



KYMCO

AK 550

The Thrills of Touring

**Owner's
Manual**

FCC Statement:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Attention

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Dear User,

Thank you very much for purchasing our AK 550 Series product.

This Manual gives detailed instructions on how to operate, maintain and adjust the AK 550 Series for prolonged durability and comfort. This model of vehicles complies with EPA regulations on scooter emission control standards, therefore complying environmental requirements in terms of low pollution, low noise and low energy consumption. Although having exceptional quality, regular maintenance is still essential for keeping the product in giving optimal performances. In order to enjoy a safe and comfortable journey with your motorcycle, please read this manual thoroughly.

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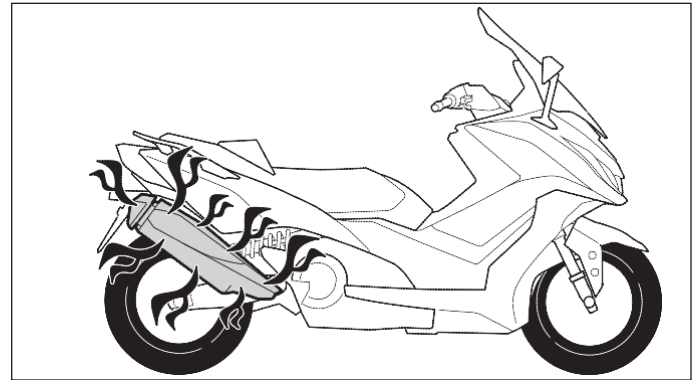
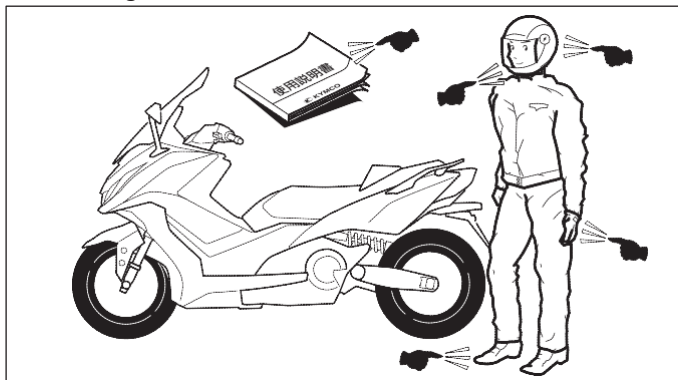


The actual product shall prevail if any content in this manual differs from the actual product.

Precautions on Safe Driving

Peruse user manual and precautions.

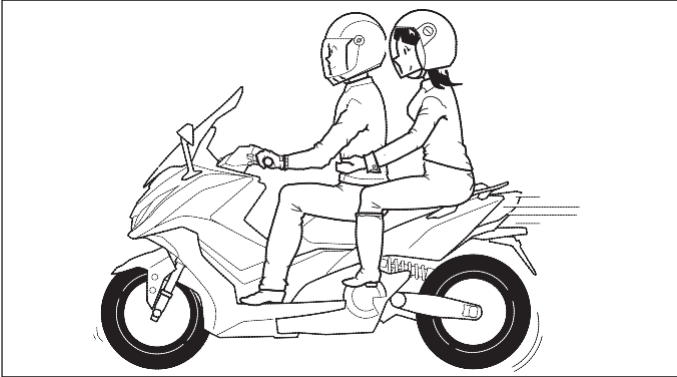
- ◆ Driver shall wear a helmet, gloves, goggles, etc.
- ◆ Do not wear clothes that may impede safe driving.
- ◆ Excessively wide and loose sleeves may be caught by the brake lever and is extremely dangerous.
- ◆ Operation of brake lever shall in no case be obstructed.
- ◆ Daily and regular checks are necessities.
- ◆ Visually check tire appearance for any foreign object or unusual abrasion.
- ◆ Exhaust gas from the muffler contains carbon monoxide which is harmful to human body.
- ◆ Start the engine only in a well ventilated location.
- ◆ Buckle up the chin-belt when wearing a Helmet.
- ◆ Hold the Handlebar with both hands when riding. Do not ride with one hand as this is extremely dangerous.
- ◆ Wearing flat shoes is safer.



- ◆ The muffler is at a very high temperature after stopping the running engine, do not touch it.
- ◆ Avoid dry grasses or flammables when parking the scooter, for the prevention of fire risks.
- ◆ The muffler is at a very high temperature after stopping the engine; park the vehicle with the Muffler facing a wall or a location free of pedestrian, for preventing any hazard of burn.
- ◆ Metal or plastic parts of the scooter may reach a very high temperature after exposing to sunshine; care shall be taken not to touch such surfaces or a burn may occur.
- ◆ Avoid making sharp turns or one-handed driving.
- ◆ Abide by all traffic rules.
- ◆ Smoking is prohibited when replenishing fuel.
- ◆ Shutdown the engine when replenishing fuel.

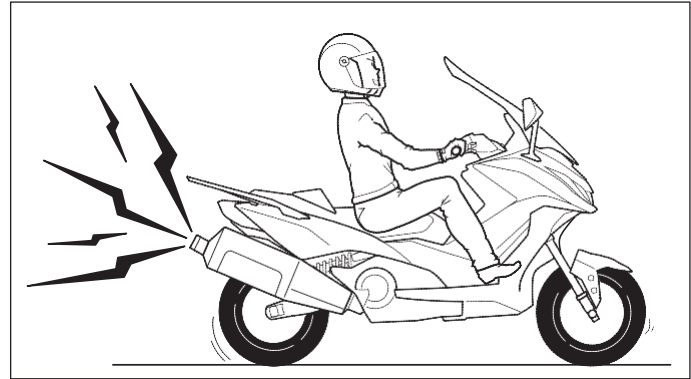
I Precautions on Safe Driving

- ◆ When mounting/dismounting the scooter, special care must be taken by the rear rider to prevent being burnt by the high-temp Exhaust Muffler.
- ◆ Operability of the handle varies in conditions with or without an extra load.
- ◆ When riding the motorcycle, the rider must place both feet on the pedals; the rear rider shall put their arms around the rider's waist and both feet on the rear pedals.



- ◆ Avoid overloading when carrying objects. Make sure that objects are fixed properly. Extra care must be taken for safe driving.
- ◆ Vehicle functionalities are related to its structure; arbitrary modification may deteriorate operability of vehicle, causing shortened service life and obstructed driver safety.
- ◆ Arbitrary modification of a vehicle is an illegal action forbidden by law. Never try to make any modification.

- ◆ Modification of vehicle may result in a nullified warrant.

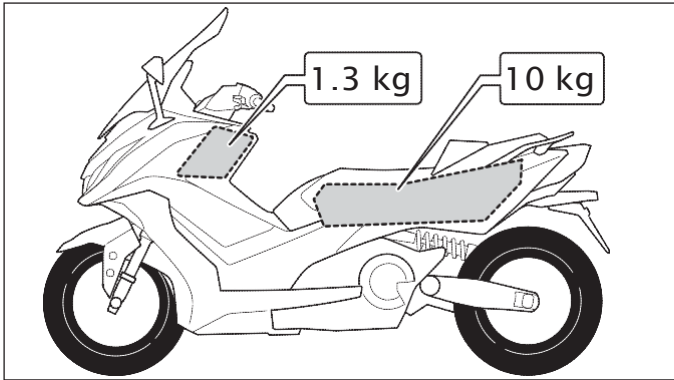


⦿ Attention

- ◆ **Natural mental relaxation and comfortable clothes are essentials to a safe driving.**
- ◆ **Abide by traffic rules, avoid anxiety, relax your mood, and pay attention to drive.**
- ◆ **Avoid wearing clothes that may impede driving safety when riding the scooter. (E.g., long skirt, flared trousers, etc.)**
- ◆ **The temperature of the Muffler is extremely high when the vehicle is running as well as within 30 minutes after stopping of driving; avoid contacting the vehicle with the body or skin to avoid burn injuries.**
- ◆ **Avoid dry grasses or flammables when parking the vehicle, for the prevention of fire risks.**

The Front Inner Box has a capacity of holding no more than 1.3 kg.

The Luggage Box has a capacity of holding no more than 10 kg.



Do Not exceed the following load limits:

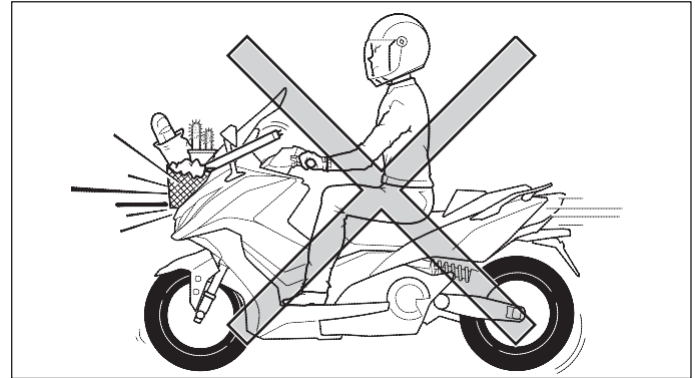
The Front Inner Box has a capacity of holding no more than

1.3 kg

The Luggage Box has a capacity of holding no more than

10 kg

It is forbidden to install a carrying basket or bracket on the front header. Carrying anything in front of the vehicle will surely block the headlight and significantly affect driving safety.

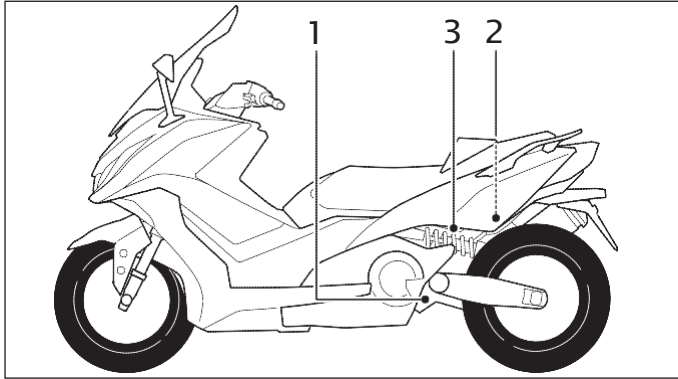


Owner Information

ID Number Record Field

Please note down the Engine Number and Vehicle Frame Number in the relevant fields below, to facilitate ordering spare parts from a KYMCO dealer, or for reference in the event of a lost of vehicle.

ID Number Record Field:

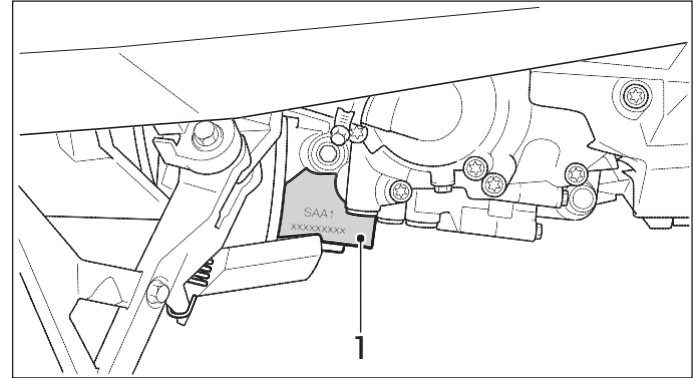


1: Engine Number engrave

2: Frame Number engrave

3: Aluminum Nameplate

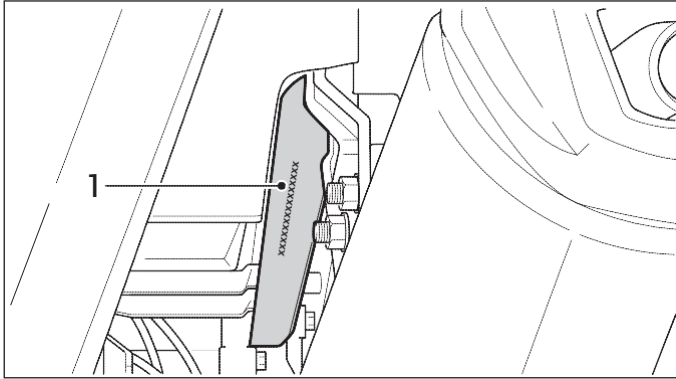
Engine Number:



1: Engine Number engrave

The Engine Number is engraved on the crank case as shown in the figure.

Frame Number:

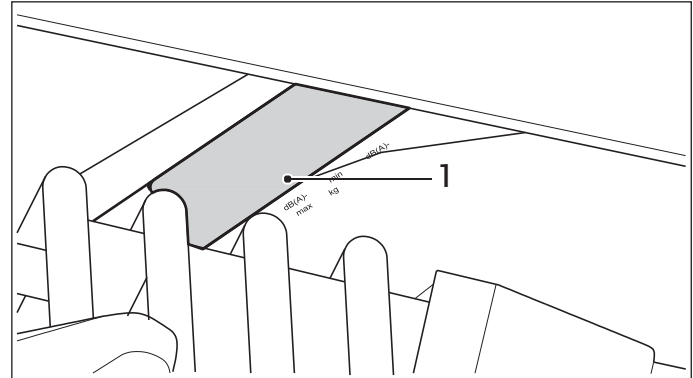


1: Frame Number engrave

The Frame Number is engraved on the chassis as shown in the figure. The Frame Number can be seen from lower-right upwards.

Aluminum Nameplate

The Aluminum Nameplate can be seen behind the Rear Cushion.



1: Aluminum Nameplate

KWANG YANG MOTOR CO., LTD.

☆ REFBE10000H1100101 ☆

L3e-A3

e13*168/2013*00121

88 dB(A)-3750 min⁻¹

max 395 kg

L3e-A2

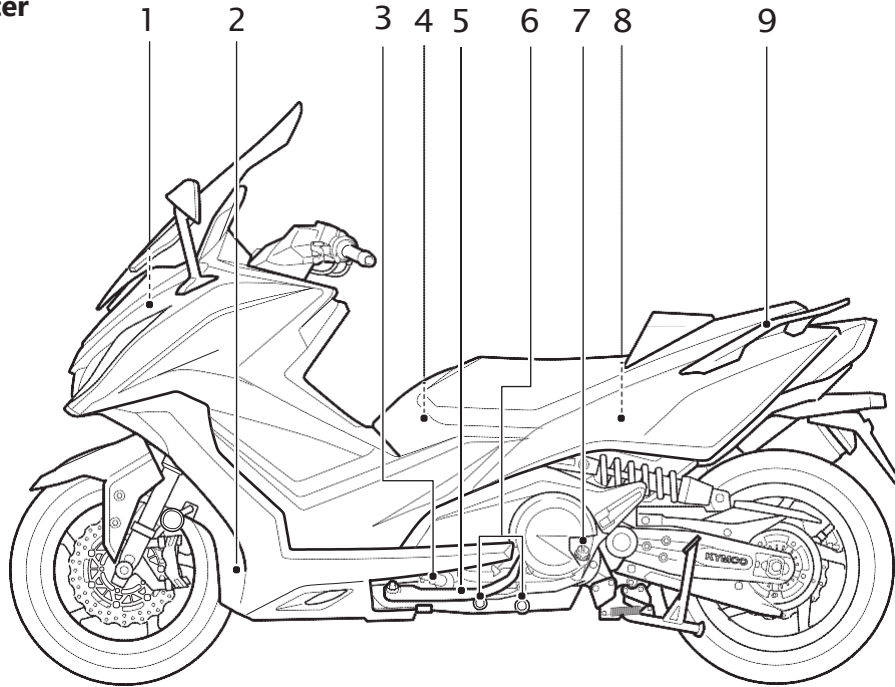
e13*168/2013*00122

89 dB(A)-3750 min⁻¹

34.2 kW

Parts Names

Left View of Scooter



1: Battery

2: Coolant level viewing window

3: Oil filter element

4: Helmet Hook

5: Side Stand

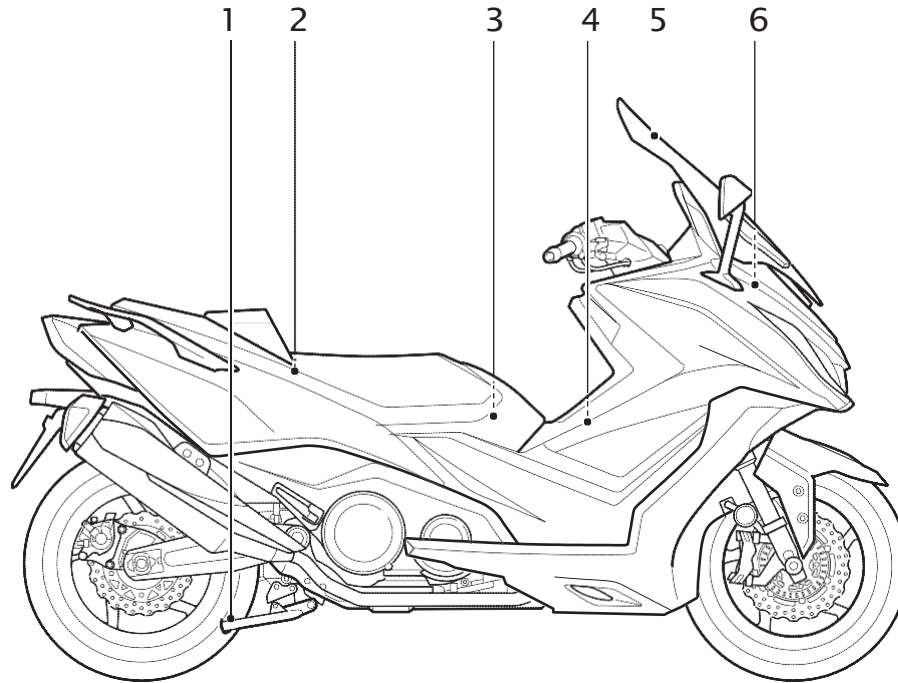
6: Engine Oil Drain Bolt

7: Oil Level Guide

8: Luggage Box

9: Left-rear Grip

Right View of Scooter



1: Main Stand

2: Tool Pack

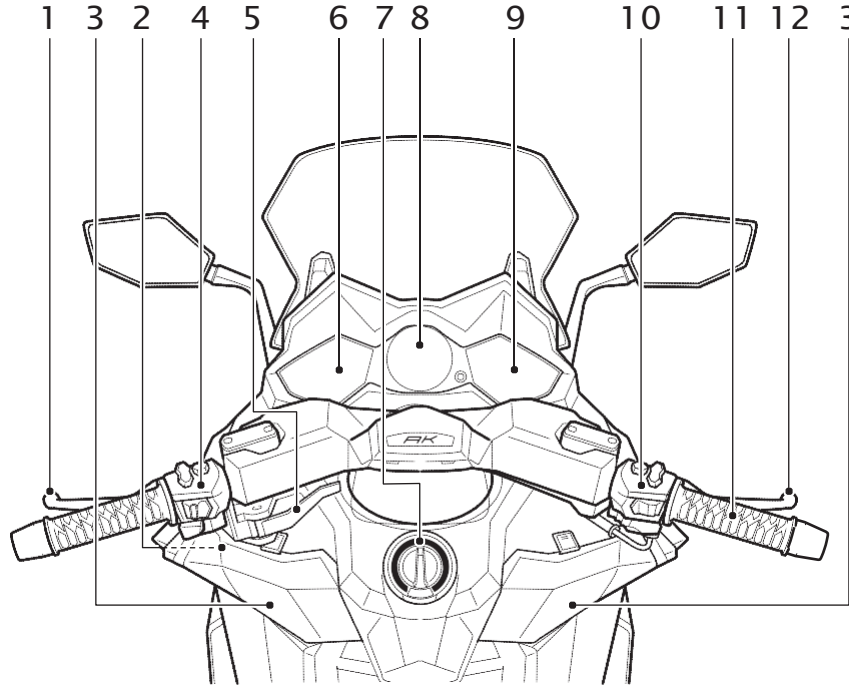
3: Fuel Tank Decorative Cover

4: Air Cleaner Element

5: Windshield

6: Fuse

Dashboard and Control Mechanism



1: Rear Brake Lever

2: USB Power Socket

3: Front Inner Box

4: Left Handlebar Switch

5: Parking Brake Arm

6: Meter – adjustment zone

7: KEYLESS Main Switch

8: noodoe

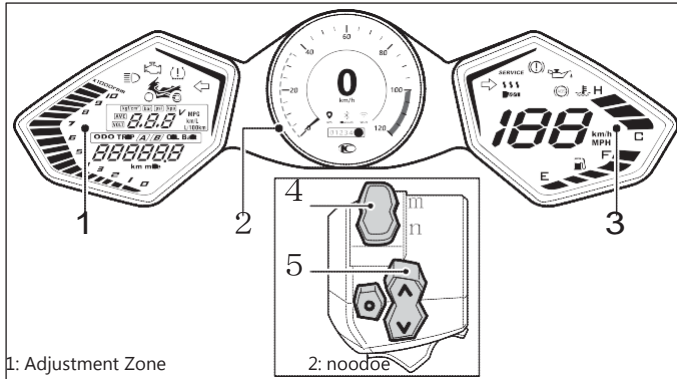
9: Meter - Display Zone

10: Right Handlebar Switch

11: Throttle Grip

12: Front Brake Lever

Control Functions of Mechanism LED Dashboard Function



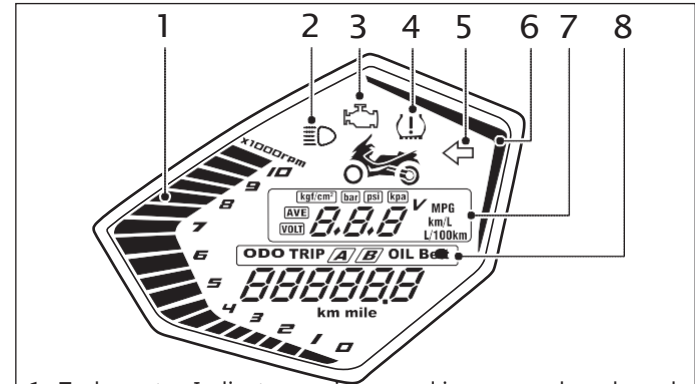
- 1: Adjustment Zone
- 3: Display Zone
- 2: noodoe
- 4: noodoe and dashboard switch button
- 5: noodoe and dashboard operation button

