



### UXV 450i EPS OFF ROAD

Owner's Manual

### Dear KYMCO UXV 450i EPS Users:

Thank you for purchasing this KYMCO **UXV 450i EPS** and welcome to the family of KYMCO **UXV 450i EPS** riders. To enjoy safety and more pleasant riding, become thoroughly familiar with this owner manual before you ride the **UXV 450i EPS**. Your safety depends not only on your own alertness and familiarity with the **UXV 450i EPS** but also the UXV mechanical condition. A pre-ride inspection before every outing and regular maintenance are essential. The quality of each KYMCO **UXV 450i EPS** is guaranteed.

Note: The information and specifications stated in this manual are for reference only and subject to change without notice.

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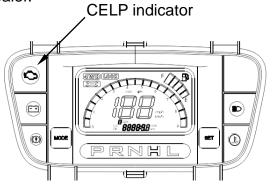
#### Battery & EFI Damage Alert

#### **WARNING**

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

#### **CELP** indicator:

When the CELP is lighted, it may indicate that a fault has been detected in the vehicle's EFI or electrical system and requires immediate inspection by a KYMCO dealer.



#### **Dangerous Alert**

#### **CAUTION:**

#### **♦POTENTIAL HAZARD**

Operating your UTV in areas with tall or loose vegetation.

#### **♦WHAT CAN HAPPEN**

Combustible materials such as tall grass or reeds .exposed to the exhaust system's hot components could result in a fire.

#### **♦HOW TO AVOID THIS HAZARD**

Clear away plant debris or other materials away from the exhaust system Use care as the exhaust system can get very hot.

#### This vehicle can be dangerous to operate.

An impact or rollover can occur quickly even during routine maneuvers such as turning and driving on hills or over obstacles, if you fail to take proper precautions.

For your safety, understand and follow all the warnings contained in this Owner's Manual and labels on this vehicle.

Keep this Owner's Manual with this vehicle at all times.

## Failure to follow the warnings contained in this manual can result in serious injury or death.

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



**WARNING** 

Indicates a strong possibility that serious injury or death may result if instructions are not followed.



Indicates a possibility that equipment or property damage could result if instructions are not followed.

Note: Gives helpful information

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

- Always drive slowly and be extra careful when operating on unfamiliar terrain. Always be aware of various terrain conditions when operating this vehicle.
- Never operate on extreme rough, slippery, or loose terrain.
- Always follow proper procedures for turning as represented in this manual. Begin turning at slow speeds before attempting to turn at faster speeds. Do not turn at high speeds.
- Never operate on hills too steep for your abilities or across the side of a hill. Practice on smaller hills before attempting larger hills.
- Always use proper procedures if you stall or roll backward when climbing a hill. To avoid stalling, maintain a steady speed when climbing a hill. In case of you stall or begin to roll downward, follow the procedure for braking described in this manual.
- Operation of this vehicle is restricted to people 16 years of age and older. No person under the age of 6 may ride as a passenger on this vehicle.

### **Safety First!**

- **Always** read the owner's manual carefully and follow the operating procedures described. Pay special attention to the warnings contained In the manual and on all labels posted on the vehicle.
- Never operate this vehicle with the canopy (roll cage) frame removed.
- Always wear the seat belt, helmet and eye protection when driving.
- Never operate this vehicle on a public roads. Be cautious when operating on non-public dirt or gravel roads, due to oncoming traffic.
- ♠Always avoid paved surfaces. This vehicle isn't designed to be used on paved surfaces and may seriously affect handling and control.
- ●Always follow this age prescription:

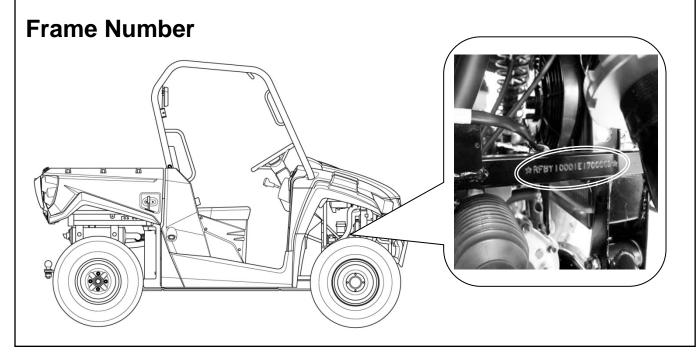
  Operation of this vehicle is restricted to people 16 years of age and older.

  No person under the age of 6 may ride as a passenger on this vehicle.
- **Always** keep combustible materials away the exhaust system. Exposure to the hot components could result in a fire.

### **Serial Number Locations**

This vehicle has 2 serial numbers: The frame number and Engine serial number.

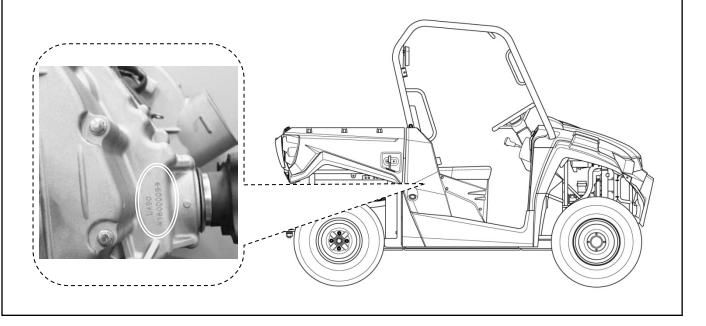
The frame number is located on the frame near right front wheel place.



### **Serial Number Locations**

The engine serial number is located on the left side of the engine crankcase.

### **Engine Serial Number**



# Ignition Switch Key, Glove Compartment Key.

Two keys come with this vehicle. Keep the spare in the safe place. The keys operate the ignition switch, glove compartment. Record the number located on the key incase you lose both keys.

KEY NUMBER:

