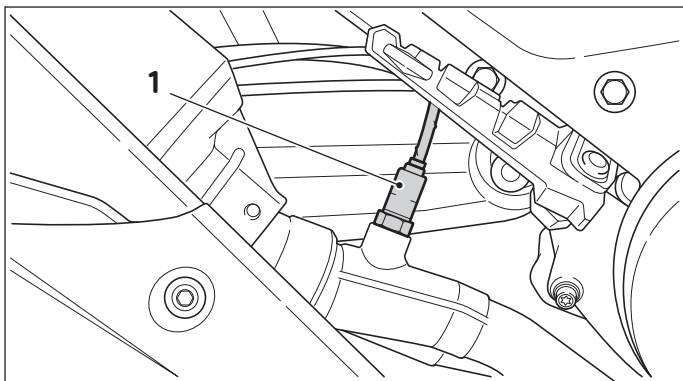


### O<sub>2</sub> Sensor



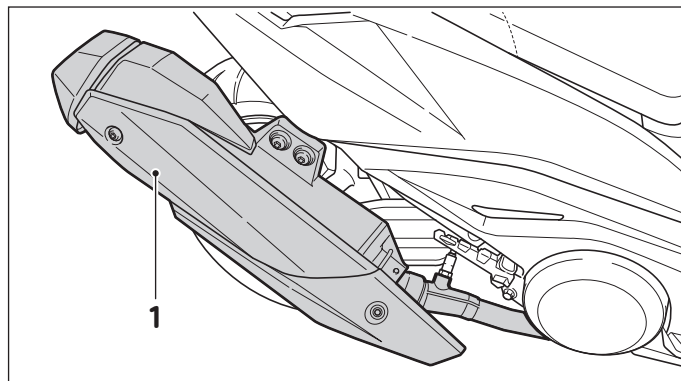
1: O<sub>2</sub> Sensor

This vehicle is provided with O<sub>2</sub> Sensor for reducing generation of pollutants in the exhaust gas.

#### **⚠ WARNING**

**Do not dismantle or replace O<sub>2</sub> Sensor by yourself, otherwise the O<sub>2</sub> Sensor may deteriorate or lose efficacy.**

### Muffler and Catalytic Converter



1: Muffler

Catalytic Converter is used for reducing generation of pollutants in the exhaust gas.

#### **⚠ WARNING**

**After using the scooter, the exhaust system becomes extremely hot due to heat from the exhaust gas**

To prevent fire or burn:

- ◆ Park the scooter properly so that pedestrian or children cannot reach.
- ◆ Do not park the scooter in the vicinity of flammables.
- ◆ Make sure the exhaust system has cooled off before performing any maintenance.

- ◆ Never turn off the main power switch while riding the scooter. Otherwise a great amount of non-burnt gas mixture will enter into muffler and combust there, damaging and burning the Catalytic Converter.
- ◆ Use only unleaded gasoline; leaded gasoline can result in aging and failure of Catalytic Converter.

## Exhaust Control System

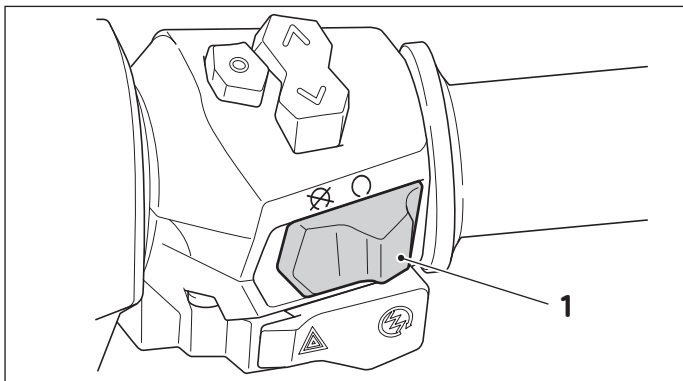
Complying with EPA Exhaust Emission Standard, the scooter is equipped with following parts in the Exhaust Control System:

- ◆ Electronic Control Unit (ECU)
- ◆ Crankcase Ventilation Valve
- ◆ Catalytic Converter
- ◆ Throttle Valve
- ◆ Various sensors:
  - Air Intake Temperature Sensor
  - Air Intake Pressure Sensor
  - Throttle Position Sensor
  - O<sub>2</sub> Sensor
  - Temperature Sensor
  - Reverse Sensor

## Proper Riding Method

### Starting the Engine

- ◆ Lift up Main Stand before starting the engine.
- ◆ Check oil and gasoline content before starting the engine.



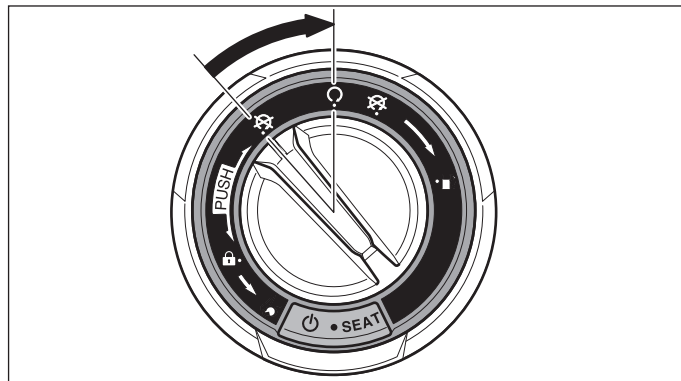
1: Engine Stop Switch

### Engine Stop Switch

- ⊗ : Engine will stop and cannot be started when setting switch to this position. Re-start of engine is only possible after setting the switch to “○” position.
- : The Engine can be started when setting the switch to this position. °

### Attention

- ◆ The Main Power is cut off when the Engine Stop Switch is set to the ⊗ position, therefore pulling the Brake Lever and pushing the Start Button will not activate the motor.
- ◆ The Engine Stop Switch is meant for a temporary engine stop only.

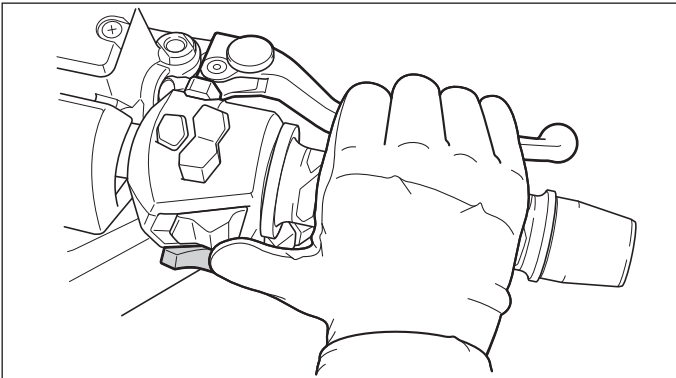


1. Unlock KEYLESS
2. Turn Main Switch to ON position.
3. Make sure the throttle grip is fully closed.
4. Make sure the Side Stand is retrieved.
5. Make sure the Engine Stop Switch is set to “○”

## Attention

When the vehicle is parked, make sure that **KEYLESS** is switched **OFF**; otherwise battery depletion may occur.

6. Hold-down the Front Brake Lever or Rear Brake Lever and press the Start Button to start the engine.



7. If starting is difficult, release the Start Button and wait for a few seconds before trying again. Each re-try shall not exceed 5 seconds, for preserving battery power.

## Attention

- ◆ **Keep finger off from Start Button immediately when engine starts.**
- ◆ **Never push the Start Button when engine is running, or engine parts may get damage.**

- ◆ **When starting the engine, Rear Brake Lever shall be set to braking state, Brake Light shall light up when the power is connected.**

Allow a brief warm-up after starting a cold engine (about 1-2 minutes), in mountains and cold areas, prolong the warm-up (about 3-5 minutes), for facilitating engine operation and a trouble-less riding.

## WARNING

- ◆ **Keep the Rear Brake Lever in braking state before riding started.**
- ◆ **The exhaust contains carbon monoxide which is harmful to health; avoid starting the vehicle in a narrow space or a poorly ventilated location.**

## Reducing Fuel Consumption

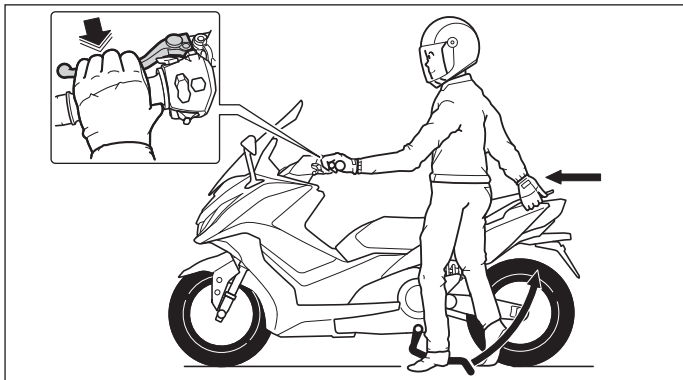
Proper riding habits may reduce fuel consumption of your scooter. Refer to the following methods for reducing fuel consumption:

- ◆ Avoid speeding up your scooter with a high rpm.
- ◆ Avoid running the engine in high rpm when not loaded.
- ◆ In case of prolonged idling due to a traffic light, traffic jam, or rail crossover block, stop the engine while waiting.