LED Dashboard - Adjustment Zone

Switch the Handlebar Switch to meter control position (m).

m → Meter

n → noodoe



- 1: Tachometer: Indicates engine speed in rpm; each scale multiplied by 1000 rpm.
- 2: High Beam Indicator: Headlight is at High Beam Position when this indicator lights up.
- 3: Engine Detection Indicator: After KEY ON, this indicator lights up for 2s and then goes off automatically, indicating the vehicle is normal. If it does not light up for 2s after KEY ON or it lights up and keeps on after 2s, the vehicle is faulty and shall be checked up by a service station.

Attention

In order to prevent accidents, do not perform adjustment when riding the vehicle. Adjust settings of the LED Dashboard after parking at a safe location.

- 4: Tire Pressure Detection Indicator: After KEY ON, this indicator lights up if tire pressure is too high or too low. If tire pressure decreases rapidly, the indicator flashes quickly; if tire pressure decreases slowly, the indicator flashes slowly.
- 5: Direction Indicator: This indicator flashes when Winker Switch is activated.
- 6: Mode Indicator: In normal operation, the LED lights up in blue; pressing the MODE button on Left Handle Switch will change the LED into amber for Rainy Day Mode.
- 7: Function Zone:
 - When switching m/n button of Right Handlebar Switch to m,
 - Clicking UP (\wedge) button on the Right Handlebar Switch,
 - VOLT (Battery Voltage) \rightarrow AVE (Average Fuel Consumption) \rightarrow (Instant Fuel Consumption) \rightarrow TPS(Tire Pressure)
 - VOLT \rightarrow Indicates Battery Voltage
 - AVE \rightarrow Average Fuel Consumption (AVE) mode, indicates Average Fuel Consumption (km/L and L/100km), (after returning TRIP to Zero, AVE will also return to Zero.)
 - \rightarrow Instant Fuel Consumption Mode, AVE indicator goes off, indicating Instant Fuel Consumption of vehicle (in km/L and L/100km).
 - Change unit of fuel consumption: When in AVE/ Instant Fuel Consumption Mode, Click "O" button on Right Handlebar Switch to switch-over between "km/L" and "l/100km".
 - Change unit of tire pressure: When in Tire Pressure Display Interface, click "O" button on Right Handlebar Switch to switch-over units in the sequence of "kg/cm² \rightarrow bar \rightarrow psi \rightarrow kpa".

- Km/Mile Unit Change-over: When in ODO Display Interface, Press-and-hold "O" button on Right Handlebar Switch for 2s to switch-over between Km and Mile display.

⦿ Attention

- ◆ **When selecting Mile Gauge, the displayed unit is MPG, i.e. miles per gallon.**
- ◆ **The Average Fuel Consumption or Instant Fuel Consumption of the vehicle displayed by the meter is for reference only. The actual fuel consumption is dependent on the actual vehicle behavior.**
- ◆ **When Battery Indication is lower than 12V, it means the battery power is low and an immediate check-up or recharge is required.**
- ◆ **When switching over between Km and Mile, units of all the meters are switched over simultaneously (except that of tire pressure).**

8: Mileage Information

- Pressing DOWN (\vee) button on the Right Handlebar Switch,
- ODO \rightarrow TRIP A \rightarrow TRIP B \rightarrow OIL \rightarrow Belt
- ODO \rightarrow Total running Mileage displayed in Km or Mile.
- TRIP A/TRIP B \rightarrow Single trip mileage; Single trip mileage can be zeroed by pressing and holding "O" button for 2s.
- OIL \rightarrow Oil Service Mileage. After running 5,000km, the "services" symbol on the right of Dashboard lights up constantly, indicating an oil recheck is required.

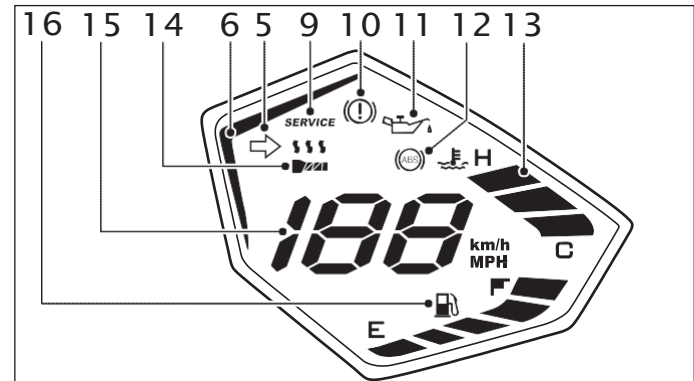
Control Functions of Mechanism

- Belt → Belt Service Mileage. After running 20,000km, the "services" symbol on the right side of the Dashboard will light up constantly, indicating a CVT belt replacement is required.

⦿ Attention

- ◆ Oil replacement indicator will only light up after running 5,000km, therefore it will not light up for the first oil replacement at 1,000km. However, a Zero adjustment is still necessary after oil replacement at 1,000km so that the indicator can act correctly for a subsequent indication.
- ◆ Oil replacement indicator will only light up after running 5,000km, Please go to a local KYMCO dealer for check-up immediately.

LED Dashboard - Display Zone



9: SERVICE Warning Indicator:

- The Oil Replacement Indicator (SERVICE Symbol) lights up when the mileage reaches 5000km. Switch to OIL Mode to turn off the Oil Replacement Indicator light (SERVICE Symbol) and reset the mileage readings to zero.
- The Belt Replacement Indicator (SERVICE Symbol) lights up when the mileage reaches 20,000km. Switch to Belt Mode to turn off the Belt Replacement Indicator light (SERVICE Symbol) and reset the mileage readings to zero.

⦿ Attention

When OIL mileage accumulation reaches 5000km or Belt mileage accumulation reaches 20000km, you need to zero both OIL and Belt mileage accumulation at the same time for turning off the service Symbols.

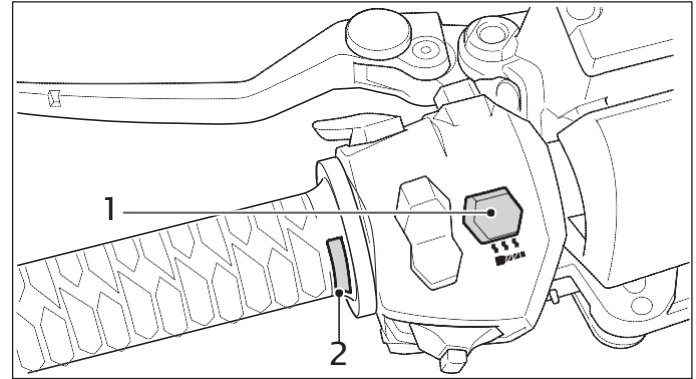
4 Control Functions of Mechanism

- 10: Parking Brake Indicator: If this indicator lights up, it indicates a locked Parking Brake.
- 11: Oil Pressure Warning Indicator:
- The Oil Pressure Warning Indicator lights up when KEYLESS Main Switch is activated.
 - Oil Pressure Warning Indicator will go off when the engine is started.
 - The Oil Pressure Warning Indicator will light up if the oil pressure is lower than normal action when the engine rotates. This denotes a system anomaly; you need to go to a KYMCO dealer for a check-up.
- 12: ABS Fault Indicator: The ABS Fault Indicator lights up constantly when the KEYLESS Main Switch is activated; it will go off when the vehicle speeds up $\geq 6\text{km/h}$.

⦿ Attention

If ABS Fault Indicator stays lighting up when vehicle speed is $\geq 6\text{km/h}$, it indicates the ABS system is faulty. Please go to a local KYMCO dealer for check-up immediately.

- 13: Water Thermometer: If water temperature reaches H (High-temp Position) when vehicle is running, it means water temperature is abnormal. Pull over and park your scooter safely, wait until the cooling water gets cooler before adding coolant and restart your engine. Go to the KYMCO dealer nearest to you for inspection and maintenance. Please note that riding your scooter with the water temperature at a high level may lead to engine failure.
- 14: Handlebar Heater: After turning ON the Main Switch, press and hold Handlebar Heater Button for 3s or more to activate/deactivate Handlebar Heating Function.



1: Heater Button

2: Handlebar Heater State Indicator

- 15: Speedometer: Vehicle speed is indicated in km/h or mph. (Switch over between metric and imperial systems by press-and-hole "O" button on Right Handlebar Switch for 2s in ODO Mode.)
- 16: Fuel Meter: Indicates fuel content in the tank. Replenish with 95 unleaded gasoline when Fuel Meter approaches the last scale near "E" (preventing fuel pump from running dry and damage).

To access the noodoe system

- Step 1** See "Download noodoe APP" to download the APP. The noodoe system will get installed automatically after successful download.
- Step 2** See the "Handlebar Control button overview" to learn about button operation.
- Step 3** Pair with your scooter, please refer to "Pair with your scooter" and "Upload and create noodoe function".

noodoe Function

- A** See "APP function overview/creation mode" for APP function overview.
- B** See "Find scooter" to locate your scooter.
- C** See "Message alert" to learn about message notice function.
- D** See "Welcome flash" for welcome message function.

To access the noodoe system

- Step 1** See "Download noodoe APP" to download the APP. The noodoe system will get installed automatically after successful download.

Download the noodoe APP: The user may enter the Google Play Shop (Android) or App Store (iOS) and search with the keyword "noodoe".

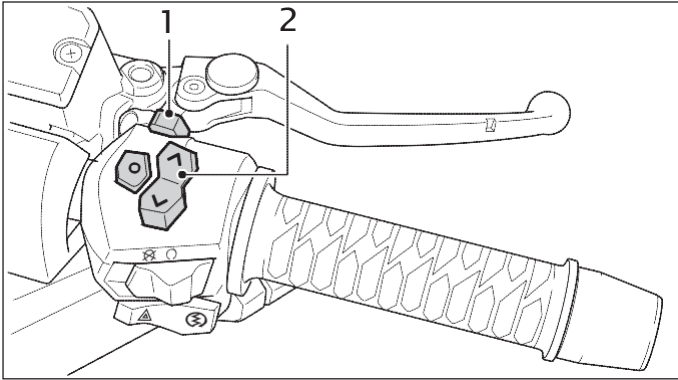


Attention



- ◆ **Minimum supported version: Android 4.4.4. or above, iOS 9 or above.**
- ◆ **Your smartphone is required to have Google service support to operate the APP successfully.**

4 Control Functions of Mechanism

Step 2 Handlebar Control button overview



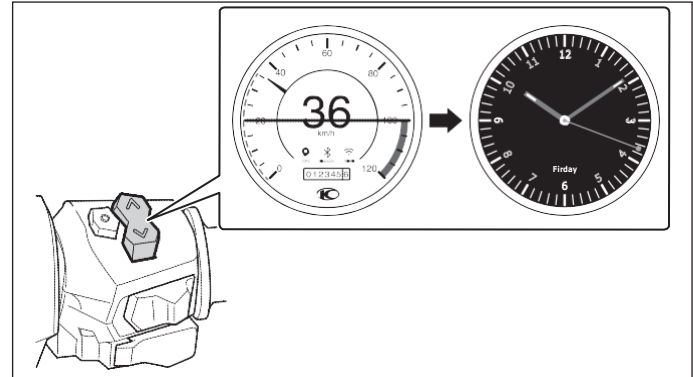
1: Dashboard and noodoe Change-over Switch
2: Dashboard and noodoe Operation Switch

	m	m → For operating the Dashboard functions on both sides of Dashboard.
	n	n → For operating noodoe function of the Dashboard.
	(^) Button → Up Button	
	(v) Button → Down Button	
	(O) Button → Enter Button	

While Driving:



- Operate (^) and (v) buttons to switch-over between 4 screens of Dashboard noodoe functions.
- Press (O) button to end the action.



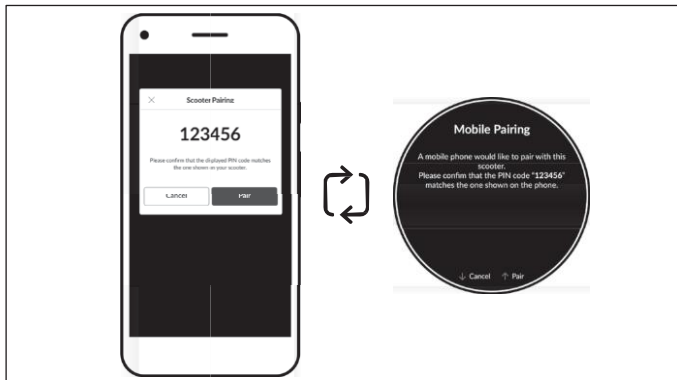
When Stopped:

Message Notice:

- Operate (^) and (v) buttons to switch-over message notices in the Dashboard noodoe Function.
- Press (O) button to activate or close message notices.

Step 3 Scooter Pairing

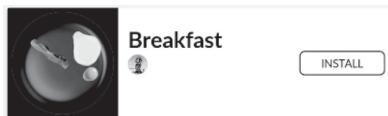
Ignition on(Scooter) → set the switch to n position (Scooter) → Press (O) button for 5s to enter "Pairing Mode" (Scooter) → Select a new user (Scooter) by the Operation Button → Select Bluetooth Device (cell phone) → Link (cell phone) → Confirm Code (cell phone and Scooter) → Press (O) button → Pairing accomplished.



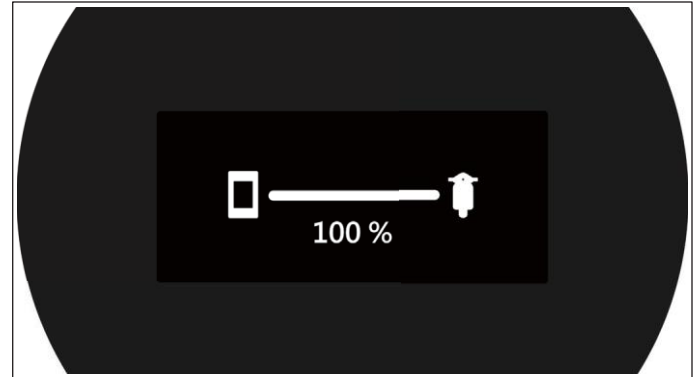
Upload Creation

User created Dashboard can be installed onto scooter.

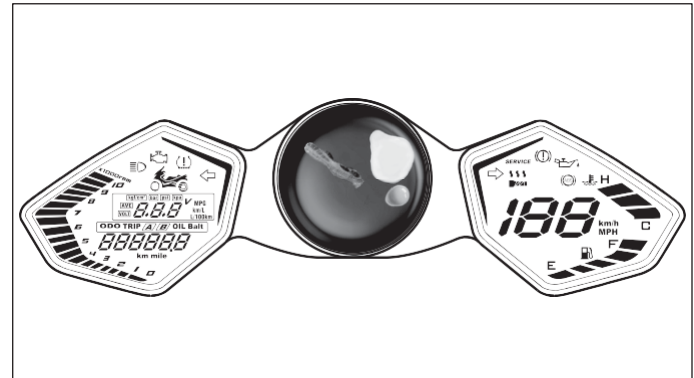
- Cell phone display



Upload creation to Scooter.



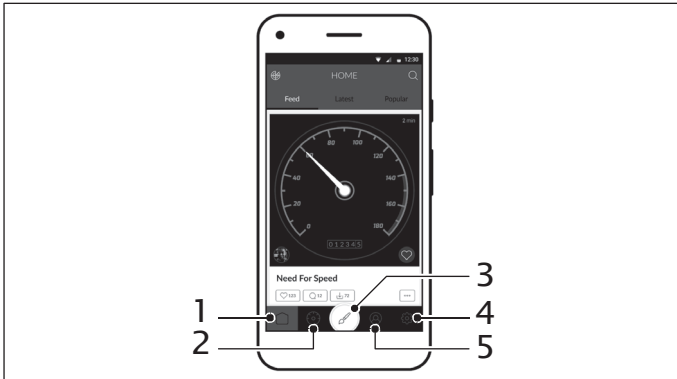
- Dashboard Display



noodoe Function

A App Functions

- The user may browse and collect creations from users all over the world and install them into the Dashboard of your vehicle.
- The user may collect or remix any creation you find, or design his/her own dashboard in Create Mode.

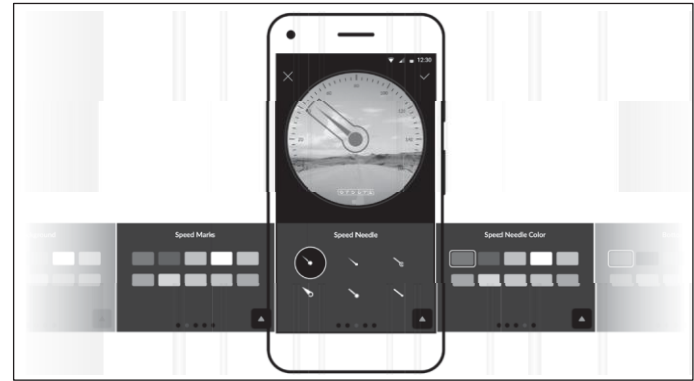


1: Home/Feed
3: Create Mode
5: Settings


2: My Dashboards
4: My Profile

Create Mode

- Create Mode allows you to remix an existing template to your liking.
- Pick between Clock, Weather, Compass or Speed and unleash your creativity. You can change colors, fonts, upload your own images and more possibilities.



