or death of the child. Children under 16-years of age may lack the skills, abilities, or judgment to operate the ATV safely and may be involved in a serious accident.

HOW TO AVOID THIS HAZARD
A child under 16-years of age should never operate this ATV.

WARNINGS

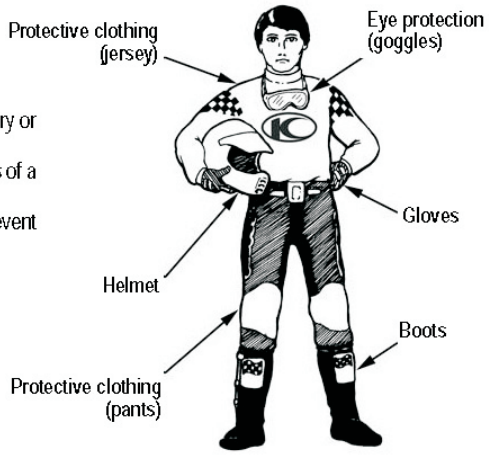
⚠ WARNING

POTENTIAL HAZARD
Operating your ATV without wearing an approved helmet, eye protection and protective clothing.

WHAT CAN HAPPEN
Operating an ATV without an approved helmet increases your chances of a severe head injury or death in the event of an accident.
Operating an ATV without eye protection can result in an accident and increases your chances of a severe injury, including loss of sight in the event of an accident.
Operating an ATV without protective clothing increases your chances of severe injury in the event of an accident.

HOW TO AVOID THIS HAZARD
Always wear an approved helmet that fits properly.
You should also wear:

* Eye protection (goggles or helmet face shield)
* Gloves
* Boots
* Long-sleeved shirt, riding jersey or long sleeved jacket
* Long-legged pants or riding pants



⚠ WARNING

POTENTIAL HAZARD
Operating your ATV after or while consuming alcohol or drugs.

WHAT CAN HAPPEN
Consuming alcohol or drugs can seriously affect your judgment. Consuming alcohol or drugs will cause you to react more slowly and will affect your balance and perception. Operating your ATV with these impairments may result in an accident.

HOW TO AVOID THIS HAZARD
Never consume alcohol or drugs before, or while driving your ATV.

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

WARNINGS

⚠ WARNING

POTENTIAL HAZARD
Operating your ATV at excessive speeds.

WHAT CAN HAPPEN
Operating your ATV at excessive speeds increases your chances of losing control of the vehicle, which can result in an accident.

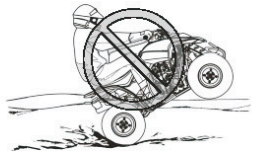
HOW TO AVOID THIS HAZARD
Always ride your ATV at a speed that is proper for the terrain, visibility and operating conditions and your experience.

⚠ WARNING

POTENTIAL HAZARD
Attempting wheelies, jumps, and other stunts when riding your ATV.

WHAT CAN HAPPEN
Attempting wheelies, jumps, and other stunts increases the chance of an accident, including a rollover, when riding your ATV

HOW TO AVOID THIS HAZARD
Never attempt stunts such as wheelies or jumps. Do not try to show off when riding your ATV.



⚠ WARNING

POTENTIAL HAZARD
Failure to inspect your ATV before operating it. Failure to properly maintain your ATV.

WHAT CAN HAPPEN
By not keeping your ATV in proper working order, you increase the possibility of an accident or equipment damage.

HOW TO AVOID THIS HAZARD
Always inspect your ATV each time you use it to make sure it is in safe operating condition. Always follow the inspection and maintenance schedules and procedures in this Owner's Manual.

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

WARNINGS

⚠ WARNING

POTENTIAL HAZARD
Removing your hands from handlebars or your feet from your ATV's footrests while riding.

WHAT CAN HAPPEN
Removing even one hand or foot can reduce your ability to control your ATV or could cause you to lose your balance and fall off the ATV. If you remove a foot from a footrest, your foot or leg may come into contact with the wheels, which could injure you or cause an accident.

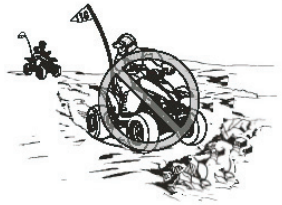
HOW TO AVOID THIS HAZARD
Always keep both hands on the handlebars and both feet on the footrests of your ATV while riding.

⚠ WARNING

POTENTIAL HAZARD
Failure to use extra care when riding your ATV on unfamiliar terrain.

WHAT CAN HAPPEN
When riding on unfamiliar terrain you may come upon hidden rocks, bumps, or holes without enough time to react. This could result in the ATV overturning or you losing control of the ATV.

HOW TO AVOID THIS HAZARD
Go slowly and be extra careful when riding your ATV on unfamiliar terrain. Always be alert to changing conditions in the terrain when riding your ATV.



⚠ WARNING

POTENTIAL HAZARD
Failure to use extra care when riding your ATV on rough, slippery, or loose terrain.

WHAT CAN HAPPEN
Riding your ATV on rough, slippery, or loose terrain can cause loss of traction or control, which could result in an accident, including a rollover.

HOW TO AVOID THIS HAZARD
Do not ride your ATV on rough, slippery, or loose terrain until you have learned and practiced the skills necessary to control the ATV on these surfaces. Always be especially cautious when riding your ATV on rough, slippery, or loose terrain.

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

WARNINGS

⚠ WARNING

POTENTIAL HAZARD
Turning the ATV improperly.

WHAT CAN HAPPEN
Your ATV might go out of control, causing a collision or rollover.

HOW TO AVOID THIS HAZARD
Always follow proper procedures for turning your ATV as described in this Owner's Manual. Practice turning at slow speeds before attempting to turn at faster speeds. Do not turn your ATV at excessive speeds.

⚠ WARNING

POTENTIAL HAZARD
Operating your ATV on steep hills..

WHAT CAN HAPPEN
Your ATV can overturn more easily on steep hills than on level surfaces or small hills.

HOW TO AVOID THE HAZARD
Never operate your ATV on hills that are too steep for the ATV or for your abilities. Practice riding on smaller hills before attempting to ride on larger hills.

WARNINGS

⚠ WARNING

POTENTIAL HAZARD
Climbing hills improperly with your ATV.

WHAT CAN HAPPEN
Climbing hills improperly could cause you to lose control of your ATV or tcause the ATV to overturn.

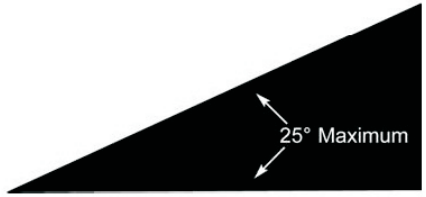
HOW TO AVOID THIS HAZARD
Always follow proper procedures for climbing hills as described in this Owner's Manual. Always check the terrain carefully before you start up any hill.

Never climb hills with slippery or loose surfaces. Shift your weight forward when riding your ATV up a hill.

Never open the throttle suddenly or make sudden gear changes, as the ATV could flip over backwards.

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

NEVER RIDE YOUR ATV UP OR DOWN HILLS STEEPER THAN 25°



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

WARNINGS

⚠ WARNING

POTENTIAL HAZARD
Going down a hill improperly on your ATV.

WHAT CAN HAPPEN
Going down a hill improperly could cause you to lose control of your ATV or cause the ATV to overturn.

HOW TO AVOID THIS HAZARD
Always follow proper riding procedures for going down hills as described in this Owner's Manual.

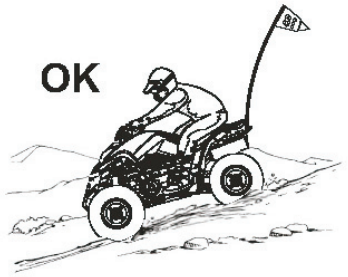
Always check the terrain carefully before you start down any hill on your ATV.

Shift your weight backwards.

Never go downhill at a high speed.

Avoid going down a hill at an angle that would cause your ATV to lean sharply to one side.

Go straight down the hill whenever possible.



⚠ WARNING

POTENTIAL HAZARD
Improperly crossing hills or turning on hills while riding your ATV.

WHAT CAN HAPPEN
Improperly crossing hills or turning on hills could cause you to lose control of your ATV or cause the ATV to overturn.

HOW TO AVOID THIS HAZARD
Never attempt to turn your ATV around on any hill until you have mastered the turning technique as described in this Owner's Manual.

Practice these maneuvers first on level ground.

Be very careful when turning your ATV on any hill.

Avoid crossing the side of a steep hill, if possible.

When crossing the side of a hill on an ATV:

* Always follow proper procedures as described in this Owner's Manual.
* Avoid hills with slippery or loose surfaces.
* Shift your weight to the uphill side of the ATV.

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

WARNINGS

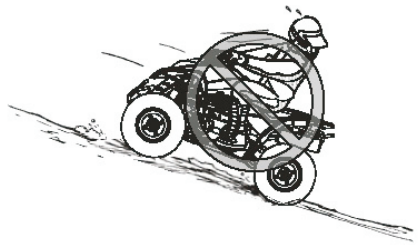
⚠ WARNING

POTENTIAL HAZARD
Stalling, rolling backwards, or improper dismounting while climbing a hill on your ATV.

WHAT CAN HAPPEN
Stalling, rolling backwards, or improper dismounting could result in the ATV overturning.

HOW TO AVOID THIS HAZARD
Select the proper transmission gear and maintain a steady speed when climbing

If you lose all forward speed:
* Keep your weight uphill
* Apply the brakes
* Engage the brake lever lock (parking brake) after you are stopped



If you begin rolling backwards:
* Keep your weight uphill
* Apply the brakes while rolling backwards
* When the ATV comes to a full stop, engage the brake lever lock (parking brake) and dismount the ATV on the uphill side, or to the side pointed uphill
* Turn the ATV around so it faces downhill and remount following the procedure described in this Owner's Manual

⚠ WARNING

POTENTIAL HAZARD
Improperly riding your ATV over obstacles.

WHAT CAN HAPPEN
Improperly riding over obstacles could cause you to lose control of your ATV or cause a collision. A loss of control or a collision could cause the ATV to overturn.

HOW TO AVOID THIS HAZARD
Before operating your ATV in a new area, check for obstacles. Never attempt to ride your ATV over large obstacles, such as large rocks or fallen trees. When you go over obstacles, always follow the proper riding procedures as described in this Owner's Manual.

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

WARNINGS

⚠ WARNING

POTENTIAL HAZARD
Skidding or sliding when riding your ATV.

WHAT CAN HAPPEN
Skidding or sliding could cause you to lose control of your ATV. When skidding or sliding, your ATV might regain traction unexpectedly which could cause the ATV to overturn

HOW TO AVOID THIS HAZARD
Learn to safely control skidding or sliding by practicing on your ATV at slow speeds and on smooth terrain. On extremely slippery surfaces such as ice, go slowly and be very cautious to reduce the chance of skidding or sliding your ATV out of control.

⚠ WARNING

POTENTIAL HAZARD
Operating your ATV through deep or fast flowing water.

WHAT CAN HAPPEN
Your ATV's tires may float, causing loss of traction and loss of control, which could lead to an accident. Water can also reduce the stopping capability of your ATV's braking system.

HOW TO AVOID THIS HAZARD
Never operate your ATV in fast flowing water, or in water deeper than the footrests. Remember that wet brakes may have reduced stopping capability. Test your ATV's brakes after leaving water. If necessary, apply the brakes smoothly several times to dry the pads, drums and rotors.

⚠ WARNING

POTENTIAL HAZARD
Improperly operating your ATV in reverse.

WHAT CAN HAPPEN
You could hit an obstacle or person behind you with the ATV, resulting in serious injury.

HOW TO AVOID THIS HAZARD
Before you engage reverse gear, make sure there are no obstacles or people behind you. When it is safe to proceed, operate the ATV in reverse at slow speeds.

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

WARNINGS

⚠ WARNING

POTENTIAL HAZARD
Operating your ATV with improper tires or with tires that have improper or uneven tire pressure.

WHAT CAN HAPPEN
The use of improper tires on your ATV, or riding your ATV with improper or uneven tire inflation, could cause you to lose control of the ATV, increasing the chance of an accident..

HOW TO AVOID THIS HAZARD
Always use the proper tire sizes and types as specified in this Owner's Manual. Always maintain proper tire pressure in your ATV's tires, as described in this Owner's Manual.

⚠ WARNING

POTENTIAL HAZARD
Operating your ATV with improper modifications.

WHAT CAN HAPPEN
Improper installation of accessories or modifications to your ATV may cause changes in handling which, in some situations, could lead to an accident.

HOW TO AVOID THIS HAZARD
Never modify your ATV or install accessories that are not specifically designed for your ATV. All parts and accessories added to this ATV should be genuine KYMCO ATV components designed for use on your ATV, and should be installed and used according to the installation instructions. Never install a twist-grip type throttle. If you have questions about personalizing your ATV, consult an authorized KYMCO ATV dealer.

⚠ WARNING

POTENTIAL HAZARD
Overloading your ATV or carrying loads or towing cargo improperly.

WHAT CAN HAPPEN
Improper loading and towing could cause changes your ATV's handling characteristics, which could lead to an accident.

HOW TO AVOID THIS HAZARD
Never exceed the stated load capacity of your ATV (as noted in this Owner's Manual). Cargo should be properly distributed and securely attached. To aid in controlling your ATV, reduce speed when carrying cargo or pulling a trailer, and allow greater distances for braking. Always follow the instructions and recommendations in this Owner's Manual for carrying cargo or pulling a trailer.

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

MEMO

PREVENTION

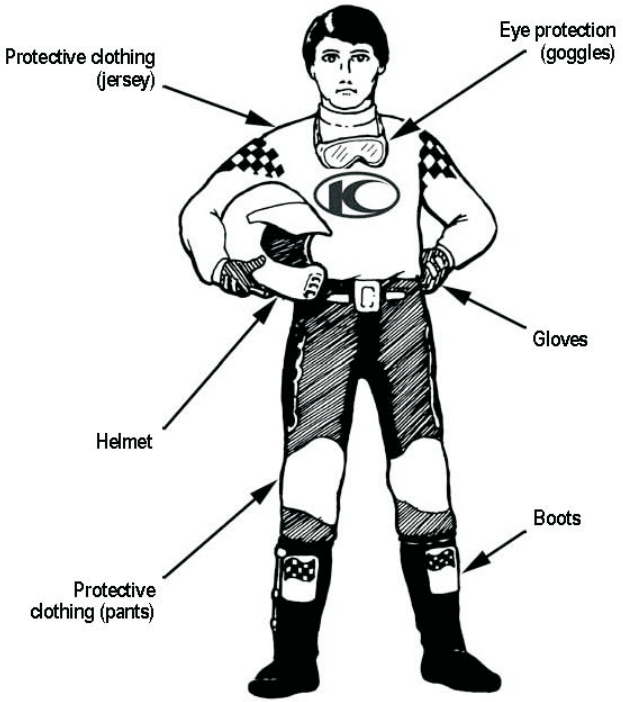
OVERVIEW

When riding an ATV, PREVENTION is the name of the game. "Had you only known" something could go wrong, you would have prevented it. If you do not take notice of the current terrain and its specific conditions before riding your ATV, you increase the risk of losing control over the situation. Using ATV prevention techniques will help you forecast potential hazards before they injure you or damage your ATV.