## Proper Riding Method

### Proper Riding Method

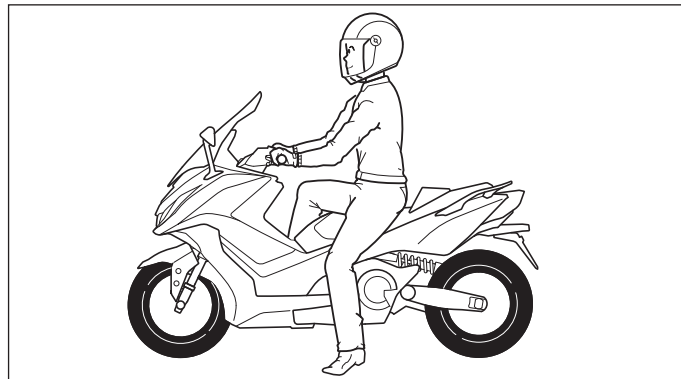
Keep the Rear Brake Lever in braking state and push the vehicle forward, the Main Stand will spring up automatically.



#### **⚠ WARNING**

- ◆ Keep engine rpm away from the red zone.
- ◆ After starting the engine, do not raise engine rpm while not advancing the vehicle, or danger may occur.

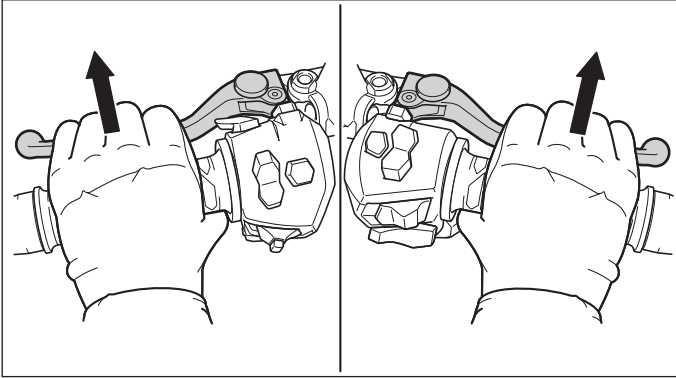
Boarding from the left side, sit upright; keep left foot standing on the ground to prevent toppling; adjust the Back Mirror to a proper angle.



#### **⚠ WARNING**

Before advancing, keep the Rear Brake Lever in braking state. **DO NOT** raise engine rpm arbitrarily.

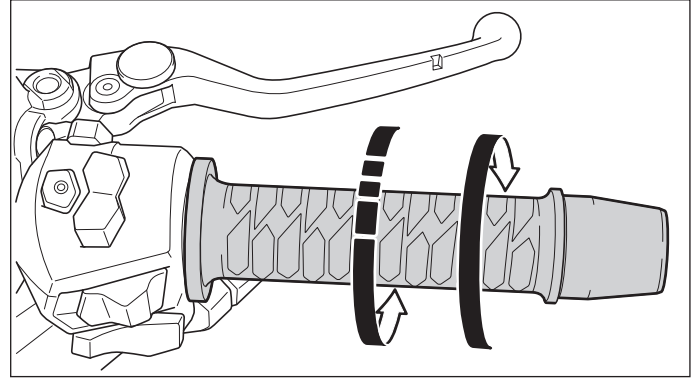
## Release Front and Rear Brake Levers



### **⚠ WARNING**

After releasing the brake, do not turn the Throttle Grip arbitrarily, or the vehicle may dash out dangerously.

Turn the Throttle Grip to adjust scooter speed.



Speed is controlled by adjusting the Throttle Grip.

Turn Speed increases.

Increase fuel (throttle) slowly

When taking off or riding on an up-slope, slowly turn the Throttle Grip to increase horsepower.

Return to original position

Speed decreases.

Be agile while returning the Throttle Grip.

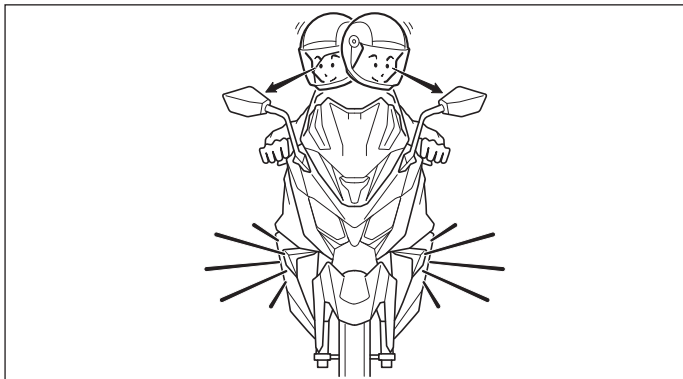
### **👁 Attention**

- ◆ For prolonging engine service life, do not speed up suddenly when the vehicle is still cold.
- ◆ Do not turn the Throttle Grip rapidly, or the vehicle may dash out.

# Proper Riding Method

## Proper Riding

Before taking off, switch on the winker, check traffic conditions both directions, slowly turn the Throttle Grip to start.



## Running-in a new engine

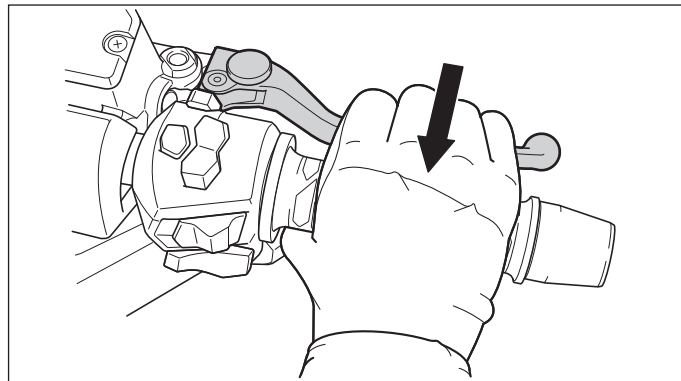
- ◆ Run-in Period of a new engine is 300km; keep speed under 80 km/h in this period.
- ◆ Avoid speeding-up rapidly.

## WARNING

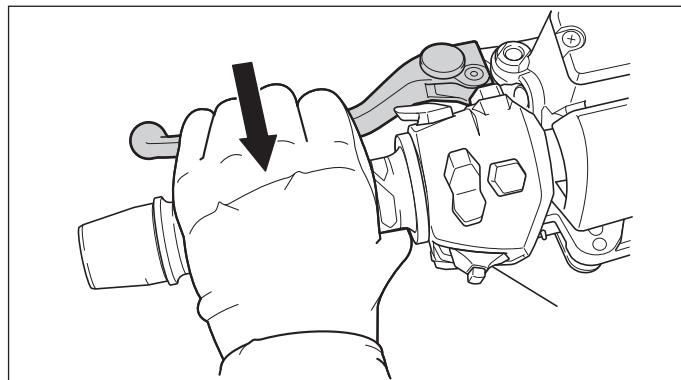
High-speed riding in the run-in period may result in worn engine parts.

## Brakes

### Front Brake



### Rear Brake



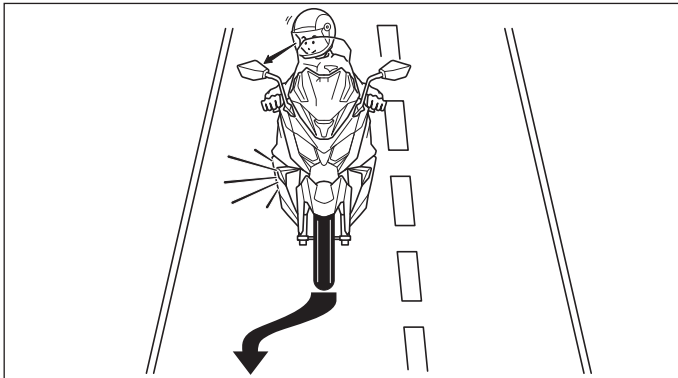
1. Before using the brake, release Throttle Grip first to a full close.
2. Grip both the front and rear brake levers at the same time and exert force gradually to activate the brake.

## **⚠ WARNING**

- ◆ **Braking on a wet or sandy road requires a longer effective braking distance and is more difficult.**
- ◆ **Slow down while running on mountain roads; it will be more difficult to brake while running down-slope, more dangerous as well.**

### **Do not brake or turn abruptly.**

Abrupt braking and turning are the causes for the extremely dangerous side skidding or tumbling.



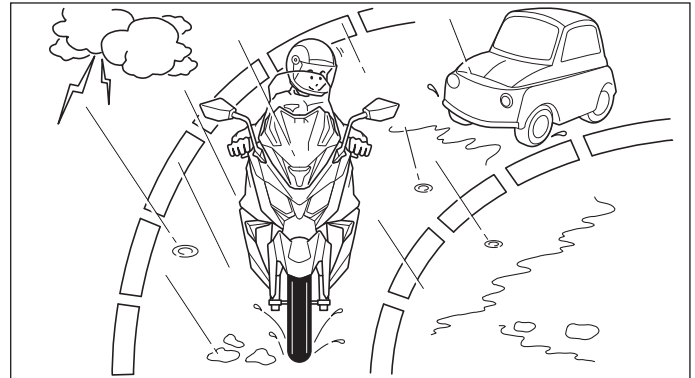
## **⚠ WARNING**

**Avoid forceful or emergency braking especially when the vehicle is tilting to one side, or a side skidding or tumbling may occur.**

### **Take extra cautions when riding in rainy days**

Road surfaces in rainy days are different from in fine days; braking distance will be longer, you should reduce your speed and take advanced actions for braking.