B Find My Scooter

- Forgot where you've parked? No worries, noodoe remembers.
- Tap the  icon and the app will guide you back to where you last parked.



Both Bluetooth/GPS/Internet functions shall be activated in your cell phone.

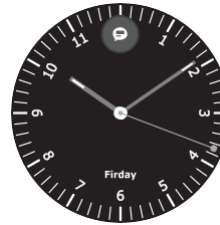
There are 2 modes of "Find my Scooter" display

1. Map Mode
2. Azimuth Mode

C Message Notice

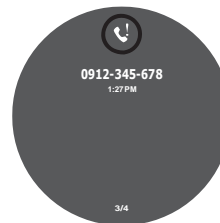
Once the cell phone is linked, any incoming message will be forwarded to the scooter dashboard (Android users may select display with → Setting → Application procedure in the selection).

- While Driving:



A message "For the sake of safety, no message is viewable when you drive the scooter." is displayed on the top of Dashboard noodoe.

- When Stopped:



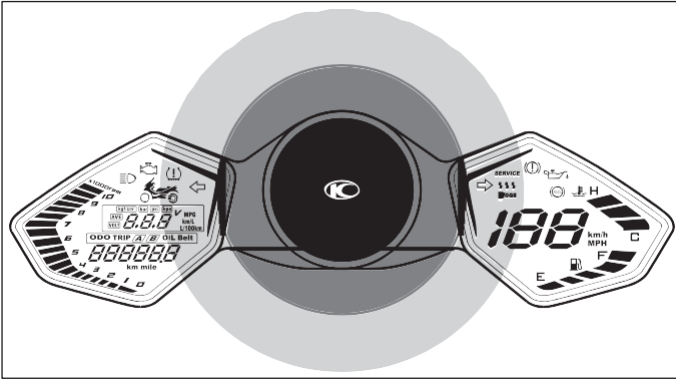
Any message received during your ride will be displayed automatically when you make a subsequent stop.

You may also press the **Up and Down** button on the right handlebar switch (only when you stop the vehicle) to manually **check** message contents.

4 Control Functions of Mechanism

D Welcome Light:

Every time you approach your scooter, it will greet you with a Welcome Light. This is very useful when you're looking for your scooter in a crowded parking area or in nighttime.



⚠ WARNING

- ◆ When using the noodoe function, make sure that the batteries of both the cell phone and vehicle are fully charged. If you need to start the engine for charging, do it in a well ventilated place.
- ◆ When Ignition off and the battery voltage gets low, the noodoe system shuts off Bluetooth/connection/welcome light function automatically. In case it fails to work after the engine has started, get the system checked and repaired by your dealer.

📢 Attention

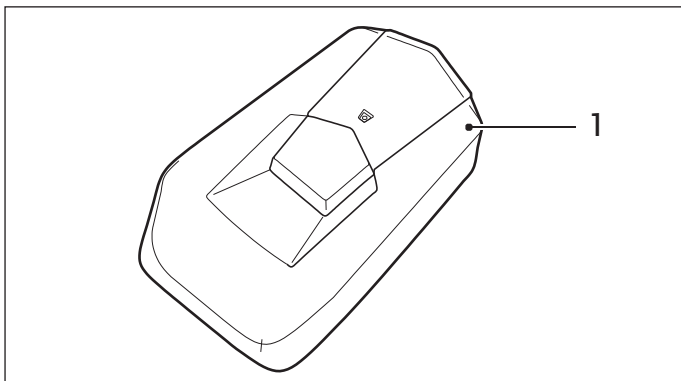
1. For enhancing the accuracy of displayed weather and local information, you should activate GPS and Network functions of your cell phone. (In case of cell phone signal failure, previous information will be displayed until resumption of the cell phone signal for displaying accurate information).
2. Switching over of Speed / Temperature / Time units are carried out from a cell phone; minor difference resulting from the frequency of data updating is within a reasonable range.
3. Scanning speed and results of Bluetooth Device may be limited in compatibility issues due to cell phone specifications.
 - a. Scanning speed of Bluetooth Device is slow.
 - b. Pairing is unsuccessful.
 - c. Bluetooth error occurs during the link.
4. The User needs to set cell phone's Cloud Messaging function to facilitate noodoe message display.
5. While driving, noodoe will not display any message (including incoming call, message, LINE, FB, etc.). While vehicle stops, noodoe automatically displays incoming calls and relevant information.
6. The last screen at the previous shut down will be the first screen on a re-start.
7. Compass function must be activated by performing the setting on a cell phone. The minor errors may exist depending on the upgrade frequency of data.

8. **Compass only performs self-verification to modify orientation when the vehicle starts to move, therefore it is normal that no orientation calibration is activated after connecting the noodoe App when the vehicle has not started moving yet.**
9. **Time of noodoe will be calibrated automatically after connecting noodoe with a cell phone.**
10. **The user shall never operate noodoe while riding the vehicle or an accident may occur.**
11. **Action of Welcome Light function can be set using an APP (On or Off).**

When Breathing Light is set enabled:

 - a. Welcome Light is only activated on a subsequent connection of a Bluetooth Device. Each activation lasts for 2 minutes before switching off automatically.
 - b. After each riding, a single cell phone linkage will only activate Welcome Light 3 times; Welcome Light will shut off Bluetooth function automatically after being activate 3 times.
 - c. Entering the Find My Scooter screen will include a and b limitations, the noodoe system will activated Welcome Light until the user leaves the Find My Scooter screen or shuts off the Bluetooth connection function.
 - d. The welcome light remains in standby mode for 3 days after shutdown. The Bluetooth function turns off 3 days later or when welcome light or battery voltage gets too low (about 12V).
12. **When KEYLESS Main Switch is Off, all the information will be removed, for preventing leaking of personal info.**
13. **APP info display speed may be limited due to network transfer rate, therefore resulting in slow data indication under poor networking speed.**
14. **There are certain APP notice limitations between iOS and Android system.**
15. **There are possibilities that APP functions may become unusable after upgrading iOS and Android software; some new cell phone models may have unusable issues.**
16. **The noodoe system may shut off and enter into protection mode due to excessive temperature rise under certain special environments or mode; however the system will resume operation when the temperature drops.**

KEYLESS Remote Control



1: KEYLESS Remote Control

KEYLESS is a high-tech electronic master switch that requires no key (see Figure above).

Each vehicle is provided with two Remote Controls (see Figure above).

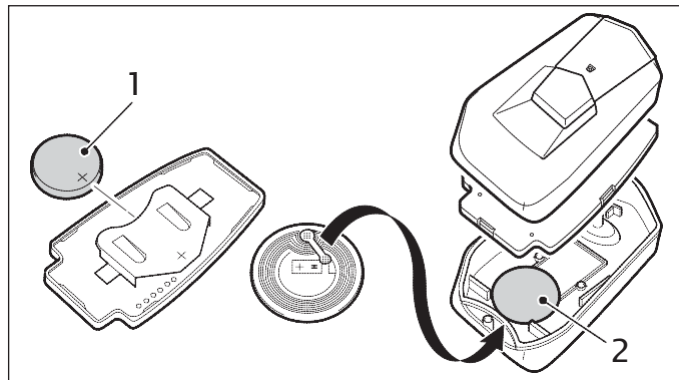
In case the Remote Control is lost, the KEYLESS Main Switch will be unable to be activated.

Customers must take special care of the safe storage of their remote controls.

⚠ WARNING

In case both KEYLESS remote controllers get lost or damaged, please visit your dealer for inspection or replacement.

Replacing battery of Remote Control



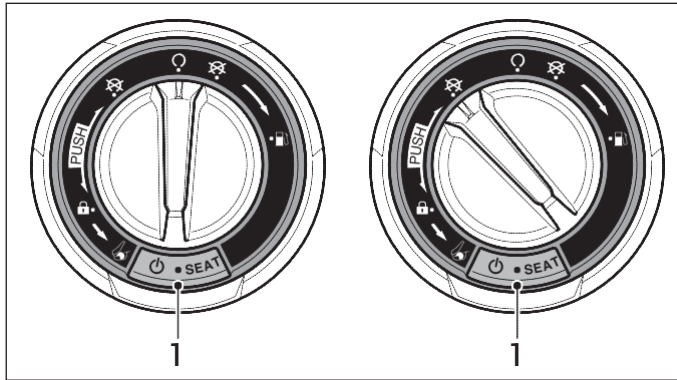
1: Battery of Remote Control

2: Antenna sticker


Battery Model for Remote Control: CR2450

⚠ WARNING

In case of replacing the case or battery, beware of the sticker placed on the case (shown above) do not lose it.





1. Button

To close down the Main Switch, turn the Main Switch to  position, backlight of the Main Switch lights up in red (constantly); it will go off, with the buzzer giving a long beep, now that the KEYLESS system and backlight have been shut down.


When the button is pressed down, backlight of Main Switch will light up about 1s before going off. If the backlight is not on/off normally, immediately go to a KYMCO dealer for checkup.

 : Steering Stem is locked at this position

 : All the power of the vehicle is cut off at this position. (Engine stops)

 : All the power of the vehicle is ON at this position. (Starting the engine is allowed.)

PUSH : Indicates a Push-down is required for the action.

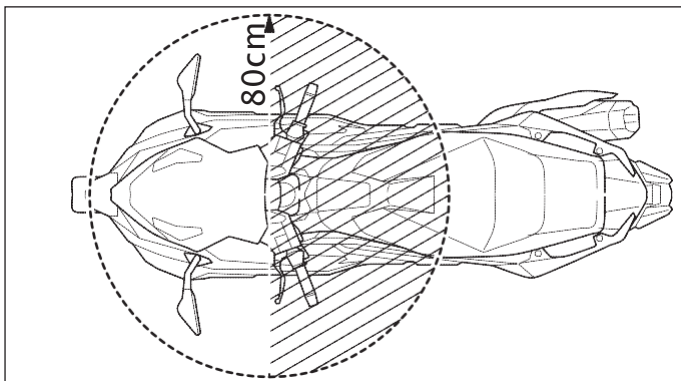
 : Indicates to open the seat pad.

 : Indicates to open the Fuel Tank Outer Cover. °

• : Indicates the position of a segment.

4 Control Functions of Mechanism

KEYLESS Sensing distance



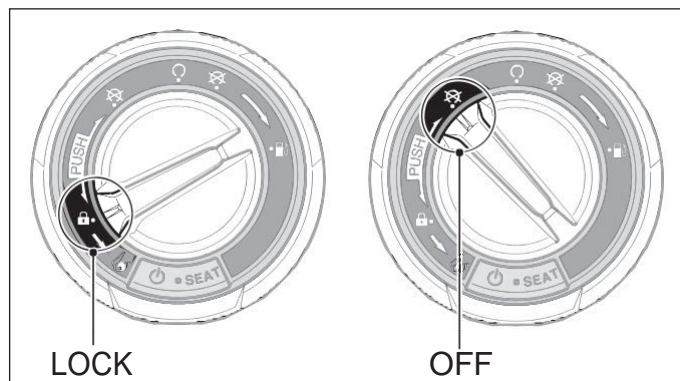
Remote Sensing: 0 ~ 80cm

Short-range Sensing: 0cm




⦿ Attention

- ◆ The optimum sensor range is 80cm which may vary with ambient conditions.
- ◆ Please lock the steering rod, close the KEYLESS system, and carry the remote controller with you before leaving your scooter.

KEYLESS Main Switch



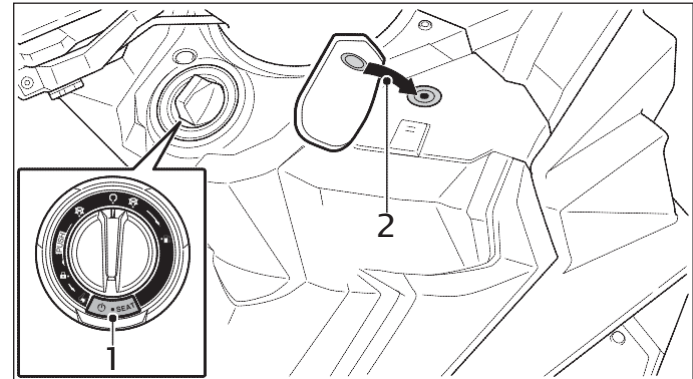
KEYLESS Controller Theft Prevention Setting – Remote Sensing (Locking)

1. When parking the vehicle and ready to leave, the user shall turn KEYLESS Main Switch from ON  to OFF  and LOCK  position; this will activate the red indicator of KEYLESS Main Switch Decorative Cover; pressing the button on the bottom will activate a long BEEP and the knob turns automatically to complete locking.
If the button is not pressed, the system will issue a long beep after several seconds, with the knob turned automatically.
2. When the power of Remote Control is weak or the surrounding is obstructive that Locking cannot be triggered.

KEYLESS CONTROLLER Theft Prevention Setting – Remote Sensing (Unlock)



KEYLESS Controller Remote Sensing Mode is operated as follows

1. Press down the button and the decorative cap of the Main Switch will light up in blue, accompanied by 2 short beep sounds. Turn the knob to any position other than idle, then to ON, blue light will go out. Now the engine is allowed to start.
2. When the power of Remote Control is weak or the surrounding is obstructive that Locking cannot be triggered, you may use short-range sensing by putting the back of Remote Control (the side without buttons) against the circular mark on the Front Inner Box and then operate the same as for the remote mode.



1. Button
2. Short-range Sensing: Place circle on the Remote Control against Circular Mark on the Luggage Cabinet.

KEYLESS CONTROLLER Theft Prevention Setting – Short-range Sensing (Unlock)

When the power of the Remote Control is weak or the surroundings are obstructive such that Locking cannot be triggered. Put the back of the Remote Control (the side without buttons) against the circular mark on the Front Inner Box and press the button; after hearing 2 short BEEPs, the KEYLESS Main Switch turns from OFF  to ON  and the indicator on its decorative cover lights up in blue, indicating completion of Unlocking.

KEYLESS CONTROLLER Theft Prevention Setting – Short-range Sensing (Locking)

By following the same steps of the Remote Sensing (Locking).

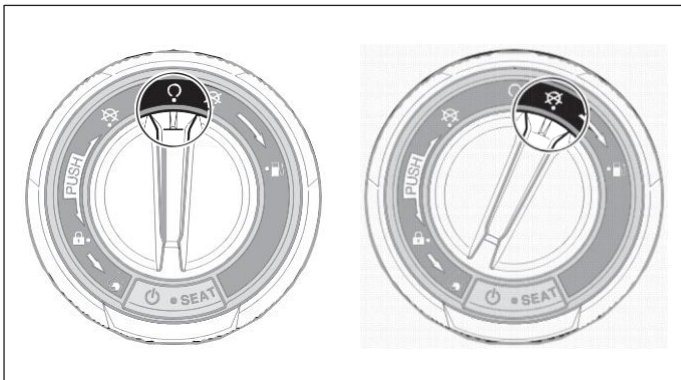
Attention

- ◆ It is strongly recommended that the user shall use Remote Sensing (Locking) mode to activate the Theft Prevention function.
- ◆ In case the KEYLESS main switch failed to operate in remote mode, try replace battery of the remote controller with a new one or use local sensor to unlock your scooter.

4 Control Functions of Mechanism

Attention

- ◆ In the LOCK and OFF state, if knob is not turned after unlocking, the blue light will stay on constantly. Turning the knob to ON will still allow starting the engine. Do NOT forget to press the button to activate locking.
- ◆ After turning ON → OFF, turning it back to ON before the long BEEP sounds up will allow you to operate the scooter again.
- ◆ In the ON or OFF state, pressing the button will open the Luggage Box. Turning the Knob to the refuel symbol on the right will open the outer cover of fuel tank (see drawing).




WARNING

Never turn the Main Switch to  or  when you are riding your vehicle, or an accident may occur.



Steering Stem Lock

For theft prevention, lock the steering stem when parking your scooter.


Locking Method:

Turn the Steering Stem to the left, then press the Main Switch inward and turn it to the left to “” position.

Unlocking Method:

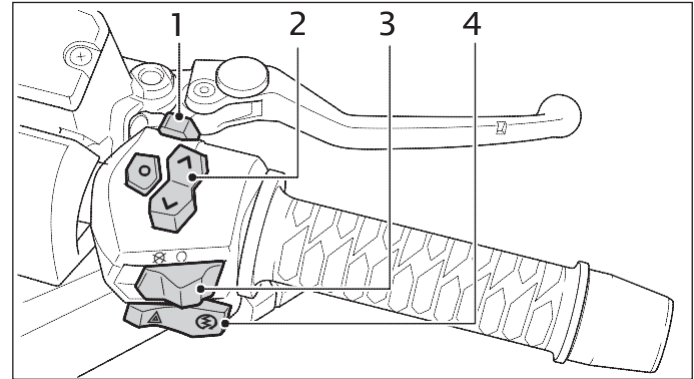
Press the Main Switch inward and turn it from “” position to the right to “”, the lock is unlocked.

Attention

- ◆ When locking the Steering Stem, turn the Main Switch to “” verify if the stem is locked before leaving the vehicle.
- ◆ Do not mark your scooter at locations where traffic safety may be obstructed.
- ◆ The location (such as back pocket, back-bag, etc.) where you put your Remote Control may affect the KEYLESS System.
- ◆ Removing the Remote Control will disable the vehicle for start-up.
- ◆ When KEYLESS system is activated (Blue backlight is on), the Main Switch may still be in the idle position; you will need to turn it to a set position (the right position) to start your vehicle.
- ◆ Avoid placing the Remote Control at a damp or high-temperature location.

- ◆ Sensing distance of remote control may alter when the battery power becomes week.
- ◆ Avoid improper actions when replacing battery of the Remote Control, for not damaging the unit. It is suggested that you should go to a professional service station for repair.