Following the safety instructions and warnings in this manual will help you "P.A.S.S." the safety test. P.A.S.S. stands for "Prevention," "Active Riding," "Sound Judgment," and "Supervision." Remembering P.A.S.S. and what it stands for will help you have a safe, enjoyable ride every time you go out to enjoy your ATV.

SAFE RIDING CLOTHING AND GEAR

Always wear clothing suited to the type of riding you will be doing. ATV riding requires special protective clothing which will make you feel more comfortable and reduce the possibility of injury. It is important to dress correctly for ATV riding in order to prevent scraped skin and serous head injuries. Practicing proper prevention in advance is simple and may prevent the inconvenience of having to attend to injuries. It is also important to take into account specific climate and weather conditions where you will be riding. Wear a liner under your helmet and layers of clothing during cooler weather and lighter, protective clothing when it is warmer. The following sections review the minimum protective gear you need to wear during every ride.



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

PREVENTION

GLOVES (hand protection)

Your hands are targets for flying objects and branches. Along with providing skin protection, gloves will shield your hands from harsh weather. Wear gloves that are weather resistant and have a gripping surface to keep them from sliding off the handlebars. Off-road style gloves with knuckle pads are the best for comfort and protection.

BOOTS (foot & ankle protection)

Wear a boot that covers the largest possible area of your leg (preferably up to your knee) and can handle significant impact. Choosing boots with low heels and a good tread will help prevent your feet from slipping off the footrests in wet or rugged conditions or getting hurt if they get hit by rocks, dirt, or branches.

HELMET (head protection)

Your helmet is your most important piece of protective gear for safe ATV riding. A proper helmet can prevent a severe head injury. The best type of helmet is a full-face type that provides protection to the wearer's face as well as the head.

If you drop or damage your helmet, get a new one immediately. Your helmet may not protect your head from injury if it has cracks, fissures, or other damage to its outside or to the core padding and liner (which are designed to absorb the energy of an impact).

Remember, even the best helmet is ineffective if it is not the proper size and the chin strap is not fastened.

GOGGLES (eye protection)

Always wear eye protection, such as goggles, to completely surround your eyes to prevent getting dirt or other debris in your eyes. Do not depend on sunglasses or even prescription glasses for proper eye protection. Glasses of this type are not recommended as they do not prevent objects from flying in through the sides, and the lenses may be damaged upon impact.

LONG PANTS (riding pants - body protection) and LONG-SLEEVED SHIRT (jersey - body protection)

Long-legged pants and long-sleeved shirts can protect your body from branches, long grass, airborne objects, or anything else that could scrape your skin. The thicker and more durable the material, the better protection it will provide. Riding pants with kneepads, and a jersey with shoulder pads specifically designed for ATV or off-road motorcycle use will provide the best protection.

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CONDITION OF YOUR ATV

The second step in PREVENTION is checking the condition of your ATV before you ride it. Chances are good that you will be using your ATV in some rough terrain and you do not want something to prevent you from enjoying your ride. Your best approach is to take steps to ensure that your ATV is properly maintained so you can avoid equipment failure or a hazardous situation.

You need to check the following items on your ATV before every ride.

1 Brakes
2 Throttle
3 Tires and Wheels
4 Fluids
5 Lights
6 Electrical
7 Controls and Cables
8 Chassis and Suspension
9 Miscellaneous Items

Inspection of your ATV

An easy way to remember what items you need to check on your ATV is by using the acronym "T-CLOC."

This acronym means:

T	C	L	O	C
TIRES & WHEELS	CONTROLS & CABLES	LIGHTS & ELECTRIC	OIL & FUEL	CHASSIS

Follow the guidelines on the following pages and in the rest of this Owner's Manual when inspecting your ATV.

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

PREVENTION

TIRES AND WHEELS

Correct tire pressure is crucial to the proper operation of your ATV. Consult the SPECIFICATIONS section of this manual for tire pressure guidelines. Incorrect tire pressure can cause poor handling, instability, and could cause you to lose control of your ATV.

Check:

1 . Tire pressure
2 . Tire surface (tread and sidewall)

While checking your ATV's tire pressure, inspect the tread and the sidewalls of the tires for cracks, cuts, or other damage. Immediately replace any tire that is damaged..

CONTROLS AND CABLES

With your ATV's engine running and parking brake applied, check the transmission operation by shifting into each drive mode: forward, neutral, and reverse. After testing, shift back into neutral and turn the engine off before dismounting.

Check:

1. Forward
2. Neutral
3. Reverse

A. BRAKES

Squeeze the ATV's hand brake lever. If the lever does not feel firm, or if it feels soft or "weak," the brake system could be low on fluid or have a leak.- refer to the GENERAL MAINTENANCE section of this manual for instructions. Do not use your ATV unless the brakes are operating normally.

Test the parking brake (brake lever lock) to confirm that it locks the hand brake lever into position then disengage it to release the brake. Be sure that the rear brake pedal (the auxiliary brake) near the footrest is working. The brakes on your ATV are essential for safety and could fail if they are not maintained properly.

Check:

1. Hand brake lever
2. Rear brake pedal (auxiliary brake pedal)
3. Parking brake (brake lever lock)

B. THROTTLE

Your ATV's throttle lever should have a free, smooth range of motion. If it seems to "stick" at any point, or does not return when released, refer to the GENERAL MAINTENANCE section of this manual for instructions. Riding your ATV with a sticking throttle can cause you to lose control of your ATV and could cause an accident. Do not ride your ATV if the throttle action is not smooth and the lever does not return after it is released.

Check:

1. Free, smooth range of motion
2. The lever returns after it is released

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

PREVENTION

LIGHTS AND ELECTRIC

Turn your ATV's hi-beam and low-beam on and off to make sure they work. At the same time, check that the taillight and brake lights work. Also, check the status/warning indicators (reverse, neutral, and hi-lo beam) on the dash when you start the ATV. Check the ignition switch and engine stop switch operation. Do not ride your ATV unless all the systems are working properly.

Check:

1. **Headlight hi-beam**
2. **Headlight low-beam**
3. **Taillight/brake light**
4. **Status/warning indicators**

Check:

1. **Ignition switch**
2. **Stop switch**

OIL AND FUEL

Start with a full tank of gas before every ride, and make sure the oil is at the proper level. Don't forget to check for fluid leaks around the ATV. Watch the overheat indicator on the dash to ensure the engine coolant level is adequate.

Check:

1. **Gas**
2. **Oil**
3. **Fluid leaks**

CHASSIS

Grass, leaves and other debris can get entangled in your ATV's suspension and shocks. Keep the suspension arms, shock springs, and fenders clean and free of debris. Check the steering smoothness by turning the handlebar full-left and full-right. Make sure there is no binding, restrictions, free-play, or looseness in the steering components.

Check:

1. **Suspension arms**
2. **Shock springs**
3. **Fenders**
4. **Steering**

MISCELLANEOUS ITEMS

Inspect your ATV's air filter. Look for debris or damage that may indicate you need to replace it, as a clogged filter can prevent your engine from running. Check the battery terminals for tightness and corrosion. Also, be sure to tighten any loose parts, nuts, or bolts on the chassis.

Check:

1. **Air filter**
2. **Battery**
3. **Tighten chassis fasteners, any loose parts**

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

PREVENTION

FIRST AID AND SURVIVAL

Before riding your ATV, you need to prepare for the unexpected. Emergencies and accidents are traumatic, but the situation can be worse if your are not prepared for it. During every ride, you should have the following items on board your ATV:

*** Tools * Water**
*** Identification * First Aid Kit**

For ATV rides that are longer in duration and distance, you should carry these additional items:

*** Cellular Telephone * Maps/GPS**
*** Emergency Kit with Flashlight and First Aid Kit**

TOOLS

Routine maintenance on your ATV will generally eliminate the need for emergency repairs. However, riding on rough terrain can cause nuts, bolts, and other fasteners to become loose. Carrying this Owner's Manual and the right tools on your ATV can prevent an inconvenience from becoming a more serious problem.

Carry these items on your ATV:

1. **Spare light bulbs**
2. **Duct tape**
3. **Rope**
4. **Spark plugs**
5. **Spare parts (fuses)**
6. **Tool kit**

WATER

Water is so important that you need to carry it regardless of the duration of your ride. Heat exhaustion and heat stroke can occur suddenly and without warning. If you become dehydrated, you could find yourself physically unable to safely operate your ATV.

IDENTIFICATION

If something does happen to you, the emergency personnel will need to know who you are and whom to contact. It is possible you may be unable to give them that information. Put your I.D. in your pocket before you ride. Without it, you are anonymous.

CELLULAR TELEPHONE

It may be necessary to make an urgent phone call or to alert friends and family where you are.

MAPS/GPS (Global Positioning System)

Maps may be unnecessary when you are familiar with the area, but when you are riding on unfamiliar trails, it is good to know where you are, what is coming up, and how to find your way home.

EMERGENCY KIT (with Flashlight & First Aid Kit)

You will need several items in your ATV's Emergency Kit including a flashlight. Matches will come in handy if you need to start a fire to stay warm, and flares are appropriate for signaling for help. A first aid kit is very important if an injury of some type should happen. your kit should include bandages, antiseptic spray, gauze and tape.

Carry these items on your ATV (or your person):

1. **Flashlight**
2. **Matches**
3. **Flares**
4. **First Aid Kit**
5. **Money**

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

ACTIVE RIDING

OVERVIEW

"Active Riding" is the second part of "P.A.S.S." It involves an understanding of how your body weight, balance, gravity, and physical forces affect the handling of your ATV. For example, when you turn an automobile quickly into a sharp turn, your body is pulled to the outside of the vehicle by centrifugal force. While an automobile is relatively stable in comparison, enough centrifugal force can cause an ATV to overturn. Constantly shifting your weight is one major difference between driving an automobile and riding an ATV. Knowing how to shift your weight is necessary to avoid rolling or flipping your ATV.

BASIC OPERATING MANEUVERS

Active riding and basic maneuvers are the foundation of your ATV ride. Without basic skills, it is impossible to advance to the level of active riding.

These are your basic maneuvers:

- **Mounting the ATV**
- **Starting the Engine**
- **Starting a Cold Engine**
- **Braking/Stopping**
- **Shifting**
- **Parking**
- **Dismounting the ATV**

MOUNTING THE ATV

Use care when mounting your ATV. While your ATV is a four-wheel vehicle, you still must use care to not upset the chassis when mounting it.

To get seated:

1. **From the left side of the ATV, grab the left-side handlebar, apply the brake, and put your left foot on the footrest**
2. **Grab the right-side handlebar**
3. **Swing your leg over the seat and set your right foot down on the right-side footrest**
4. **Get seated in a comfortable position**
5. **Always keep your feet planted on the footrests**

STARTING THE ENGINE

Always start your ATV when it is at rest on a flat, level surface. Carbon monoxide poisoning can kill you, so never run your ATV's engine in an enclosed space.

Follow these steps to start your ATV:

1. **Climb up onto the ATV and sit down.**
2. **Engage the parking brake (brake lever lock)**
3. **Shift into neutral**
4. **Turn on the ignition switch**
5. **Move the emergency stop switch to RUN**
6. **Press the starter button**
7. **Let the engine warm up**

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

An easy way to remember the starting procedure for your ATV is by using the acronym "BONE-C."

This acronym means:

B	O	N	E	C
BRAKES LOCKED	IGNITION SWITCH ON	NEUTRAL TRANSMISSION	ENGINE SWITCH	AUTOMATIC CHOKE

STARTING A COLD ENGINE

■ **NOTE: Do not to touch or compress the throttle lever when starting a cold engine, as this will prevent the engine from starting easily.**

1. Turn off all electrical accessories (hand warmers, lights, etc.), then rotate the ignition switch key to the first position (ON) leaving the headlights OFF. Note that the "N" indicator will be illuminated on the dash display.
2. Press the starter button. Do not hold the starter button down for more than eight seconds.

⚠ CAUTION

Do not hold the engine start button more than 30 seconds. A rest period should be observed between the cranking cycles to let the starter cool down. Pay attention not to discharge the battery.

3. If the engine does not start, press the starter button for another eight seconds.

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

4. Once started, allow the engine to warm up for approximately two to three minutes, or until the ATV will accept throttle and accelerate smoothly.

BRAKING / STOPPING

Always allow plenty of room and time to stop your ATV safely. Be alert and prepared, as sometimes quick stops are inevitable. Whether you are stopping slowly or stopping quickly, follow these braking guidelines:

1. Squeeze the brake lever on the left handlebar to apply both the front and rear brakes.
2. If your wheels lock, release the brake lever for a second, then apply the brakes again.
3. Avoid prolonged application of the brakes. Even maintaining minimal pressure on the brake lever will cause the brake pads to drag on the brake rotor and may cause overheating of the brake fluid.

⚠ WARNING

Prolonged and repetitive use of the ATV's hydraulic brake for high speed stops will cause overheating of the brake fluid and premature brake pad wear which can cause unexpected loss of braking ability.

⚠ WARNING

Use only KYMCO approved brake fluid. Never substitute or mix different types or grades of brake fluid, as unexpected loss of braking ability can result. Check the ATV's brake fluid level and pad wear before each use. The loss of braking ability can result in severe injury or even death.

SHIFTING

This KYMCO ATV is equipped with an automatic, dual-range transmission with reverse capability. To shift your ATV into the different drive modes, follow these steps:

1. To engage the HIGH range from neutral, move the shift lever forward.
2. To engage the LOW range from HIGH range, move the shift lever outward and forward.

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

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

⚠ CAUTION

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

3. To engage reverse gear from neutral, move the shift lever forward, outward and back to the "R" position.

⚠ CAUTION

Never shift the transmission while your ATV is in motion. Should your ATV be on a surface that is not level, engage the parking brake (brake lever lock) before shifting into another transmission range or into reverse.

⚠ WARNING

Do not start the engine or operate your ATV with the clutch shield removed. Severe injury could result.

PARKING

Parking your ATV involves the same guidelines as braking, as well as the following guidelines:

1. After the ATV is stopped, shift into neutral
2. Stop the engine using the engine stop switch
3. Turn off the ignition switch
4. Always try to park your ATV on level ground. If you have to park on a hill, shift the ATV's transmission into low gear.
5. Engage the parking brake (brake lever lock)

DISMOUNTING YOUR ATV

To park and dismount from your ATV:

1. Doublecheck that the parking brake (lever lock) is engaged
2. Swing your right leg over to the left side of the seat
3. Step to the ground on the left side of the ATV

HOW TO HANDLE THE ATV (Active Riding Techniques)

Active riding involves moving your body as you maneuver your ATV. You must learn to lean and shift your weight into your turns to maintain control of your ATV. Your safety depends on using safe riding techniques.