When running down-slope, return Throttle Grip to closed position and apply brake intermittently to slow down the speed.



## **⚠ WARNING**

**Wet road surfaces as well as railroad crossover, light rail track, manhole cover, and steel plates covering the construction sections are very slippery; slow down and take extra caution when passing them.**



# Proper Riding Method

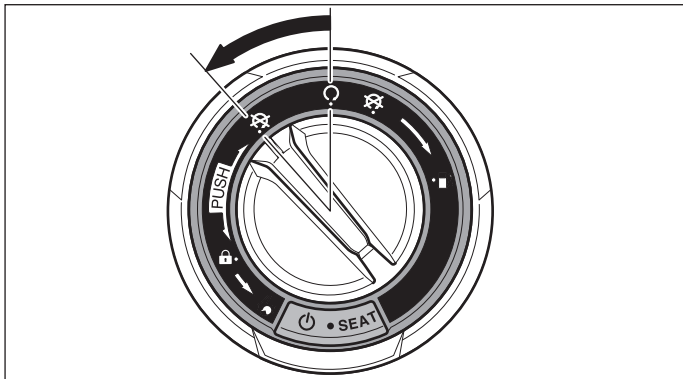
## Proper Parking Method

When approaching to a parking location:

- ◆ Switch on winker in advance and take heed of vehicles behind you while slowly pulling-over.
- ◆ Return Throttle Grip to original position and apply both front and rear brakes in advance; this will activate your Brake Light to alert vehicles behind you.

## At full stop of vehicle

Turn off Winker Switch, set KEYLESS Main Switch to “” position.

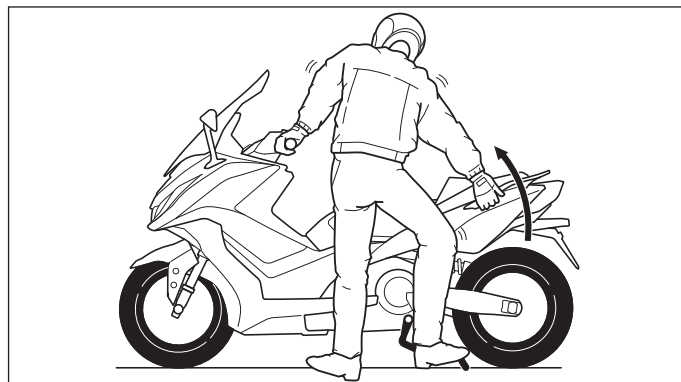


## WARNING

**Never turn off the KEYLESS Main Switch while riding the vehicle; fully shutting off the electrical system may lead to an accident; operate it only after stopping the vehicle.**

## Parking the Vehicle

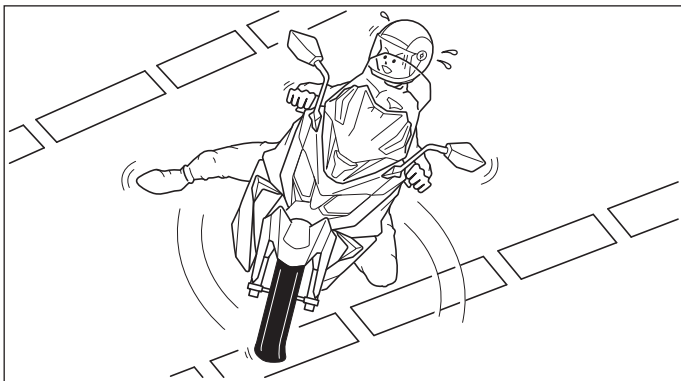
- ◆ Standing on the left side on a flat ground, the rider shall brace the Main Stand up.
- ◆ Brace the Main Stand up on a flat ground not impeding the traffic.
- ◆ Bracing up the Main Stand on an unlevel ground may result in tumbling of vehicle.
- ◆ Hold the Handlebar with left hand and keep it straight; while treading down the Main Stand with right foot, grasp the Left Rear Grip beside the Seat Pad with right hand and pull upwards forcefully.



- ◆ For the purpose of theft prevention, lock up the Steering Stem and switch off KEYLESS when parking the vehicle.

## A tumbled vehicle

To restart a tumbled vehicle with engine stopped, you need to turn the KEYLESS Main Switch off and on again before restarting.



### **WARNING**

To prevent potential fire hazard caused by overflowed gasoline of tumbled vehicle, the engine will be stopped automatically when the vehicle tilts more than 65°.

## Checks before Riding

### Keep a good habit to perform checks before riding

For keeping your vehicle in a safe and effective operating condition, perform regular checks, adjustments and lubricating maintenance according to the Maintenance Program.

Exhaust Control System can reduce generation of pollutants in the exhaust gas of your scooter. Please perform maintenance according to specified mileage or schedule, for ensuring compliance with exhaust emission standards

### **⚠ WARNING**

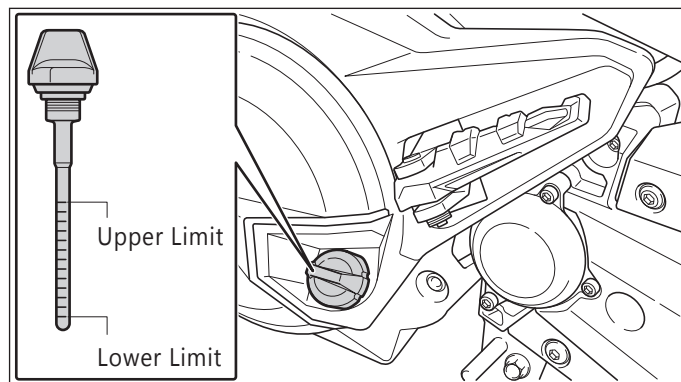
- ◆ Please consult a KYMCO dealer if you are not familiar with scooter check-up and maintenance.
- ◆ Injury or electrocution may occur if any body part or clothing touches a running engine. Please stop the engine while performing scooter maintenance.
- ◆ For preventing burning hazard after riding a vehicle, touch its engine, muffler, brake disc, brake caliber or brake pad only after it has cooled down.
- ◆ When performing maintenance, never run the engine in an enclosed space; there is a risk of carbon monoxide intoxication due to exhaust emission.
- ◆ To avoid damaging the scooter, never carry out any maintenance without receiving a professional training or lacking of a special tool.

## Engine Oil and Oil Filter

Before riding the scooter, check engine oil for compliance with level requirement or any leakage. Engine Oil and Oil Filter shall be replaced regularly according to maintenance and lubrication schedule.

### Check/Replenish Engine Oil

1. Park the scooter on flat ground and brace up the Main Stand. Activate KEYLESS Main Switch and start the engine, idle it for about 3 minutes without using Throttle Grip, then stop the engine. Allow resting for another minute.
2. Pull out Oil Level Guide and wipe it clean, insert the Oil Level Guide without screwing it in.
3. Check oil level. When the level approaches lower limit, replenish oil to a middle level between the upper and lower limits.



## Attention

Engine and Muffler are extremely hot. Take special care to prevent burn while checking oil level.

### Recommended Oil Specification

#### Specification:

SAE : 10W/40 MA

API: SL Class or better

First oil replacement: 1,000 km. Subsequent oil replacement Every 10,000 km.

## WARNING

- ◆ There are many inferior oils in the market which may cause engine failure if miss-used by the consumer.
- ◆ To ensure oil replacement of your beloved vehicle with recommended specifications, please go to the dealer where you purchased your vehicle from.

## Attention

- ◆ A slanted vehicle may lead to a faulty verification of oil level.
- ◆ If oil is checked or replaced immediately after stopping the engine, be specially careful not to get burnt.

## Check/Replenish the Fuel

- ◆ Replenish gasoline as soon as possible when the Fuel Indicator on the Dashboard approaches the last segment near E.
- ◆ Replenish with #95 Unleaded Gasoline as soon as possible.

### Using Fuel Tank Cap:

Stop Engine first

1. Turn KEYLESS Main Switch to OFF position, keep turning clockwise to the end will open the Fuel Tank Outer Cover. Then open Fuel Tank Cap.
2. Use only #95 unleaded gasoline or better.
3. Rotate the Fuel Tank Cap back and make sure to press it down tightly until it locks into position.

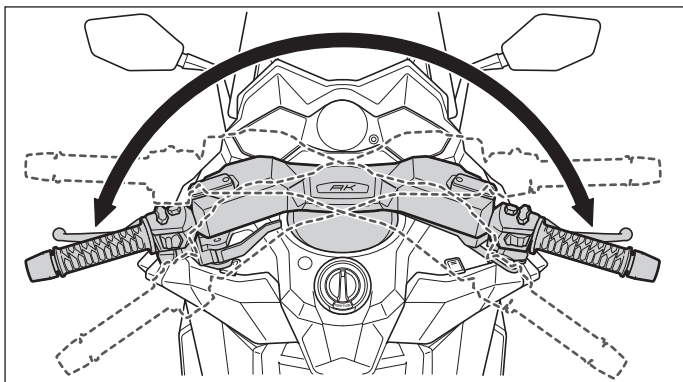
## WARNING

- ◆ DO NOT smoke when replenishing gasoline.
- ◆ Stop engine when replenishing gasoline.
- ◆ When replenishing the fuel, keep the fuel level below the baseline plate, otherwise the fuel will overflow.
- ◆ It is recommended to add Kymco Nozzle Cleaner in the fuel every 10,000km when replenishing the fuel, for cleaning Fuel Injection Nozzle.
- ◆ Avoid operating Fuel Pump for prolonged time when the Fuel Tank is empty, which may affect normal service life of Fuel Pump.