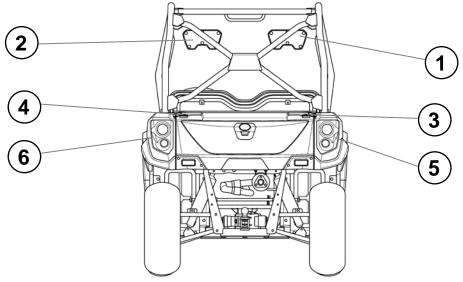


1.Ignition Switch

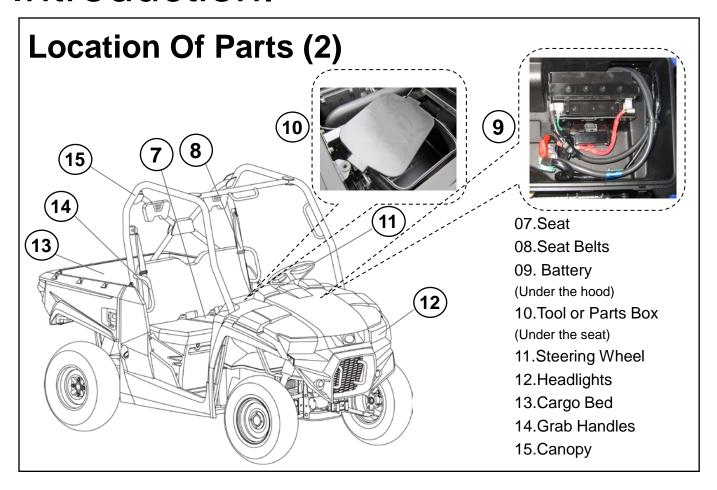


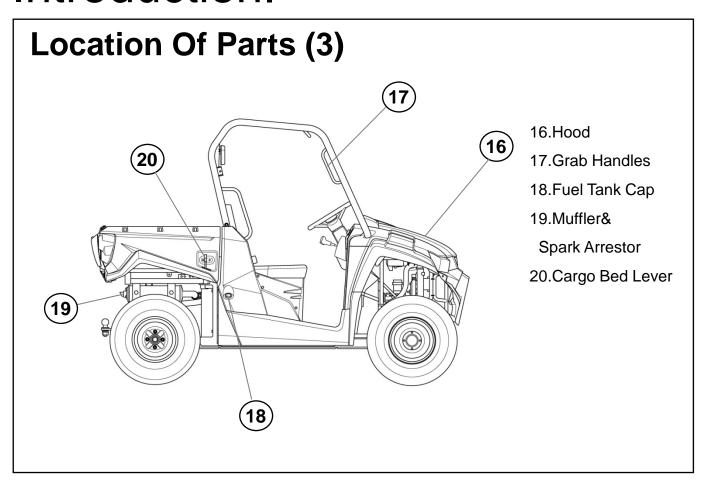
2. Glove Compartment

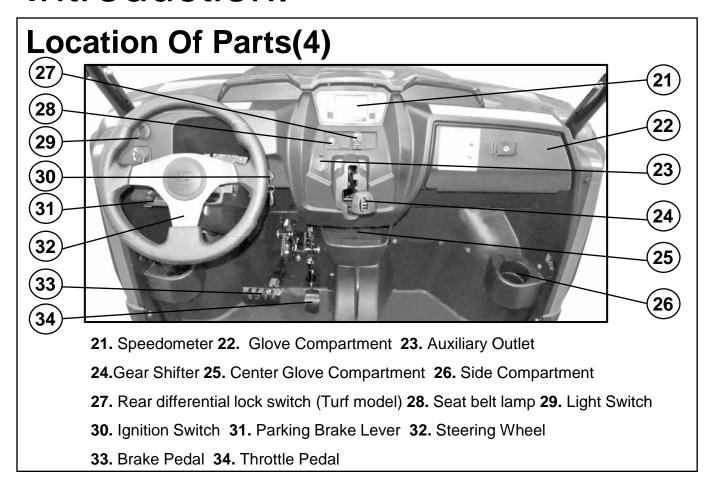
### **Location Of Parts (1)**



- 1.Right Head Cushion 2.Left Head Cushion 3.Right Latch Handle
- 4.Left Latch Handle 5.Right Tail /Brake Light 6.Left Tail / Brake / Back up Light







### **Warning Labels Location**



• Plan for hills, rough terrain, ruts, and other changes in traction and terrain, Avoid payed surfaces

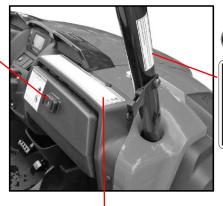
· Avold side hilling (riding across siopes). NEVER operate on hills greater than 15 °



severe injuries and death.

#### Be Sure Riders Pay Attention and Plan Ahead

if you think or feel the vehicle may tip or roll, reduce your risk of injury: . Keep a firm grip on the steering wheel or handholds and brace yourself. . Do not put any part of your body outside of the vehicle for any reason.



#### **A WARNING**

VEHICLE ROLLOVER COULD CAUSE SEVERE INJURY OR DEATH.

THIS STRUCTURE IS NOT A CERTIFIED ROLLOVER PROTECTIVE STRUCTURE (ROPS) AND MAY NOT PROTECT OCCUPANTS IN ACCIDENTS AND ROLLOVERS.

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#### **WARNING**

IMPROPER TIRE PRESSURE OR OVER-LOADING CAN CAUSE LOSS OF CONTROL AND RESULT IN SEVERE INJURY OR DEATH.

- . WEAR A SEAT BELT WHEN RIDING IN THIS VEHICLE.
- . KEEP YOUR HANDS AND FEET INSIDE THE VEHICLE AND WATCH FOR BRANCHES, BRUSH, OR OTHER HAZARDS THAT COULD ENTER THE VEHICLE.
- ROLLOVER COULD CAUSE SEVERE INJURY OR DEATH. THE ROLL BAR AND SEATBELT CANNOT PROTECT OCCUPANTS IN ALL
- ACCIDENTS, INCLUDING ROLLOVER.

   DRIVE STRAIGHT UP AND DOWN INCLINES DRIVING ACROSS THE SIDE OF AN INCLINE INCREASES THE RISK OF OVERTURNS.

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

#### NEVER

- EXCEED THE VEHICLE LOAD CAPACITY OF 910 KG (2006 LBS).
- INCLUDES WEIGHT OF OPERATOR, PASSENGER, CARGO, ACCESSORIES, AND TRAILER TONGUE, MAXIMUM LOAD IN CARGO BED: 200KG(441 LBS). • WHEN LOADED-BACK DOWN A SLOPE AND APPLY BRAKES OR ACCELERATE
- · LOADING/TRAILER TOWING CARGO OR TRAILER CAN AFFECT STABILITY AND HANDLING. WHEN LOADED WITH CARGO OR TOWING A TRAILER
- REDUCE SPEED
- -ALLOW MORE ROOMS TO STOP -AVOID HILLS AND ROUGH TERRAIN
- -OPERATE IN LOW RANGE GEARS ONLY

**NEVER** use on public highways where a collision with cars or trucks can occur.

ALWAYS use an approved helmet

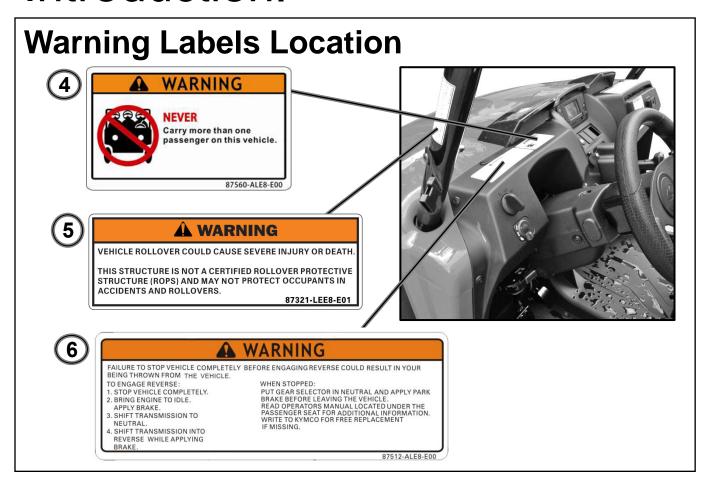
and protective gear

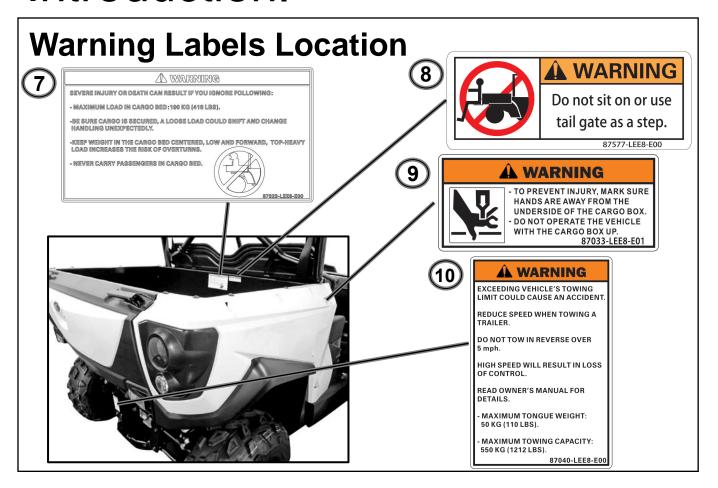
NEVER use with drugs

or alcohol Operators must be 16 years or older, have a valid drivers licence and minors must be supervised by an adult.