Safe riding techniques include:

* Starting
* Leaning, Weight Shift, and Balance
* Wide Turns
* Sharp Turns
* Quick Turns
* K-Turns
* Riding Uphill
* Riding Downhill
* Sidehilling/Transversing
* Swerving
* Crossing Obstacles

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

STARTING

Once the engine is warm, your ATV is ready to ride.

1. Keep both of your feet on the footrests and both hands on the handlebars at all times
2. Hold the brake lever, and release the parking brake (lever lock)
3. Shift the transmission into gear
4. Release the brake lever slowly and apply the throttle

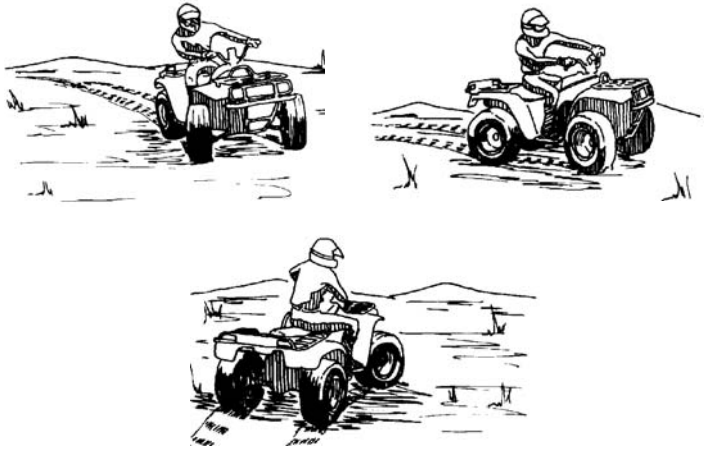
LEANING, WEIGHT SHIFT, AND BALANCE

When you turn your ATV, the goal is to move forward and slide over to the side of the seat that is on the inside of the turn. Support your body weight on the outside footrest and lean your body into the inside of the turn. Pay attention to the ATV's handling. If you feel the tires coming off the ground, reduce speed, shift more of your body weight to the side of the ATV that is lifting, and make the turn wider if possible.

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

WIDE TURNS

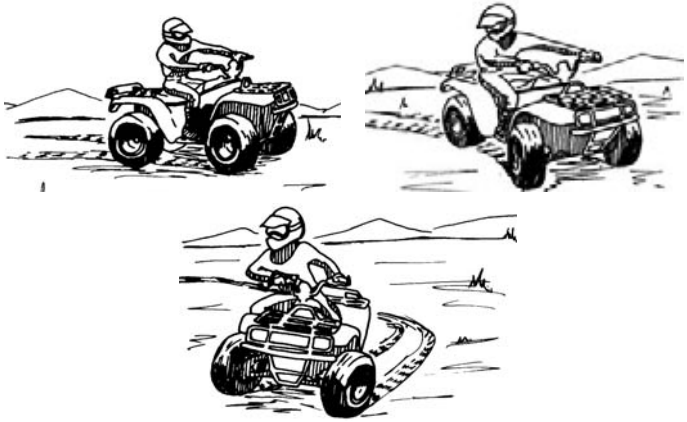
About 20% of ATV accidents happen during turns. If you don't understand turning techniques, you can lose control of your ATV by losing traction, plowing, or tipping. Use this riding method for wide turns:



1. Ease off the throttle as you approach the turn to slow down
2. Use the principles of leaning, weight shifting, and balancing: shift your body weight to the inside of the turn
3. Gradually increase your speed as you come out of the turn

SHARP TURNS

After mastering wide turns, practice the advanced skill of sharp turns. Use this riding method for sharp turns:



1. Ease off the throttle as you approach the turn to slow down
2. Use the principles of leaning, weight shifting, and balancing: shift your body weight to the inside of the turn
3. You might have to lean into the turn more than you do in a wide turn
4. If shifting your weight and balance aren't enough to keep your ATV's tires on the ground, straighten out the handlebars as much as you can
5. Gradually increase your speed as you come out of the turn

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

QUICK TURNS

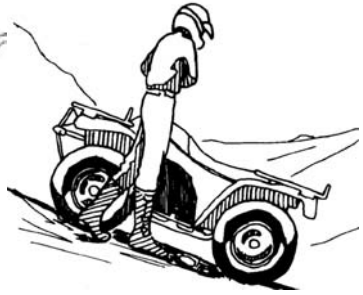
Quick turns are the most difficult turns, and should only be attempted after you have become very familiar with the handling characteristics of your ATV. Use this riding method for quick turns:

1. Ease off the throttle as you approach the turn to slow down
2. Turn the handlebars, shift your weight, and balance at the same time as you enter the turn (use the principles of leaning, weight shifting, and balancing: shift your body weight to the inside of the turn)
3. Follow your weight shift with slight acceleration
4. For multiple turns, repeat this movement as needed
5. To make your turn quicker, try raising yourself off the seat a few inches as you shift your weight to your outside foot

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

K-TURNS

Use the K-turn maneuver if you accidentally stall your ATV while riding uphill. Using a K-turn will enable you to point the ATV downhill in a controlled manner and prevent the ATV from rolling back. Use the turning method on this page for K-turns:



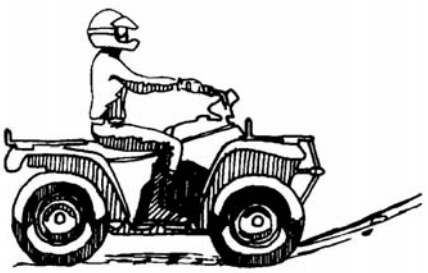
1. Stop where you are, apply the brakes, and shift the transmission into neutral
2. Shut off the ATV's engine
3. Keep your body weight shifted forward
4. Dismount the ATV on the uphill side
5. If you are to the left of the ATV, turn the handlebar all the way to the left
6. Partially release the brake, but lightly hold the brake lever so you can control the ATV rolling
7. Let the ATV roll slowly to your right side until it faces slightly downhill
8. Reapply the brakes firmly
9. Remount the ATV from the uphill side, and keep your weight shifted uphill when you sit down
10. Start the engine and follow the method for riding downhill

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

RIDING UPHILL

Approximately 20% of ATV accidents that happen while riding on hills and as a result of the ATV rolling or flipping. Use extreme caution when riding your ATV on hills, and use this method for riding uphill.

1. Shift the transmission down a gear and accelerate before you start climbing; then maintain a steady pace
2. Lean as far forward as possible. For steeper hills, lift slightly off of the ATV's seat, stand and lean forward
3. If you lose speed, quickly shift to a lower gear (on an ATV with a manual transmission), or carefully apply more throttle (on an ATV with a automatic transmission). Be prepared to release the throttle (so your front tires won't lift), OR
4. If that doesn't work and you still have forward motion and the terrain permits, do a U-turn, go back down, and try climbing again, OR
5. If you have lost all forward motion, use the K-turn maneuver to go safely down the hill

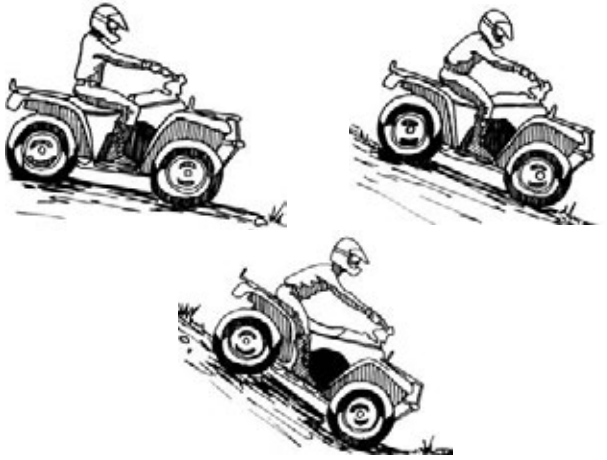


NEVER RIDE YOUR ATV UP OR DOWN HILLS STEEPER THAN 25°

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

RIDING DOWNHILL

Success in riding downhill depends on how familiar and skilled you are with using your ATV's brakes. Use care to balance braking force and downhill speed so you don't lose control and flip your ATV over. Use this method for riding downhill.

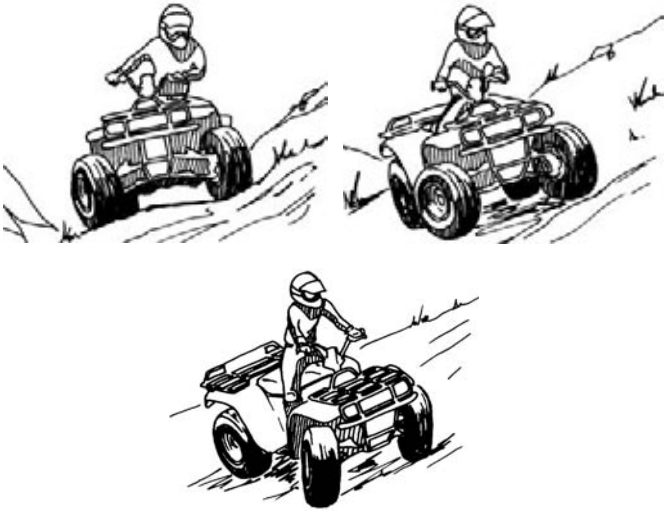


1. Shift your body weight as far back on the seat as possible
2. Select a low gear; stay out of neutral
3. Lightly apply the brakes and use very little throttle

SIDEHILLING / TRAVERSING HILLS

Sidehilling requires advanced ATV riding skills, as the terrain can be difficult and unpredictable. Whether your skills are advanced or not, try to avoid this kind of riding.

If you're in a situation where you absolutely have to sidehill on your ATV, use this riding method:



1. Keep your ATV's speed low and consistent
2. Shift all your body weight to the uphill side of the seat; also, support your weight on the uphill footrest
3. Steer as if you are driving into the hill
4. If your ATV feels like it may tip over, turn the handlebar downhill. If that is not possible because of the terrain or other conditions, or if it just does not work, stop and get off the ATV. Dismount your ATV on the uphill side.

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

SWERVING

Swerving is an emergency maneuver required to avoid an obstacle, but is similar in action to a quick turn. Swerving differs as a quick turn involves slight acceleration during the turn. Do not accelerate if you swerve to maintain better control of your ATV. If you are in a situation where you feel you must swerve your ATV, use this riding method:

1. Ease off the throttle as you approach the obstacle
2. Turn the handlebar, and at the same time, shift your weight and balance as you swerve. Using the principles of leaning, weight shifting, and balancing,shift your body weight to the inside of the turn
3. Avoid using the brakes until the obstacle avoidance swerve is complete and you have regained full control of your ATV

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

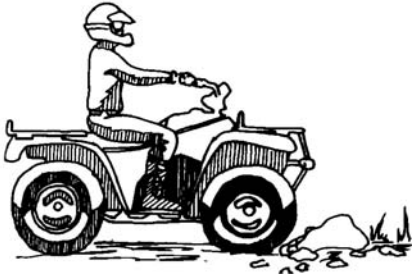
CROSSING OBSTACLES

Crossing obstacles is dangerous, and even experienced ATV riders should avoid this practice if possible. Riding over logs, rocks, and ruts means you must combine all the active riding skills into one big motion. Your ATV will respond differently for different obstacles (logs, ruts, etc.), but these are general guidelines for overcoming two-track (both tires contacting the obstacle at the same time) obstacles:

1. Keep the ATV's speed very low - less than 5 MPH
2. Approach the obstacle head-on
3. Lift up slightly off the seat
4. Keep your weight on the footrests
5. Apply a slight amount of throttle when the front tires make contact with the obstacle
6. Lean forward and release the throttle when the front tires clear the obstacle
7. Keep your body loose to absorb any shock from going over the obstacle
8. If the ATV begins to tip, shift your weight to maintain balance

To clear a single-track (only one tire contacts the obstacle) hazards, follow the same guidelines, except:

1. Use the ATV's momentum to clear the obstacle
2. Do not pull up on the handlebar
3. Do not apply the throttle



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

TIPS

Riding an ATV and driving a automobile have some similarities; however, there are certain situations that require special attention:

* Reversing
* Skidding or Sliding
* Parking on a Hill
* Stalling on a Hill
* Crossing Water
* Crossing Roads
* Riding in Cold Weather
* Stopping the ATV
* Stopping the Engine

REVERSING

Remember, it is difficult to see behind you as you back up your ATV.

1. Proceed slowly, using a slight amount of throttle
2. Keep your handlebar straight.
3. Avoid backing down hills; use a U-turn or K-turn to turn around

SKIDDING or SLIDING

Be careful: it's easy to lose control of your ATV riding through sand, ice, mud, or water. Follow these suggestions on controlling a skid or slide:

1. Turn your handlebar into the direction of the slide
2. Avoid using the brakes until you are out of the skid
3. Shift your weight forward.

Sometimes your ATV may not respond and will go straight ahead instead turing.

1. Slow down and move forward on the seat
2. Lean to the inside of the turn and turn the handlebar

PARKING ON A HILL

In the rare case you need to park your ATV on a hill:

1. Keep the ATV's transmission in gear
2. Engage the parking brake (lever lock)
3. Find something to block the rear tires

STALLING ON A HILL

If you use the proper method for riding your ATV uphill, you should avoid this situation. If you stall on a hill, follow these guidelines:

1. If your ATV has not started rolling backwards yet, follow the procedure for the K-turn, OR
2. If your ATV is already rolling backwards, lean as far forward as possible, standing up on the footrests
3. Gently apply the parking brake (lever lock)
4. When you come to a stop, perform a K-turn
5. If your ATV continues to roll backward, dismount immediately on the uphill side

CROSSING WATER

Your ATV can only handle water up to its footrests. Crossing water deeper than that risks engine damage and/or personal injury. Avoid fast moving water. ATV tires can be buoyant, so if the water is too deep, your ATV may float.

⚠ CAUTION

Riding your ATV through water deeper than the footrests may lead to severe engine damage due to water ingestion.

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

■ **NOTE: Engine damage caused by water ingestion or immersion will not be covered by your KYMCO warranty.**

1. Physically check the depth and current of the water, especially if you can't see the bottom. Look for boulders, logs, or other submerged obstacles that could impede your crossing
2. Keep your speed steady and slow
3. Make sure you have a way out on the other side of the water
4. If you get stuck in the sludge or mud, try rocking your ATV from side to side to free it
5. Once you've cleared the water, briefly apply the brakes to make sure they function

CROSSING ROADS

Crossing paved roads can be dangerous and should be avoided. However, if you must cross a road follow these guidelines:

1. Before crossing, stop completely on the shoulder of the road
2. Check both directions for oncoming traffic
3. Do not cross near a blind corner or intersection because the lack of visibility is dangerous
4. Ride straight across the road to the opposite shoulder
5. Be aware that since your ATV could stall, give yourself enough time to cross and get off the road
6. Assume that oncoming vehicles cannot see you, and if they do, they may not be able to predict your actions
7. It is illegal to cross public roads in some states and communities. Become aware of your local laws

RIDING IN COLD WEATHER

■ **NOTE: Check that all control levers move freely. Make sure that the footrest, shift lever, and rear brake pedal are free of ice and snow.**

⚠ WARNING

For your personal safety, it is very important to wear cold-weather clothing that will be appropriate for the coldest anticipated temperatures.