## Checks before Riding

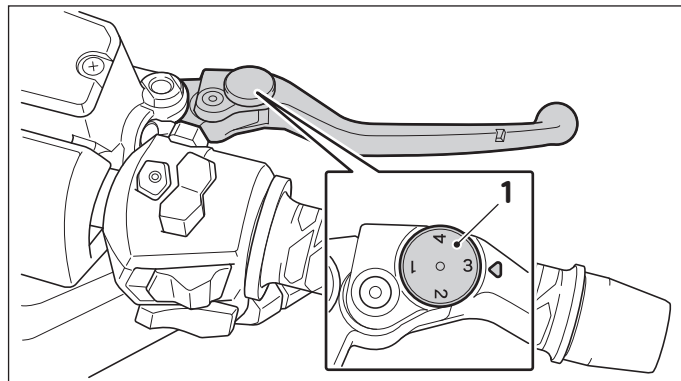
### Check Steering Stem

- ◆ Check for any slackening by swaying it up and down, forward and back, and left and right.
- ◆ Check if Handlebar is too tight.
- ◆ Check the Handlebar for any colliding.
- ◆ When finding any anomaly, go to a KYMCO dealer or service station for repair.



### Check and Adjust Brakes

1. Adjust brake lever clearance using adjustment knob (totally 4 adjustment positions).
2. Push the brake lever forward when adjusting the knob (default setting is 2).
3. After adjustment, pull the Brake Lever (1) with hand until reaching a position where fingers feel comfortable; check if the clearance at the front end of Brake Lever is within the specified dimension.

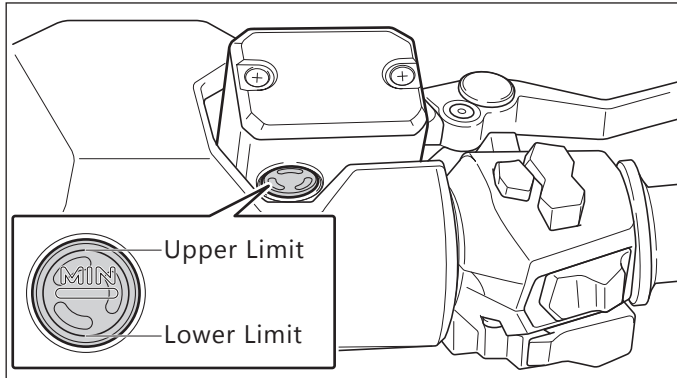


1: Adjust brake lever

## Checking Front Brake Fluid

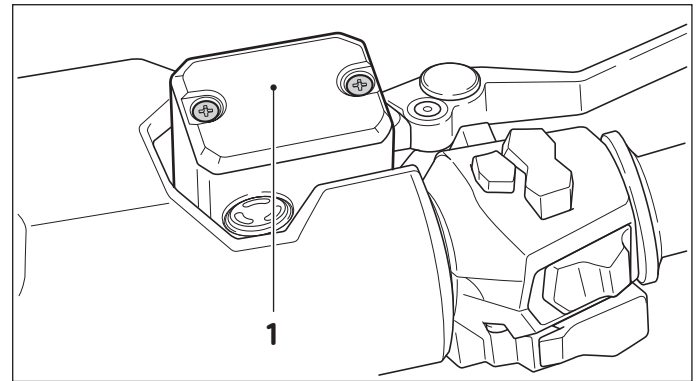
1. Straighten the Handlebar, check brake fluid in the Right Reservoir. Keep the level between the Upper Mark and Lower Mark.
2. If level lowers near the Lower Mark, check the brake lining for a worn condition.
3. If the brake lining is not worn exceeding a specified limit, most likely there is a leakage of brake fluid; go to a dealer for repair.

### Viewing Window of Front Brake Fluid



## Replenishing Front Brake Fluid

1. Straighten the Handlebar, remove 2 fixing screws of Reservoir and remove Reservoir Cover.
2. Replenish Reservoir with recommended DOT-4 Brake Fluid to the Upper Scale. Install Reservoir Cover and tighten 2 fixing screws.
3. Replace Brake Fluid every 10000km or 1 year.



1: Reservoir Cover of Brake Fluid

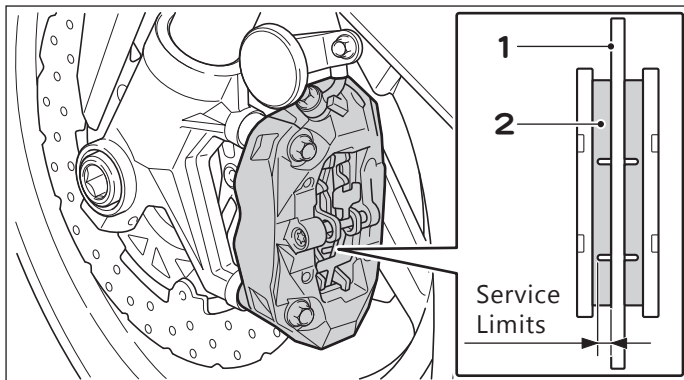
### **WARNING**

- ◆ **Mixed use of Brake Fluids of different brand and different specifications may result in braking fault and danger.**
- ◆ **When replenishing braking fluid, cover painting parts with a cloth to prevent damaging them.**

## Checks before Riding

### Check Front/Rear Brake Lining

Check Brake Lining Limit



- ◆ Is braking effective?
- ◆ Verify braking effect of front and rear brakes in low speed.

### Check Tires

- ◆ Check grip between tire and ground and a normal tire pressure. If the tire pressure is low, inflate to the normal level.
- ◆ In case of a gripping anomaly, check tire pressure for normal reading using a pressure gauge.

#### Pressure measurements of cool tire:

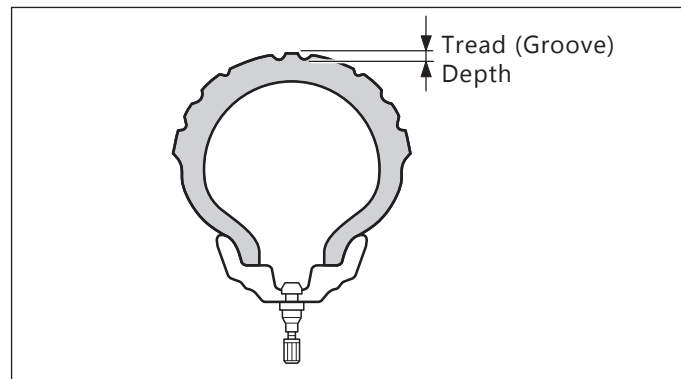
With 1 rider

Front Tire 2.4 kgf/cm<sup>2</sup> Rear Tire 2.70 kgf/cm<sup>2</sup>

With 2 persons

Front Tire 2.4 kgf/cm<sup>2</sup> Rear Tire 2.70 kgf/cm<sup>2</sup>

- ◆ Check the tire grooves for any metal or pebble chip; remove it, if any, before riding.
- ◆ Replace the tire if there is a fracture or the limit of the groove depth is reached. (See arrow indication in the drawing.)



Measure the groove depth at the center of the tread pattern. Take measurements at several points since uneven wear may occur.

Replace the tire if any of the measurements is lower than the service limit. Make sure the wheel is properly balanced when a new tire is replaced.

### Service Limits:

Front Tire 0.8 mm

Rear Tire 0.8 mm

### Check Tread Pattern for Wear

Check tires before each riding. In case of finding a transverse line (minimum pattern depth), nail or glass chip on the tire, or crack line on the side wall of tire, go to Kymco dealer for replacing with new one. Excessive wear of tire tread pattern will result in reduce friction and the tire will become more prone to be punctured; it also affects safety of operation.

### Tire Specifications:

Front Tire Specifications

120/70-R15 56H

Rear Tire Specifications


160/60-R15 67H

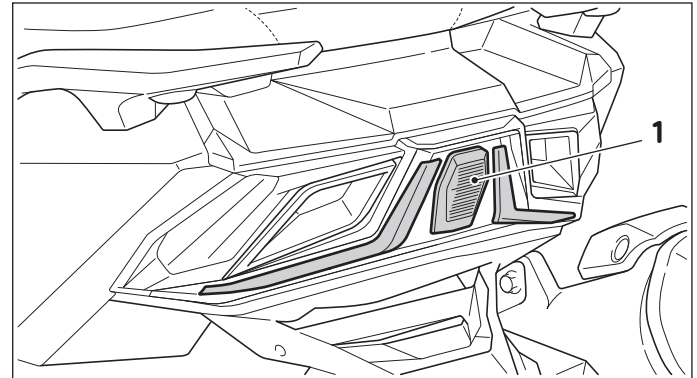
### Check Brake Light

- ◆ Turn KEYLESS Main Switch to “○” position.
- ◆ Respectively pull the Front and Rear Brake Levers, verify if Brake Light goes on.