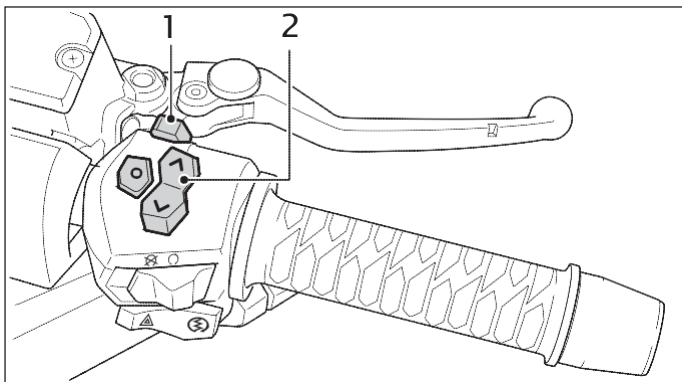
Right Handlebar Switch



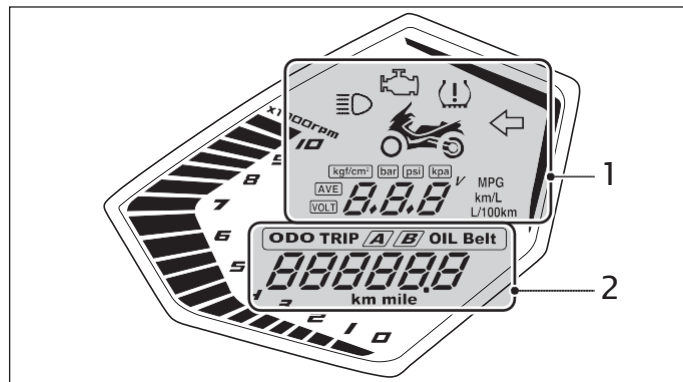
- 1: Dashboard and noodoe Change-over Switch
- 2: Dashboard and noodoe Operation Switch
- 3: Engine Start/Stop Switch
- 4: Park Alert Switch/ Electrical Start Switch

1. Dashboard and noodoe Change-over Switch: Press this button to change over between Dashboard and noodoe interfaces.

4 Control Functions of Mechanism



- 1: Noodoe Change-over Switch
- 2: Noodoe Operation Switch

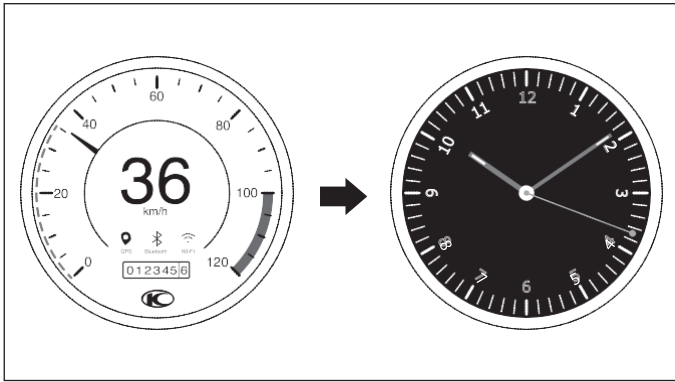


- 1: Set switch to "m" and select UP (^) button
- 2: Set switch to "m" and select DOWN (v) button

2. Dashboard and noodoe Operation Switch

- When the switch is at [m], selecting UP operation button (^) will switch the vehicle information on the upper-left of Dashboard.
- When the switch is at [m], selecting DOWN operation button (v) will switch the vehicle information on the lower-left of Dashboard.

- When the switch is at [n], selecting UP (^) /Down (v) operation button will switch the noodoe information at the center of Dashboard.



3: Engine Stop Switch

- ⊗ : At this position, engine is stopped and cannot be started; it requires switching back to ○ position to start the engine.
- : At this position, starting the engine is allowed.
During normal riding, put the Engine Stop Switch at 「○」 position. In the event of emergency, such as fuel cable jam or vehicle tumbling, turn the switch to ⊗ position to force-stop the engine.

4: Park Alert Switch/ Engine Ignition Switch

Park Alert Switch

- ⚠ : Push this switch to the left, all the Fault Alert Lights (4 winkers, left and right, front and rear) will flash.
- OFF: Push this switch to the right, all the Fault Alert Lights stop flashing.

⦿ Attention

Do NOT use the Fault Alert Light for prolonged period after stopping the engine, or power of battery will deplete.

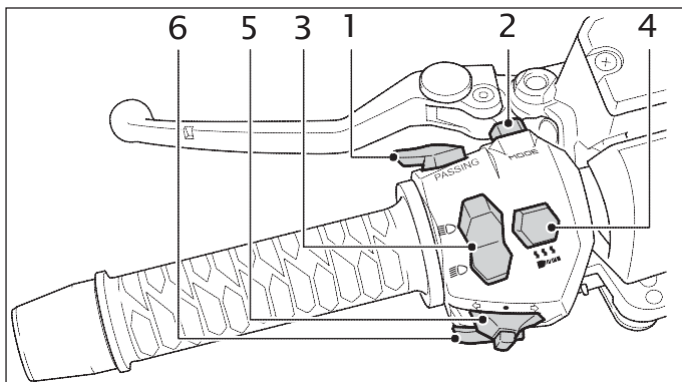
Electrical Start-up Switch

Turn ON Main Switch, do remember to pull-up both the front and rear brake levers; press down this button to start the engine.

⦿ Attention



To avoid insufficient voltage of battery and you cannot start the engine, go to KYMCO dealer for check-up when the starting motor becomes less powerful.

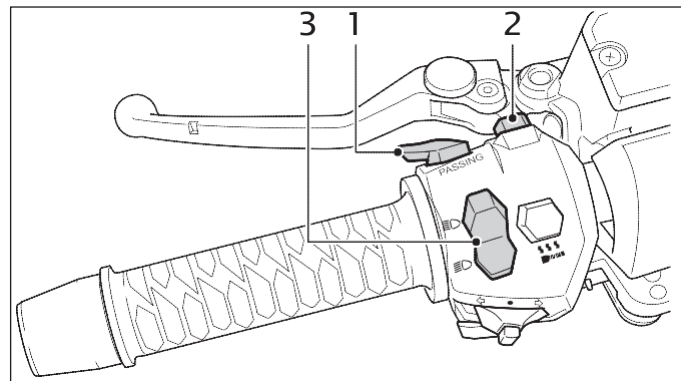
Left Handlebar Switch



1: Over-pass Light SW.
3: High/Low Beam SW.
5: Winker SW.

2: Mode Change-over SW.
4: Handlebar Heater SW.
6: Horn SW.

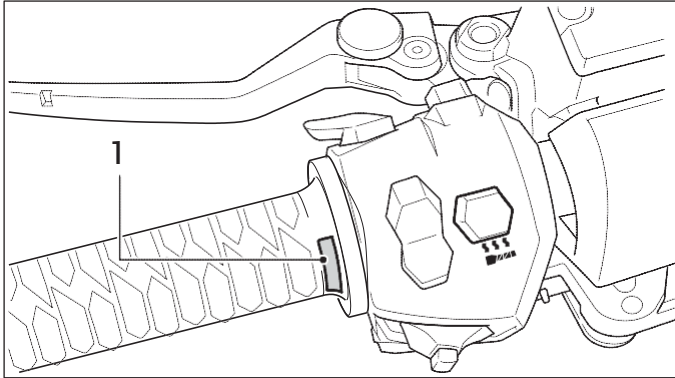
- 1: Over-pass Light SW.: Pressing this button will activate High Beam.
- 2: Mode Change-over SW.: Pressing this button will turn the Dashboard LED into Yellow, for Rainy Day Mode (Deceleration Control).
- 3: High/Low Beam SW.: Pushing the switch to 「」 for High BEAM, to 「」 for Low Beam.



1: Over-pass Light SW.
3: High/Low Beam SW.

2: Mode Change-over SW.

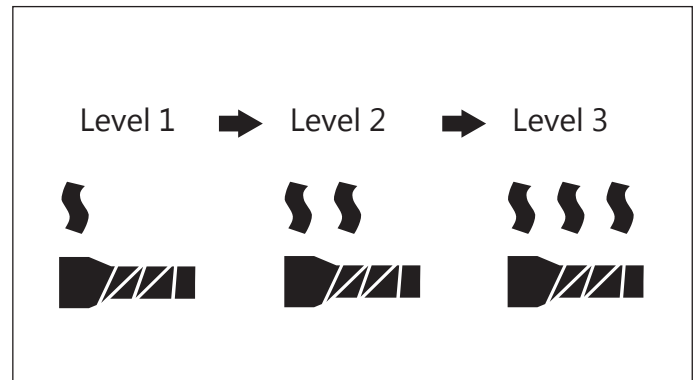
- 4: Handlebar Heater SW.
 - After turning ON the Main Switch, press and hold Handlebar Heater Button for 3s or more to activate/deactivate Handlebar Heating Function.
 - After activating Handlebar Heater controller, click the button to select heating level in the sequence of 1 > 2 > 3 > 1 > 2 ..

Handlebar Heater State Indicator:

1: Handlebar Heater State Indicator

- a. After turning ON KEYLESS Main Switch, a self-check is performed with the LED indicator flashing in a 1-white and 1-red format.
- b. After KEYLESS Main Switch ON and indicator self-check, in the event of a Handlebar Heater anomaly, the indicator will flash in red, with the Handlebar Heater function disabled. (Refer to anomaly states below for indicator flashing modes.)
- c. After KEYLESS Main Switch ON, press and hold the button to activate Handlebar Heater. Indicator lights in white constantly for normal operation.
- d. Turn KEYLESS Main Switch OFF or press and hold the button to deactivate Handlebar Heater. The indicator will go out, indicating the function is switched off.


- e. If Handlebar Heater is faulty, the indicator will flash in red. After eliminating the fault and re-starting (Key Off → Key On) the vehicle, indicator will resume normal operation. Clicking the button when the indicator is flashing in red will stop the flashing. For the sake of your safety, please go to a KYMCO dealer for check-up.

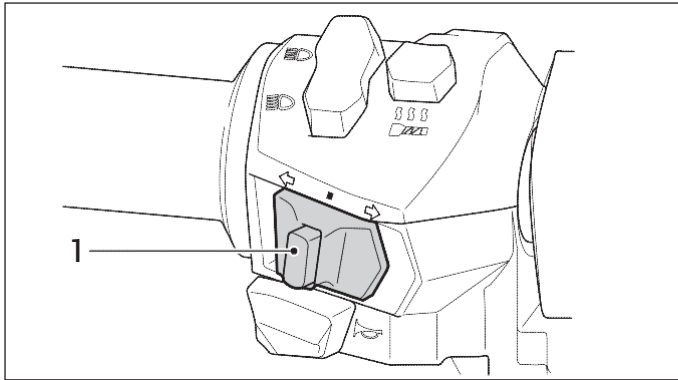
**Dashboard Level Indication:**

- a. On activation of heating function, Dashboard will receive signal from controller and display the current heating level to the user.
- b. Level Indication:
 - Level 1:45°C
 - Level 2:55°C
 - Level 3:65°C
 - Heating Function OFF: All goes off.

Control Functions of Mechanism

(This is only the setting value; the actual temperature depends on the environment temperature and vehicle condition, a difference may exist.)


- c. If the signal from the controller to the dashboard is faulty for any cause, a  symbol flashes in the Dashboard.
5. Winker SW.: Use the winker when making a turn or changing a lane. Pressing-in the button will deactivate the Winker.
 - ↶ : Use this position for Left Turn.
 - ↷ : Use this position for Right Turn.
 - : To release Winker, just press-in the button.




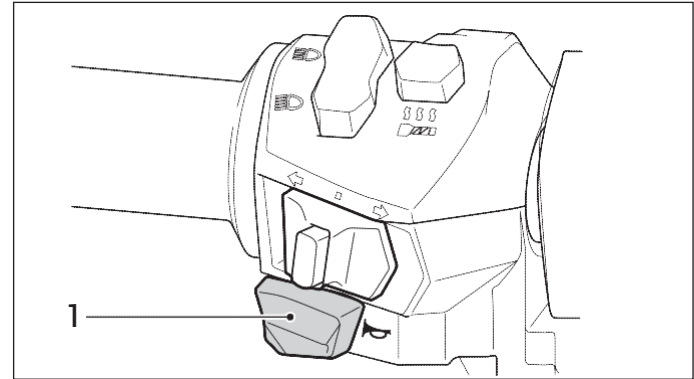
1: Winker SW.

⦿ Attention

Winker will not release automatically, it requires resuming after use. Forgetting to resume it may result in traffic safety issues.

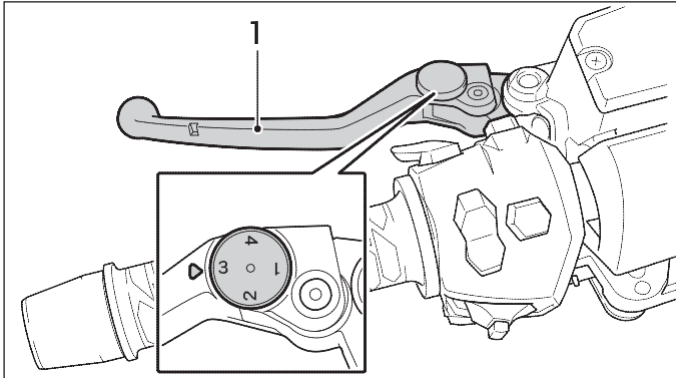
Winker will not activate when the KEYLESS Main Switch is at "  " position.

6. Horn Switch: Horn will sound when Main Switch KEY is turned ON at  " position.



1: Horn SW.

Rear Brake Lever



1: Rear Brake Lever

Rear Brake Lever situates on the Left Handlebar; when applying the Rear Brake, hold the Front Brake Lever with left hand and apply a proper force on it.

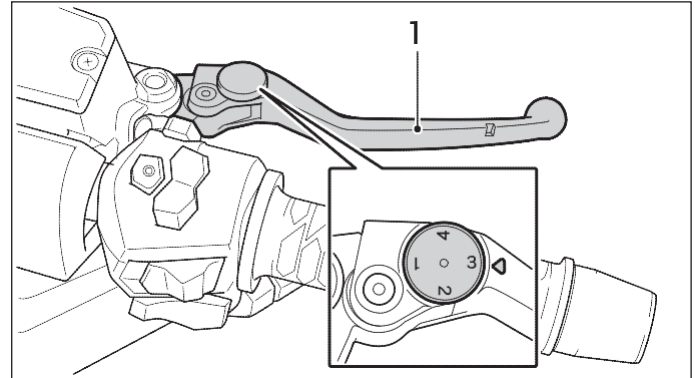
⚠ WARNING

Improper operation may result in danger.

👁 Attention

Rear Brake Lever is provided with an adjustment knob, allowing adjusting the space between the Rear Brake Lever and the Left handlebar. Please set the knob to the proper position and align with the Alignment Mark on the Rear Brake Lever.

Front Brake Lever



1: Front Brake Lever

Front Brake Lever situates on the Right Handlebar; when applying the Front Brake, hold the Front Brake Lever with right hand and apply a proper force on it.

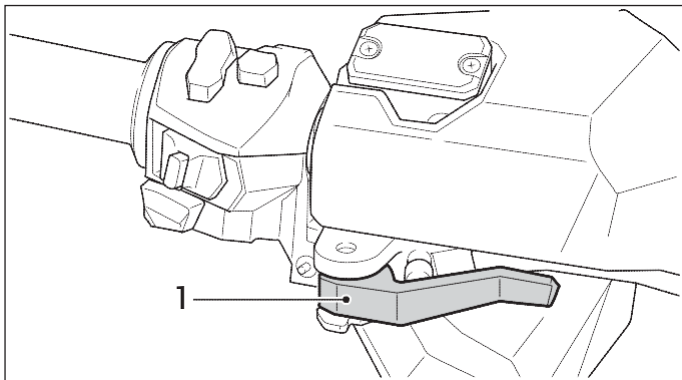
⚠ WARNING

Improper operation may result in danger.

👁 Attention

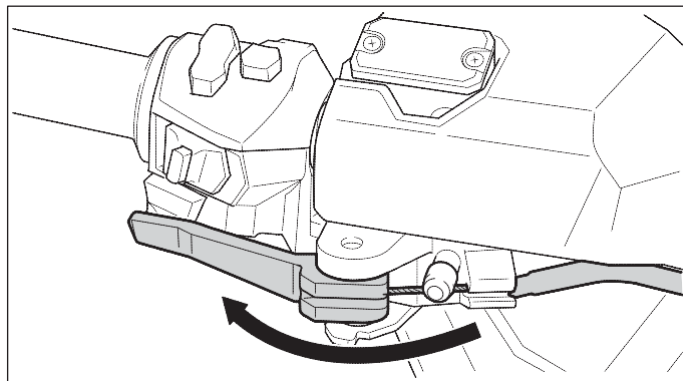
The Front Brake Lever is provided with an adjustment knob, allowing adjusting of the space between the Front Brake Lever and the throttle grip. Please set the knob to the proper position and align with the Alignment Mark on the Front Brake Lever.

Parking Brake Arm



1: Parking Brake Arm

This vehicle is provided with a Parking Brake Arm for locking up the rear tire, so as to prevent accident caused by rear tire movement when parking the vehicle on a slope.

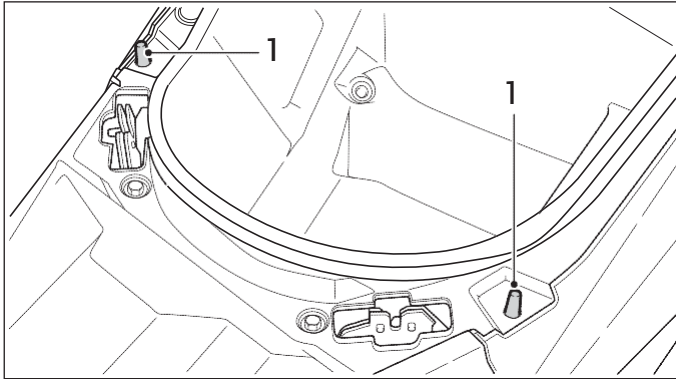


Turn Parking Brake Arm to the left and click into lock position. To unlock, just turn Parking Brake Arm back to its original position (on the right).

WARNING

- ◆ Never use the Parking Brake Arm while riding the vehicle, or loss of control of the scooter and an accident may occur. Make sure the vehicle is fully stopped before using this Parking Brake Arm.
- ◆ When using the Parking Brake Arm, verify if rear tire is truly stopped from moving.
- ◆ Before riding your scooter, verify if the Parking Brake Arm is released, otherwise output power may be affected and the Parking Brake may be damaged.

Helmet Hook



1: Helmet Hook

A Helmet Hook is provided on the front edge of Seat Pad. Lift up the Seat and put the buckle of the Helmet around the Hook, then close up the Seat Pad.

⚠ WARNING

DO NOT ride your scooter with the helmet attached to the hook. A hooked helmet may hit others or hamper your driving when riding your scooter which, in turn, may hamper your riding safety.

Luggage Box

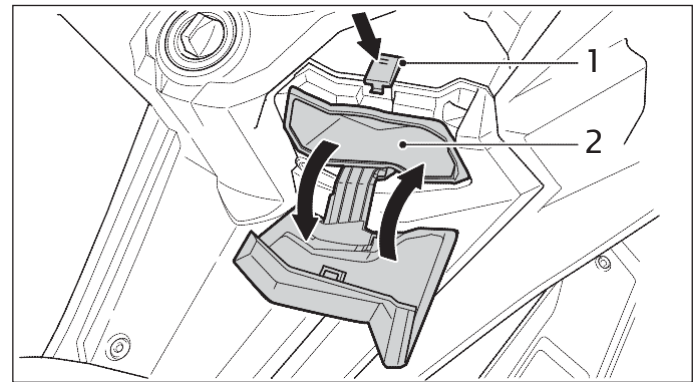
Front Inner Box

Open the left/right Front Inner Box

Press down the Front Inner Box pushbutton and pull the cover downward to open it.

Close up the left/right Front Inner Box

Pushing the cover back to its original position will close it up.



1: Front Inner Box pushbutton

2: Luggage Box

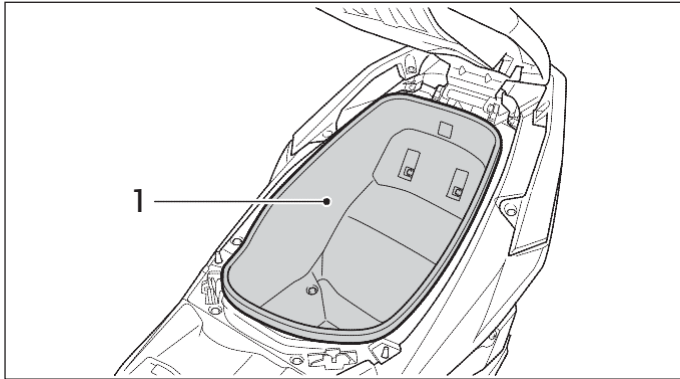
4 Control Functions of Mechanism

Luggage Box

The Luggage Box is situated beneath the Seat Pad. The Helmet and other objects may be carried in the Luggage Box.