1. With the transmission in neutral, move the ATV forwards and backwards to see if the wheels roll freely. If the ATV will not roll, the tires may be frozen to the ground or the brake pads may be frozen to the brake rotors or drums
2. If the tires are frozen to the ground, pour warm water around them to melt the ice

⚠ CAUTION

Before riding, manually rock the ATV forwards and backwards to make certain that all the wheels roll freely.

3. If the brakes are frozen, move the ATV to a warmer area to thaw out the brakes

⚠ WARNING

Do not attempt to free frozen brakes by pouring warm water on the brake pads, brake rotors or drums.

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

- **NOTE: After the brakes thaw, dry them by applying them several times while riding slowly.**
- **NOTE: After riding through water, mud, snow, or slush, it is important to dry both the front and rear brake systems before parking your ATV.**

⚠ WARNING

Ride slowly and be extra careful when riding on snow-covered or ice-covered terrain. Always be alert to changing terrain conditions when operating your ATV in cold or wet weather.

4. Practice driving in an open snow-covered or ice-covered area at slow speeds before driving on snow-covered or ice-covered trails

5. Pay attention to how your ATV responds to steering and braking on the type of terrain you will encounter on your trail ride

STOPPING YOUR ATV

To stop your ATV, first release the throttle lever, then apply the brakes evenly.

STOPPING YOUR ATV'S ENGINE

To stop your ATV's engine, turn the ignition switch key to the OFF position or push the emergency stop switch to the OFF position.

- **NOTE: Remember to turn the ignition switch to the OFF position if your ATV is not going to be ridden so you will not deplete the battery's energy.**

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

SOUND JUDGMENT

OVERVIEW

Human beings are not invincible, we need to use sound judgment to keep ourselves and others safe from harm. Knowing that the first "S" in "P.A.S.S" stands for "Sound Judgment" means you need to use yours when you operate your ATV.

Do you consider yourself to be pretty conservative, or are you a heavy risk-taker? Before continuing with this section of the manual on sound judgment, check your **RISK FACTOR** by completing this short survey:

1. Do you drive over the speed limit?

1	2	3
Never	Sometimes	Often

2. Are you more daring around your friends than when you are alone?

1	2	3
Never	Sometimes	Often

3. Do you drive your automobile when the gas gauge is on empty?

1	2	3
Never	Sometimes	Often

4. Do you feel that no matter what you do, you won't get hurt?

1	2	3
Never	Sometimes	Often

5. Do you drink or use drugs before you drive your automobile?

1	2	3
Never	Sometimes	Often

6. Do you drive your automobile even if it has a major problem with the brakes, tires, or engine?

1	2	3
Never	Sometimes	Often

7. Do you thrive on the adrenaline rush you get from speeding and dangerous situations?

1	2	3
Never	Sometimes	Often

8. Do you hurt yourself because you try to do things that are beyond your abilities?

1	2	3
Never	Sometimes	Often

9. Do you tailgate other drivers when you think they're driving too slow?

1	2	3
Never	Sometimes	Often

10. Do you ignore weather reports before you do outside activities like swimming, camping, fishing, or boating?

1	2	3
Never	Sometimes	Often

Add the totals from survey questions 1 through 10, the total points indicate your **RISK FACTOR**.

10 to 15 points indicates that your are fairly conservative. You probably make safe choices that will help you avoid hurting yourself and the people around you.

16 to 20 points indicates that you can alternate between conservative and risky choices. Depending on your mood or whom you're with, the choices you make may help you or hurt you.

21 to 30 points indicates that you are taking risks. You should reconsider a lot of the judgments you make. You probably put yourself in dangerous situations that could potentially hurt yourself and the people around you.

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

SOUND JUDGMENT

ENVIRONMENT

The environment that you will operate your ATV in is often harsh and sometimes dangerous if you don't take proper precautions.

WEATHER

You need to consider the weather when you participate in an outdoor activity such as riding an ATV. It is dangerous to ride your ATV when the weather is bad or could potentially become bad. Before starting out on your ATV, check the weather forecast for the location and duration of your ride.

TERRAIN

Always pay close attention to the terrain you're on, even if it is in an area familiar to you. Do not assume that the landscape you're used to doesn't change. Changes to landscape can happen at any time: fences can be constructed and excavations dug in a short period of time. Weather, climate, and development take their toll as well as erosion and other changes that can affect your ATV's ability to ride smoothly and surely.

Because terrain can constantly change in configuration, you may not know how it has changed until you get there. Whether it's familiar or not, check out your surroundings before and during your ride.

NIGHT RIDING

It is best to avoid riding your ATV at night when visibility is limited. With little to no light, it is difficult to see what is around you.

If you must ride at night, proceed slowly and never ride at a speed that would prevent you from reacting to something that could come up in the limited view of your ATV's headlamps.

PAVED SURFACES

Avoid riding your ATV on paved surfaces. Your ATV was not designed for use on pavement and its handling will become more difficult and unpredictable than when riding on non-paved surfaces.

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

SOUND JUDGMENT

TRAIL RIDING

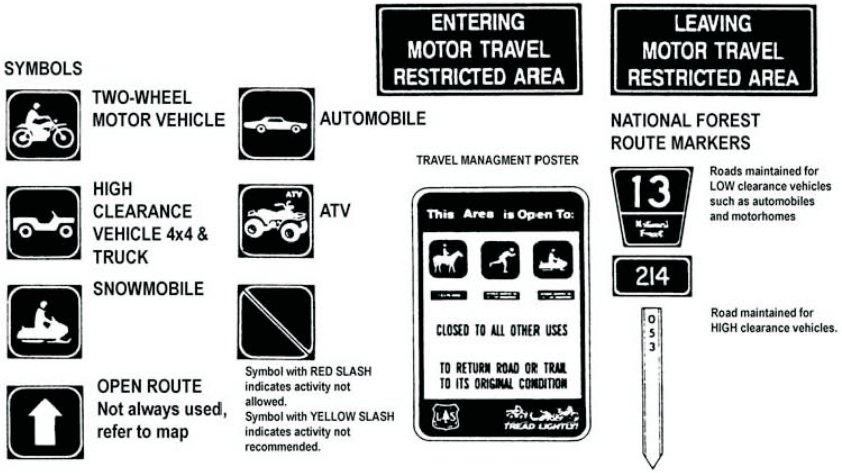
Use sound judgment when trail riding with your ATV. You should only ride on trails that suit your riding ability. If the trail is very rugged, standing up on your footrests will make it easier for you to endure the rough terrain.

Make yourself visible to others by using your ATV's headlights and taillights. If you stop, pull completely off the trail in a way to protect yourself, your ATV and the environment.

Outsloped trails (trails that slant to allow rain to run off) make trail riding more challenging. To ride on outsloped trails, keep your weight shifted towards the uphill of the slope. Proceeding slowly with your weight shifted towards the slope will help you from sliding off the trail.

Be aware of the rules and the laws that govern the area in which you will be riding your ATV. Learn which trails you can legally and safely ride on and who else might be on those trails. The signs shown on this page are examples of those currently used in many areas to designate trail types and restrictions.

TRAIL SIGNS



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

SOUND JUDGMENT

THOSE AROUND YOU

People do all kinds of things that you can't predict or control. Be aware of others and their behavior, as it can affect your enjoyment and safety when your ride your ATV.

RIDING COMPANIONS

Always leave a lot of space between you and other riders, especially in dusty and dirty conditions when it is difficult to see the riders in front of you stopping or avoiding obstacles.

Riding with a group of ATV riders is not the same as riding your ATV alone. You must be more alert, as you cannot predict the actions of the other riders. Other riders can also be a distraction keeping you from properly scanning the terrain on which you are riding.

PASSENGERS

You should never carry a passenger on your ATV. Passengers are prohibited, as it is unsafe for a number of reasons. One critical reason is the extra weight of the passenger, even a small person, on the seat makes an ATV difficult to control. Statistics indicate that about 50% of all ATV accidents involve passengers.

OTHER VEHICLES

Depending on where you're riding, you might encounter other ATVs, motorcycles, bicycles, or large motor vehicles on roads and trails. Respect the presence of automobiles and other vehicles if you're crossing roads or riding in public areas.

Take steps with your riding apparel choices and your actions to make yourself very visible. Remember, if you can't see other vehicles coming, that means they cannot see you.

HIKERS

Even though your ATV can take you to remote areas, don't assume that you are alone. Many people participate in hiking, camping, and other outdoor activities, and these people may be in remote areas where you would not expect them. For your safety and theirs, bealert at all times.

EQUESTRIANS

Many people enjoy horses. The trails that are enjoyable for ATV riding are also well suited for equestrian riding. Watch for horseback riders and provide them a wide berth so you do not startle their horses. Approach slowly and if you see the horse react to your ATV's presence, stop immediately and turn off the engine until the horse and rider have left the area.

ANIMALS AND NATURE

Respect the outdoors that your ATV enables you to enjoy. Don't use your ATV to chase animals or birds. Drive around young trees rather than over them. Keep clear of streams and ditches with standing water.

Tread Lightly and leave the environment as you found it.

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

SOUND JUDGMENT

EQUIPMENT

The last thing you would expect is that your KYMCO ATV would break down in the middle of a field. KYMCO products are usually so reliable that sometimes you forget that your ATV, like any machine, has service needs and usage limitations.

ATV MAINTENANCE

You have to maintain your ATV for your safety, its operational integrity and to protect your investment. The General Maintenance section of this Owner's Manual tells you how to take care of your ATV. If at any time, abnormal noises, vibrations, or improper operation of any component on your ATV is detected, DO NOT OPERATE YOUR ATV. Take your ATV to an authorized KYMCO ATV dealer for inspection, adjustment or repair.

PERSONAL CHOICES

A safe, enjoyable ATV ride is dependent on many personal choices. An ATV, like all motorized vehicles, can be dangerous to operate if you choose to ignore safety precautions, take unnecessary chances, or ride beyond your ability or your machine's capability. Don't allow the thrill of freedom or adventure to affect your ability to make good, safe choices.

SOUND JUDGMENT

LOAD CAPACITY RATINGS

KYMCO ATV Load Capacity Ratings	
Item	*Specifications*
Max Load Capacity	485 lb. (220 Kg)
Front Rack - maximum	75 lb. (34 Kg)
Rear Rack - maximum	150 lb. (68 Kg)
Tongue Weight	35 lb. (16 Kg)
Tongue & Rear Cargo Weight - maximum	200 lb. (91 Kg)
Towing Capacity	1050 lb. (477 Kg)

Max Load Capacity - Total weight of rider, tongue weight, and cargo load on front and rear racks.

Tongue Weight - Weight on trailer tongue.

Tongue and Accessory Weight - Include as part of the front and rear rack weights.

Tongue and Rear Cargo Weight - Total weight on trailer tongue and rear rack load.

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

SPEEDRACK

When installing Speedrack accessories on your ATV, make sure to read and carefully follow the instructions provided in each kit.

■ **NOTE: Use extra caution when operating your ATV with additional loads such as accessories and/or cargo. Handling of your ATV may be adversely affected. Reduce speed when adding additional loads.**

⚠ WARNING

POTENTIAL HAZARD
Overloading your ATV or carrying loads or towing cargo improperly.

WHAT CAN HAPPEN
Improper loading and towing could cause changes your ATV's handling characteristics, which could lead to an accident.

HOW TO AVOID THIS HAZARD
Never exceed the stated load capacity of your ATV (as noted in this Owner's Manual). Cargo should be properly distributed and securely attached. To aid in controlling your ATV, reduce speed when carrying cargo or pulling a trailer, and allow greater distances for braking. Always follow the instructions and recommendations in this Owner's Manual for carrying cargo or pulling a trailer.

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

SOUND JUDGMENT

ALCOHOL AND DRUG CONSUMPTION

Alcohol is related to 30% of all hospital admissions caused by ATV accidents in the United States. It is extremely dangerous to drink alcoholic beverages and ride an ATV. Alcohol, even in moderation, severely impairs your ability to control an ATV.

Substances to avoid when riding:

1. **Alcohol**
2. **Over-the-counter or prescription drugs**
3. **Illegal/mood altering drugs**

Be aware that prescription and over-the-counter medications can cause drowsiness and impaired judgment. A wide range of medications, including allergy, cold, flu, and headache medications, will affect your physical abilities and judgment.

Your physical size and weight will not minimize the effects of even one antihistamine tablet, so use extreme care if you need to take medications before you plan to ride your ATV.

Illegal drugs not only inhibit your judgment and ability to ride your ATV, but there can be severe legal consequences if you are confronted by law enforcement authorities. The same is true for excessive alcohol use, so never use alcohol or drugs before or during your ATV ride.

THE EFFECTS OF ALCOHOL*

The Number of Drinks that Impair Mental and Physical Abilities

1 to 2 DRINKS	Mental processes such as restraint, awareness, concentration, and judgment are affected, reaction time slowed; and inability to perform complicated tasks.
3 to 4 DRINKS	Depth perception, glare recovery, eye movement, and focus affected; decreased judgment and control.
5 or more DRINKS	Coordination deteriorates; loss of critical judgment, and impaired memory and comprehension.

**According to the ATV Safety Institute*

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

SOUND JUDGMENT

YOUR PHYSICAL CONDITION

Being physically exhausted is like being intoxicated. When fatigued, you will not be able to perform detail-oriented tasks and your coordination will be affected. This will severely inhibit your ability to ride your ATV safely.

Do not ride:

1. Your ATV when you're tired

RECKLESS RIDING

Riders who have an ATV accident when speeding have a 25% chance of being hospitalized from the resulting injuries. The faster you ride your ATV, the more likely a crash can injure your head and internal organs. Avoid stunts and uncontrolled riding such as wheelies and jumps that reduce your control and can create greater injuries or even death if you crash your ATV.

LAWS AND REGULATIONS

Any law enforcement officer will tell you that ignorance of the law is no excuse for improper behavior. Before operating your ATV, check out your local, state, or provincial off-road laws. Before starting a ride, make sure that you can legally ride in the proposed area. Be a good off-road citizen: Illegal or irresponsible riding will cause authorities and landowners to close riding area.

GROUP BEHAVIOR

It is a proven psychological fact people will do irresponsible and riskier things in a group that they would never consider doing when they are alone. When you are riding your ATV with other riders use extra care and sound judgment to make sure that the activities do not get out of hand. Being wise and responsible is the best way for you and your riding friends to avoid injury or even death from an ATV accident.

SIPDE

Individually, the safe behaviors and sound judgments listed in this manual will have limited impact, but combined they become the foundation of safe and responsible ATV use. When you're paying attention to your physical condition, when you're monitoring the movements of your ATV, and when you're constantly evaluating your environment you are practicing **SIPDE**.