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### **Warning Labels Location**



#### **WARNING**



- KEEP HANDS, BODY AND OTHER PERSONS AWAY FROM CLOSING CARGO BOX.
- DO NOT OPERATE THE VEHICLE WITH CARGO BOX UP.

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#### **A WARNING**

- IMPROPER TIRE PRESSURE OR OVERLOADING CAN CAUSE LOSS OF CONTROL.
- LOSS OF CONTROL CAN RESULT IN SEVERE INJURY OR DEATH.
- OPERATING TIRE PRESSURE: SET WITH TIRES COLD. RECOMMENDED: FRONT: 70 kPa, (0.70 kgf/cm2), 10 psi
  - REAR : 98 kPa , (0.98 kgf/cm2) , 14 psi MINIMUM: FRONT: 63 kPa, (0.63 kgf/cm2), 9 psi
    - REAR : 91 kPa , (0.91 kgf/cm<sup>2</sup>) , 13 psi
- NEVER SET TIRE PRESSURE BELOW MINIMUM.
- TIRE MAY DISLODGE FROM RIM.
- GROSS VEHICLE WEIGHT RATING: 910 KG (2006 LBS)
- MAXIMUM WEIGHT INCLUDES OPERATOR, PASSENGER, CARGO AND TRAILER TONGUE WEIGHT.

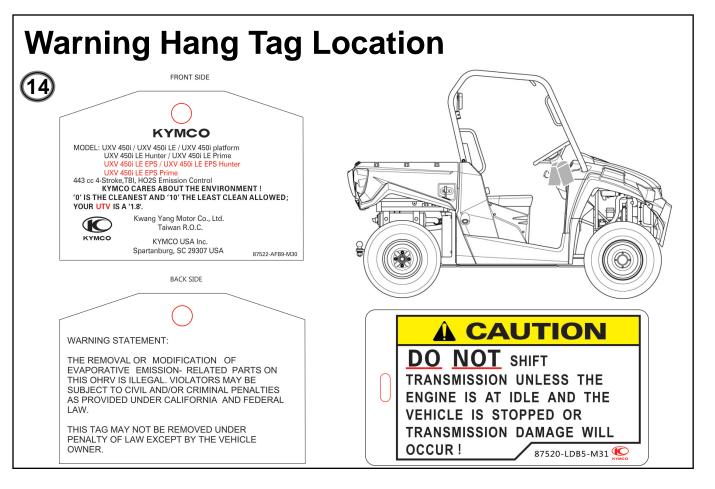
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Spartanburg, SE 29397 USA



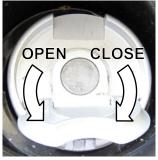
#### Fuel Level Inspection/Refilling

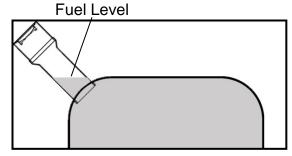
Check to make sure fuel level is sufficient. If the fuel level indicator is flashing "E", refill with nonleaded gasoline as soon as possible.

- 1. Turn the tank cap counterclockwise with hand to remove the cap.
- 2. Fill with nonleaded gasoline.
- 3. Turn the fuel tank cap clockwise to replace the cap.







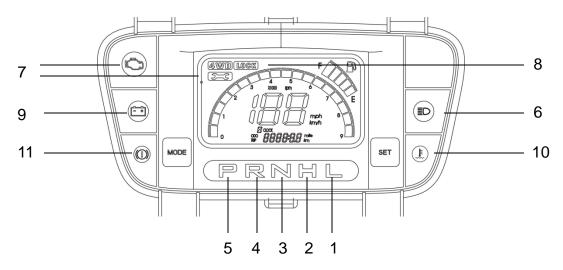


Be sure to stop the engine before refilling. Never refill the fuel tank near open flames or sparks. Do not overfill the fuel tank (See fuel level above).

#### **Indicator Lights**

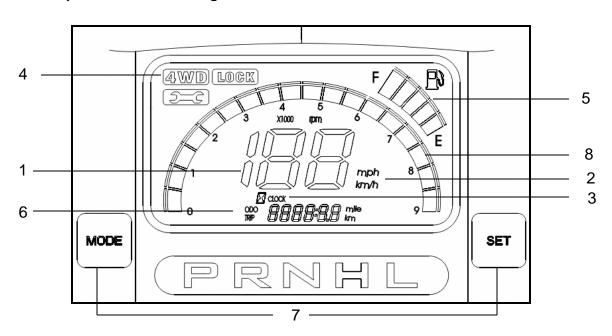
The indicator lights on the console display:

- 1. Lower gear 2. High gear 3. Neutral gear 4. Reverse gear 5. Parking gear
- **6.** High Beam indicator light **7.** FI system indicator light **8.** Differential lock indicator light **9.** Battery low voltage indicator light **10.** High coolant temperature indicator light **11.** Parking brake indicator light

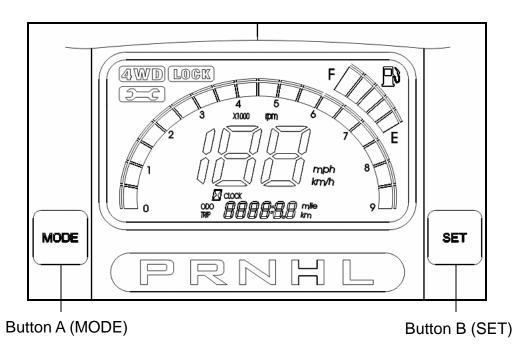


#### **Instruments and Indicators**

**1.** Speedometer **2.** Km/h or Mph **3.** Clock **4.** 4WD **5.**Fuel Gauge **6.**ODO Meter **7.** Adjust Button **8.** Engine Tachometer

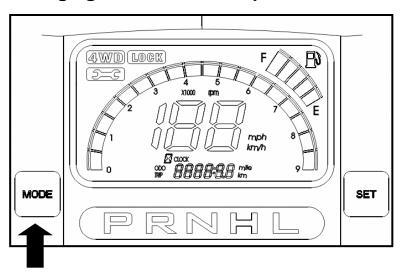


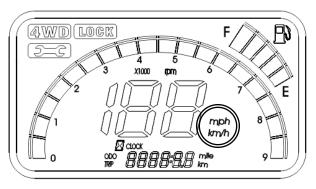
### **Operation Instructions for Multi-meter**



#### **Operation Instructions for Multi-meter:**

Changing the mode from mph or km/h



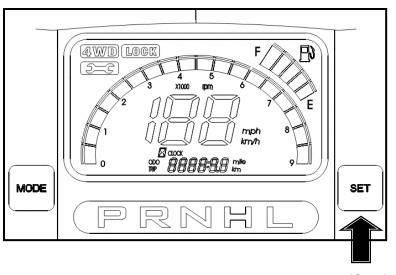


Press and hold button "A" for 2 seconds

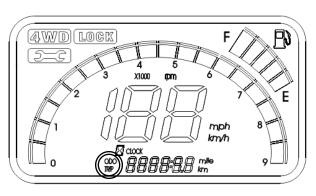
Button A (MODE)

### **Operation Instructions for Multi-meter:**

Shift function from ODO or TRIP



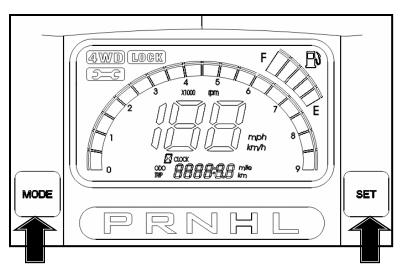




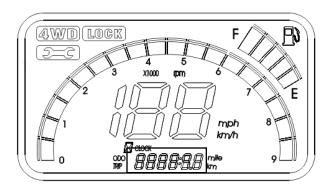
Press and hold button "B" for 2 seconds

#### **Operation Instructions for Multi-meter:**

To reset "Trip meter" to zero



Press and hold button "A" and "B" buttons simultaneously for 2 seconds

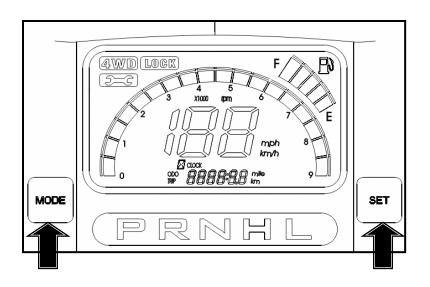


Button A (MODE)

Button B (SET)

### **Operation Instruction for Multi-meter:**

Setting the clock.