Open Luggage Box

1. Mechanical: Push down Main Switch and turn it counter-clockwise to “👉” position to open the Luggage Box.
2. Electronic:
 - When using KEYLESS Main Switch for KEY ON, press the SEAT button below to open the Luggage Box.



1: Luggage Box

ⓘ Attention

- ◆ It may be impossible to put a Helmet of different size and shape into the Luggage Box. Please select a Helmet that fits the capacity of the Luggage Box.
- ◆ For the purpose of theft prevention, do not put valuables in the Luggage Box. Close the Seat Pad when leaving the scooter.
- ◆ Make sure not to leave the key in the Luggage Box while closing it.
- ◆ To prevent mold generation, do not leave a wet raincoat or clothing in the Luggage Box.
- ◆ Empty the Luggage Box before washing the scooter, so that objects do not get wet.
- ◆ Due to engine operation and environmental factors, the Luggage Box tends to be warm and humid; do not put fragile, flammable or easy to decay objects in it.

Do Not exceed the following load limits:

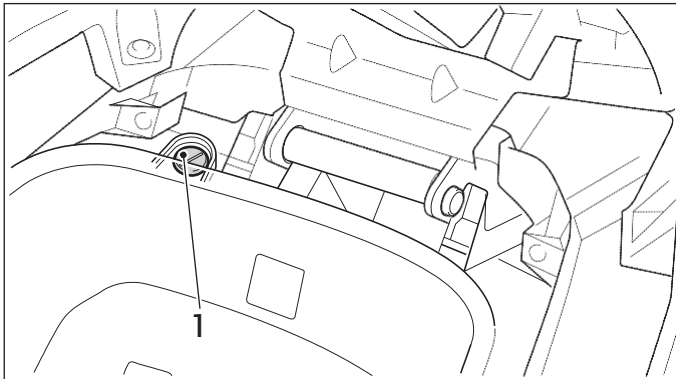
Front Inner Box
1.3 kg
Luggage Box
10 kg

ⓘ Attention

Place the Helmet in an optimal manner. Anything exceeding the capacity of Luggage Box may damage the hinge of Seat Pad while closing the Seat.

Components inside the Luggage Box:

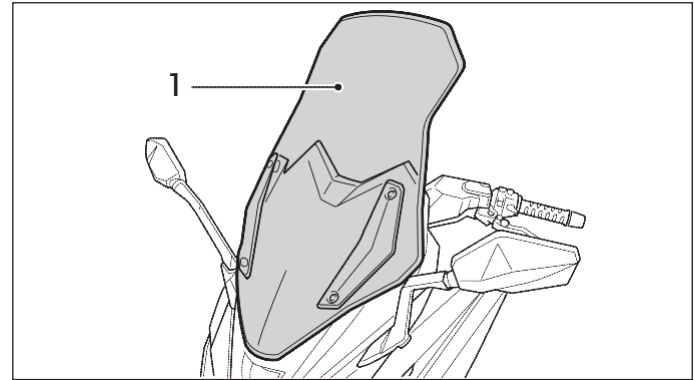
- ◆ Light (Lighting angle adjustable): The lamp lights up when Seat Pad is lifted up, goes out when closed. (The Luggage Box Light is provided with light-sensing switch; in case the user forgets to close the Seat Pad or the Seat fails to fully close up, system will cut the power automatically after a set time, preventing any power loss of battery.)



1: LED Light of Luggage Box, with Light Sensing Switch

Windshield

There are two options of Windshield Height subjecting to rider's need.

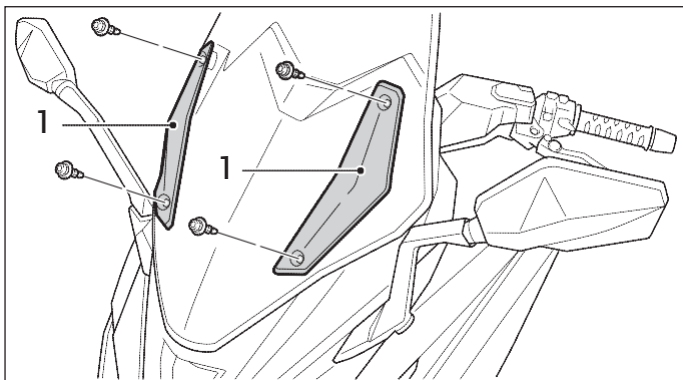


1 : Windshield

Adjusting Windshield Height

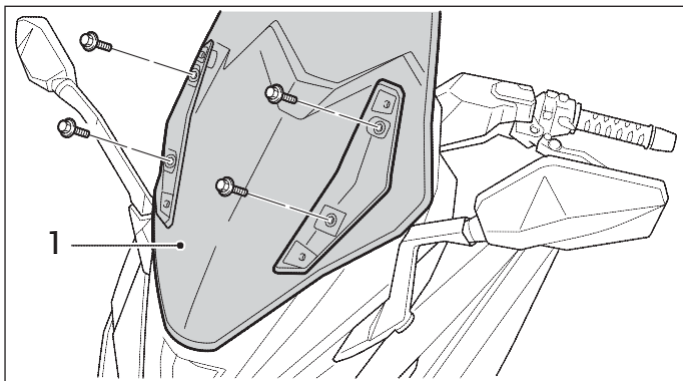
1. Remove the Fixing Screws and Front Guards of the Windshield.

Control Functions of Mechanism



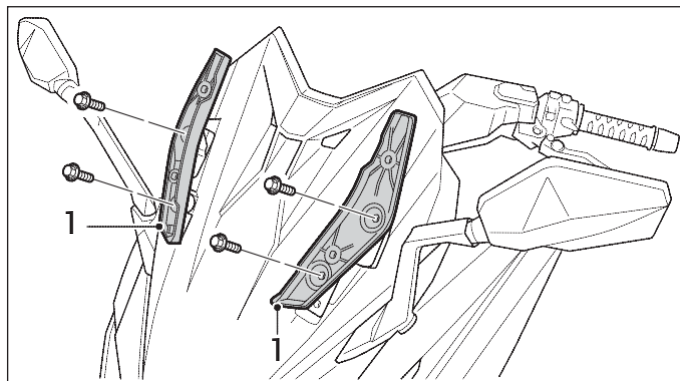
1: Front Guards of the Windshield

2. Remove Screws and Windshield.



1: Windshield

3. Remove the Windshield Partition Panel Bracket.



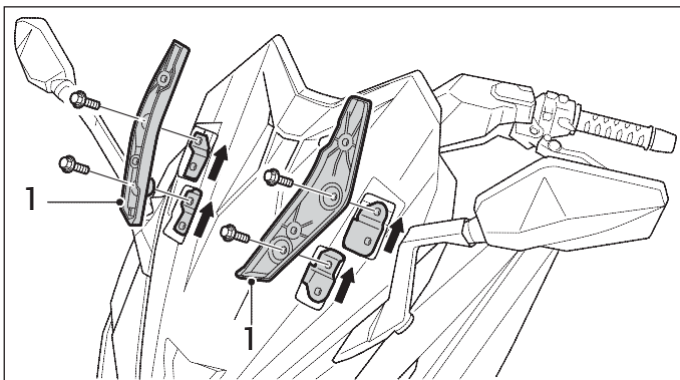
1: Windshield Partition Panel Bracket

4. Fix the Windshield Partition Panel Bracket to the desired position; Tighten screws to specified torque.
5. Install the Windshield with screws to the fixing position.
6. Tighten screws to specified torque.

⚠ WARNING

Slackened Windshield can lead to accidents. Make sure that screws are tightened to specified torque.

7. Re-install Windshield Front Guard and Quick-fix Screws.



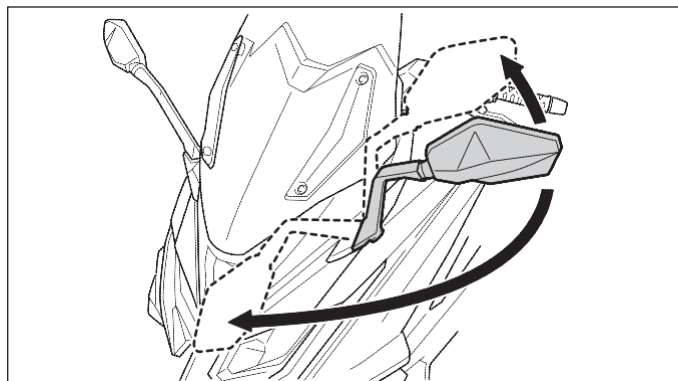
1: Windshield Partition Panel Bracket

Tightening Torque:**Bracket Screw**

20-28 N·m (204-285.6 kgf·cm)

Windshield Screw

10-14 N·m (102-142.8 kgf·cm)

Back Mirror

1: Back Mirror

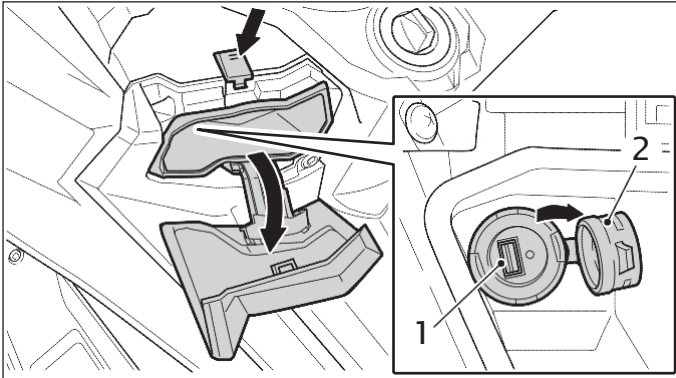
Back Mirrors are the important equipment for securing the rider's safety before and during riding. Proper use of the Back Mirror is essential.

Back Mirror is designed to be capable of turning forward and backward. When parking in a narrow space or putting down the vehicle, you may adjust the Back Mirror to a proper position.

⚠ WARNING

- ◆ **Adjust Back Mirrors to proper positions before riding the vehicle.**
- ◆ **To secure safety of the rider as well as other vehicles in behind, never remove the Back Mirror or replace them with inadequate ones.**

USB Power Socket



1: USB Power Socket

2: Protection Cap

This vehicle is provided with a USB Power Socket. You may connect a low power consumption product to the Socket, for charging the product while the engine is running.

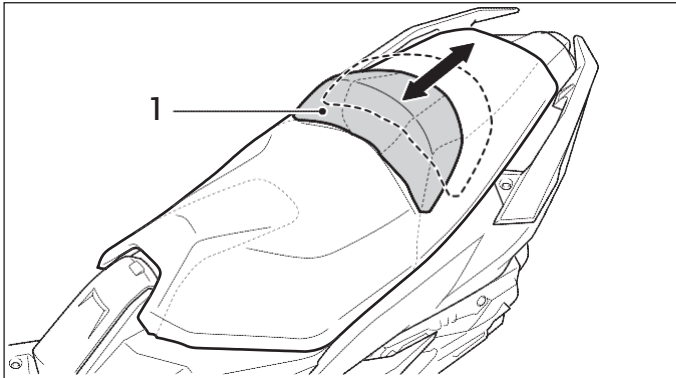
⚠ WARNING

- ◆ To avoid electrocution or short-circuit, make sure to cover-up the protection cap after using the USB Power Socket.
- ◆ To prevent any accident from occurring, park your Scooter at a safe location before using the USB Power Socket.

⦿ Attention

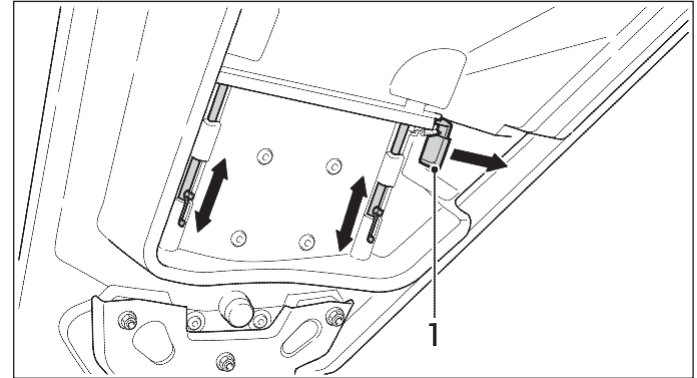
- ◆ SB Power Socket can only be used with a running engine.
- ◆ To prevent power depletion of battery, do not charge a product using the USB Power Socket without running the engine.
- ◆ To prevent fuse from being blown, do not charge a product with a load exceeding 10W; if overheat occurs during charging, the system will cut off power supply automatically.
- ◆ After riding and before leaving the scooter, make sure the product is unplugged and the Protection Cap is properly covered back.

Rider Backrest



1: Rider Backrest

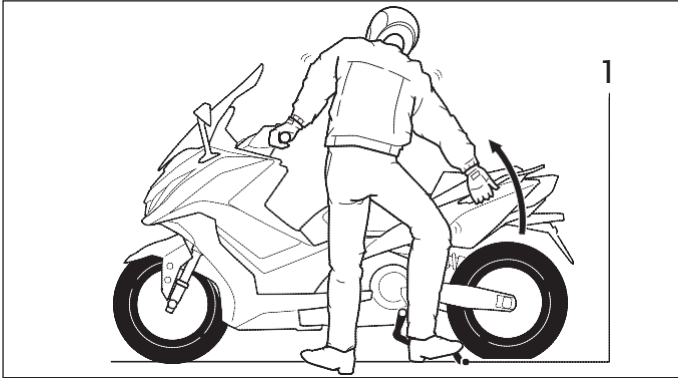
To enhance riding comfort, the Rider Backrest is adjustable to 2 different positions.



1: Lever

1. Lift up Seat Pad.
2. Push down the Lever.
3. Slide to the front or back for a position most fit the rider.
4. Release the Lever, slightly slide the Backrest to position.
5. Close up the Seat Pad.

Main Stand



1: Main Stand

When parking with Main Stand, stop the engine and turn the Main Switch off.

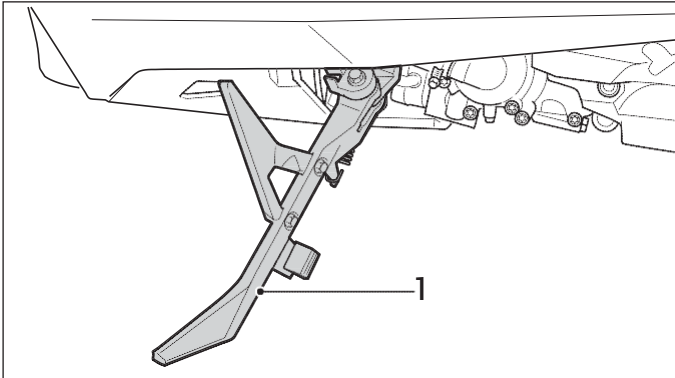
While keeping the scooter perpendicular to the ground, holding the Left Handlebar with left hand and Rear Grip with right hand, thread upon the Main Stand using the right foot and exert force with both right foot and right hand to lift the vehicle up to a standing pose.

WARNING

- ◆ Make sure the Main Stand springs up fully before riding the scooter.
- ◆ The Main Stand must not come in contact with the ground while riding the scooter, otherwise it may interfere the riding and cause loss of control due to abrasion with the ground.

- ◆ Main Stand may fail to spring up to position while running the vehicle if the bracket spring becomes weak. Go to a KYMCO service station for replacement as soon as possible.

Side Stand



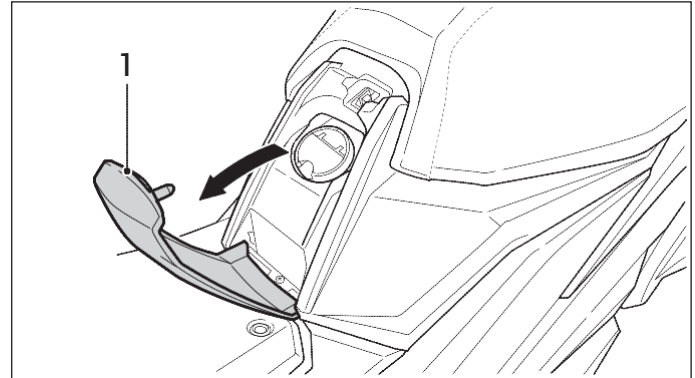
1: Side Stand

Side Stand situates on the left side of scooter; push the Side Stand down or up with your foot. Engine cannot be started when the Side Stand is pushed down.

WARNING


- ◆ **Side Stand Switch is a part of the ignition obstruction circuit; the rider must push the Side Stand up before riding the vehicle. If this function becomes inactive, go to a KYMCO service station for repair.**
- ◆ **Do NOT ride the vehicle if the Side Stand fails to lower down or maintain the pushed-up position; should the Side Stand touch the ground, the rider may lose control of the vehicle.**

Fuel Tank Decorative Cover/ Fuel Inlet Cover

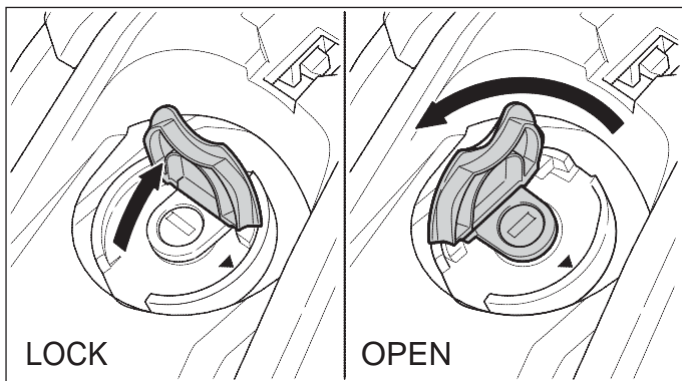


1: Fuel Tank Decorative Cover

Open Fuel Tank Decorative Cover

Turn the KEYLESS Main Switch to the OFF position, turn the knob clockwise to the end to release the Fuel Tank Decorative Cover .

4 Control Functions of Mechanism



Open the Fuel Tank Cap upwards and rotate it to the right to open it.

To close the Fuel Tank Outer Cover

Turn the Fuel Tank Cap back, make sure the Fuel Tank Cap is in position before pressing the Fuel Tank Outer Cover back; ensure that Fuel Tank Outer Cover is fully engaged.

⚠ WARNING

In order to prevent fire risks caused by fuel overflow from the Fuel Inlet, make sure the Fuel Tank Cap is fully locked after refueling.

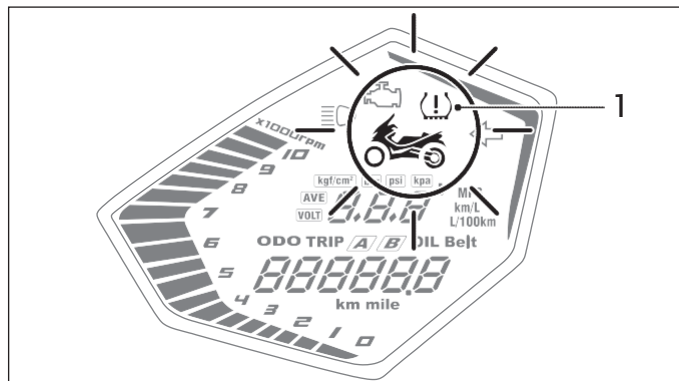
TPMS, Electronic Tire Pressure Sensor

Operation of TPMS, Electronic Tire Pressure Sensor:

- ◆ TPMS consists of 2 wireless Tire Pressure Sensors (1 each on respective nozzle of front and rear tire) and a controller. The sensor detects the current tire pressure and sends the signal to Controller by wireless transmission. The Controller then sends the signal to Dashboard, informing the rider of pressure condition with the displayed indicator.