This acronym means:

S	I	P	D	E
SCAN / SEARCH	IDENTIFY HAZARDS	PREDICT WHAT WILL HAPPEN	DECIDE WHAT TO DO	EXECUTE THE DECISION

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

SUPERVISION

OVERVIEW

When you allow others to ride your ATV you become responsible for their safety and their actions. The riding ability of your guests, their awareness of proper ATV operation, the terrain, and the condition of your ATV must be factored into your decision to allow others to ride your ATV. Additionally, you can be legally responsible for the actions your guests may take while riding your ATV.

TAKING RESPONSIBILITY

The final letter in the "PASS" acronym stands for SUPERVISION. As outlined in this manual, there are a number of elements for enjoyable and safe ATV riding and ownership. As the owner of an ATV, you are directly responsible to supervise its use.

INEXPERIENCED/UNTRAINED RIDERS

Never let anyone who has not been educated in proper and safe ATV operation to ride your ATV. Even guests who own an ATV or who have prior riding experience may not have the foundation of a formal training course that would have educated them about safe ATV operation. As the vehicle owner it is your responsibility to keep uneducated guests (especially under-aged children) off of your ATV.

EXPERIENCED/TRAINED RIDERS

When anyone borrows your ATV, you become responsible to supervise them and control their actions. Before a guest rides your ATV, have them take an ATV training course, have them watch the ATV safety video, and have them read this Owner's Manual. As the owner of the ATV, you are responsible for their training.

Not every ATV operates in the same way or has the same handling characteristics that your ATV possesses. The riding position may be different, the controls may differ, and the power delivery will vary from brand and model of ATV. So regardless of how much experience your guests may have with ATVs in general, they don't have experience with your ATV. Spend time with your guests to make sure they are familiar and comfortable with the operation of your ATV before you let them ride.

SUPERVISION

ATV RIDER AGE GUIDELINES

Regardless of experience, you should never let anyone under 16-years of age operate your ATV.

KYMCO and the ATV Safety Institute recommend that all ATV operators ride the appropriately sized ATV for their age.

ATV RIDER AGE GUIDELINES

Age (Years)	*Engine Size (cc)*	*Speed Limitations (MPH)*
6 to 11	Up to 70	10 - Governed / 15 - Maximum
12 to 15	Up to 90	15 - Governed / 30 - Maximum
16 & Older	Over 90	According to Local Regulations

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

SECTION 2 - OPERATION & MAINTENANCE
PREFACE

Thank you for choosing this quality KYMCO ATV. It has been designed and manufactured to provide you with reliable and enjoyable operation. This Owner's Manual should be considered a permanent part of your ATV and must remain with the ATV in the event of a resale.

Section 2 of this manual was prepared by the engineers and service staff of KYMCO to provide you with the information required to operate and maintain your ATV. This section also covers rider-related instructions, as well as service and storage instructions. If your ATV ever requires repairs or service, contact an authorized KYMCO ATV dealer for professional service.

As the owner and rider of a KYMCO ATV, you should become thoroughly familiar with your ATV's basic operation, maintenance and storage procedures. Please read and understand the entire Owner's Manual before operating your KYMCO ATV to ensure safe and proper use. Always operate your ATV within your level of skill and current terrain conditions.

At the time of publication, all of the information and illustrations in this manual are technically correct. Some illustrations herein are used to best represent a certain procedure or item and are not intended to depict actual conditions. Because KYMCO is constantly refining and improving its products, there may be differences between the vehicle images and the text depicted in this manual and your ATV. As such, no retroactive obligation to the product is available.

PARTS AND ACCESSORIES

When you need replacement parts, oil, or accessories for your KYMCO ATV, be sure to use only GENUINE KYMCO PARTS, OIL, AND ACCESSORIES. Genuine KYMCO parts, oil, and accessories have been engineered and approved to meet the standards and requirements of your KYMCO ATV. For a complete list of accessories, refer to the current KYMCO ATV Accessory Catalog. To aid in service and maintenance procedures on this ATV, a Service Manual and an Illustrated Parts Manual are also available from your local KYMCO ATV dealer.

SPECIFICATIONS*

ENGINE AND DRIVE	
Type	**Four-Cycle/Liquid Cooled**
Bore x Stroke	**89mm*71.2mm (3.56*2.80in.)**
Displacement	**442.9 cc (26.57 cu in.)**
Ignition Type	**IDI(Inductive Discharge Ignition)**
Spark Plug Type	**NGK CR7E**
Spark Plug Gap	0.7 - 0.8 mm (0.028 - 0.032 in.)
Brake Type	Hydraulic with Parking Brake & Foot Brake
Fuel Delivery	**Electronic Fuel Injection (EFI)**

CHASSIS	
Length (Overall)	210 cm (83 in.)
Height (Overall)	119.2 cm (47 in.)
Width (Overall)	1102 cm (43 in.)
Suspension Travel	19.0 cm (7.5 in.)
Wheelbase	121.7 cm (48 in.)
Tire Size (Front)	24 * 8-12
Tire Size (Rear)	24 * 10-12
Tire Inflation Pressure	0.4 kg/cm2 (5.7 psi)

MISCELLANEOUS	
Dry Weight (Approx)	277 kg (609 lb)
Gas Tank Capacity (Rated)	15 L (3.75 U.S. Gal.)
Differential Capacity	270 ml (9.1 fl oz)
Differential At Change	250 ml (8.5 fl oz)
Rear Drive Capacity	250 ml (8.5 fl oz)
Rear Drive At Change	230 ml
Engine Oil Capacity	2.85 L (3.02 U.S. qt)
Engine Oil Changed Capacity	2.20 L (2.33 U.S. qt)
Engine Oil Changed Capacity with Oil Filter Changed	2.40 L (2.54 U.S. qt)
Gasoline (Recommended)	87 Octane Regular Unleaded
Engine Oil (Recommended)	SAE 5W-30
Differential/Rear Drive Lubricant	SAE 80W-90 Hypoid
Taillight/Brakelight	12V/5W/21W
Headlight	12V/35W

** Specifications subject to change without notice.*

GENERAL INFORMATION

ATV IDENTIFICATION NUMBERS

Your KYMCO ATV has two identification numbers, the Vehicle Identification Number (VIN), and the Engine Serial Number (ESN).

The VIN (1) is located on the lower-front cross-member of the frame.

The ESN is located on the back of the engine crankcase and is visible from the side of the ATV.

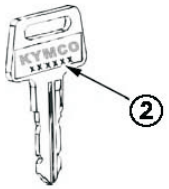
The VIN and ESN are required by your KYMCO dealer to order proper parts, perform service, and to submit warranty claims. Always provide your ATV's year, model, VIN and ESN when contacting an authorized KYMCO ATV dealer for assistance.

■ **NOTE: Record your VIN, ESN and ignition switch key numbers on the inside, back cover of this manual.**

Warranty repairs will be declined by KYMCO if the VIN or ESN on your ATV have been removed or altered in any way. If your ATV requires a repair that will replace the engine crankcase or the frame, ask your dealer to contact KYMCO to discuss the situation.

IGNITION SWITCH KEY

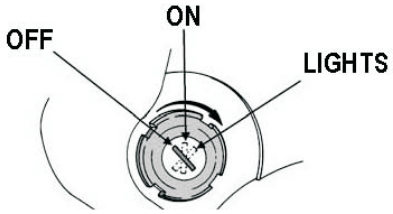
Your KYMCO ATV is delivered with two keys. Keep the second key as a spare and store it in a safe place. An identifying number (2) is stamped on each key. Use this number when ordering a replacement key.



CONTROL LOCATIONS & FUNCTIONS

IGNITION SWITCH OPERATION

Use your ATV's key to "unlock" and operate the ignition switch. The ignition switch has three positions.



OFF position - All electrical circuits (except the accessory plug) are off. The engine will not start or run. The key can be removed in this position.

ON position - The ignition circuit is complete and the engine can start and run. The key cannot be removed in this position.

LIGHTS position - The ignition circuit is complete, the engine can start and run, and the headlights and taillight are lit. The key cannot be removed in this position.

■ **NOTE: The accessory plug is powered by the battery at all times.**

⚠CAUTION

Do not leave the ignition switch in the LIGHTS position for a long period of time without the engine running, as the battery voltage will be depleted. Always leave the ignition switch in the OFF position when engine is not running.

SHIFTING

This KYMCO ATV is equipped with an automatic, dual-range transmission with reverse capability. To shift your ATV into the different drive modes, follow these steps:

1. To engage HIGH range from neutral, move the shift lever forward.

2. To engage LOW range from HIGH range, move the shift lever outward and forward.

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

⚠CAUTION

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

3. To engage reverse gear from neutral, move the shift lever forward, outward and back to the "R" position.

⚠CAUTION

Never shift the transmission while your ATV is in motion. Should your ATV be on a surface that is not level, engage the parking brake (brake lever lock) before shifting into another transmission range or into reverse.

2WD/4WD SELECTOR SWITCH

The 2WD/4WD selector switch (1) allows you to operate your ATV in either two-wheel drive (rear wheels powered) or four-wheel drive (all wheels powered).

2WD should be adequate for normal riding on flat, dry, hard surfaces. 4WD can be used for rough trail conditions. To engage or disengage power to the front wheels, move the switch to the 4WD position or to the 2WD position.

⚠ CAUTION

Never operate the 2WD/4WD selector switch while your ATV is in motion as you may damage the differential.

BRAKES

Your KYMCO ATV is equipped with front and rear hydraulic brakes that can be activated with hand and foot controls.

LEFT HAND BRAKE - Activates front and rear brakes

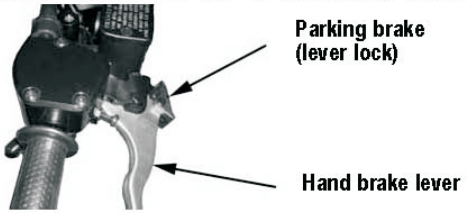
RIGHT HAND BRAKE LEVER - Activates front brake only

REAR BRAKE PEDAL - Activates front and rear brakes

Left Hand Brake Lever

The left hand brake mounted on the left handlebar activates the front and rear brakes on your ATV. To apply the front and rear brakes, squeeze the lever towards the handlebar grip.

Right Hand Brake Lever & Parking Brake



The hand brake mounted on the right handlebar activates the front brakes on your ATV. To apply the front brakes, squeeze the lever towards the handlebar grip.

To engage or release the parking brake (brake lever lock), use the following procedure:

1. Squeeze the hand brake lever two or three times to achieve maximum brake pressure, and then release it
2. Depress and hold the brake lever lock
3. While holding in the brake lever lock, squeeze the brake lever.

■ **NOTE: The brake lever lock will click as it engages and the brake lever will not return to its released position.**

4. Release the parking brake's lever lock by squeezing the brake lever. Once the lock is disengaged the lever will return to its released position.

Use the following procedure to verify that the parking brake (brake lever lock) locks the front wheels when engaged:

1. Squeeze the hand brake lever two or three times
2. Depress and hold the brake lever lock
3. Attempt to push the ATV

■ NOTE: The parking brake (lever lock) must lock the ATV's front wheels. If it does not, take your ATV to an authorized KYMCO ATV dealer for service.

⚠ WARNING

Always make sure that the parking brake (lever lock) has been disengaged before operating your ATV. An accident can result if the parking brake is left engaged while the ATV is ridden. Never rely on the parking brake as the sole means of securing the ATV when parking on a hill. Always block the downhill side of the ATV's wheels or park the ATV perpendicular to the hillside.

Rear Brake Pedal

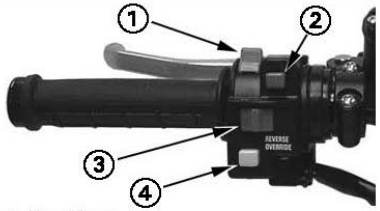
Rear Brake Pedal

Pressing the rear brake pedal downward with your right foot will apply the front and rear wheel brakes.

LEFT HAND HANDLEBAR CONTROLS

Headlight Hi / Lo Switch

Use the HI/LO ① switch to select the high or low headlight beam when the ignition switch is in the LIGHTS position. When the switch is in the HI position, the high beam will illuminate. When the switch is in the LO position, the low beam will illuminate.



Starter Button

Pressing this button ② activates the starter motor. Before starting the engine, make sure the ignition switch is in the ON position, the transmission is in neutral, and the parking brake is engaged.

■ NOTE: Your ATV has a safety feature which prevents starting when the transmission is not in neutral.

Emergency Stop Switch

Use the emergency stop switch ③ to stop the engine without turning off the ignition switch. **OFF** position - The ignition circuit is off and the engine cannot be started and will not run. **RUN** position - The ignition circuit is on; the engine can start and run.

■ NOTE: The battery will be depleted if the ignition is left ON for a long period when the Emergency Stop Switch is OFF.

Reverse Override Button

Pressing the reverse override button ④ when the ATV is in REVERSE will bypass a feature of your KYMCO ATV's ignition that reduces engine RPM in reverse.

⚠ WARNING

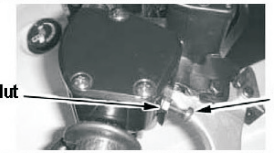
Be alert when using the reverse override button as the ATV's engine performance and speed will be increased. Always look for obstacles before riding your ATV in reverse.

CONTROL LOCATIONS & FUNCTIONS

THROTTLE LEVER

The position of the throttle lever controls engine output. Operate the throttle lever with your thumb. Pushing it forward increases engine RPM, allowing the lever to return to its original position decreases engine RPM.

THROTTLE LIMITER SCREW

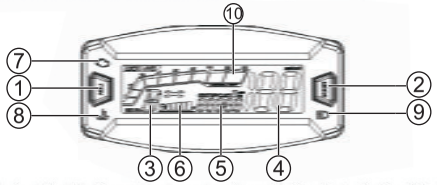


Throttle lever travel may be limited by adjusting the throttle limiter screw. The throttle limiter permits you to adjust the engine's output to match the rider's skill and experience. To adjust the throttle limiter, use the following procedure:

1. Loosen the locking nut
2. Turn the throttle limiter screw clockwise to decrease maximum engine RPM or counterclockwise to increase maximum engine RPM
3. Tighten the locking nut securely

■ **NOTE: Your ATV is equipped with an ignition limiter that retards timing when maximum engine RPM is approached. When this RPM limiter is activated, it can be misinterpreted as a high-speed ignition misfire.**

MULTIFUNCTION METER



① **Adjust/Set Button** - Use in conjunction with the Mode Button ②, to set the clock and reset the trip meter to zero. This button is also used to toggle between MPH and km/h.

■ **NOTE: Depress and hold the Adjust/Set Button ① and the Mode Button ② simultaneously for three seconds to activate the gauge setting functions. Approximately ten seconds after releasing the buttons, the display will return to normal operating mode.**

② **Mode Button** - Used this button to toggle between the Clock, Hour Meter, Odometer, and Trip Meter display ⑤ on the LCD. Use in conjunction with the Adjust/Set Button ① to set the clock or reset the trip meter to zero

③ **Gear Position Indicator** - Indicates which transmission mode is selected: **R** = Reverse, **N** = Neutral, **L** = Low Range, **H** = High Range.

An E will be displayed if the transmission is not engaged in a selected gear.