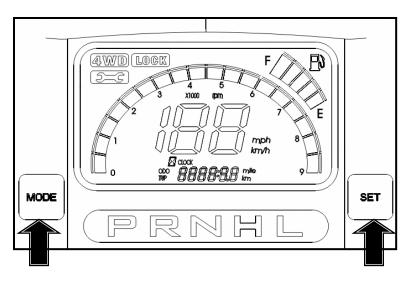


Press and hold button "A" and "B" for 5 seconds when set in the ODO mode. The clock will begin to flash. (continued)

Button A (MODE)

Button B (SET)

#### **Operation Instruction for Multi-meter**



When the clock is flashing, press button "B" to set the hour.
Press button "A" to adjust the

Wait for 2 seconds to finish time setting.

minutes.

Button A (MODE)

Button B (SET)

#### **Auxiliary Power Outlet**

The power outlet provides 12-volt s DC that may be used to power an auxiliary light or other optional 12 volt accessories.

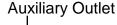
#### **Seat Belt Lamp**

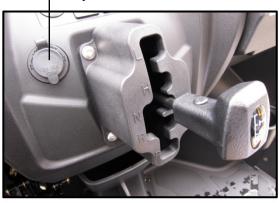
The seat belt lamp will remain lit while the engine is running to alert you to fasten the seat belt.

#### **Rear Differential Lock Switch**

(Applies to "Turf" model only)

When riding in two-wheel drive condition, this switch can lock the rear differential to make both of the rear wheels turn at the same speed at all times.







Seat Belt Lamp

Rear Differential Lock Switch

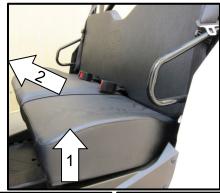
#### **Seat Removal and Installation**

- Pull up on front of seat and push toward the front of vehicle.
- Install the seat by sliding the tabs into the rear of the seat base.
- Push down firmly on the front of the seat until the pins are fully seated into the grommets.

#### **Seat Belts**

Your **UXV450i** is equipped with lapshoulder seat belts for the operator and passenger. The seat belts should be used by the driver and passenger each time the UTV is driven.

If you want to adjust your seat belt height. Remove the bolt and nut, adjust position to the desired height. Then tighten the bolt and nut.







Seat Belts

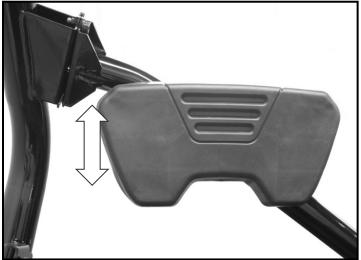
Three positions

### **Head cushion adjustment**

If you want to adjust the head cushion height, remove the four bolts and adjust to the position you need.

Then tighten the bolts.





#### **Gear Selector**

- 1.Lower Gear
- 2.High Gear
- 3.Neutral Gear
- 4.Reverse Gear
- 5.Parking Gear



To change gears, stop the vehicle and wait for the engine to return to idle speed, push the button and move the lever to the desired gear.

Do not attempt to shift gears with engine speed above idle or while the vehicle is moving.

Always place the transmission in gear with the parking brake locked whenever the vehicle is left unattended.

Maintaining shift linkage adjustment is important to assure proper transmission function.

See your dealer if you experience any shifting problems.



**Note:** When shifting between high and neutral gear, the button does not need to be pressed.

#### **Switches**

#### **Ignition Switch**

The ignition switch is a three-position, keyoperated switch, The key can be removed from the switch when it is in the **OFF** position.

**ON:** Electrical circuits are on

Electrical equipment can be used.

**OFF:** Engine off .All electrical circuits are

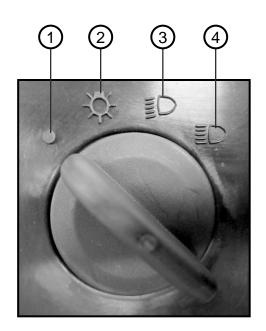
off except Acc.12V

**START:** Electrical starter is engaged by holding ignition switch key in this position. Upon release ,the key will return to the **ON** position.



## Switches Light Switch

- The ignition switch key must be in the ON position to operate the headlights.
- The switch has 4 positions.
- **1. Light off -** At this position, light is turn off.
- **2. Position light -** At this position , light is turn off
- **3. LO Headlight Beam-** When you select this position . low beam will illuminate.
- 4. **Hi Headlight Beam-** When you select this position .high beam will illuminate .High beam indicator light will turn on.



## Switches Drive Select Switch

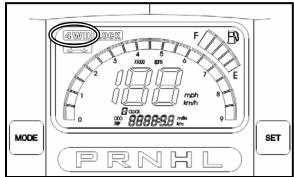
The 2WD/4WD allows the operator to operate the vehicle in either two-wheel drive (rear wheel) or four wheel drive(all wheels) For normal riding on flat, dry, hard surfaces, two-wheels drive should be sufficient. In situations when additional traction is necessary, four-wheel drive would be the desired choice.

To either engage or disengage the front wheels, turn the switch to the 4WD position or the 2WD position.

#### **Drive Select Indicator**

Displays 4WD when selected by the 4WD drive selector switch.





#### **Differential Lock mode**

The vehicle is equipped with a lockable differential that allows the operator to choose between an open differential or a closed differential in low traction situations. Turf version of model is equipped with both front and rear differentials.



#### The different functions as below charts.

Standard Version Model	Front Left & Right Wheels	Rear Left & Right Wheels
2WD	Different speed when vehicle turning.	Same speed when vehicle turning.
4WD	Different speed when vehicle turning.	Same speed when vehicle turning.
4WD LOCK	Same speed when vehicle turning.	Same speed when vehicle turning.

#### **A** WARNING

NEVER EXCEED 10 MPH(16 KPH) WHEN DIFFERENTIAL IS LOCKED LOSS OF CONTROL AND SEVERE INJURY OR DEATH MAY RESULT AT HIGH SPEEDS WHEN DIFFERENTIAL IS LOCKED.

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

### **Differential Lock mode**

Turf Version Model	Front Left & Right Wheels	Rear Left & Right Wheels	
2WD	Different speed when vehicle turning.	Same speed when vehicle turning.	Lock the rear differential
		Different speed when vehicle turning.	Unlock the rear differential
4WD	Different speed when vehicle turning.	Same speed when vehicle turning.	
4WD LOCK	Same speed when vehicle turning.	Same speed when vehicle turning.	

#### **A WARNING**

NEVER EXCEED 10 MPH(16 KPH) WHEN DIFFERENTIAL IS LOCKED. LOSS OF CONTROL AND SEVERE INJURY OR DEATH MAY RESULT AT HIGH SPEEDS WHEN DIFFERENTIAL IS LOCKED. Notice: Damage to the differential can occur if it is engaged while the vehicle is traveling at high speeds or while the rear wheels are spinning. Slow the vehicle to nearly stopped before engaging the differential.