### Check Brake Light for stain or fracture.

#### ⦿ Attention

Turn KEYLESS Main Switch to “○” position but Engine Stop Switch to  position.



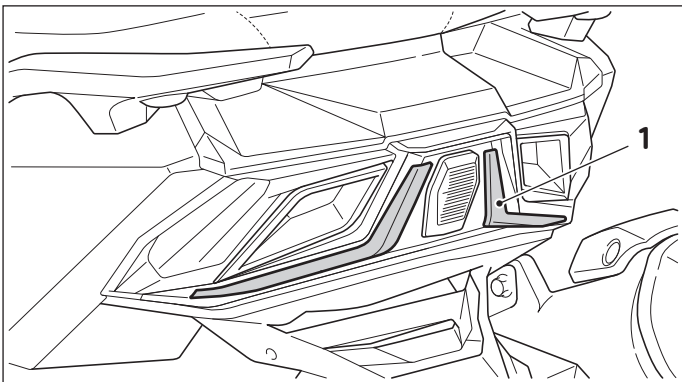
1: Brake Light



## Checks before Riding

### Check the Tail Light

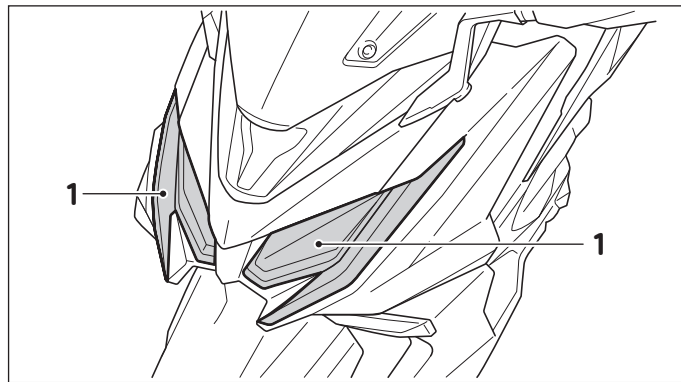
- ◆ Turn the KEYLESS Main Switch to “○” position.
- ◆ Check if the Tail Light goes on.
- ◆ Check the Tail Light Lens for stains or fractures.



1: Tail Light

### Check the Winkers

- ◆ Turn the KEYLESS Main Switch to “○” position.
- ◆ Check if the Headlight goes on.
- ◆ Check the Headlight Lens for stains or fractures.

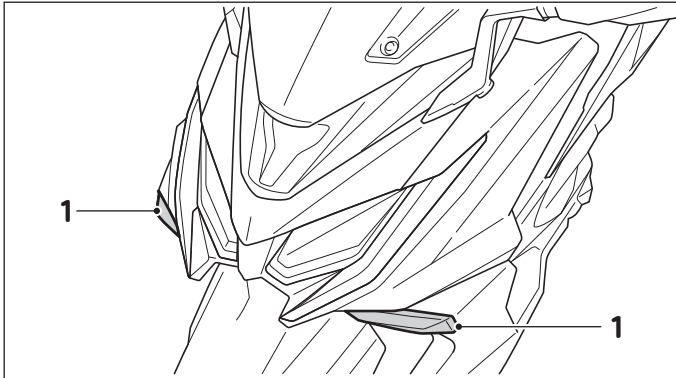


1: Headlight

## Check the Winkers

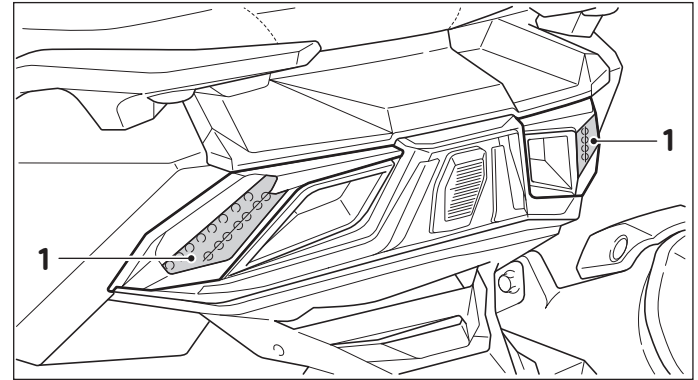
- ◆ Turn the KEYLESS Main Switch to “○” position.
- ◆ Operate the Winker Switch to verify if each Winker works.
- ◆ Check the Winker lens for stain or fracture.

## Check the Winker



1: Winker

## Rear Winker

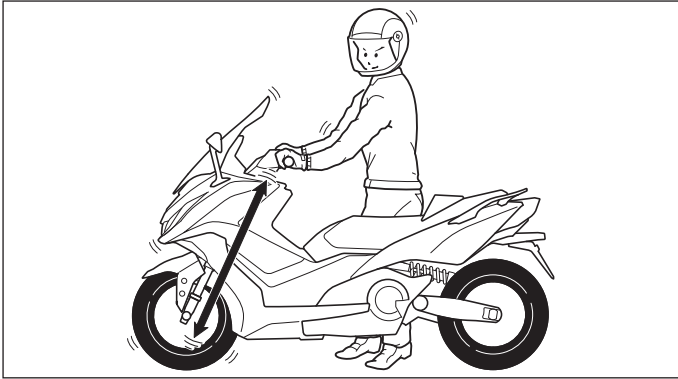


1: Rear Winker

## Checks before Riding

### Check Front/Rear Cushion

Exert load onto Handlebar and Seat Pad and shake the vehicle up and down, check if cushions act normally.



- ◆ **Check if Head Light, Tail Light or Winker goes on normally.**

Start engine and turn on switches, check if Head Light, Tail Light or Winker goes on normally, and check for any stain or fracture on the light lens.

- ◆ **Check Dashboard for normal display.**

- ◆ **Check the Horn for working normally.**

Turn KEYLESS Main Switch to “○” position and press Horn Button.

- ◆ **Check Back Mirror for proper angle.**

Sit yourself on Seat Pad and check the rearview of the mirror; also check for any damage or stain.

Considering actual riding safety, a torque is specified by the statutory regulation as of 1.02-1.428 Kgf-m. Therefore when fixing the Back Mirror onto the vehicle, it shall not be totally rigid (either exceptionally loose).

- ◆ **Check License Plate for any stain or damage.**

Check License Plate for any stain or damage; secure it tightly.

- ◆ **Check for normal exhaust gas.**

Check Muffler for slackening or noise.

- ◆ **Others, check if previous anomalies still existed.**

## Side Stand

In addition to parking the vehicle, the Side Stand provide an additional safety mechanism: when it is lowered down, the ignition power will be cut off automatically.

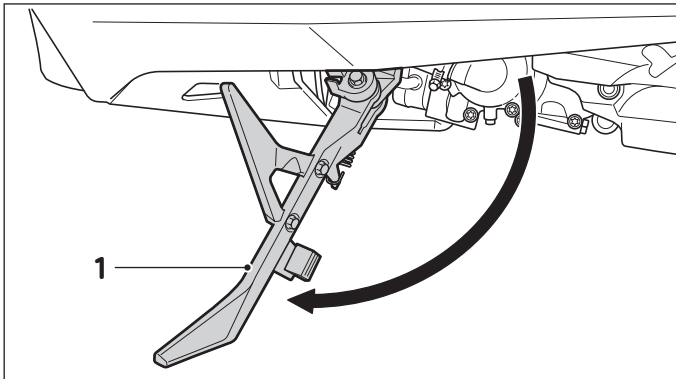
### <Checking Method>

Check the Automatic Engine-Stop Function of Side Stand.

1. Brace up Main Stand on flat ground.
2. Retrieve Side Stand to UP position and start the engine.
3. Kick Side Stand to DOWN position and engine shall stop running automatically.

### ⓘ Attention

If any problem occurs when operating Side Stand, go to a KYMCO dealer for checking up.



1: Side Stand

## Simplified Maintenance and Repair

### Regular Checks

- ◆ To ensure comfortable riding, regularly checking of your vehicle is necessary. Please go to a KYMCO dealer or service station for after sales service and maintenance.
- ◆ Refer to User Manual for Check Schedule and Check Items.
- ◆ Regular check is also required when scooter is left idle for a long period of time.

### Initial Check

Please perform the initial check of a new vehicle within 1 month from the date of purchase or at the mileage of 300km.

### Precautions

If a cleaning, adjustment, or replacement is necessary based on the check result, please carry it out as required.

### ⦿ Attention

#### Take safety precautions while performing maintenance

- ◆ Brace the vehicle with its Main Stand on a level location.
- ◆ Operate with proper tools.
- ◆ Carry out preparations with the engine stopped.
- ◆ Engine body and muffler are extremely hot after engine stops, take care not to be burnt.

## Overview of Regular Maintenance for Hazard Reduction

I: Inspection; clean, lubricate, replenish, remedy or replace as required. A: Adjustment. C: Cleaning. R: Replace.