④ **Speedometer**- Indicates the approximate ATV speed in miles per hour (MPH) or kilometers per hour (km/h).

⑤ **Clock/Hour Meter/Odometer/Trip Meter** - Displays time, total engine hours, total miles/kilometers traveled, or trip miles/kilometers traveled. To set the clock, use steps A through C. To reset the trip meter, proceed to step D.

A. To set the clock, press and hold the Mode Button ② until CLOCK is displayed

B. Press and hold the Adjust/Set Button ① and Mode Button ② approximately three seconds until the hour display starts to flash, then release the buttons and press the Mode Button ② to set the hour.

■ **NOTE: The hour display will read from 1 to 24 and may be cycled rapidly by holding the Mode Button ② down for three seconds.**

C. After you have selected the desired hour, press and release the Adjust/Set Button ① to toggle the clock to the minute display (the minute digits will flash), then press the Mode Button ② to set the minutes. After approximately ten seconds, the minute display will stop flashing and the gauge will return to normal operation.

■ **NOTE: Power for the clock memory is supplied through the 15-amp accessory fuse; the gauge verifies when the ATV's ignition is turned ON. If the clock loses its memory power supply (failed fuse, etc.), the gauge will "power-up," reset, and shut down repeatedly until clock memory power supply is restored. Always check the 15-amp accessory fuse first if this gauge begins to cycle through this "power-up" sequence.**

D. To reset the trip meter, press and hold the Mode Button ② until TRIP is displayed in the display; then press and hold the Adjust/Set Button ① and Mode Button ② until the trip meter reads 0 (zero).

⑥ **Fuel gauge** - The fuel gauge shows the approximate fuel supply available in a graduated display. The normal operating fuel range is with the section between the segment F and segment E. When the segment E or the fuel indicator flashes, fuel will be low and you should refill the tank as soon as possible.

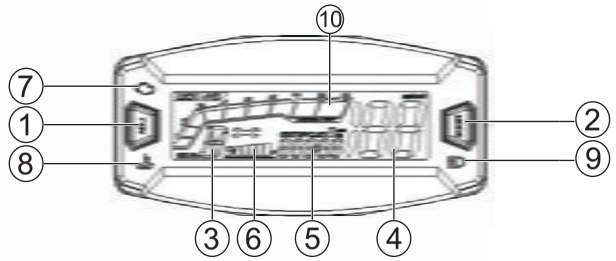
⑦ **CELP indicator** - If flashing, it indicates that a fault has been detected in the scooter's EFI or electrical system. Requires immediate inspection by a KYMCO dealer.

■ **NOTE: The CELP indicator lights momentarily when the scooter is turned ON before the engine is running.**

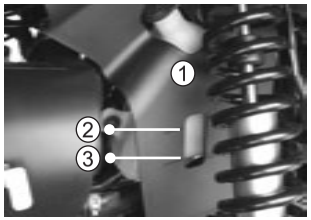
⑧ **Coolant Temperature Warning Symbol** - When the coolant is over specified temperature, the coolant temperature warning symbol flashing. If this occurs, stop the engine and check the reserve tank coolant level.

⑨ **High Beam Indicator Light** - This light is illuminated when the headlight high beam is on.

⑩ **Tachometer** - Indicates the engine speed in the revolutions per minute (RPM)



ENGINE COOLANT RESERVOIR



1.Reserve Tank
2."F" (Full) Mark
3."L" (Low) Mark

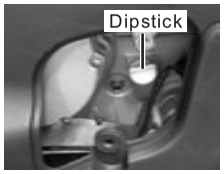
Coolant absorbs heat from the engine and transfers it to the air at the radiator. If the coolant level becomes low, the engine overheats and may suffer damage. Check the coolant level each day before operating the vehicle, and replenish coolant if the level is low. Change the coolant in accordance with the Maintenance Schedule.

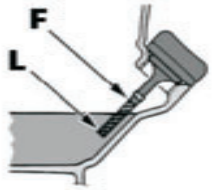
Coolant Level Inspection

1. Situate the vehicle on level ground.
2. Check the coolant level through the coolant level gauge on the reserve tank. The coolant level should be between "F" (Full) and "L" (Low) marks.
3. If the amount of coolant is insufficient, unscrew the cap from the reserve tank and add coolant through the filler opening to the "F" (Full) mark. Install the cap.

DIP STICK (oil level stick)

There is a dip stick on the left side of the engine for checking the engine oil level. To check the oil level, use the procedure listed on this page.





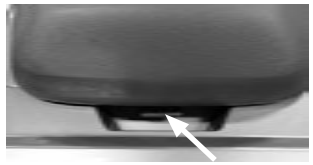
■ **NOTE: The ATV should be parked on level ground, with the engine off, when checking the engine oil level.**

1. Unscrew the dip stick, remove it and wipe it with a clean cloth
2. Reinstall the dip stick, thread it into the engine case
3. Unscrew the dip stick and visually note the oil level on the stick. The engine oil level should be above the "L" mark but not higher than the "F" mark. Add or remove oil as required

⚠CAUTION

Do not overfill the engine with oil. Overfilling the engine can cause oil leaks and/or oil contamination of the air filter element. Always make sure the oil level is above the "L" mark but not higher than the "F" mark.

SEAT LATCH



1. To remove the seat, lift up on the latch release (located at the rear of the seat), then raise the rear of the seat and slide it rearward

2. To remount the seat to the ATV, slide the front of the seat into the seat retainers and push down firmly on the rear of seat. The seat should automatically latch into position.

⚠ WARNING

Make sure the seat is secure before mounting and riding the ATV. Severe personal injury may result if the seat is not properly secured.

SAFETY FLAG BRACKET

A bracket has been supplied for mounting a safety flag at the rear of your ATV.

TRAILERING AND TOWING

⚠ WARNING

Never use the cargo racks as a towing or trailering point.

Your KYMCO ATV is equipped with a frame-mounted receiver for a standard 5.1 cm (2 in.) receiver hitch. A standard receiver hitch must be purchased separately.

When loading a trailer properly, two items are critical: Gross Trailer Weight (the weight of the trailer plus cargo) and Trailer Tongue Weight See the ratings chart on page 48 of this manual.

⚠ WARNING

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

⚠ WARNING

NEVER EXCEED ANY OF THE ATV'S WEIGHT RESTRICTIONS

Trailer Tongue Weight is the downward force exerted on the hitch by the trailer coupler when the trailer is fully loaded and the coupler is at its normal towing height. Refer to the Load Capacity Ratings Chart on page 48 of this manual for tongue weight information.

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

⚠ WARNING

Riding your ATV when towing a trailer requires extreme caution or the activity will be hazardous. Trailer towing will affect the handling and braking of your ATV. You should only tow at low speeds and never exceed 10 mph. Avoid sudden accelerations and stopping. Do not make quick maneuvers. Avoid uneven surfaces and do not tow on hills. Never carry passengers in a trailer unless the trailer is designed for such use and has a rigid tow bar. Allow for more stopping distance when towing a trailer.

TRANSPORTING YOUR ATV

When transporting your ATV, KYMCO recommends to set the ATV in its normal operating position (level, on all four wheels) and use the following procedure:

1. Engage the parking brake and place the transmission in gear
2. Secure the ATV with hold-down straps rated to hold a load in excess of your ATV's weight

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

⚠ CAUTION

When attaching hold-down straps, care must be taken not to damage the ATV.

When transporting the ATV, make sure the parking brake (brake lever lock) is engaged, the transmission is in first gear, and the ATV is properly secured.

GASOLINE-OIL-LUBRICANT

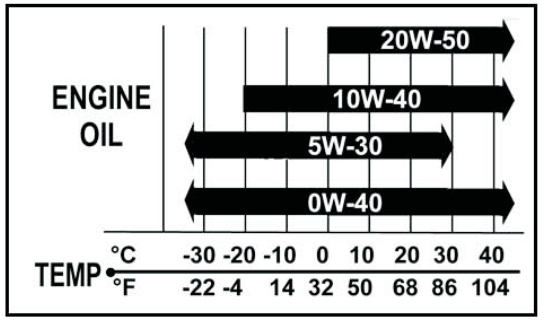
Recommended Gasoline

The recommended fuel to use in your ATV is regular unleaded gasoline with a 87 minimum octane rating. In many areas, oxygenates (either ethanol or MTBE) are added to the gasoline. Oxygenated gasolines containing up to 10% ethanol, 5% methane, or MTBE are acceptable fuel.

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

Recommended Engine/ Transmission Oil

The recommended engine oil to use in your ATV is an oil which is rated SE, SF, or SG under the API service classification. These oils meet all of the lubrication requirements of a KYMCO ATV engine. The recommended oil viscosity is SAE 5W-30. Ambient temperature should determine the correct weight of oil. See the viscosity chart below or consult an authorized KYMCO ATV dealer for guidance.



⚠CAUTION

Any oil used in place of the KYMCO recommended engine oil can cause serious engine damage.

Recommended Front Differential/Rear Drive Lubricant

The recommended lubricant for your KYMCO ATV (front differential and rear drive when applicable) is an SAE approved 80W-90 Hypoid fluid.

⚠CAUTION

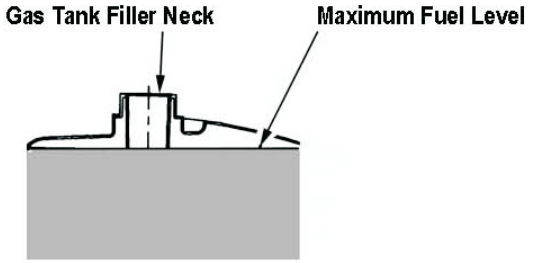
Any lubricant used in place of the KYMCO recommended lubricant can cause serious front differential/rear drive damage.

Filling the Gas Tank

⚠ WARNING

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

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



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

⚠ WARNING

Do not spill or overflow gasoline when filling the gas tank. This will greatly increase the risk of a fire hazard. Always allow the engine to cool before filling the gas tank.

⚠ WARNING

Do not overfill the gas tank.

Tighten the tank cap securely after filling the ATV's gas tank.

BREAK-IN PROCEDURE

New ATVs and renewed ATV engines require a "break-in" period. The first month is most critical to the life of your ATV's engine, and proper operation during this break-in period will help assure maximum life and performance from your ATV.

During your ATV's first ten hours of operation, always use a light throttle, keeping engine RPM well below the maximum. Varying the engine RPM during the break-in period allows the engine and transmission components to mate together so they will operate smoothly in the future. Applying some higher engine RPM's and other loads during the break-in period is not detrimental when done in moderation. Do not pull a trailer or haul very heavy cargo loads during the break-in period.

When the engine starts, allow it to warm up properly. Permit the engine to idle for several minutes until the it has reached normal operating temperature. However, do not allow the engine to idle for excessively long periods of time, as this additional heat can affect future engine integrity.

⚠ CAUTION

BRAKE PADS MUST BE BEDDED-IN TO ACHIEVE FULL BRAKING EFFECTIVENESS.

Braking distance will be greater until brake pads are properly bedded-in.

TO PROPERLY BED-IN THE BRAKES, USE FOLLOWING PROCEDURE:

* **Choose an area sufficient to safely accelerate your ATV to 30 mph and smoothly brake to a stop**
* **Accelerate to 30 mph, then compress the brake lever to decelerate to 0 - 5 mph**
* **Repeat procedure five times**

⚠ WARNING

Do not attempt sudden stops or put yourself into a situation with your ATV where a sudden stop will be required until the brake pads are properly bedded-in.

After the completion of the break-in period, your ATV's engine oil and oil filter should be changed. Other maintenance after break-in should include checking of all prescribed adjustments and tightening of all fasteners. It is your responsibility, as the owner and rider of your ATV, to arrange for and pay for this initial service.

Because of the technical ability and resources available to an authorized KYMCO ATV dealer, it is best to take your ATV to the dealer for service rather than attempting to perform this initial service yourself.

GENERAL MAINTENANCE

■ **NOTE: Proper maintenance of your ATV is important for optimum performance and safety. Follow the Maintenance Schedule listed in this manual and in other official KYMCO publications.**

If you become aware of any abnormal noises, vibrations, or improper function of any component of your ATV, DO NOT OPERATE THE ATV. Take your ATV to an authorized KYMCO ATV dealer for inspection and adjustment or repair.

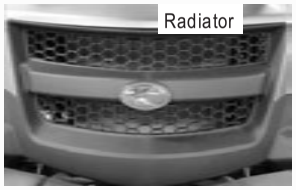
If you do not feel qualified to perform any of the maintenance procedures or inspections listed in this Owner's Manual, take your ATV to an authorized KYMCO ATV dealer for professional service.

■ **NOTE: The instructions and information on the following pages refer to specific items in the maintenance and care of your ATV.**

MAINTENANCE SCHEDULE					
Item	Page	Initial 100 miles after break-in	Initial 100 miles after 1 month	Initial 300 miles after 3 months	Initial 600 miles or 6 months
Battery	73	I	I		
*Engine nuts and bolts	-	I			I
*Valve clearance	-	I			I
Spark plug	74	I		I	I
	74	Replace every 4000 miles or 18 months			
Engine Coolant	61	I	I	I	I
Radiator condition/cleanliness	68	I		I	
Throttle cable	75	I	Inspect every time before riding		
Gas / vent hoses	60	I	Inspect every time before riding		
	60		Replace every 2 years		
Engine / transmission oil and filter	68	R			R
Air filter	76	I	I		
Gear lubricant	69	I	I		
(Front differential-rear drive)	69		Replace every 4 years		
V-Belt	77	I			I
Muffler / spark arrester	78				C
Tires / air pressure	77	I	Inspect every time before riding		
*Brake components	70/71	I	Inspect every time before riding		
Brake fluid	70	I	*Replace every 2 years		
Brake hoses	71	I	*Replace every 4 years		
*Steering	-	I	Inspect every time before riding		
*Suspension (Ball joint boots, drive axle boots front and rear, tie rods, differential and rear drive bellows)	-	I	Inspect every time before riding		
*Chassis nuts and bolts	-	I	T		
Throttle Body/EMS Sensor	-	I			I
Electrical connections	-	I			I
Headlight / taillight-brakelight	79	I	Inspect every time before riding		
Air filter housing drain	76	I	Inspect every time before riding		

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

RADIATOR


Radiator

Periodically check the radiator area for cleanliness.
Inspect radiating fins. They must be clean, free of mud, dirt, leaves and any other deposit that would prevent the radiator to cool properly.
Remove as much deposits as you can with your hands. If water is available in proximity, try rinsing the radiating fins.
If available, use a garden hose to rinse the radiating fins.

⚠CAUTION

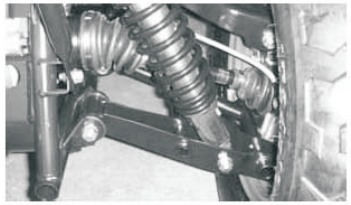
Never clean radiator with your hands when it is hot. Let the radiator cool down before cleaning.