ⓘ Attention

1. When KEYLESS Main Switch is set ON, the Tire Pressure Sensor related Model Symbol on the left side of Dashboard will light up; if this symbol then goes out automatically, the tire pressure is normal (as shown in the Figure).



1: Tire Pressure Sensor related Model Symbol

2. When KEYLESS Main Switch is set ON, the Tire Pressure Sensor related Model Symbol on the left side of Dashboard will light up; if this symbol stays on constantly, the tire pressure is not normal.

Anomalies include:

Front Tire Pressure

$\geq 3.2\text{kgf/cm}^2$ or $< 1.6\text{kgf/cm}^2$

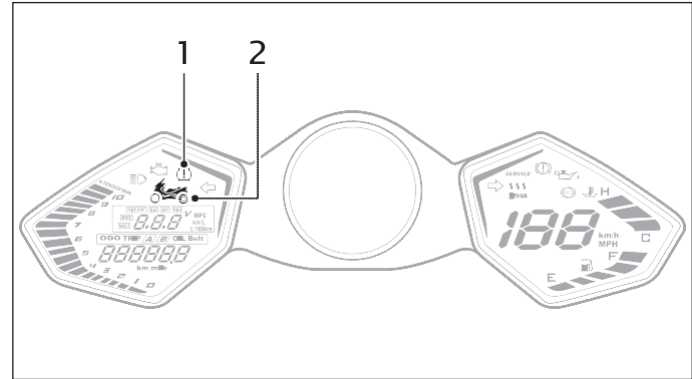
Rear Tire Pressure

$\geq 3.75\text{kgf/cm}^2$ or $< 1.65\text{kgf/cm}^2$

The owner needs to replenish or release tire pressure if the reading is too low or too high. Consult the dealer for assistance if you have any questions.

(Standard tire pressure under normal inflation: Front Tire 2.35kgf/cm^2 ; Rear Tire 2.7kgf/cm^2)

3. **DO NOT remove wireless Tire Pressure Sensor or Controller, or TPMS function will be lost.**
4. **No re-adjustment of TPMS is required when a new tire or rim is replaced.**
5. **Re-adjustment of TPMS is required when replacing a new wireless tire pressure sensor and controller; please consult a KYMCO dealer.**
6. **When replacing a tire rim, the Tire Pressure Sensor shall be kept in a correct order to distinguish the front one and the rear one.**




1: Tire Pressure Indicator

2: Model Symbol

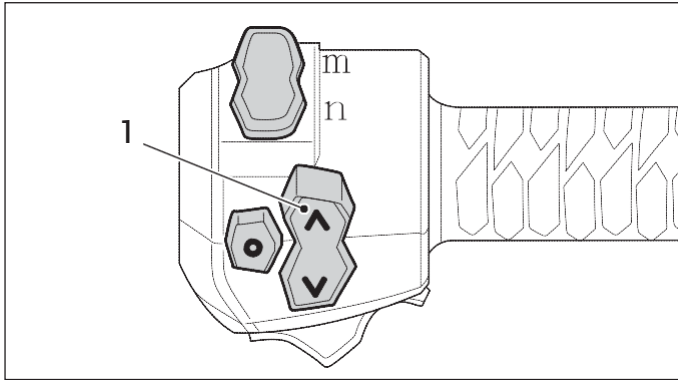
TPMS Learn Code Operation:

- ◆ Applicable to owner and dealer service personnel.
- ◆ Re-adjustment of TPMS is required when replacing a new wireless tire pressure sensor and controller.
- ◆ When performing code learning, keep the vicinity clear of other vehicle or transmitter, to prevent miss-triggering.
- ◆ Confirm if the TPMS is installed properly, the tire pressure is adjusted correctly and the tires are mounted precisely.

Learn Code Activation Procedure:

1. Press and hold Operation Button ( button on the Handlebar), but it is necessary to switch over to Dashboard position "m" in advance.

Control Functions of Mechanism



1: Operation Button

2. KEY ON the KEYLESS Main Switch.
3. Release the Operation Button (\wedge) when the front tire of the Model Symbol flashes and tire pressure unit disappears.
4. TPMS is now entered into Code Learning Mode.
5. The Front Tire in the Symbol flashes continuously.
6. Operator releases or inflates the Front Tire to get a pressure change > 3 psi, the sensor will be awakened within 1 minute; setting of the front tire is complete when the pressure value appears.
(If a Code Learn is not performed when the Front Tire flashes, press the UP button to jump to Rear Tire Code Learn. If a Code Learn is not accomplished within 2 minutes, the program exits Code Learn Mode.)
7. Now that the Rear Tire of the Model Symbol flashes continuously.

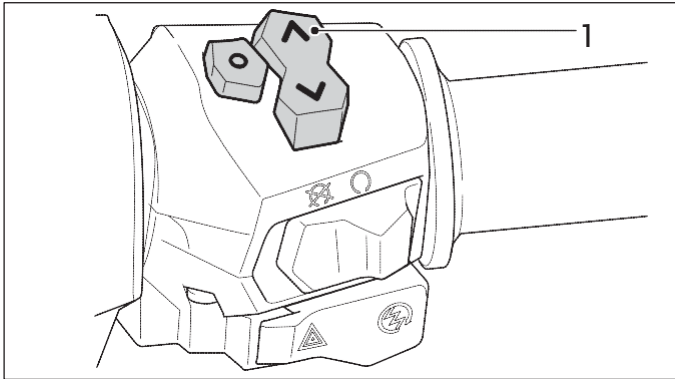
8. Operator releases or inflates the Rear Tire to get a pressure change > 3 psi, the sensor will be awakened within 1 minute; setting of the rear tire is complete when the pressure value appears.

(If a Code Learn is not performed when the Rear Tire flashes, press the UP button to exit Code Learn Mode. If a Code Learn is not accomplished within 2 minutes, the program exits Code Learn Mode.)

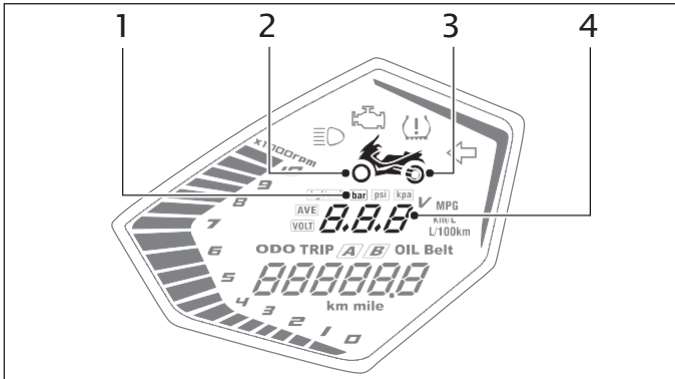
9. Now that the Front Tire flashes, the tire pressure value appears with unit displayed.

⦿ Attention

1. **Once you have your vehicle, inflate the tires to 20psi or more for the TPMS computer to automatically learn the initial values and facilitate the subsequent normal operation.**
2. **Re-do Code Learning after replacing parts.**
3. **When replacing a tire, care must be taken to avoid inserting a tool onto the nozzle as the TPMS is mounted at the nozzle location.**
4. **Make sure the direction is correct when replacing a part.**
5. **Tire Pressure values are for reference only.**
6. **Slackening of nut during parts installation will cause air leakage.**
7. **If tire pressure cannot be detected, the unit may be out of battery power and requires replacement of a new part.**



1: Change Pressure Unit Switch

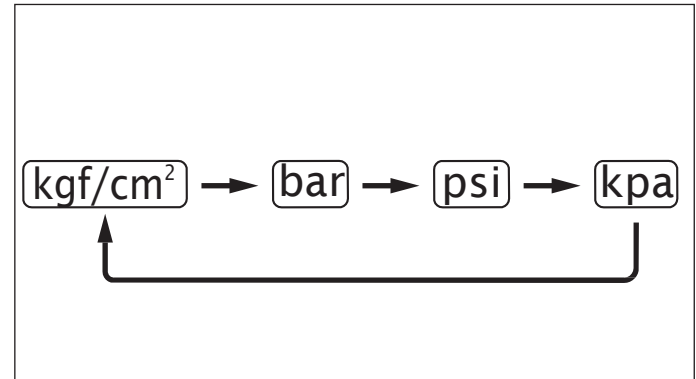


1: Pressure Unit
3: Model Rear Wheel

2: Model Front Wheel
4: Tire Pressure Display Zone

Change Pressure Unit

Turn KEYLESS Main Switch ON, the Model Symbol will light up. Push the Dashboard and noodoe Switch to "m" position and press the UP button to change over to TPMS Mode. Pressing "O" button on the Right Handlebar Switch to change units in the sequence of [kgf/cm² → bar → psi → kpa].



■ Anomaly:

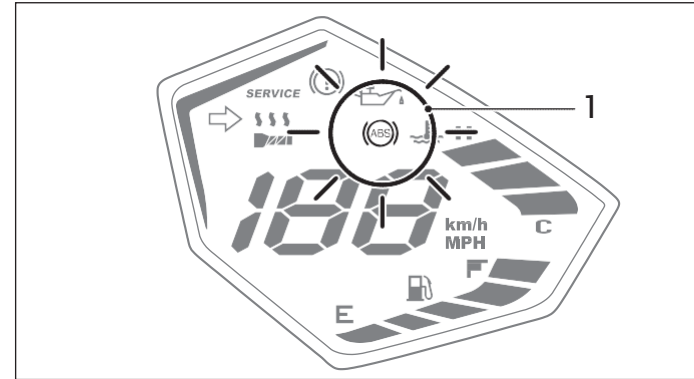
1. With Main Switch set to ON, when Tire Pressure Indicator in the Dashboard lights up continuously, it may be due to a pressure > 3.2 kgf/cm² or < 1.6 kgf/cm² of Front Tire; or a pressure > 3.75 kgf/cm² or < 1.65 kgf/cm² (23.4psi) of Rear Tire. Change over to TPMS Mode by pressing the Mode button, the tire pressure value will be flashing.
2. Tire Pressure Indicator will light up continuously if controller is faulty. Change over to TPMS Mode by pressing the Mode button, the *Err* symbol will appear.

Control Functions of Mechanism

3. Tire Pressure Indicator will light up continuously if signal of tire pressure sensor fails to reach the controller due to environmental interference. Change over to TPMS Mode by pressing the Mode button, ---will appear.
4. Tire Pressure Indicator flashes quickly if tire pressure drops fast; it flashes slowly if tire pressure drops slowly.

ABS (Anti-lock Braking System)

ABS Brake Indicator:



1: ABS Indicator

ABS is a double electronic control system capable of controlling front and rear brakes respectively. When ABS is activated, the rider can feel pulses acted by ABS on the handlebar; in which case the rider needs to hold the handlebar constantly, without "press-and-releasing" it, or the ABS effect may be diminished. The ABS Brake Indicator situates on the left upper corner of Dashboard (as shown in the figure); it lights up when the Main Brake Switch is activated and does not go off automatically. The ABS Brake Indicator only goes off when engine is started and vehicle runs above 6km/hr.

⦿ Attention

ABS is controlled by ECU; if ABS fails, the ABS Brake Indicator will light up; ABS may lose its function, but the original brake still works; the ABS resumes normal braking functionalities.

⦿ Attention

- ◆ **When riding on a rough or pebbled road surface, effective ABS braking distance will become longer.**
- ◆ **Always keep a proper safety distance with preceding vehicles while riding a scooter.**
- ◆ **ABS gives optimal performance with a longer braking distance.**
- ◆ **To avoid deterioration of ABS performance, do not remove or damage the wheel sensor or the rotor of wheel sensor.**
- ◆ **When activating power of KEYLESS Main Switch, or when vehicle speed exceeds 6 km/h, ABS will execute a self-diagnosis. During this self-diagnosis session, a vibration may be felt on the Brake Lever if you pull it gently, which is a normal phenomenon.**

In the event of an emergency brake in response to a special road condition, ABS system helps preventing a locked wheel resulting from the sudden braking action, allowing the rider being able to steer the vehicle smoothly. An ABS system controls the braking force automatically to prevent the tire from skidding.

An ABS system will not shorten braking distance in the following conditions: when running on a soft and unlevelled road or a descending slope, the braking distance is even longer than a vehicle without ABS. Therefore models with ABS have the optimal performances on flat road surfaces.

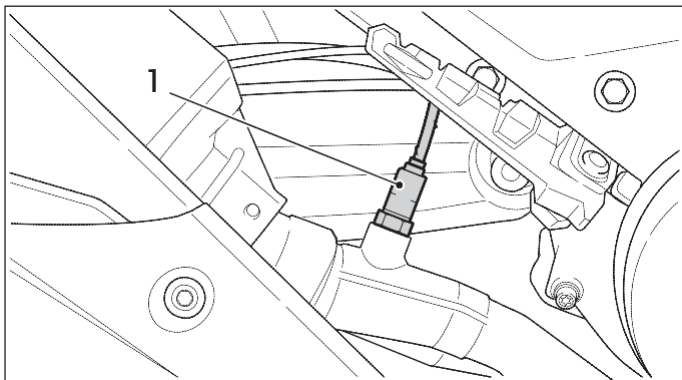
An ABS System comprises an ABS ECU and front and rear tire speed sensors. Using tires not conforming to original specifications may affect the detection of speed sensors and result in abnormal ABS activation.

⚠ WARNING

- ◆ **Using tires not conforming to original size specifications may result in malfunctioning of the ABS system, or even an accident of the rider due to malfunctioned activation of the Anti-lock Braking System. Therefore it is a must that you use tires conforming to KYMCO specifications.**
- ◆ **When ABS activates, you may feel a light vibration on the Brake Lever, which is a normal phenomenon.**
- ◆ **When vehicle speed is below 6 km/h, the ABS system will not activate.**
- ◆ **ABS will not work when power is out or the system malfunctions, and ABS indicator will light up.**

4 Control Functions of Mechanism

O₂ Sensor



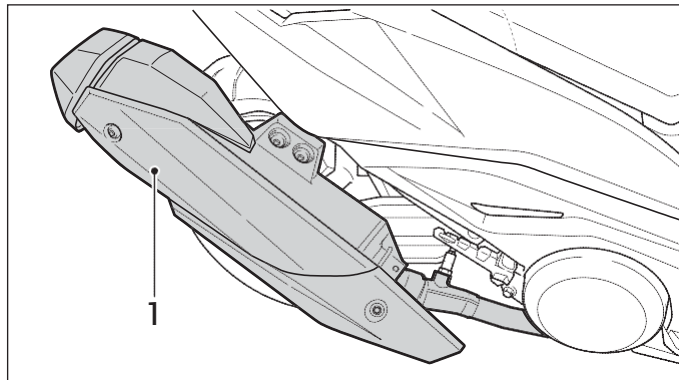
1: O₂ Sensor

This vehicle is provided with O₂ Sensor for reducing generation of pollutants in the exhaust gas.

⚠ WARNING

Do not dismantle or replace O₂ Sensor by yourself, otherwise the O₂ 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

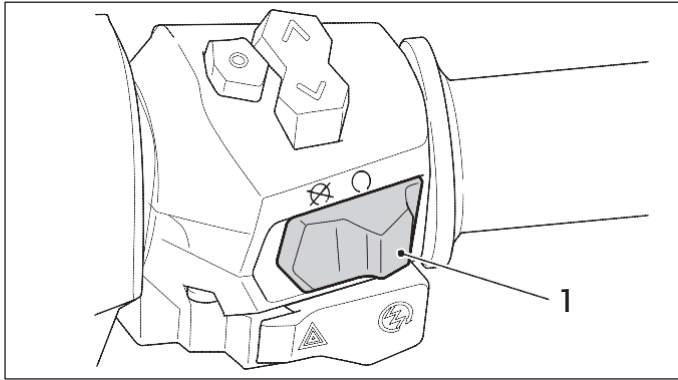
Complying with EPA Exhaust Emission Standard, the scooter is equipped with following parts in the Exhaust Control System:

- ◆ Electronic Control Unit (ECU)
- ◆ Crankcase Ventilation Valve
- ◆ Catalytic Converter
- ◆ Throttle Valve
- ◆ Various sensors:
 - Air Intake Temperature Sensor
 - Air Intake Pressure Sensor
 - Throttle Position Sensor
 - O₂ 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.



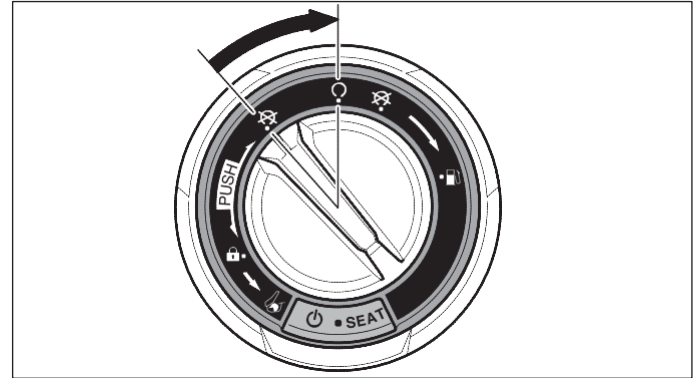
1: Engine Stop Switch

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.

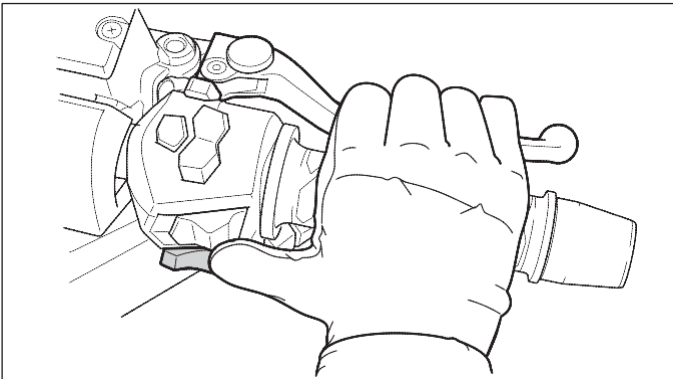


1. Unlock KEYLESS
2. Turn Main Switch to ON position.
3. Make sure the throttle grip is fully closed.
4. Make sure the Side Stand is retrieved.
5. Make sure the Engine Stop Switch is set to ⊙ ”

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

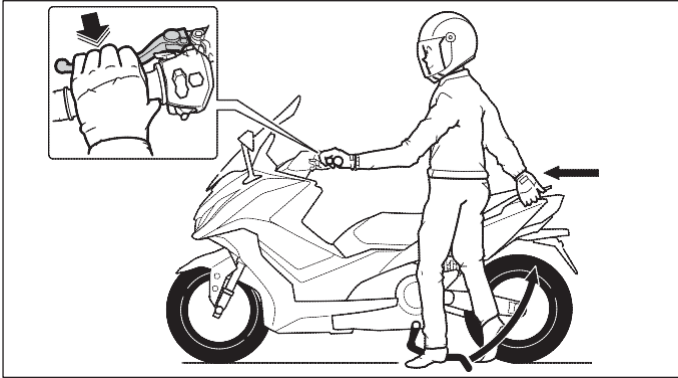
Proper riding habits may reduce fuel consumption of your scooter. Refer to the following methods for reducing fuel consumption:

- ◆ 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

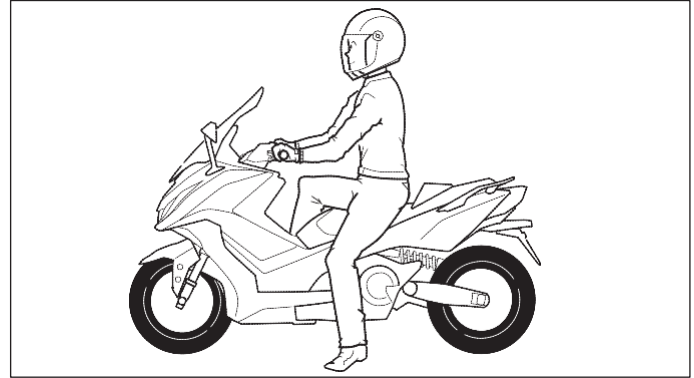
Keep the Rear Brake Lever in braking state and push the vehicle forward, the Main Stand will spring up automatically.



