

harley-davidson



G350

U S E R M A N U A L

Lambretta

USER MANUAL / ENG



Mod.# **G 350**



The User Manual is considered as a permanent component of the scooter and shall be delivered with the scooter when the scooter is resold or transferred. The User Manual contains important safety information and instructions. Please carefully read it before operating the scooter.

Important information

Knowledge about scooter running-in

The first 1,000km riding distance of a new scooter plays the most important role in its entire service life, during which the correct running-in not only can ensure the longest service life, but also can give full play to the performance of the new scooter. Our Company's scooter parts are made of quality materials by precision machining. The running-in can make the surfaces of parts polish each other to realize smooth engagement.

Careful and patient running-in can make the scooter run stably and give full play to its excellent performance. It is particularly important to avoid operations during running-in that may lead to overheating of engine components, such as running at high speed for a long time.

For the specific method for running-in, please refer to the section "Running-in of a New scooter".

Danger / Warning / Note

Please carefully read the contents herein and keep the essentials in mind. The words "Danger", "Warning" and "Note" are used to emphasize the importance of the instructions. Please understand the definitions carefully.

 DANGER

The matters identified by this word are related to the rider's personal safety is concerned and ignoring them could result in injury.

 WARNING

The matters identified by this word are related to notes for the scooter operation to avoid the scooter damage.

Note :

The matters identified by this word are special explanations for the convenience of maintenance or to make important notes more explicit.

Preface:

Thanks for choosing our scooters. We design, test and manufacture this model of scooter with the most advanced technology to provide you with happy, interesting and safe riding. After you are thoroughly familiar with the essentials herein, you will find that riding a scooter is one of the most exciting sports and at the same time, you can enjoy the real fun of riding.

The Manual outlines the correct repair and maintenance methods for the scooter. Your scooter will be durable in use without fault if you follow the instructions. The maintenance agencies and the trained technicians and complete tools and equipment can provide you with quality maintenance services at any time.



All data, illustrations, pictures, and specification parameters collected herein are prepared based on latest products when the Manual is published. However, due to the continuous improvement of the product and changes in other aspects, there may be some inconsistencies between your scooter and this Manual. Dealers will provide you with correct guidance at any time. Our Company reserves the right to change at any time.

Please note that the parameters herein cover and explain models of all configurations. Therefore, your model may differ from the standard configuration described herein.

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Accessories

There are various accessories available on the market for assembly on your scooter, but we are unable to directly control the quality and suitability of the accessories on the market. Unsuitable accessories could even endanger the rider. Therefore, please select and install the accessories with particular caution. While it is not possible to check the suitability of every accessory sold on the market, your dealer can help you to select high-quality accessories that are available on the market and to install them correctly.

For your careful selection of accessories and installation, we have developed general guidelines for your reference, from which you can determine the accessories specifications and know how to install them.

DANGER

• Improper accessory installation or scooter modification can change the scooter maneuverability, causing accidents. Never use unsuitable accessories and make sure all accessories are installed correctly. All accessories and parts used shall be genuine products of our Company. Accessories and parts shall be installed correctly. For any problem, please contact the authorized dealers or repair shops designated by our Company.

- All additional weight accessories or accessories easily against the wind shall be installed close to the scooter body and center of gravity and as low as possible. The rack and attached parts shall be carefully checked to ensure they are firmly installed. Otherwise the center of gravity will shift, which may bring danger.

The key point for accessory installation is to pay attention to the balance of left and right sides and firmness of installation.

- Check if the ground clearance and tilt angle of the installed accessory are appropriate. Inappropriate installation will reduce the two safety factors. The poor installation of accessories will lead to maneuvering difficulty and even riding danger. The size of accessories will directly affect the air resistance and maneuvering stability. Special care must be taken not to interfere with the normal operation of functional systems for shock absorption, steering, controlling, etc.
- If the accessories are installed on the handlebars or front fork assembly, it will cause severe imbalance, reduce steering flexibility and cause front wheel vibration and unstable riding.

Accessories to be installed on the handlebars and front fork assembly shall be as light as possible.