SHOCK ABSORBERS

Each shock absorber on your ATV should be visibly checked weekly for excessive fluid leakage (some seal leakage is normal), cracks or breaks in the shock body, or a bent shock rod. If any one of these conditions is detected, replacement is necessary.

- **NOTE: If you ride your ATV in extremely cold weather (-10° F / -23° C or colder), a small amount of fluid leakage may occur on the shock rod. Unless the leakage is excessive, replacement of the shock absorbers is not necessary.**

The shock absorbers have spring force adjustment sleeves with five positions to allow the spring rate to be adjusted for different riding and loading conditions. If the spring rate is too soft or too stiff, adjust the sleeve according to the chart below.



- **NOTE: Use a spanner wrench to adjust the spring force adjustment sleeve to the desired position.**

Position	Spring Force	Setting	Load
1		Soft	Light
2	↓	↑	↑
3		↓	↓
4			
5	Stronger	Stiff	Heavy

GENERAL LUBRICATION

Cables

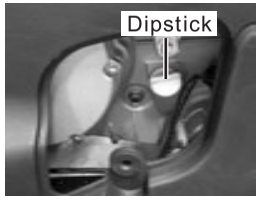
Under normal use, the cables do not require lubrication. However, it is advisable to lubricate the ends of the cables periodically with a quality cable lubricant.

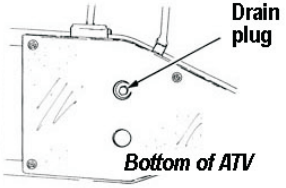
Engine/Transmission - Oil and Filter

- **NOTE: Refer to the recommended oil viscosity chart (on page 63) in this manual to select the proper engine oil for your ATV.**

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

1. Park the ATV on level ground
2. Remove the oil dip stick. Be careful not to allow dirt to enter the dip stick hole.





3. Remove the drain plug from the bottom of the engine and drain the oil into a drain pan
4. Remove the oil filter plug from the filter mounting boss (located on the front-right side of the transmission case) and allow the oil to drain from the filter completely
5. Using an oil filter wrench and a ratchet handle (or a socket or box-end wrench), remove the old oil filter and dispose of it properly. Do not reuse oil filter

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

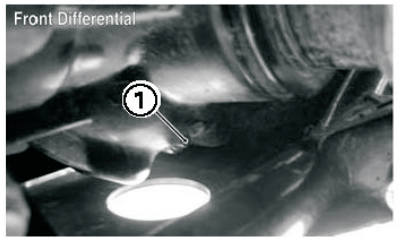
6. Apply some oil to the new filter's O-ring gasket and check to make sure it is positioned correctly, then install the new oil filter. Tighten it securely
7. Install the oil filter drain plug and tighten securely
8. Install the engine oil drain plug and tighten it securely. Pour the recommended oil in the filler hole. Install filler plug
9. Start the engine (while the ATV is outside on level ground) and allow it to idle for a few minutes
10. Turn the engine off and wait approximately one minute. Recheck the oil level and adjust as necessary
11. Inspect the area around the drain plug and oil filter for leaks

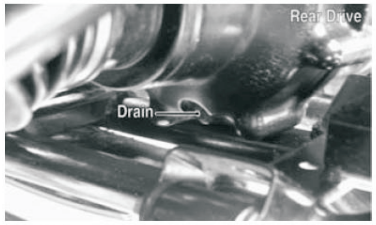
■ **NOTE: Dispose of the used oil and filter in an environmentally proper way.**

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

Inspect and change the gear lubricants in your ATV according to the Maintenance Schedule. When changing the lubricant, only use the approved SAE 80W-90 hypoid-type fluid and use the following procedure:

1. Park your ATV on level ground
2. Remove each fluid filler plug
3. Drain the fluid into a drain pan by removing the drain plug from the Front Differential (1)





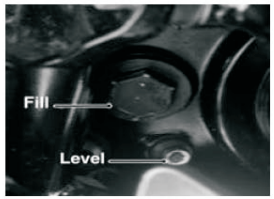
4. Drain the fluid into a drain pan by removing the drain plug from the Rear Drive (2)

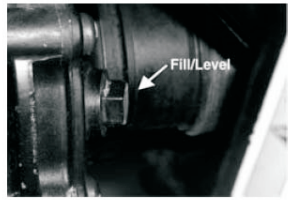
⚠ CAUTION

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

5. After all the fluid has been drained, reinstall the drain plugs and tighten them securely
6. Pour recommended oil into each filler hole

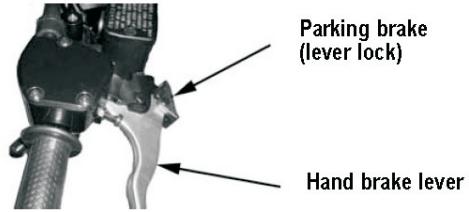
■ **NOTE: If the gear case has a level plug, add fluid up to the threads of the level plug. If your ATV's gear case only has a fill plug, add fluid to within 1 in. of the threads of the fill plug.**





7. Reinstall the fluid filler plugs and level plugs

HYDRAULIC RIGHT HAND BRAKE

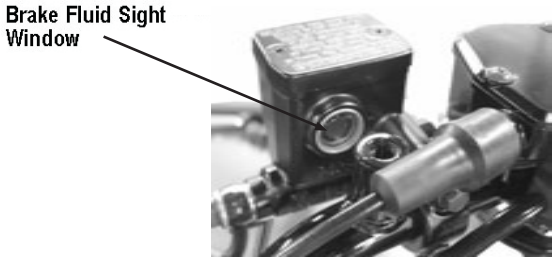


⚠ WARNING

Be sure to inspect the hydraulic brake system before every ATV ride. Always maintain brakes and the brake fluid according to the Maintenance Schedule

BRAKE FLUID - RIGHT HAND BRAKE

Check the brake fluid level in the brake fluid reservoir sight glass. If the level in the reservoir is not visible in the sight glass, add DOT 4 brake fluid.



■ **NOTE: If the sight glass appears dark, there is an insufficient amount of brake fluid in the reservoir.**

⚠ CAUTION

Be careful not to spill any fluid when filling the brake fluid reservoir. Brake fluid can damage the finish of plastic parts, so wipe away spilled fluid immediately.

Parking Brake (Brake Lever Lock)

Check to make sure the parking brake lock functions properly and that the brake (when engaged) locks the wheels.

1. Squeeze the right hand brake lever two or three times
2. Depress and hold the brake lever lock
3. Attempt to push the ATV

■ **NOTE: The parking brake (lever lock) must lock the wheels. If it doesn't, take your ATV to an authorized KYMCO ATV dealer for service.**

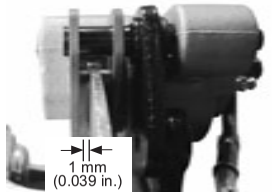
Brake Hoses

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

Brake Pads

The clearance between the brake pads and brake discs is adjusted automatically as the pads wear. The only maintenance that is required is to replace brake pads when they become worn. To check the thickness of the brake pads use this procedure:

1. Remove a front wheel
2. Measure the thickness of each brake pad
3. If the thickness of the pads is less than 1.0 mm (0.039 in.), take your ATV to a KYMCO ATV dealer to have brake pads replaced



4. Reinstall the wheel and tighten the lug nuts to 40 ft-lb.

REAR FOOT BRAKE

Your ATV's rear foot brake must be maintained periodically to remain fully functional.

⚠ WARNING

Be sure to inspect the rear brake system before each ride. Maintain the brakes according to the Maintenance Schedule.

■ **NOTE: The brake fluid reservoir is located under the seat.**

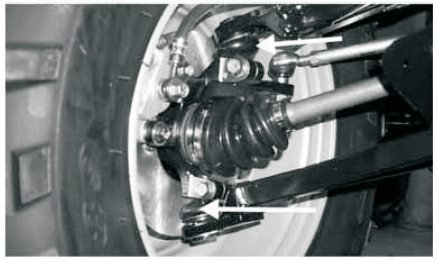
1. Press down on the rear brake pedal several times to check for firmness
2. If the pedal response is not firm, the system must be bled

■ **NOTE: Take your ATV to an authorized KYMCO ATV dealer for any brake system fluid bleeding.**

PROTECTIVE RUBBER BOOTS

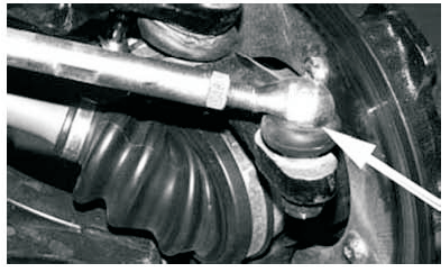
The protective boots over the ATV's drive shafts should be inspected periodically per the Maintenance Schedule.

Ball Joint Boots (Upper/Lower & Left/Right)



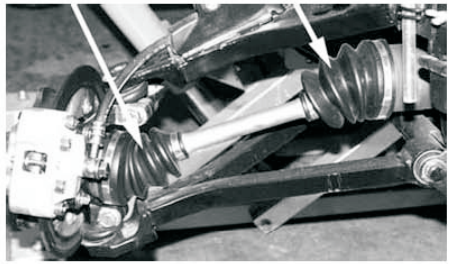
1. Secure your ATV on sturdy stand to elevate the front wheels
2. Remove both front wheels
3. Inspect the four ball joint boots for cracks, tears, or perforations
4. Check the ball joint for free-play by grasping the steering knuckle and turning it from side to side, and up and down.
5. If boot damage is present or ball joint free-play seems excessive, contact an authorized KYMCO ATV dealer for service

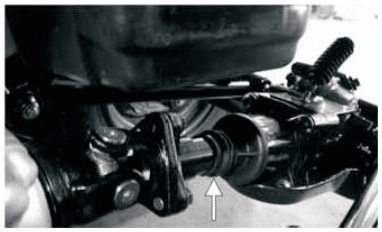
Tie Rod Boots (Inner/Outer & Left/Right)



1. Secure your ATV on a sturdy stand to elevate the front wheels
2. Remove both front wheels
3. Inspect the four tie rod boots for cracks, tears, or perforations.
4. Check the tie rod end free-play by grasping the tie rod near the end and attempting to move it up and down.
5. If boot damage is present or tie rod end free-play seems excessive, contact an authorized KYMCO ATV dealer for service

Drive Axle Boots





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

BATTERY

The battery is located under the seat of your ATV. After initial service, batteries require regular cleaning and recharging in order to deliver peak performance and maximum service life. The procedures listed in this manual are recommended for cleaning and maintaining lead-acid batteries. Always read and follow instructions provided with battery chargers and battery products.

■ **NOTE: You can perform your own battery maintenance if you are qualified to do so. If you do not feel qualified, take your ATV to an authorized KYMCO ATV dealer for battery service. As with all other periodic maintenance, you are responsible to arrange and pay for this service.**

Battery Capacity: 12V-18AH

1. Remove the battery hold-down and then disconnect the battery cables (negative cable first)
2. Remove the battery from the battery compartment. Then thoroughly wash the battery and the compartment with soap and water

■ **NOTE: If the battery posts, cable ends, or the battery case has a buildup of white/green powder residue, apply water and baking soda to neutralize this acid residue and rinse with warm soapy water.**

3. Use a wire brush to clean the battery posts and cable ends, removing all corrosive buildup. Replace any damaged cables
4. Use a multimeter to test the battery voltage. The voltage for a fully charged battery should be at least 12.5 DC Volts

■ **NOTE: If the meter indicates the proper voltage, the battery may be reinstalled in the ATV (see step 10).**

5. If the meter indicates low voltage, charge the battery using the guidelines on the following page

⚠ WARNING

Battery service must be performed in an area free of any sparks, open flame, cigarettes, or any other flame. Always wear safety glasses. Protect skin and clothing when handing a battery. When servicing battery in enclosed space, keep the area well-ventilated. Make sure the battery venting is not obstructed.

A. When using an automatic battery charger, always follow the charger manufacturer's instructions.

B. When using a constant-current battery charger, refer to the Battery Charging Chart on this page

⚠ CAUTION

Never exceed the battery's standard charging rate.

⚠ WARNING

An battery overheated from improper charging could explode causing severe injury or death. Always monitor charging times and charge rates carefully. Stop charging if the battery becomes very warm to the touch. Allow it to cool before resuming charging.

Battery Charging Chart (Constant-Current Charger)

Battery Voltage (DC)	Charge State	Charge Time Required (at 1.5-2.0 Amps)
12.5 or more	100%	None
12.2-12.4	75%-99%	3-6 hours
12.0-12.2	50%-74%	5-11 hours
11.0-11.9	25%-49%	13 hours (minimum)
11.5 or less	0-24%	20 hours (minimum)

⚠ CAUTION

To avoid damage from the ATV's electronic fuel injection parts, do not remove or install a battery wire when the ignition switch is at the "ON" position.

6. After charging the battery for the specified time, remove the battery charger and allow the battery to sit and cool for 1 to 2 hours
7. Test the battery voltage again. The meter should read at least 12.5 DC Volts. If the voltage is as specified, the battery is ready to be reinstalled in the ATV

■ **NOTE: If voltage in step 7 is below specifications, charge the battery an additional 1 to 5 hours and retest. If the voltage and the electrolyte level is proper, then the battery can be reinstalled in the ATV.**

8. Reinstall the battery into the battery compartment and apply a light coat of dielectric grease on the battery posts and cable ends

⚠ CAUTION

Before installing the battery, make sure the ATV's ignition switch is in the OFF position.

9. Connect the battery cables (positive cable first) and reattach the battery hold-down

⚠ CAUTION

Connecting the battery cables in reverse (positive to negative and negative to positive) can cause serious damage to the electrical system.

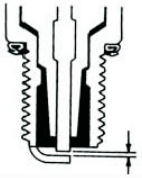
SPARK PLUG

Your ATV is equipped with a specific spark plug (see the specifications chart for the correct spark plug). The appearance of the insulator on a used spark plug will help determine if it is the proper one for your ATV.

A light brown insulator indicates that the spark plug is correct. A white or dark insulator indicates that the engine may need to be serviced or the carburetor may need to be adjusted. Consult an authorized KYMCO ATV dealer if the plug insulator is not a light brown color.

To help prevent cold weather fouling (a buildup of carbon and unburned fuel on the spark plug) make sure you thoroughly warm up your ATV's engine before riding.

Before inspecting a spark plug, clean the area around the spark plug to prevent dirt from entering the engine when removing or installing the spark plug.



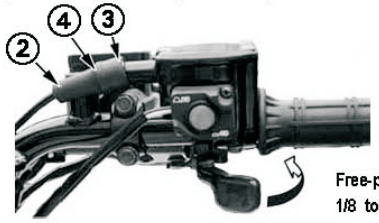
Adjust the spark plug's ground electrode gap to 0.028- 0.032 in. (0.7-0.8 mm). Use a wire-type feeler gauge to check the gap.

When installing a spark plug, be sure to tighten it securely. A new spark plug should be tightened 1/2 turn once the washer contacts the cylinder head. A used spark plug should be tightened 1/8 -1/4 turn once the washer contacts the cylinder head.