⚠ 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.

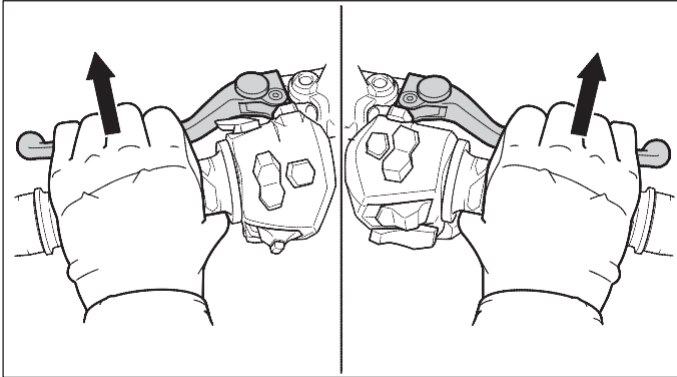
Boarding from the left side, sit upright; keep left foot standing on the ground to prevent toppling; adjust the Back Mirror to a proper angle.



⚠ WARNING

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

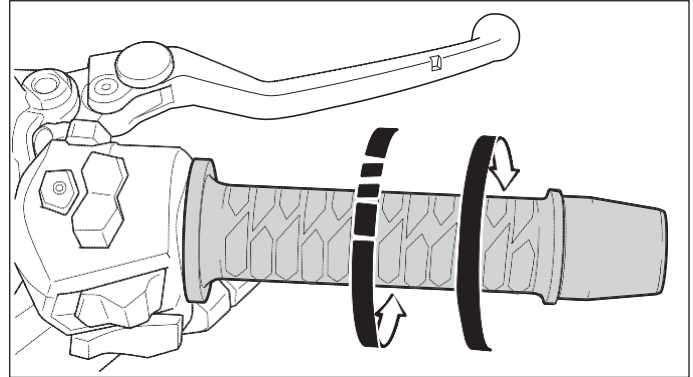
Release Front and Rear Brake Levers



⚠ 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.

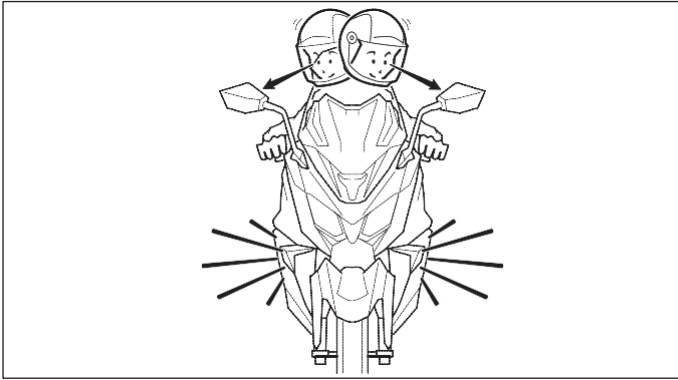
👁 Attention

- ◆ 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

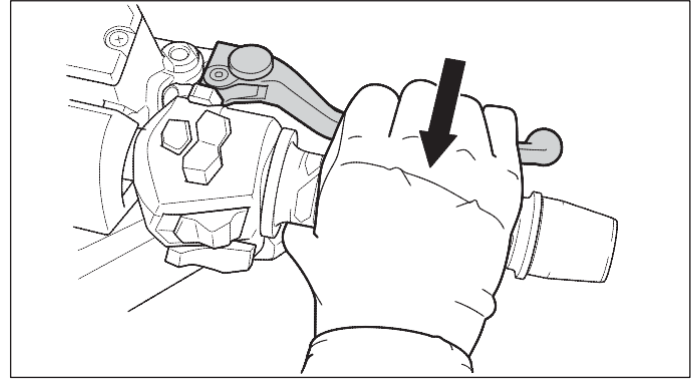
- ◆ Run-in Period of a new engine is 300km; keep speed under 80 km/h in this period.
- ◆ Avoid speeding-up rapidly.

WARNING

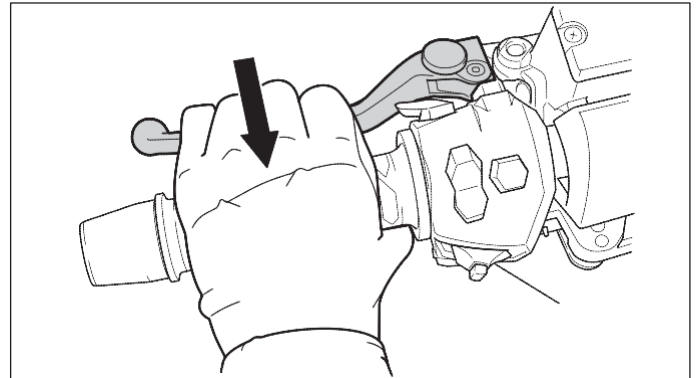
High-speed riding in the run-in period may result in worn engine parts.

Brakes

Front Brake



Rear Brake



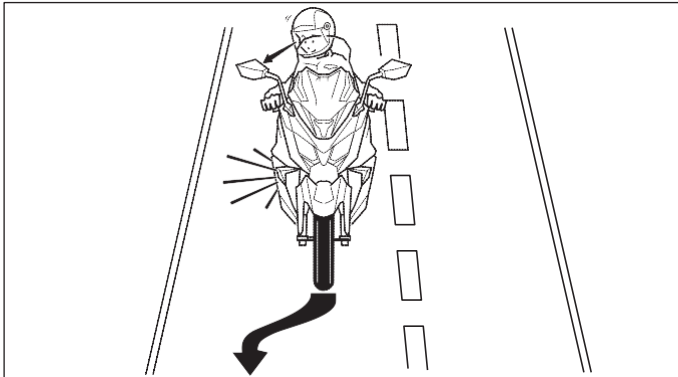
1. Before using the brake, release Throttle Grip first to a full close.
2. Grip both the front and rear brake levers at the same time and exert force gradually to activate the brake.

⚠ 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.



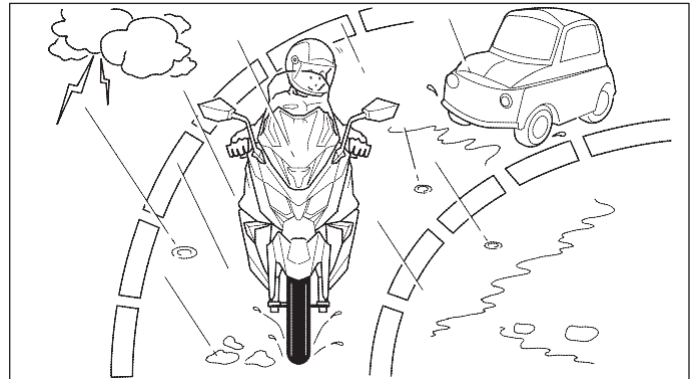
⚠ WARNING

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

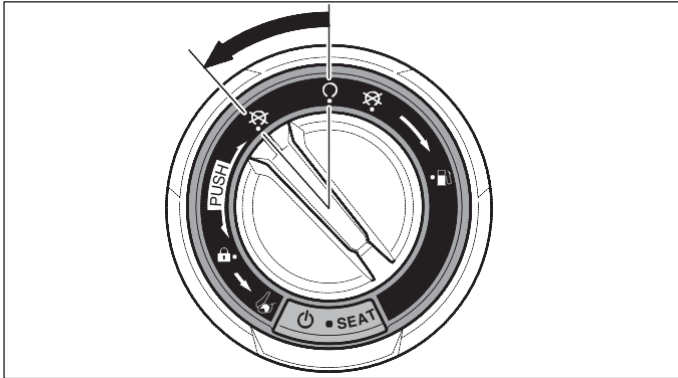
Proper Parking Method

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.

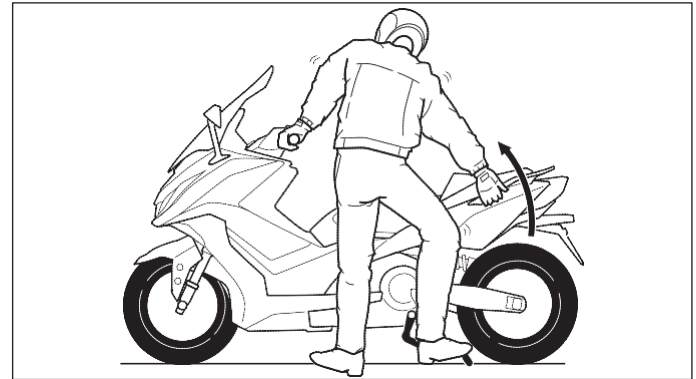


WARNING

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

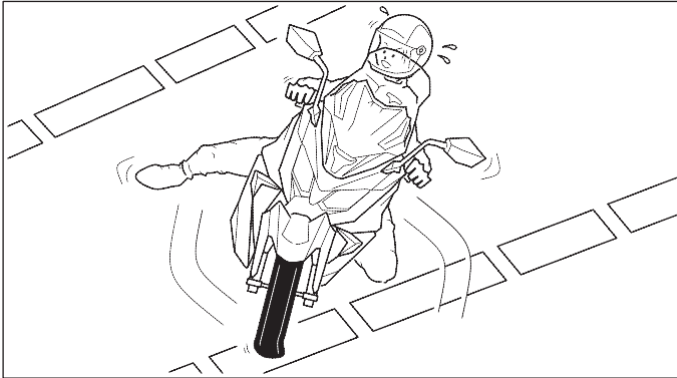
- ◆ Standing on the left side on a flat ground, the rider shall brace the Main Stand up.
- ◆ Brace the Main Stand up on a flat ground not impeding the traffic.
- ◆ Bracing up the Main Stand on an unlevel ground may result in tumbling of vehicle.
- ◆ Hold the Handlebar with left hand and keep it straight; 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

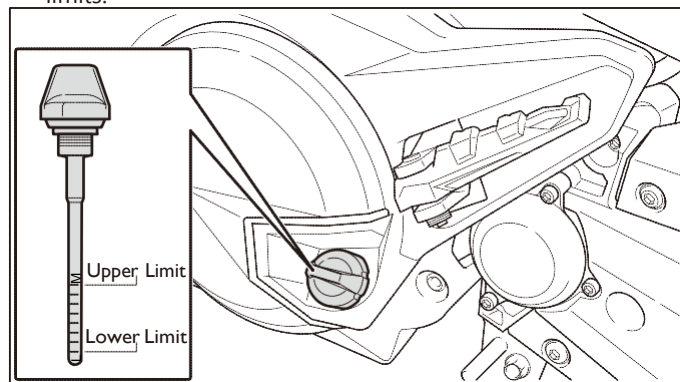
- ◆ **Please consult a KYMCO dealer if you are not familiar with scooter check-up and maintenance.**
- ◆ **Injury or electrocution may occur if any body part or clothing touches a running engine. Please stop the engine while performing scooter maintenance.**
- ◆ **For preventing burning hazard after 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: 1,000km.

Second oil replacement: 5,000km

Third oil replacement: 10,000km.

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.
- ◆ If engine or clutch is replaced, refer to the Maintenance Schedule for more details.

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.

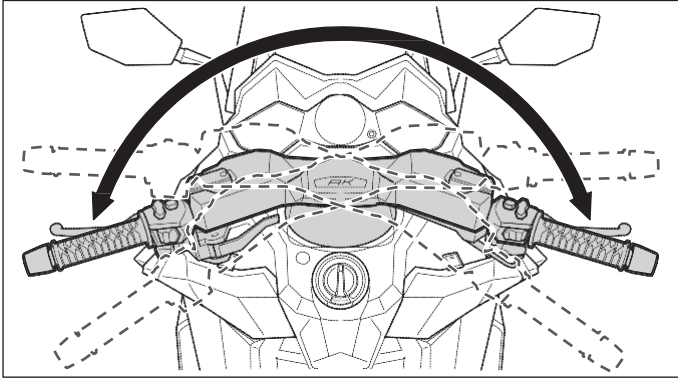
WARNING

- ◆ 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

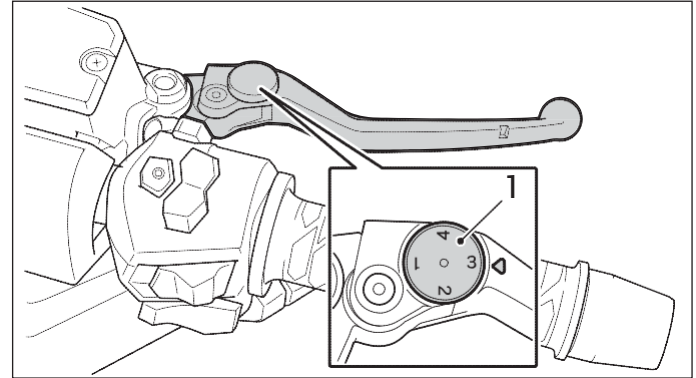
Check Steering Stem

- ◆ 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.

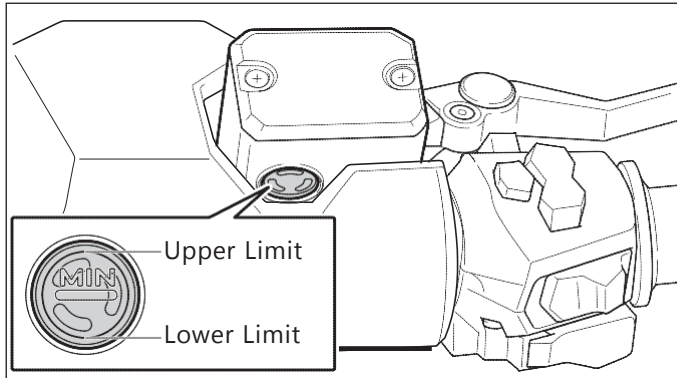


1: Adjust brake lever

Checking Front Brake Fluid

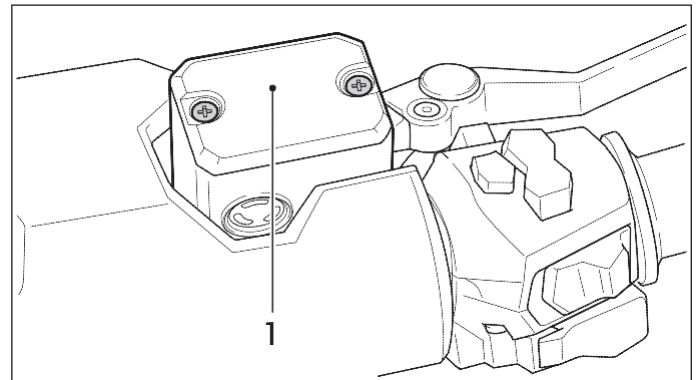
1. Straighten the Handlebar, check brake fluid in the Right Reservoir. Keep the level between the Upper Mark and Lower Mark.
2. If level lowers near the Lower Mark, check the brake lining for a worn condition.
3. If the brake lining is not worn exceeding a specified limit, most likely there is a leakage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

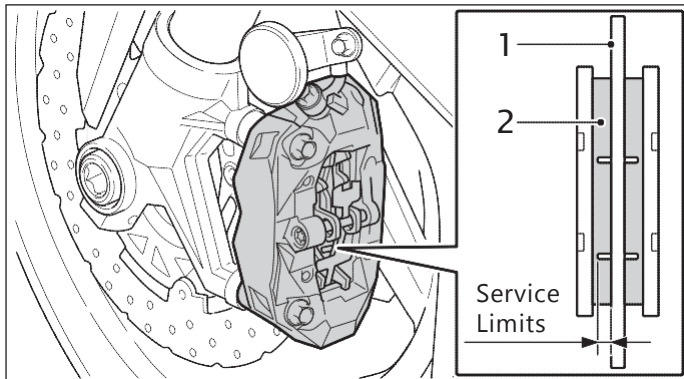
⚠ WARNING

- ◆ **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:

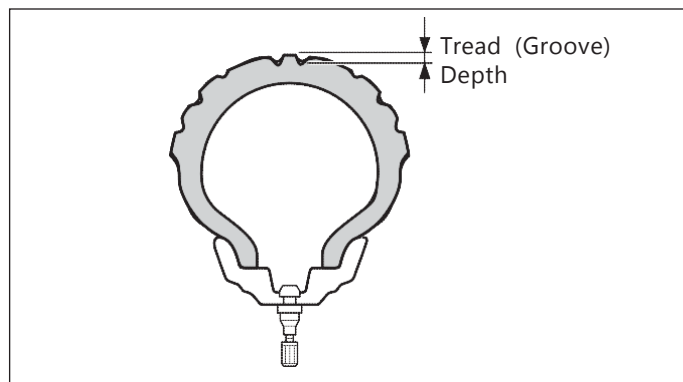
With 1 rider

Front Tire 2.4 kgf/cm² Rear Tire 2.70 kgf/cm²

With 2 persons

Front Tire 2.4 kgf/cm² Rear Tire 2.70 kgf/cm²

- ◆ 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

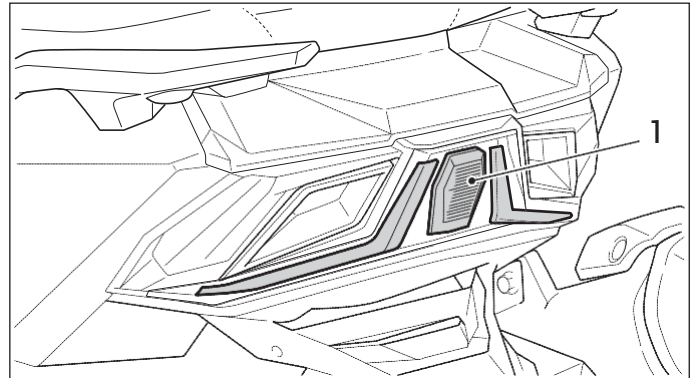
Check Brake Light

- ◆ 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.