T: Tightening. M: Maintenance. D: Diagnosis

FREQUENCY		WHICHEVER COMES FIRST	ODOMETER READING						
		X 1000 km	1	5	10	15	20	25	30
		X 1000 mi	0.6	3	6	9	12	15	18
ITEM		MONTH	1	6	12	18	24	30	36
*	Air Filter Servicing				I		R		I
	Spark Plug				I		R		I
*	Throttle Free Play			I	I	I	I	I	I
*	Valve Clearance	Check/Adjust.	Every 40000 km (24000 mi)						
*	Hose Inspection				I		I		I
*	Engine Oil		R		R		R		R
*	Engine Oil Screen		C		C		C		C
*	Engine Oil Filter		R		R		R		R
*	Fuel Injection Diagnostic Tool				I		I		I
**	CVT Clutch Removal				I		I		I
	Brake Fluid			I	R	I	R	I	R
	Brake Pad Replacement			I	I	I	I	I	I
	Brakes			I	I	I	I	I	I
*	Switches			I	I	I	I	I	I
	Steering			I	I	I	I	I	I
*	Lights			I	I	I	I	I	I
*	Torque Specifications			I	I	I	I	I	I
**	Wheels/Tires			I	I	I	I	I	I
	Coolant Level Check			I	R	I	R	I	R
	Drive Belt						R		
	Timing Belt(Drive Belt)			I	I	I	I	I	I

# Simplified Maintenance and Repair

## Check Battery

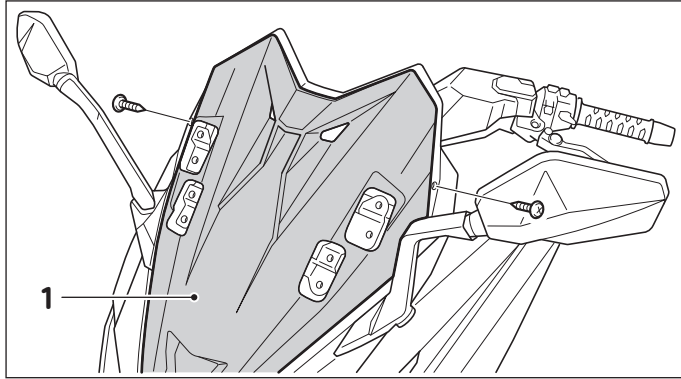
This vehicle uses maintenance-free battery.

No battery fluid replenishment is required.

Check battery voltage:

Battery voltage shall exceed 12V when checked using a voltmeter. Remove battery and fully recharge it if voltage is too low.

## Replacement – Removal and Installation of outer cover



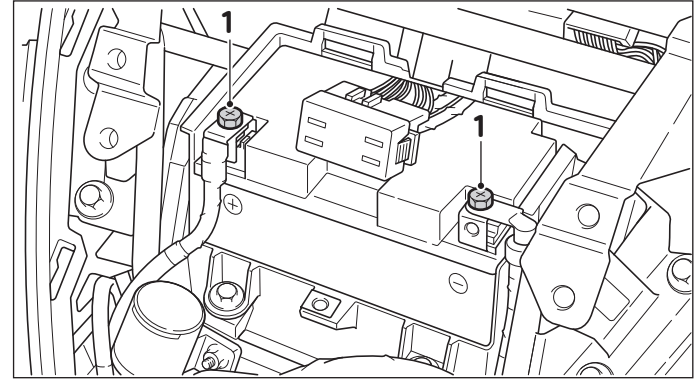
1: Windshield

### ⓘ Attention

Tenons and grooves are provided on outer covers. To prevent breaking the tenon by pulling or bruising it at portion of an acute angle, you need to be very careful when removing or installing an outer cover. If you worry about breaking the tenon, have a KYMCO dealer to do it for you.

## Remove Battery

1. Loosen the fixing screws of the Windshield Front Guard.
2. Remove Screws and Windshield.
3. Remove the Windshield Partition Panel Bracket.
4. Remove Dashboard Front Cover
5. Loosen the screws of the Battery Cover and Battery Terminal screws.



1: Battery Screws

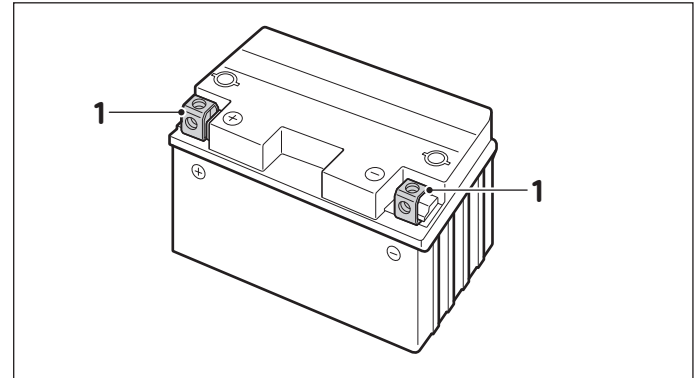
6. Remove Battery  
Re-install battery in a reverse sequence.

## ⦿ Attention

- ◆ The Battery tends to self-discharge and become weak when the vehicle is left idle for a long time. Remove the Battery from the vehicle and fully re-charge it; then store it in a cool and well ventilated place.
- ◆ Remove the negative cord from the battery if the vehicle is expected to idle for a long time.
- ◆ A weakened battery voltage is displayed on the Dashboard; you will need to remove the battery and fully re-charge it, or go to a KYMCO service station for service.
- ◆ If battery is stored for more than 2 months, it shall be checked monthly and re-charged if necessary.
- ◆ When re-using a stored battery, fully recharge it before installing it.

## Cleaning Battery Poles

- ◆ For cleaning battery poles, remove a battery fixing screw first.
- ◆ If battery pole is corroded, remove the battery for cleaning.
- ◆ After cleaning, apply a thin layer of grease or Vaseline on battery poles before installing battery



1: Battery Pole

## ⦿ Attention

- ◆ Keep away from naked fire when removing/installing a battery.
- ◆ For removal, turn KEYLESS Main Switch to OFF position first. Followed by removing the negative (-) wire, then the positive (+) wire. Connect the positive wire first when installing, then the negative.
- ◆ Fully tight a slackened nut of battery poles.

## Precautions on using batteries:

1. Electrolyte in the battery contains sulfuric acid, therefore is toxic and dangerous; severe burn may occur on negligence; avoid getting in contact with skin, eye or clothing. Wear goggles when working in the vicinity of battery. In the event of following conditions, take first aid measures as required:



# Simplified Maintenance and Repair

- ◆ Skin contact: Rinse with plenty amount of clean water.
  - ◆ Ingestion: Drink large amount of water or milk and seek medical care immediately.
  - ◆ Eye contact: Rinse with clean water for 15 minutes and seek medical care immediately.
2. Battery will generate explosive hydrogen, therefore shall be kept away from any fire source (e.g. spark, flame or lit cigarette). Provide with sufficient ventilation if charged in an enclosed room.
  3. Store batteries in a location where children cannot access.
  4. Battery situates below the Front Windshield. Remove Windshield and Dashboard Front cover will reveal the battery. For re-charging the battery: When battery power is about to deplete, immediately go to a KYMCO dealer for re-charge. Keep in mind that the more option devices installed on the scooter, the faster the battery power depletes.

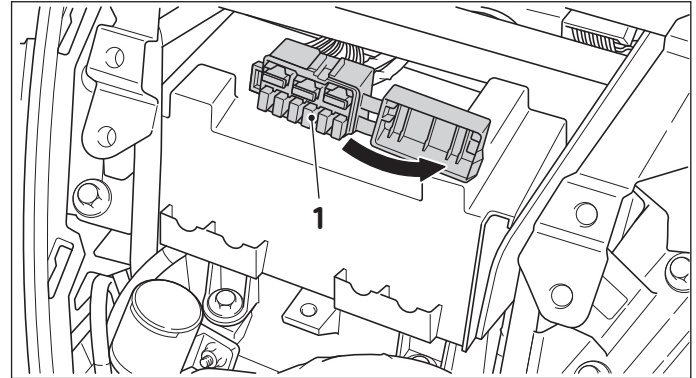
## Fuse Replacement

Fuse situates above the battery. Remove Battery Cover to access Fuse.

- ◆ Turn KEYLESS Main Switch off, check for blown Fuse.
- ◆ Only replace with a fuse of specified capacity.
- ◆ Identify the cause of a blown fuse before replacing it.

### Fuse Specification:

ABS IGN :	MAIN RELAY :	FAN :
5A	15A	10A
USB,GRIP,SEAT :	ECU :	BACK UP :
15A	10A	10A
LIGHT :	ABS M :	BACK UP :
15A	25A	15A



1: Fuse Box

### ⓘ Attention

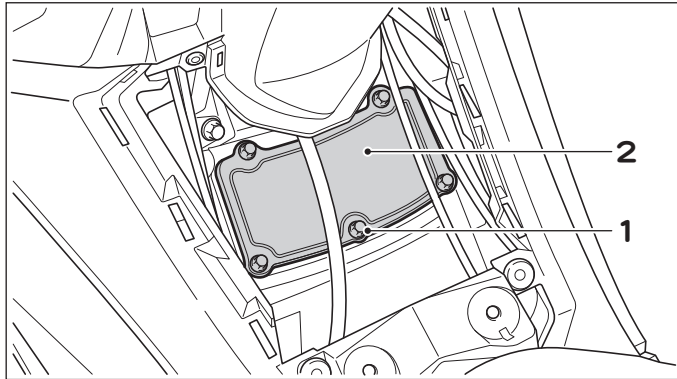
- ◆ Only replace electrical devices (lights, meters) with ones of specified ratings.
- ◆ If using an inadequate fuse, it may be blown easily or battery loading may become imbalance.
- ◆ Avoid frontal strong water jet when cleaning the scooter.