### **Steering Wheel Adjuster (1)**

Pull steering wheel adjuster(1) to adjust the position of steering wheel.

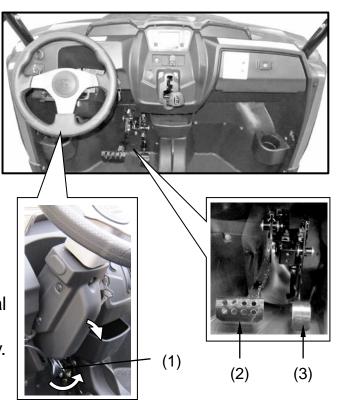
### **Brake Pedal (2)**

Step on the brake pedal to slow or stop or stop the vehicle.

### **Throttle Pedal (3)**

Step the pedal down slightly to increase engine speed.

Always check the throttle pedal in the original position before starting the engine. Make sure there's adequate throttle pedal free play.



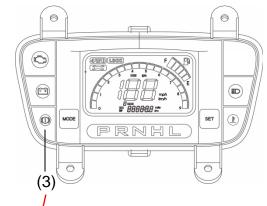
### Parking Brake(3)

To engage the parking brake, pull the parking brake lever outward until resistance is felt. Make sure the parking brake lever is functioning properly before each operation.

Note: If you forget to release the parking brake, an alarm will sound above 5 km/h, to help prevent damage to the brake

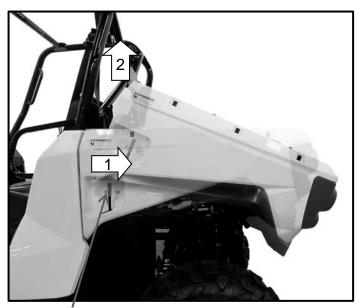
system.







Cargo Bed (Lift and lower the cargo bed)



Cargo Bed Lever

### To lift

Push the cargo bed release lever to right side, then slowly lift up cargo bed until it stops.

### To lower

Lower the cargo bed slowly to its original position and be sure the it is locked into place.

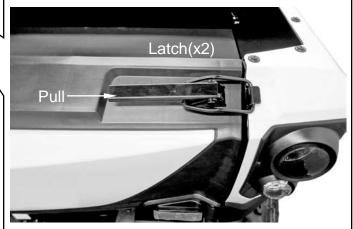
Maximum load in cargo bed: 440 lbs or 200 kg

## Cargo bed Tailgate (open)

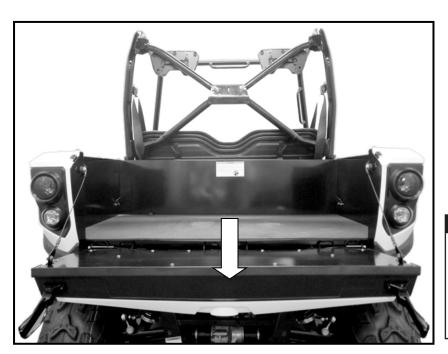


### To open

Unlock the latches (1), and then lower the tailgate.

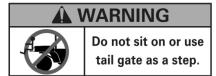


### Cargo bed tailgate ( close )



### To close

Place the tailgate in the original position, and then hook the latches.



#### **WARNING**

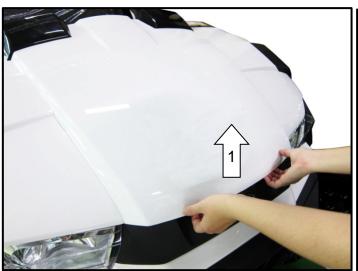
Never drive your UTV with the tailgate open or the cargo bed in the tilted position. This could cause instability which could lead to a tip over or an accident.

Tilting the cargo bed exposes the exhaust system. Always keep combustible materials away the exhaust system. Exposure to the exhaust system's hot components could result in a fire.

## **Hood (To Open)**

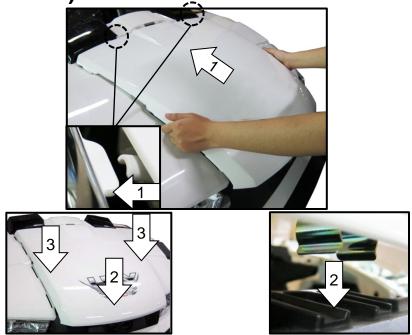
Pull up the hood from the front end.

Then remove the hood.





Features And Controls Hood (To Install)



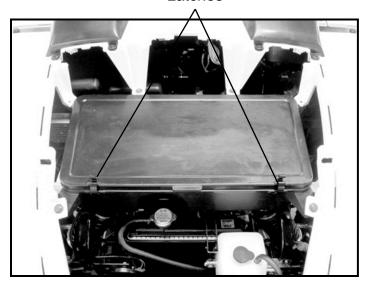
Insert the tabs(1) and tap the tabs(2)(3) to correct position, then check tightness.

Notice: Install incorrectly could cause the hood loosen and fall off when vehicle being driven.

### **Front Compartment (To Open)**

Release the latches and open the front compartment.

Latches

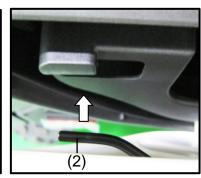




## Features And Controls Rear Storage Compartment









(To open) Pull the handle(1) and open the rear compartment.

(To close) Pull the handle, push ends of cover, release and push the handle to make sure latches(2) engage with the grooves firmly.

Notice: Install incorrectly could cause the latch loosen and the rear compartment to open.

### **Daily Safety Checks**

Check the following items each day before operation.

- 1.Fuel-----Enough fuel in tank, no leaks.
- **2.Engine Oil**-----Engine oil level is within the standard(when engine is cold),no leaks.
- 3. **Tires** ------Air pressure (when cold) and check tires crack, damage or abnormal wear. Check for any imbedded stones or other foreign particles in tread.
- 4.Front wheel Air pressure : 0.7kgf/cm²;10psi .
- 5.Rear wheel Air pressure : 0.98kgf/cm²;14psi.
- **6.Headlight & other indicate light** ----- Check the operation if they are normal.
- **7.Brake/Brake oil level** ----- Check the operation and oil level is normal.
- **8.Coolant** -----Coolant level between level lines (when engine is cold), no leaks.
- **9.Front gear case & Rear gear case ----**No oil leak.
- **10.EFI system** ----- Check Engine lamp is not illuminated.

## How to operate Start the Engine



### **WARNING**

Never run the vehicle in a closed area, such as a garage Exhaust gases contain carbon monoxide, a colorless, odorless, poisonous gas.

Breathing exhaust gas leads to carbon monoxide poisoning, asphyxiation, and death.



- 1. Fasten the seat belts, helmets and eyes protections. (both operator and passenger)
- 2.Set the parking brake.
- 3.Depress the foot brake and put the gear shift lever in the "**N**" (neutral) position.
- 4. Turn the ignition switch clockwise to the **START** position; then when the engine starts, release to the key to the **ON** position with foot on the brake.

Note: If the gear shift lever is not in the "N" (neutral) position, you MUST apply the brake then the engine can be started.

### **Driving Safely (Driving procedures)**

- 1. Sit on the seat and fasten the seat belt.
- 2. Wear the helmet and eyes protection when driving.
- 3. After starting the engine and allowing it to warm up, shift the transmission into gear.
- 4. Check your surroundings and determine the path of travel.
- 5. Release the parking brake.
- 6.Keeping both hands on the steering wheel, slowly depress the throttle with your right foot and begin driving. Vehicle speed is controlled by the amount of throttle opening & transmission shifting.
- 7.Drive slowly. Practice maneuvering and using the throttle and brakes on level surfaces.
- 8. Always install the safety net before driving.