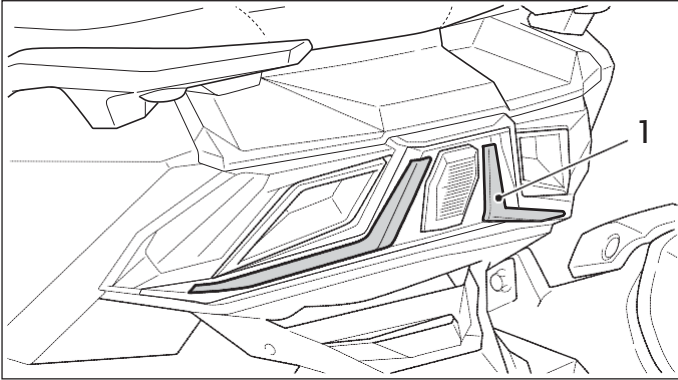


1: Brake Light

Checks before Riding

Check the Tail Light

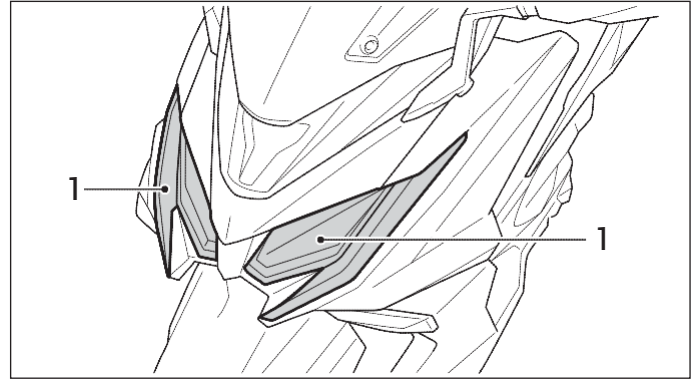
- ◆ Turn the KEYLESS Main Switch to ☺ ” position.
- ◆ Check if the Tail Light goes on.
- ◆ Check the Tail Light Lens for stains or fractures.



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.

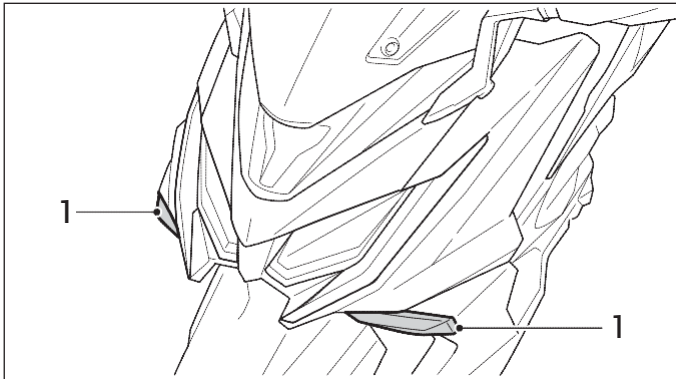


1: Headlight

Check the Winkers

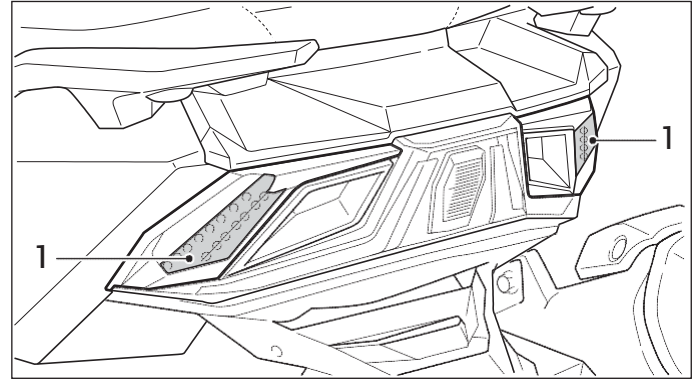
- ◆ Turn the KEYLESS Main Switch to ☺” position.
- ◆ Operate the Winker Switch to verify if each Winker works.
- ◆ Check the Winker lens for stain or fracture.

Check the Winker



1: Winker

Rear Winker

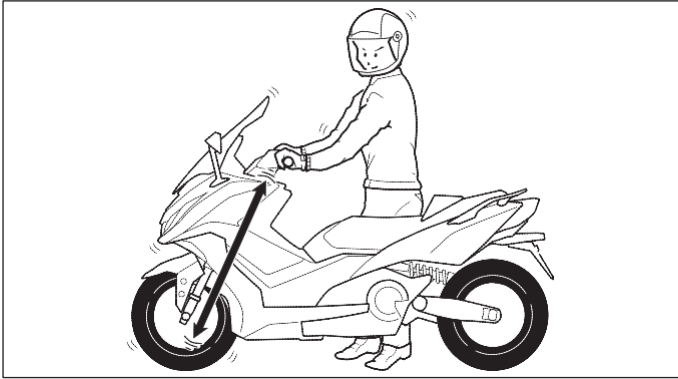


1: Rear Winker

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 slacking 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.

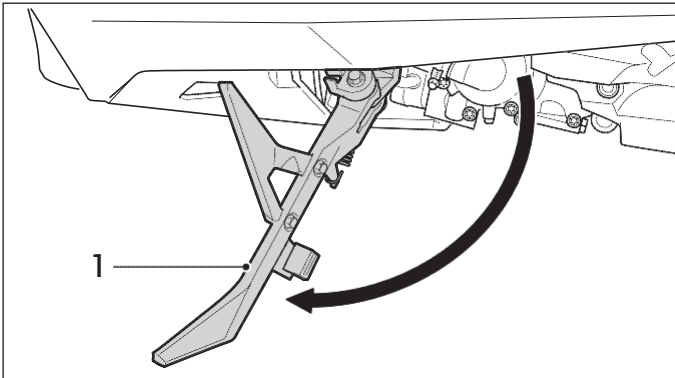
<Checking Method>

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.

Simplified Maintenance and Repair

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	1	R	R	R		R		R	
Engine Oil Screen		C	C/R	C/R		C/R		C/R	
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)	2		I	I	I	I	I	I	

◆ If engine or clutch is replaced, the following items should be recorded from the beginning: Engine Oil, Engine Oil Screen, Engine Oil Filter. 73

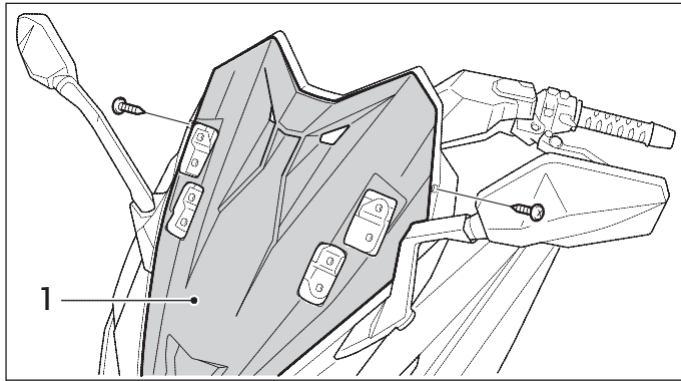
7 Simplified Maintenance and Repair

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



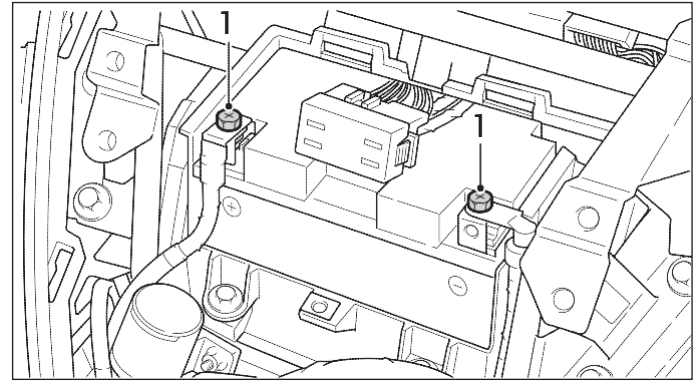
1: Windshield

ⓘ 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

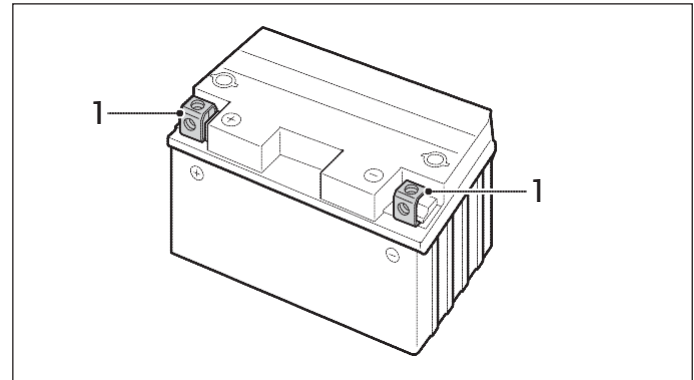
6. Remove Battery
Re-install battery in a reverse sequence.

⦿ 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 recharge 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.

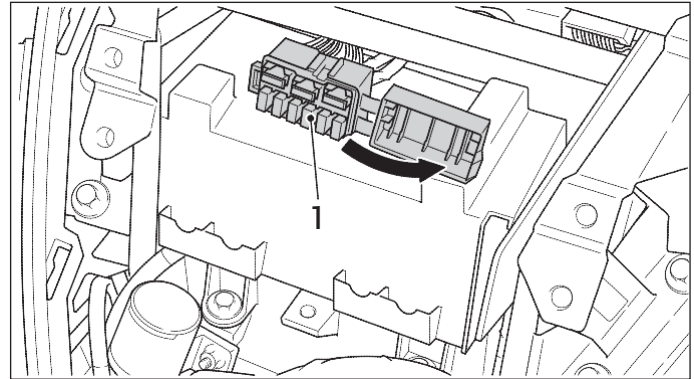
Fuse Replacement

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

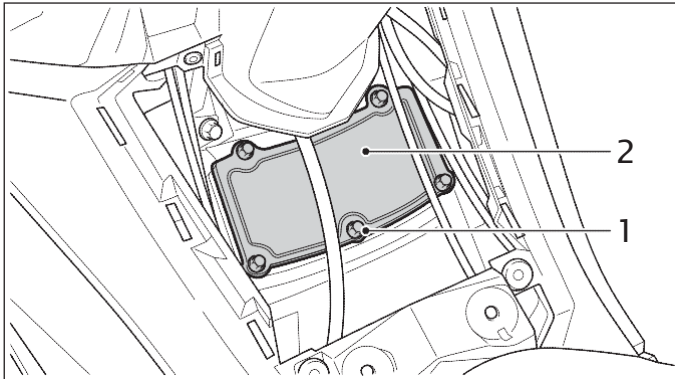
- ◆ Only replace electrical devices (lights, meters) with ones of specified ratings.
- ◆ If using an inadequate fuse, it may be blown easily or battery loading may become imbalance.
- ◆ Avoid frontal strong water jet when cleaning the scooter.

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

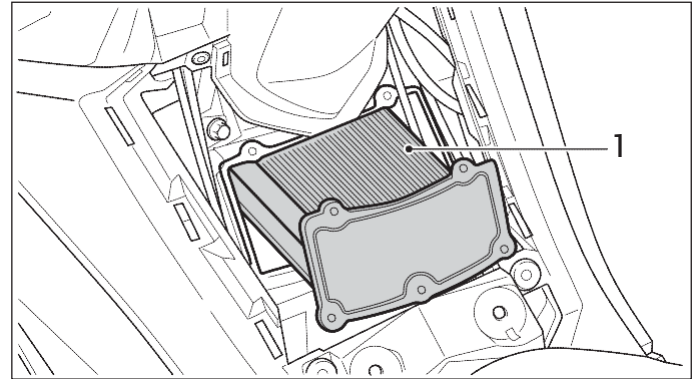
1. Remove outer covers of scooter.
2. Remove Air Cleaner Cover.
3. Loosen Air Cleaner Cover Fixing Screw and take out Air Cleaner Element.



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.**

CVT Transmission System Filter Wool

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

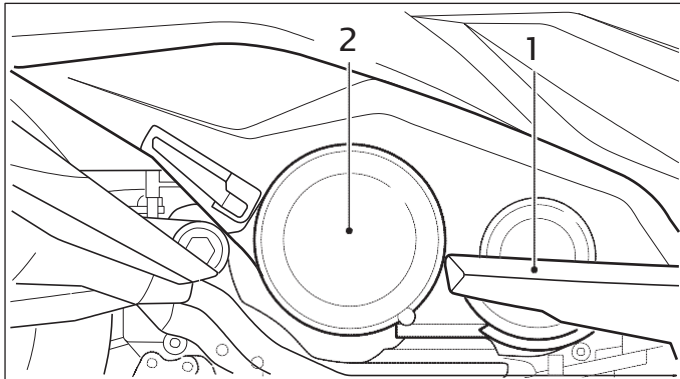
Clean Filter Wool regularly as specified in Maintenance Schedule; replace or clean Filter Wool every 5000km.

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.

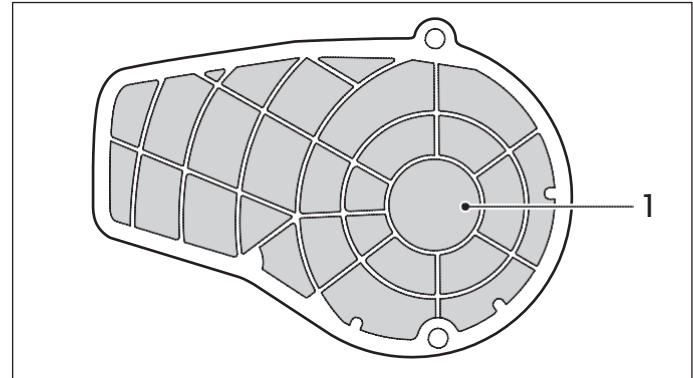


1: Side plate on the right

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, second oil change when 5,000km and third oil change when 10,000km. Afterwards, change the oil every 10,000km.

In order to maintain optimal engine performance, check oil level every 1,000km. Replenish to standard level in case of shortage.

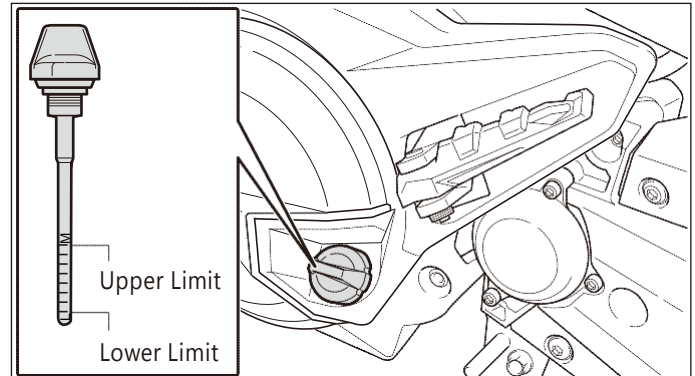
If engine or clutch is replaced, refer to the Maintenance Schedule for more details.

Oil Capacity:

Dismantle: 3.0L (full capacity)

Change oil: 2.6L (excluding oil filter)

2.7L (including oil filter)



⦿ Attention

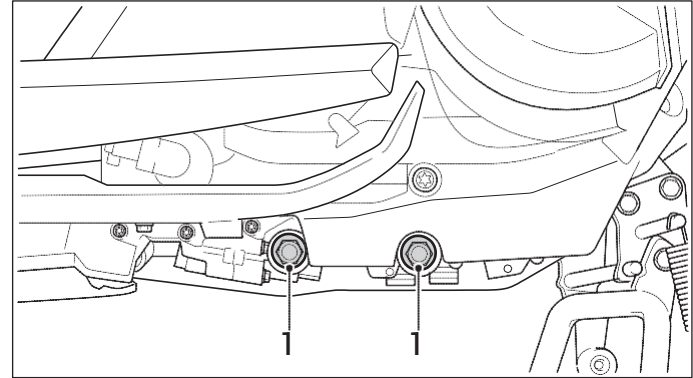
- ◆ If vehicle is used rarely and 10,000 km is not reached after using for 1 year it is suggested that oil shall still be changed since it may deteriorate along with time and cause damage to the engine.
- ◆ The annual checks must be performed every year .
- ◆ To check the oil capacity accurately especially after oil replacement, the engine must idle for 3 minutes. After idling and the engine cools down, check the oil capacity which should be between the M and L marks. If not, replenish same type of oil to between the M and L marks then check the capacity again.

⦿ 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.

Spark Plug Check and Adjustment

Dirty electrode or excessive gap can cause poor sparking.

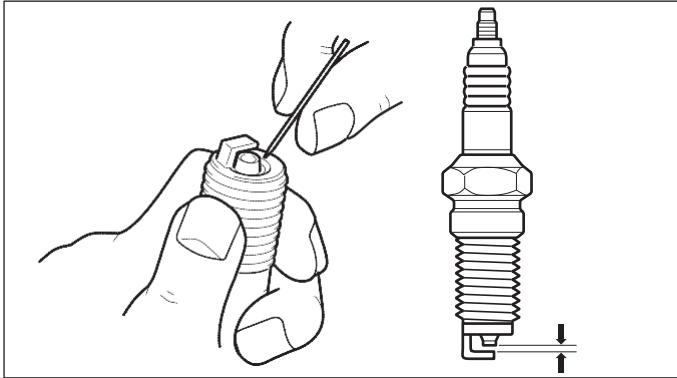
Cleaning Method

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

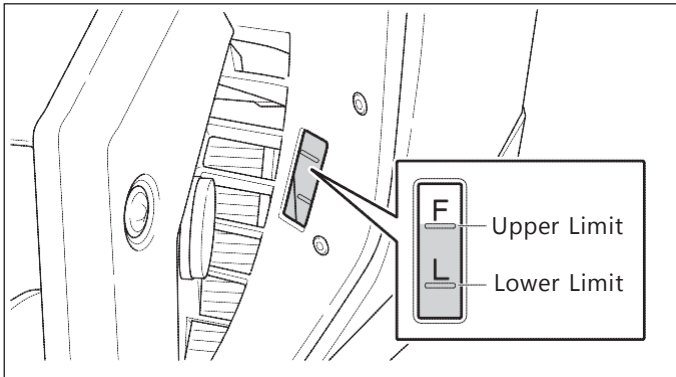
For the sake of safety, check level of coolant before riding the scooter. Replace the coolant as specified in Regular Maintenance Schedule.

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.



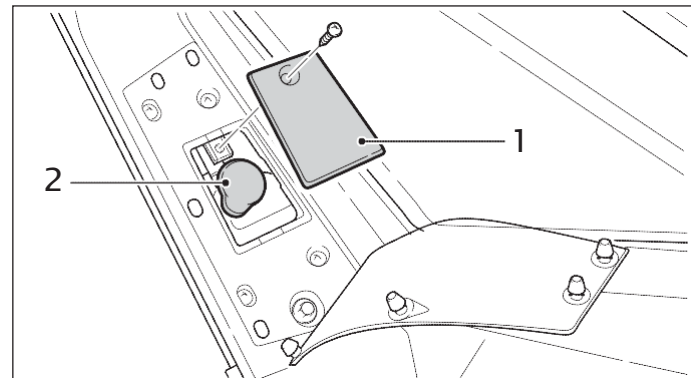
Attention

- ◆ 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
Manufacturer	Fames Technology Co., Ltd	Kwang Yang Motor Co., Ltd	Lihjoen Speed Meter Co., Ltd
CE	report 	report 	report 
FCC	in procedure	 2AM4E-37130-LGC6	 2AMA5-LJ-39600
JRF	Receiver:   201-17826	  005-101624	  021-170813
	Control:   201-17827		
KCC	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
NCC	Receiver:  CCAL17LP0150T9	 CCAN17LP0260T0	Receiver:  CCAL17LP0150T9
	Control:  CCAL17LP0140T6		Control:  CCAL17LP0140T6
	NFC:  CCAB17LP0540T0		
SRRC	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 11.8Ah
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.
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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

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