## Air Cleaner Element

Replace Air Cleaner Element as specified in Regular Maintenance Schedule. Check and replace Air Cleaner Element more frequently if vehicle is often used in dusty environments or damp areas.

### Replace Air Cleaner Element

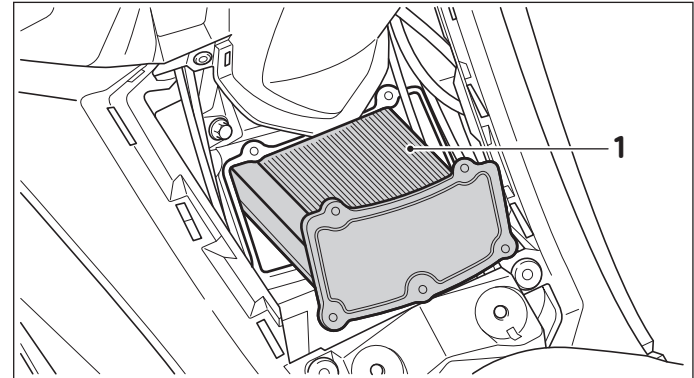
1. Remove outer covers of scooter.
2. Remove Air Cleaner Cover.
3. Loosen Air Cleaner Cover Fixing Screw and take out Air Cleaner Element.



1: Fixing Screw

2: Air Cleaner Cover

4. Take out Air Cleaner Element
5. Replace a new Air Cleaner Element



1: Air Cleaner Element

### Precautions on replacing Cleaner Element:

- ◆ Make sure the Air Cleaner Element is positioned correctly in the case.
  - ◆ Do not start engine when Air Cleaner Element is not installed, or dirty air may enter the engine and cause abnormal wear.
  - ◆ Do not wet the Air Cleaner Element when cleaning the vehicle, or engine start may become difficult.
6. Install Air Cleaner Cover and tighten Fixing Screw.
  7. Re-install outer covers of scooter. (\*)

### Attention

- ◆ **Air Cleaner Element made of paper is used. Clean the Element every 10,000 km.**
- ◆ **Replace with a new Air Cleaner Element every 20,000km.**

# Simplified Maintenance and Repair

## CVT Transmission System Filter Wool

Excessive dust accumulation in CVT Transmission System may result in unsmooth vehicle operation; clean and replace Filter Wool regularly.

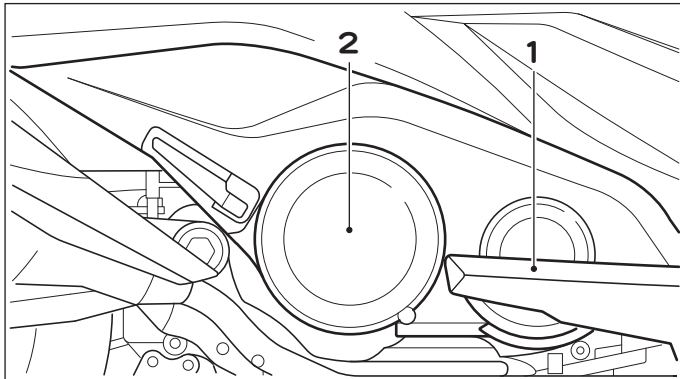
Clean Filter Wool regularly as specified in Maintenance Schedule; replace or clean Filter Wool every 5000km.

### Replace Filter Wool

1. Remove side plate on the right.
2. Remove Fixing Bolts of Crankcase Right Cover.
3. Remove 2 Fixing Bolts of Filter Wool.
4. Replace Filter Wool.

### Insert Method

Operate in reversed procedures as removal.

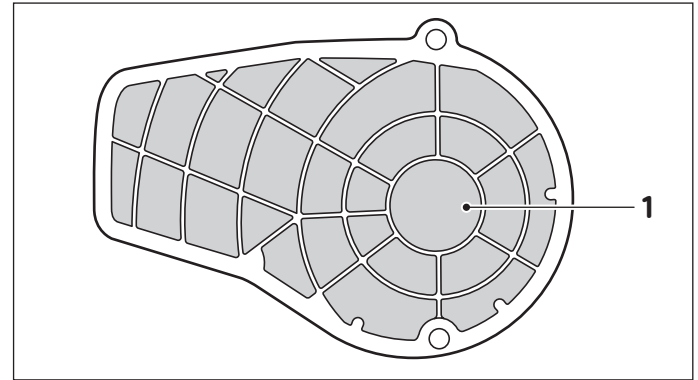


1: Side plate on the right

2: Crankcase Right Cover

### Cleaning Method

1. Remove side plate on the right.
2. Remove Fixing Bolts of Crankcase Right Cover.
3. Remove 2 Fixing Bolts of Filter Wool.
4. Clean Filter Wool body with air jet and clean out dirt from Crankcase Right Cover.



1: Filter Wool Body

### User Precautions:

1. Do not remove the battery cable when the KEYLESS Main Switch is set to ON.
2. Tighten torque: 0.1~0.2kgf-m (do not exceed 0.6kgf-m). Tighten the bolts using a maintenance tool; do not tighten it excessively or the bolt may break and the cable may get loose, resulting in an accident.
  - After installation, make sure that bolts will not slacken and wires will not interfere with the chassis, so as to prevent any potential danger.

- When the user or personnel of service station removes the Muffler, it is necessary to remove O2 Sensor first °

## ⦿ Attention

**When riding or parking vehicle in humid environments (e.g. in a rainy day or washing vehicle), fog formation may occur temporarily inside the cover of Dashboard and lights due to inside/outside temperature differences; which is not a quality issue of them. However if large amount of drops or accumulation of water appears inside Dashboard and light cover, please consult a KYMCO dealer for receiving service.**

## Change Oil

### Oil Change Period

First oil change when running 1,000km; afterwards every 10,000km.

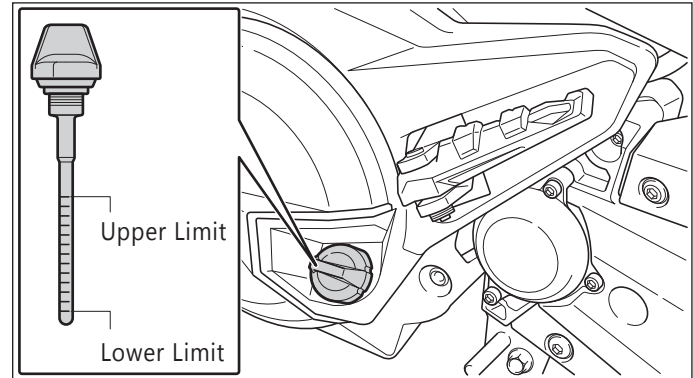
In order to maintain optimal engine performance, check oil level every 5,000km. Replenish to standard level in case of shortage.

### Oil Capacity:

Dismantle: 3.0L (full capacity)

Change oil: 2.6L (excluding oil filter)

2.7L (including oil filter)



## ⦿ Attention

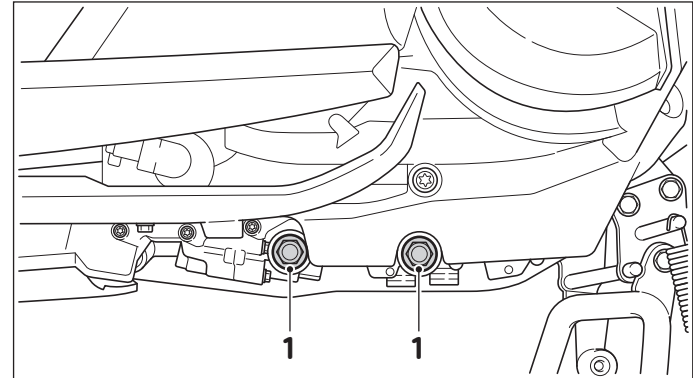
- ◆ If vehicle is used rarely and 10,000 km is not reached after using for 1 year, it is suggested that oil shall still be changed since it may deteriorate along with time and cause damage to the engine.
- ◆ The annual checks must be performed every year .

## ⦿ Attention

To avoid using poor quality oil, please go to a KYMCO dealer for oil change.

### Oil Change Period

1. Remove Oil Level Guide.
  - Remove Drain Bolt and drain all the oil.
  - Warming up the engine before changing oil facilitates oil draining.
2. Clean Oil Screen and re-install it. Tighten Drain Bolt after wiping it clean.
3. Fill in new oil. Filling capacity is 2.6L. (Including Oil Filter, oil change shall be 2.7L).
4. Fully tighten the Oil Level Guide.
5. After warming up the engine, stop the engine and wait for 1 minute; then verify the oil level with the Oil Level Guide.