THROTTLE CABLE ADJUSTMENT

Follow this procedure to adjust your ATV's throttle cable free-play:

1. Slide the rubber boot (2) back and loosen the jam nut (3) from the throttle cable adjuster
2. Turn the adjuster (4) until the throttle lever has the proper free-play of 1/8 to 1/4 in. (3 - 6 mm).



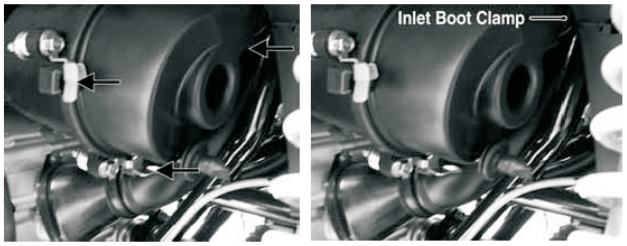
Free-play
1/8 to 1/4 in. (3 - 6 mm)

3. Tighten the jam nut against the throttle cable adjuster securely and slide the rubber boot back over the adjuster

AIR FILTER

The air filter element inside the air filter housing must be kept clean to provide good engine power, gas economy and to prevent premature engine wear. If you use your ATV under normal conditions, service the filter at the intervals specified. If you ride it in dusty, wet, or muddy conditions, inspect and service the filter more frequently. Use the following procedure to remove the filter and then inspect and clean it:

1. Rotate the three latches to release the filter housing cover, then loosen the inlet boot clamp



2. Remove the filter housing cover and air filter element
3. Fill an adequately sized wash pan with a nonflammable solvent and wash the element clean of debris
4. Squeeze the element by pressing it between the palms of both hands to remove excess solvent. Do not twist or ring-out the element or you may damage it
5. Dry the element
6. Put the element into a plastic bag. Pour air filter oil into the bag and work the oil into the element
7. Squeeze the element to remove excess oil

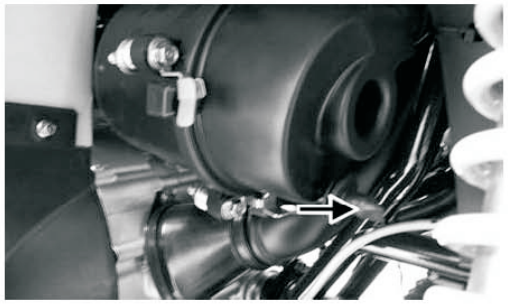
⚠CAUTION

A torn air filter can cause damage to your ATV's engine. Dirt and dust may get inside the engine if the element is torn. Carefully examine the element for tears before and after cleaning it. Replace the element with a new one if it is torn or damaged in any way.

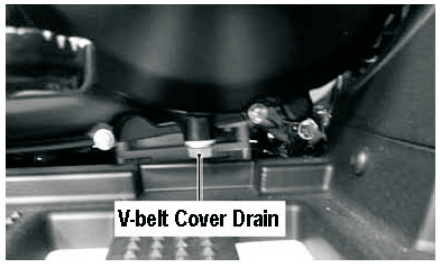
8. Clean any dirt or debris from inside the air cleaner. Be sure no dirt enters the carburetor.
9. Reinstall the air filter and cover.
10. Reconnect the inlet boot and tighten the clamp securely

AIR FILTER HOUSING DRAIN

You should occasionally drain any fluid that has accumulated in your ATV's air filter housing. Do this using the rubber-flap drain valve located on the side of the housing. Squeeze the flap to allow fluid to drain from the housing. Inspect the drain to make sure it is not blocked with debris and it is sealing properly.



DRAINING THE V-BELT COVER



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

1. Place your ATV on a level surface.
2. Remove the drain bolt from the cover to allow fluid to drain out
3. Shift the range lever to the neutral position; then start the engine.
4. Increase and decrease engine RPM several times to force out any additional fluid, then stop the engine.
5. Reinstall the drain bolt and tighten securely

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

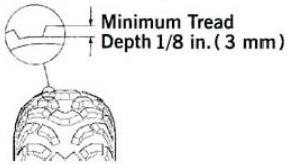
TIRES

⚠ WARNING

Always use the size and type of tires specified for your KYMCO ATV. Refer to the specifications chart in this manual for tire-related information and always maintain proper tire inflation pressure.

Tire Tread Condition

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



⚠ WARNING

The use of worn-out tires on your ATV can be dangerous and can increase the risk of an accident.

Tire Replacement

Your ATV has low-pressure tubeless tires. Air is sealed by the contact surfaces of the inner wheel rim and the tire bead. If either the inner wheel rim or tire bead are damaged, air may leak. Be extremely careful not to damage these areas when replacing tires. It is very important to use the proper tools when repairing or replacing tires to prevent damage to the tire, the tire bead or wheel rims. If you do not have access to the proper tools or lack the technical ability, have your tires serviced by an authorized KYMCO ATV dealer.

⚠ CAUTION

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

⚠ WARNING

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

Tubeless Tire Repair

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

WHEEL REMOVAL

1. Park your ATV on level ground and engage the parking brake
2. Loosen the lug nuts on the wheel to be removed
3. Elevate the ATV by placing a sturdy jack under the axle
4. Remove the lug nuts
5. Remove the wheel
6. Install the wheel and reinstall the lug nuts
7. Tighten the nuts in a crisscross pattern to 40 ft-lb. of torque
8. Remove the jack

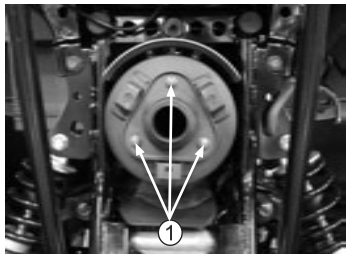
MUFFLER / SPARK ARRESTER

The muffler on your ATV has a spark arrester which must be periodically cleaned. Refer to the intervals listed in the Maintenance Schedule and clean the spark arrester using the procedure listed on this page.

⚠ WARNING

Before service, wait for the muffler to cool to avoid burns.

1. Remove the cap screws (1) securing the spark arrester assembly to the muffler and then remove the spark arrester



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

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

3. Install the spark arrester assembly and secure with the cap screws. Tighten the screws securely

LIGHT BULB REPLACEMENT

The wattage rating of each bulb is listed below. When replacing a burned bulb on your ATV, always use the same wattage rating.

Headlight 12V/35W

Taillight/Brakelight 12V/5W/21W

⚠ CAUTION

Only use bulbs that are specified in this manual as replacement bulbs on your ATV.

Headlight

■ **NOTE: The bulb portion of the headlight is fragile. HANDLE WITH CARE. When replacing the headlight bulb, do not touch the glass portion of the bulb. If the glass is touched, it must be cleaned with a dry cloth before installing. Oil residue from your skin on the bulb will cause the bulb to fail.**

To replace the headlight bulb, use the following procedure:

1. Disconnect the wiring connector from the back of the headlight
2. Grasp the bulb housing, turn it counterclockwise, and remove the bulb
3. Install the new bulb into the housing and rotate it completely clockwise
4. Reinstall the wiring harness connector

⚠ CAUTION

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

Taillight / Brakelight

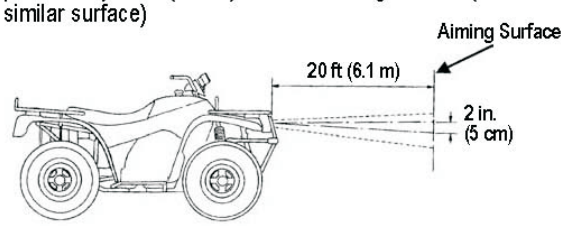
To replace your ATV's taillight/brakelight bulb, use the following procedure:

1. Rotate the socket counterclockwise and remove it from the housing
2. To remove the bulb from the socket, push in and rotate counterclockwise
3. To install the new bulb, push in and turn clockwise
4. Insert the socket into the housing and rotate it clockwise

CHECKING / ADJUSTING HEADLIGHT AIM

Your ATV's headlights can be adjusted vertically and horizontally. The projected center of the HIGH beam should to be used for vertical and horizontal aiming.

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

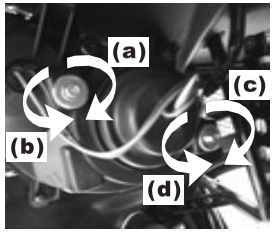


■ **NOTE: There should be an average operating load on your ATV when adjusting the headlight aim.**

2. Measure the distance from the floor to the center of each headlight
3. Using the measurements obtained in step 2, make horizontal marks on the aiming surface
4. Make vertical marks which intersect the horizontal marks on the aiming surface directly in front of the headlights
5. Switch on the ATV's lights. Make sure the HIGH beam is on. DO NOT USE LOW BEAM
6. Observe each headlight beam aim. Proper aim is achieved when the most intense beam is centered on the vertical mark 2 in. (5 cm) below the horizontal mark on the aiming surface
7. Adjust each headlight until you achieve the correct aim by turning the necessary adjuster clockwise or counterclockwise (see image on following page)

Headlamp Aim Adjuster

To **raise** a headlight beam, turn the adjusting bolt in direction (a).
To **lower** a headlight beam, turn the adjusting bolt in direction (b).
To **inner** a headlight beam, turn the adjusting bolt in direction (c).
To **outer** a headlight beam, turn the adjusting bolt in direction (d).



FUSES

The ATV's fuses are located in a power distribution module in front of the steering post under the electrical access panel. If there is any type of electrical system failure, always check the fuses first.

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

⚠CAUTION

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

ELECTRICAL OUTPUT TERMINALS

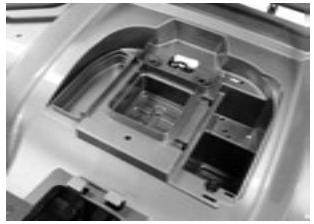
Your ATV has two output terminals for electrical accessories located on the front and rear wiring harnesses. The accessory plug is located on the front body panel.

⚠CAUTION

Always use electrical accessories on your ATV that draw less than 180 W.

STORAGE COMPARTMENT

Store this owner's manual in your ATV's storage compartment located under the seat.



GENERAL MAINTENANCE
PREPARATION FOR STORAGE

⚠CAUTION

Prior to storing your ATV, it should be properly serviced to prevent component rusting and deterioration.

KYMCO recommends the procedures listed on this page to prepare your ATV for storage. If you lack the technical ability to prepare your ATV for storage, consult an authorized KYMCO ATV dealer about performing this service.

1. Clean the seat cushion (cover and base) with a damp cloth and allow to the seat's surface to dry
2. Clean your ATV thoroughly by washing dirt, oil, grass, and other debris from the entire vehicle. Allow the ATV to dry thoroughly. DO NOT get water into the engine, air intake or exhaust
3. Drain the gas tank completely or add a fuel stabilizer to the fuel in the gas tank. Remove the air filter housing cover and air filter
4. Start the engine and allow it to idle, then spray KYMCO Engine Preserver into the air filter opening for a period of ten to twenty seconds. Turn off the engine and reinstall the air filter and housing cover

⚠CAUTION

If the interior of the air filter housing is dirty, clean it of any debris before starting the ATV's engine.

5. Drain the gasoline from the fuel tank
6. Plug the exhaust system outlet with a clean cloth
7. Apply some light oil to the upper steering post bushing and shafts of the shock absorbers
8. Tighten all nuts, bolts, cap screws, and screws - tighten these fasteners to the proper torque specification. Make sure that the rivets holding components together are tight - replace all loose rivets
9. Disconnect the battery cables (negative cable first) and then remove the battery. Clean the battery posts and cables. Store the battery in a clean, dry area were you can access it for periodic charging
10. Store your ATV indoors, parked in a level position

⚠CAUTION

Do not store your ATV outside in direct sunlight to avoid damage to the body work. Avoid using a plastic cover as moisture can condense on the ATV, causing rust and corrosion.

GENERAL MAINTENANCE
PREPARATION OF YOUR ATV FOR RIDING AFTER STORAGE

After storage, your ATV requires particular attention and adjustments to make sure you will enjoy many miles of trouble-free riding. To take your ATV out of storage, KYMCO recommends using the following procedure:

1. Clean your ATV thoroughly
2. Clean the engine. Remove the cloth from the exhaust system outlet
3. Check all control wires and cables for signs of wear or fraying. Replace any suspect items
4. Change the engine/transmission oil and filter
5. Charge the battery and test the voltage (refer to page 73) before installation. When installing the battery, connect the positive cable first

⚠CAUTION

Before installing the battery, make sure the ignition switch is in the OFF position. Connect the positive cable to the battery first.

6. Inspect the front and rear brake systems. Verify the good condition of the brake fluid, pads and the controls -
7. Verify the proper operation and adjustment of all controls, headlights, taillight, brakelight, and the headlight aim - adjust or replace items as necessary
8. Check the tire pressures - inflate the tires to the recommended pressure
9. Tighten all nuts, bolts, cap screws, and screws - tighten these fasteners to the proper torque specification. Make sure that the rivets holding components together are tight - replace any loose rivets
10. Make sure the steering moves freely and does not bind
11. Check the spark plug - clean or replace as necessary
12. Follow the recommendations listed in the Pre-Ride Inspection

MAINTENANCE RECORD

DATE	MILEAGE	SERVICE PERFORMED & NOTES

U.S. EPA EMISSION CONTROL STATEMENT/ WARRANTY COVERAGE

(U.S. Only)

STATEMENT/WARRANTY

KYMCO warrants to the original retail purchaser, and each subsequent purchaser, that all U.S. EPA-certified KYMCO ATV's are designed, built, and equipped to conform to all U.S. EPA Emission Control Regulations. Please read this statement completely.

Your authorized KYMCO dealer will repair or replace any defective emission-related component at no cost to you for parts or labor during the warranty period. You may have non-warranty service performed by any repair establishment that uses equivalent components and appropriate service techniques. Regulations exist that provide significant civil penalties for any tampering that would cause your ATV to no longer meet U.S. EPA emission standards.

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

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

WARRANTY PERIOD

The emissions warranty period for this ATV begins on the original date of sale (the same date as the start of the vehicle's Limited Warranty coverage) and continues for 30 months, or 3,100 miles, whichever comes first.

COVERED COMPONENTS

The emissions warranty covers major emissions control components and emission-related components as listed here:

Engine Management and Sensors
Barometric Pressure Sensor
Camshaft Position Sensor
Engine Control Unit (ECU)
Engine Coolant Temperature Sensor
Intake Air Temperature Sensor
Manifold Absolute Pressure Sensor
Oxygen Sensor
Throttle Position Sensor
Crankshaft Position Sensor

Ignition System
Connectors Ignition Coil
Knock Sensor System
Spark Plugs
Capacitive Discharge Ignition (CDI) Module
Magneto Pick-Up

Fuel/Air System
Fuel Injectors
Fuel Pressure Regulator Carburetor(s)
Turbocharger Assembly
Air Bypass Valve
Turbo Waste Gate Control Valve
Crankcase Ventilation System
ISC Valve

Miscellaneous Items Used in Aforementioned Systems
Switches
Grommets
Clamps
Hoses
Ties
Gaskets
Wiring

VEHICLE OWNER'S RESPONSIBILITIES

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