Safety net

## How to operate Start the Engine



### **CAUTION**

Do not keep running the starter motor too long otherwise -- the starter motor may overheat causing severe damage.

### **Braking/Stopping**

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

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

### **Parking**

Parking vehicle follows the rules below:

- 1. After the vehicle stops, shift into neutral gear.
- 2.Set the parking brake.
- 3. Turn off the ignition key.
- 4.If you have to park on the hill, shift to low gear, set the parking brake, and block the wheel on the downhill side.

### **Driving Downhill**

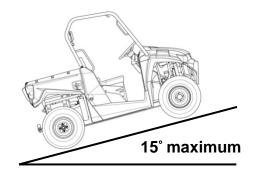
- 1. Hold both hands on the steering wheel make the vehicle stable.
- 2. Avoid steep hills.
- 3.Before driving down the hill, shift into low gear and release the accelerator to allow maximum engine brake. Do not use 4 wheel drive when driving down the hill. Engine braking can cause the front wheels to slide reducing steering control.

## **Driving Uphill**

whenever driving uphill, follow these precautions:

- 1. Always travel straight uphill.
- 2. Avoid steep hills(15° maximum)
- 3. Keep both feet on the floor.
- 4. Proceed at a steady rate of speed and throttle opening.

# NEVER OPERATE UP OR DOWN HILLS STEEPER THAN 15°



### **Crossing Water**

**UXV450i EPS** can only operate in water up to its floorboard. Stay away from fast flowing rivers. This vehicle tires can be buoyant. In deep water, the vehicle may lose traction due to floating.

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

### **Driving in Reverse**

Follow these guidelines below when operating in reverse gear:

- 1.Back slowly.
- 2. Apply the brakes lightly for stopping.
- 3. Avoid turning at sharp angles.
- 4. Always avoid backing downhill.
- 5. Never open the throttle suddenly while backing.
- 6. Always inspect left and right fields of vision before backing.

## **Emission Control System**

### **Crankcase Emission Control System**

This engine is equipped with a closed crankcase system.

Blow-by gases forced back to the combustion chamber by the intake system.

The system does not allow the blow-by gases to enter the atmosphere.

### **Exhaust Emission Control System**

The emission from the exhaust of this vehicle are controlled by engine design, including factory-set fuel delivery and ignition. KYMCO Exhaust Emission Control System including catalytic converter system. Please do not change any KYMCO design.

### Noise Exhaust Emission Control System

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

## **Emission Control System**

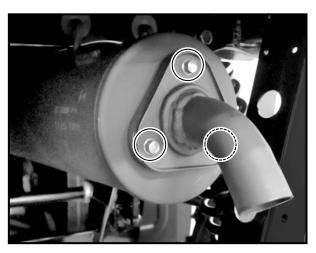
### **Spark Arrester**

Your UXV 450i EPS has a spark arrester.

The spark arrester be installed and functional when the vehicle operated on public lands.

### Remove method

remove 3 bolts



### Cleaning method

Use the iron brush cleaning carbon on the spark arrester •



## Maintenance And Lubrication **Engine Oil**

Always check and change the oil at the OWNER MANUAL standard intervals.

1. Position the vehicle on the level ground.

2.Start the engine and let it idle for 20~30seconds. 10°

4.Add fresh oil into the oil tank.

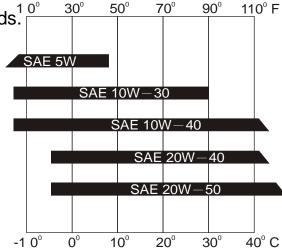
Make sure the engine oil at the specified level. Add oil as necessary. Check for leaks.

### Oil quantity:

Engine oil capacity: 2.85L (3.02 US qt.) Engine oil changed: 2.2L (2.3 US qt.)

Engine oil changed

with filter changed: 2.4L (2.5 US qt.)



Recommended engine oil classification: API Service SJ type or higher

## **Engine Oil**

Engine oil level measurement

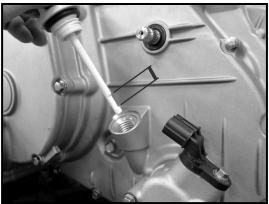
- A. Place the machine on a level place.
- B. Warm up the engine for several minutes and stop it.
- C. Unscrew the dipstick/filler cap and check the oil level should be within the standard range.
- Insert the dipstick and thread it in.

If the level is low, add oil to raise it to the proper level.

### NOTE:

Wait a few minutes until the oil level settles before checking.





Engine oil replacement

- 1. Place the machine on a level place.
- 2. Warm up the engine for several minutes and stop it.
- 3. Place a container under the engine.
- 4. Remove the oil fill cap (1) and oil drain bolt (2) to drain the oil.
- 5. Add oil to raise it to the proper level.
- 6. Insert the dipstick and thread it in.

### **CAUTION:**

Be sure no foreign material enters the crankcase.

### **CAUTION:**

When removing the oil filter cap, the compression spring, oil strainer and O-ring will fall out. Take care not to lose these parts.



(1) oil fill cap



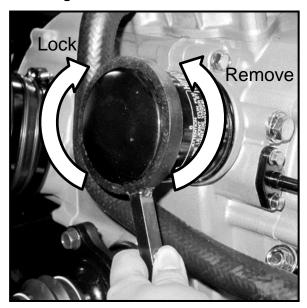
(2) oil drain bolt

### NOTE:-

Skip steps E to I if the oil filter cartridge is not being replaced.

Remove the oil filter cartridge with an oil cartridge wrench.





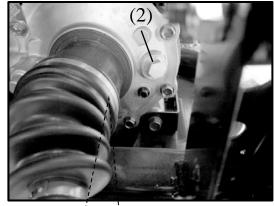
### Changing the front gear box oil

- 1. Place the vehicle on the a level surface.
- 2. Place a container under the front gear box to collect the used oil.
- 3. Remove the front gear box oil drain bolt(1) and front gear box oil filler bolt (2).
- 4. Install the front gear box oil drain bolt(1) and then tighten it to the specified torque.
- 5. Fill the front gear box oil with recommended oil.
- 6. Install the front gear box oil filler bolt(2).

### **Tightening torque**

Drain bolt: 5 N-m (0.5 kgf-m) Recommended oil: SAE 80

Oil quantity: Periodic oil change 0.25L





### Changing the rear gear box oil

- 1. Place the vehicle on the a level surface.
- 2. Place a container under the rear gear box to collect the used oil.
- 3. Remove the rear gear box oil drain bolt(1) and rear gear box oil filler bolt (2).
- 4. Install the rear gear box oil drain bolt(1) and then tighten it to the specified torque.
- 5. Fill the rear gear box oil with recommended oil.
- 6. Install the rear gear box oil filler bolt(2).

### **Tightening torque**

Drain bolt: 5 N-m (0.5 kgf-m)
Recommended oil: SAE 80

Oil quantity: Periodic oil change 0.23L

(1)

Note: UXV 450i TURF model equips rear differential same with front gear box.

### **BRAKE FLUID INSPECTION**

Check if the fluid level is between upper and lower level.

### **WARNING**

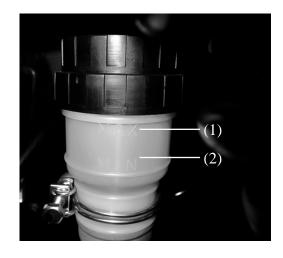
POTENTIAL HAZARD

Brake fluid contacting the skink or eyes.

WHAT CAN HAPPEN May cause irritation.