1: Drain Bolt

## Attention

- ◆ **It is recommended to use KYMCO original 4-stroke engine oil.**
- ◆ **The following conditions may expedite oil deterioration, an early oil change is advised.**
  - Riding on pebbled roads often.
  - Riding short distances often.
  - Idling often.
  - Riding in the cold area.
- ◆ **When replenishing oil, make sure the oil level is not exceeding the Upper Limit mark.**
- ◆ **Do not mix-use oils of different brand, class or low quality ones; they may cause engine faults.**
- ◆ **Change oil while the engine is still hot; be careful not to burn your skin.**

### Oil Filter Element Tightening Torque:

11 N-m (110 kgf-cm)

### Engine Oil Drain Bolt Tightening Torque:

9 N-m (90 kgf-cm)

### Magnet Screw Tightening Torque:

28 N-m (280 kgf-cm)

## Precautions on Oil Change

- ◆ Excessive and insufficient oil amount can both affect engine performance.
  - Excessive Oil – Increased friction resistance of moving parts in the engine, which lowers output power and increases engine temperature, leading to early deterioration of engine oil.
  - Insufficient Oil – Reduced oil supply to moving parts in the engine, therefore results in worn parts, parts ablation, etc.
- ◆ Do not mix-use oils of different brand, class or low quality ones; they may cause engine faults.
- ◆ Kymco Emissary Engine Oil contains additives (e.g., spirits, etc.) during the manufacturing process.
- ◆ Arbitrarily mixing additives bought from the market may deteriorate the oil, affect lubricating properties and shorten the service life of engine.

# Simplified Maintenance and Repair

## Spark Plug Check and Adjustment

Dirty electrode or excessive gap can cause poor sparking.

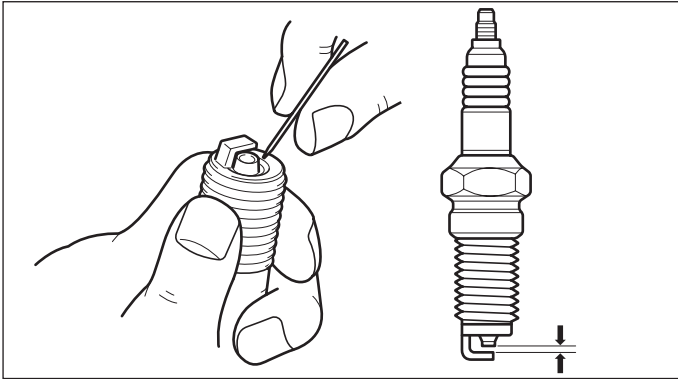
### Cleaning Method

Use a Spark Plug Cleaning Device is the best way

If a Spark Plug Cleaning Device is not available, clean with a needle brush.

### Adjustment

Normal Gap of Spark Plug is 0.7 ~ 0.8mm (See the Figure).



### Specified Spark Plug:

(NGK) CR7E

Do not use a Spark Plug other than the specified one.

### Attention

- ◆ Engine is very hot after stopping, be careful not to get burnt.
- ◆ Tighten the plug by hand, followed by using a Spark Plug Spanner.

### Tightening Torque:

100-140 kgf-cm

## Check Coolant

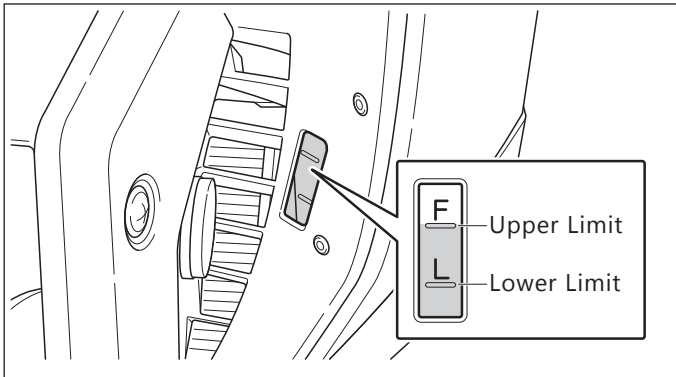
For the sake of safety, check level of coolant before riding the scooter. Replace the coolant as specified in Regular Maintenance Schedule.

### Check Level of Coolant

1. Park the vehicle on flat ground and brace it up with Main Stand.

#### Attention

- ◆ Temperature in the engine may cause false reading of Coolant level. Check coolant level after the engine cools down.
  - ◆ Inclined vehicle may cause false reading of Coolant level.
2. Check level of Coolant via viewing window on the preserving radiator. Make sure the level is between "F" and "L" marks.



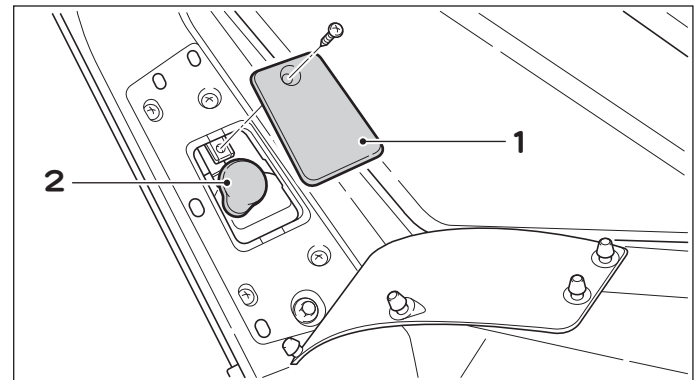
#### Attention

- ◆ Before riding the vehicle, check the radiator and pipe for any leakage.
- ◆ Check the ground where the vehicle is parked for any leakage mark.
- ◆ Before riding the vehicle, check the fin and front protection screen of radiator for any foreign object. Foreign objects may reduce the cooling function or even cause vehicle or engine damage in worse conditions.

### Replenish Coolant (Fill the Reserve Radiator)

1. Stand the vehicle upright on flat ground.
2. Open Reserve Radiator 4 (remove screw 1 and cover 2), replenish water to Upper Limit.

If level of coolant gets excessively low, something must be wrong. Go to a KYMCO Dealer for check and repair.



1: Cover

2: Radiator Cap



## ⦿ Attention

- ◆ **Water temperature is very high after riding, do not open the cap of radiator.**
- ◆ **Use soft water for mixing cooling liquid.**
- ◆ **Using poor quality coolant may shorten the service life of radiator. Please be careful.**
- ◆ **Replace coolant in the radiator every 10000km.**
- ◆ **Add proper amount of coolant liquid to ensure performance of the cooling system.**

























### **In case of fault of vehicle:**

Go to a KYMCO dealer for check and repair if any fault occurs when riding the vehicle. Use only original parts for replacement.

### **Check following items if engine does not start or engine stops when riding the vehicle:**

- ◆ Whether gasoline is sufficient.
- ◆ Whether Dashboard Fuel Indicator approaches E. Replenish with 95 unleaded gasoline or better.
- ◆ Whether proper method is used for starting the engine.
- ◆ Others, whether any part is faulty.

# Simplified Maintenance and Repair

	Keyless	Noodoe	TPMS
<b>Manufacturer</b>	Fames Technology Co., Ltd	Kwang Yang Motor Co., Ltd	Lihjoen Speed Meter Co., Ltd
<b>CE</b>	report 	report 	report 
<b>FCC</b>	in procedure	 2AM4E-37130-LGC6	 2AMA5-LJ-39600
<b>JRF</b>	Receiver:   201-17826	  005-101624	  021-170813
	Control:   201-17827		
<b>KCC</b>	Receiver:  MSIP-CMM-fms-38700-LGC6-00	 MSIP-CMM-KYm-37130-LGC6	Receiver:  MSIP-CRM-LIJ-39660-LGC6-00
	Control:  MSIP-CMM-fms-38703-LGC6-00		Control:  MSIP-REM-LIJ-39650-LGC6-E00
<b>NCC</b>	Receiver:  CCAL17LP0150T9	 CCAN17LP0260T0	Receiver:  CCAL17LP0150T9
	Control:  CCAL17LP0140T6		Control:  CCAL17LP0140T6
	NFC:  CCAB17LP0540T0		
<b>SRRC</b>	Receiver: CMIIT ID: 2017DJ4315	CMIIT ID: 2017DJ4304	
	Control: CMIIT ID: 2017DJ4313		

## Specifications

## AK 550 – SAA1AA

Item	Specifications	Item	Specifications
Engine Type	SAA1	Axle Base	1580 mm
Displacement	550.4 c.c.	Vehicle Weight (Curb Weight)	226 kg
Cylinder diameter × Stroke	69*73.6	Front Tire	120/70-R15
Compression Ratio	11	Rear Tire	160/60-R15
Gear Shifting Method	CVT	Fuel type	95 unleaded gasoline or better
Clutch	Wet Centrifugal Type	Battery Capacity	12V 11Ah
Ignition Method	ECU Full Transistor Type	Spark Plug	NGK CR7E
Starting Method	Self Start		
Total Oil Content	3.0L		
Total Length	2165 mm		
Total Width	795 mm		
Total Height	1400 mm		

**AK 550 User Manual**  
**KWANG YANG MOTOR CO., LTD.**  
**Second Version – 2017 July**  
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#### **ABOUT KYMCO**

KYMCO is one of the global leading powersports brands. KYMCO's mission is to create personal vehicles that win the hearts of consumers all over the world. KYMCO always goes above and beyond to bring to customers the most thoughtful riding experience for everyday life. KYMCO's current product range includes scooters, motorcycles, mobility scooters, ATVs and utility vehicles.

You can learn more about KYMCO at [www.kymco.com](http://www.kymco.com)

**T300-SAA1AA-A1**