HOW TO AVOID THE HAZARD

Avoid contacting brake fluid with the skin or eyes. In case of contact, flush thoroughly with water and call a doctor if your eyes were exposed.

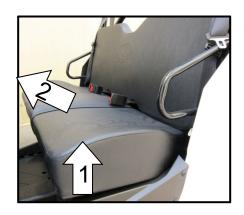


- (1) Upper level mark MAX
- (2) Lower lever mark MIN

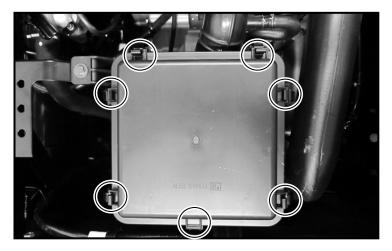
### **Air Cleaner**

Remove the seat.

Loosen the air cleaner latches.



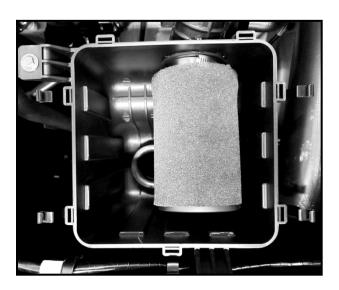
Seat



Latches

### **Air Cleaner**

Remove air cleaner cover. Remove air filter element.



Using high pressure air to clean air filter element.

Inspect the air filter element and replace it if damaged.

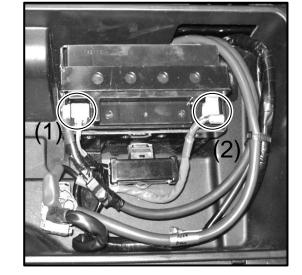


### **Battery Remove**

- 1. Make sure the ignition switch is **OFF.**
- 2. Remove the hood.
- 3. Disconnect the negative (-) terminal lead (1) from the battery first, then disconnect the positive (+) terminal lead (2).
- 4. Remove the battery.

### **Battery installation**

- 1. Install in the reverse order of removal.
- 2. After installing the battery, check if the battery cables are routed correctly.



#### NOTE:

First connect the positive (+) cable and then negative (-) cable to avoid short circuit.

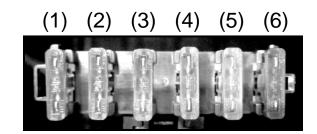
### **Fuse Replacement**

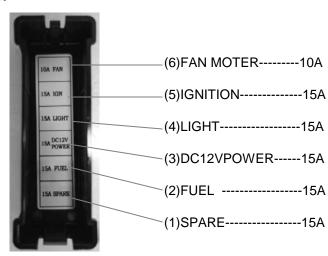
The fuse box stored beside the battery. To replace a fuse:

- 1. Make sure the ignition switch is **OFF**.
- 2. Open the fuse box cap.
- 3. Pull the old fuse out.
- 4. Push the new fuse in to the fuse holder.
- 5. Close the fuse box cap.

#### **CAUTION:**

To prevent accidental short-circuiting, turn off the main switch when checking or replacing a fuse.





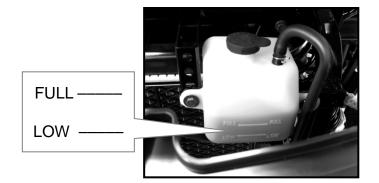
### **Cooling System Inspection**

- 1. Remove the hood.
- Check the coolant level in the coolant reservoir when the engine is cold as the coolant level will vary with engine temperature.
  - The coolant level should be between the full and low marks.
- If the level is low, remove the coolant reservoir cap, and then add coolant or distilled water to raise it to the specified level.

Recommended Coolant Solution Coolant Mixture Ratio: Water 50%:Antifreeze 50%(1:1)

### **NOTE:**

A permanent type of antifreeze is installed in the cooling system when shipped. It is colored green and contains ethylene glycol. It is mixed. It is mixed at 50% with water and has a freezing point of -35 °C(-31 °F)



### **Wheel Removal**

- 1. Elevate the wheel by placing a suitable stand under the frame.
- 2.Remove the nuts from the wheel.
- 3. Remove the wheel assembly.



### Wheel Installation

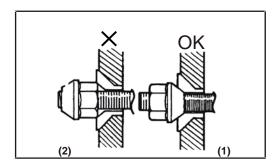
When reinstalling a wheel, tighten the wheel nuts in a crisscross(rather than a circular)pattern.

Wheel nut torque:

Front:55 N-m(5.5 kgf-m)

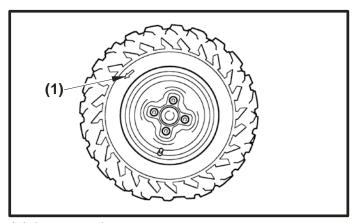
Rear:55 N-m(5.5 kgf-m)

Be sure the tapered side of the wheel nuts face the wheel rim.



#### NOTE:

The arrow mark  $\leftarrow$  on the tire must point toward the rotating direction of the wheel.



(1) Arrow mark

### **WARNING**

POTENTIAL HAZARD Installing wheels improperly.

WHAT CAN HAPPEN A wheel may come loose, possibly leading to an accident.

HOW TO AVOID THE HAZARD Carefully follow the instructions in this Owner's Manual when installing.

## Maintenance And Lubrication Spark Plug Inspection

The spark plug is an important engine component and is easy to inspect.

The condition of the spark plug can indicate the condition of the engine.

For example, a very white center electrode porcelain color could indicate an intake air leak or carburet problem for that cylinder.

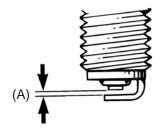
Do not attempt to diagnose such problems yourself.

Instead, take the machine to a KYMCO dealer. You should periodically remove and inspect the spark plug because heat and deposits will cause the spark plug to slowly break down and erode. If electrode erosion becomes excessive, you should replace the spark plug with one of the proper type.

Standard spark plug (NGK): CR7E

Before installing the spark plug, measure the electrode gap with a feeler gauge and adjust to specification.

Spark plug gap: 0.7~0.8 mm



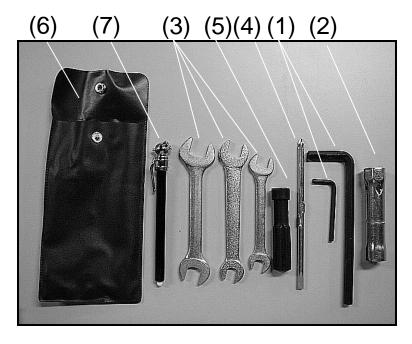
(A) Spark plug gap

### **Tool Kit**

The tool kit put down location at Right Glove Compartment.

The tool kit includes the following items:

- (1) Hexagon wrench
- (2) Spark plug wrench
- (3) 8/12; 10/14; 17/19 mm wrench
- (4) Screwdriver
- (5) Screwdriver handle
- (6) Tool bag
- (7) Air pressure gauge



MODEL UXV 450i EPS

**DIMENSIONS:** 

OVERALL LENGTH 106 in(2700 mm)

OVERALL WIDTH 56.69 in(1440 mm)

OVERALL HEIGHT 72.84 in(1850 mm)

SEAT HEIGHT 32.91 in(836 mm)

WHEELBASE 72.00 in(1829 mm)

GROUND CLEARANCE 10.00 in(254 mm)

MINMUN. TURNING RADIUS 157.48 in(4000 mm)

**BASIC WEIGHT:** 

WITH OIL AND FULL FUEL TANK Standard:515 kg Turf Model:551 kg

MAX. CARGO BED LOAD 190 kg
DRY WEIGHT 490 kg

MAX. WEIGHT CAPACITY 360 kg

**ENGINE:** 

ENGINE TYPE 4 -STROKE, SOHC

CYLINDER ARRANGEMENT SINGLE CYLINDER

BOREx STROKE 3.50X2.80 in(89X71.2 mm)

ACTUAL DISPLACEMENT 442.9cc COMPRESSION RATIO 9.1:1

STARING SYSTEM ELECTRIC STARTER

LUBRICATION SYSTEM WET SUMP

MODEL UXV 450i EPS

**ENGINE OIL:** 

CAPICITY/EXCHANGE/TYPE 2.85L/2.2L/5W-30

EXCHANGE WITH FILTER CHANGED 2.4L

FRONT GEAR BOX:

CAPICITY/EXCHANGE/TYPE 270ML/250ML/SAE80#

**REAR GEAR BOX** 

CAPICITY/EXCHANGE/TYPE 250ML/230ML/SAE80#
AIR FILTER: SPONGE ELEMENT

**FUEL:** 

TYPE UNLEADED GASOLINE

FUEL TANK CAPACITY 8.32 gal (32 L)

THROTTLE BODY:

TYPE/MANUFACTURER PTA1/KYMCO

**SPARK PLUG:** 

TYPE/MANUFACTURER CR7E-NGK SPARK PLUG 0.7~0.8mm

**CLUTH TYPE:** WET CENTRIFUGAL AUTOMATIC

MODEL UXV 450i EPS

TRANSMISSION:

PRIMARY REDUCTION SYSTEM V-BELT

SECONDARY REDUCTION SYSTEM SHAFT DRIVE

TRANSMISSION TYPE: CVT

TIRE:

TYPE TUBELESS
SIZE(FRONT) 25x 8-12
SIZE(REAR) 25x10-12
WHEEL MATERIAL STEEL

PRESSURE FR/RR 0.7/0.98(kgf/cm2) OR 10/14 psi

**BRAKES:** 

SYSTEM FRONT AND REAR UNIFIED

TYPE(FRONT)

TYPE(REAR)

OPERATION

DUAL DISC BRAKE

SINGLE DISC BRAKE

FOOT OPERATION

SUSPENSION:

FRONT SUSPENSION DUAL A-ARM REAR SUSPENSION DUAL A-ARM

SHOCK ABSORBER: COIL SPRING/OIL DAMPER

MODEL UXV 450i EPS

**WHEEL TRAVEL:** 

FRONT WHEEL TRAVEL 176mm
REAR WHEEL TRAVEL 172mm

**ELETRICAL**:

IGNITION SYSTEM DC, ECU AUTOMATIC CONTROL

GENERATOR SYSTEM 1. Rare earth A.C. generator or

2. Ferrite A.C.generator

BATTERY TYPE MF-VTX20L

BATTERY CAPACITY 12V18AH

**BULB VOLTAGE** 

**WATTAGE X QUANTITY:** 

HAEDLIGHT: 12V35/35W\*2 REAR LIGHT 12V21W/5W\*2

BRAKE LIGHT 12V5W\*2 POSITION LIGHT 12V5W\*2

Max. Wattage for Accessary

limitation 10W (Ferrite ACG model)

190W (Rare earth ACG model)

Note: The limitation is just for reference, using of accessories will void the vehicle warranty. In selecting and using accessories, you are personally responsible for your own safety and the safety of other persons involved.

UXV 450i EPS **MODEL SPECIFIED FUSES:** MAIN FUSE 30A **FAN MOTER** 10A **IGNITION** 15A 15A LIGHT DC12VPOWER 15A **FUEL** 15A **SPARE** 15A

#### PERIODIC MAINTENANCE/LUBRICATION

				EVE	EVERY	
ITEM	WHICHEVER COMES FIRST	mi	100	600	1200	
I I E IVI		Km	150	1000	2000	
	ROUTINE	MONTH	1	6	12	
Engine oil	•Replace (Warm engine before draining).		0	$\bigcirc$	0	
*Oil strainer	◆Clean.     ◆Replace if necessary.		0	0	0	
Engine oil filter cartridge	•Replace		0	$\bigcirc$	0	
Final gear oil	◆Check oil level/oil leakage     ◆Replace every 12 months.		0		0	
Differential gear oil	Check oil level/oil leakage     Replace every 12 months.		0		0	
Air filter element (for engine and *V-belt compartment)	Clean. (More often in wet or dusty areas.)  Replace if necessary.			0	0	
*Throttle body	Check idle speed/starter operation.     Clean if necessary.				0	
*Cylinder head cover breather system	Check breather hose for cracks or damage.     Replace if necessary.			$\circ$	0	
Spark plug	Check condition.     Adjust gap and clean.     Replace if necessary.		0	0	0	
*Fuel line	Check fuel hose for cracks or damage.     Replace if necessary.			0	0	
*Valves	One of the characters of the		0	0	0	

(Cont'd)

		INITIAL EVERY		ERY	
ITEM	WHICHEVER COMES FIRST	mi	100	600	1200
		Km	150	1000	2000
	ROUTINE	MONTH	1	6	12
*Brake	Check operation and brake fluid.     Replace brake pad if necessary.		0	0	0
*Coolant	Check coolant leakage. Replace if necessary. Replace coolant every 24 months.		0	0	0
*V-belt	Check operation.     Replace if damage or excessive wear.		0		0
*Exhaust system	Check leakage.  Retighten if necessary.  Replace gasket if necessary.			0	0
Spark arrester	•Clean			$\bigcirc$	0
*Wheels	Check balance/damage/runout.     Replace if necessary.		0	0	0
*Wheel bearings	Check bearing assembly for looseness/damage.     Replace if damaged.		0	0	0
*Steering system	Check operation. Replace if damaged. Check toe-in. Adjust if necessary.		0	0	0
*Drive shaft boots	Check operation.     Replace if damaged.			0	0
*Suspension	Check operation.     Correct if necessary.			$\bigcirc$	0

(Cont'd)

			INITIAL	EVE	ERY
ITEM	WHICHEVER COMES FIRST	mi	100	600	1200
I I CIVI		Km	150	1000	2000
	ROUTINE	MONTH	1	6	12
*Knuckle shafts/ Steering shaft	•Lubricate every 6 months.			0	0
*Fittings and Fasteners	Check all chassis fittings and fasteners.     Correct if necessary.		0	0	0

<sup>\* :</sup> It is recommended that these items be serviced by a KYMCO dealer.

<sup>\*\* :</sup> Lithium soap base grease.

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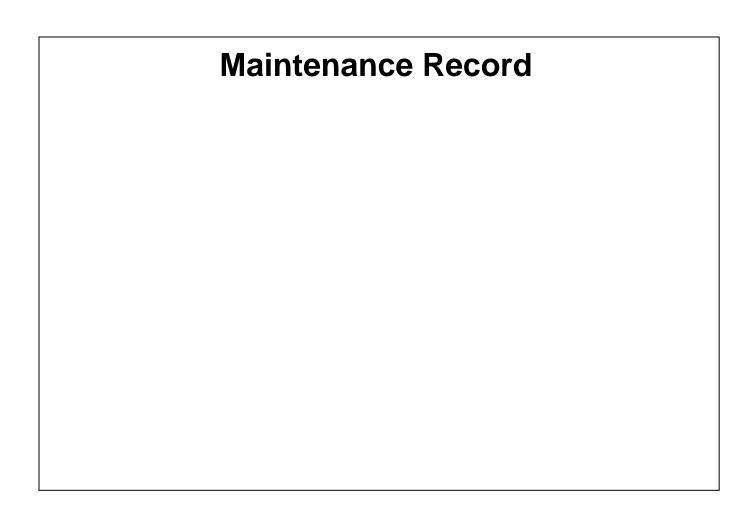
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