- Parts like the windshield, backrest, seat bag, luggage carrier are accessories against the wind that easily cause riding instability, which are especially obvious when the scooter encounters crosswinds or large scooters. If accessories are installed improperly or poorly designed accessories are installed, the riding safety will be endangered.
- Some accessories make the rider's seating position deviate from the normal position, which not only limits the rider's range of motion, but also limits the rider's maneuvering capability.
- Additional electrical accessories can make the electrical system overload. Severe overload may damage the wiring, shut down the engine while riding, or even burn down the scooter

- For transporting goods, the goods shall be fixed as low as possible and as close as possible to the scooter body. If the goods are not fixed correctly, it will raise the center of gravity, which is dangerous and will make it difficult to control the scooter. The size of goods will affect the air resistance and the maneuverability of the scooter. Please balance the goods on both sides of the scooter and secure the goods.

Modification

Random scooter modification or removal of original parts can't ensure the scooter riding safety, which is also illegal. The modification will make the user lose the right to quality assurance.

Instructions for safe riding

Riding a scooter is a very interesting and exciting sport. It also requires some special precautions to ensure the safety of the rider and passenger. The precautions are as follows:

Wear a safety helmet

It's the first step to choose a helmet meeting the safety and quality standards to protect the rider. The head injury is the most serious scooter accident. Always wear a safety helmet and protective glasses when riding a scooter.

Clothing for riding

Wearing loose and exotic clothing will make you uncomfortable and unsafe. Try to choose quality tight clothing when riding a scooter.

Pre-operation checks

Read the instructions in the section "Pre-operation checks" carefully. Check the items one by one as per the instructions and never forget, because it can guarantee the safety of the rider and passenger.

Get familiar with your scooter

Your riding skills and mechanical knowledge are the foundations of safe riding. Please practice in an open area with little traffic until you are fully familiar with the mechanical properties and operation of the scooter. Please remember that practice makes perfect.

Know about your riding skills

Always ride a scooter within your scope of skills. Know about the limits of your riding skills and never ride beyond your abilities to avoid accidents.

Be cautious for riding on rainy days

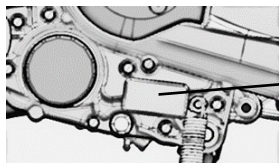
Pay more attention to the riding on rainy days and keep in mind that the braking distance is twice as long as that on sunny days. Avoid riding on road marking paint, well lid and oily road surface to avoid skidding. Special care shall be taken when passing railway crossings, metal bars and bridges. Slow down when you can't make a clear judge about the road conditions.

Speed limit

Do not let the scooter or engine speed too high at any time to avoid accidents.

Strategies while riding

Most of the scooter accident cases are that a car hits the scooter rider ahead while turning. A wise riding strategy is to make yourself visible to other drivers. Wear striking clothing with safety reflective materials even on wide roads during the daytime. Don't ride in other drivers' blind area.

VIN position**Engine No.****VIN position.**

The Vehicle identification number (VIN) and Engine No. are used for the scooter registration. When you order accessories or entrust special services, the numbers can enable the dealer to provide you with better services.

- The Engine No. is on the left side of the crankcase, next to the oil filter.
- Open the VIN cover, and you can see the VIN.
- The scooter nameplate is on the right front of the frame base-plate.

Please write down the numbers below for your future reference.

- Vehicle identification number (VIN) :
- Engine No. :

Method of product model designation

- > Product model: GK350T
- > Corporate (or registered trademark) code: GK
- > Nominal engine displacement: 350
- > scooter type: T (scooter)

Notes for product configuration

The scooter herein has multiple configurations.

The illustrations herein can only represent one or several configurations, not all of them. The specific configuration shall be subject to the actual product.

Special warning

Please pay attention to the following and similar matters. Failure to follow them may cause damage to parts or scooter or even personal casualty.

DANGER

- Fold up the side stand before riding to avoid the scooter overturns while turning, causing personal casualty.
- Check if the front and rear braking systems work normally before riding. For any problem, please check and repair it immediately.

WARNING

Nonprofessional personnel shall not unplug the fuel pipe to drain the fuel to avoid the damage to the scooter when there is an open fire; don't let the scooter muffler contact with foreign substances to avoid a fire; no fire hazard shall exist in the use and storage environment of the scooter.

When parts need to be replaced for the scooter maintenance, our Company's genuine parts shall be used. Non-genuine parts, especially electrical parts, may damage or even burn the scooter.

Please don't add any accessories at will, especially electrical parts. Improper wiring or electrical overload may burn the scooter.

Maintenance of muffler

The scooter muffler is equipped with catalyst to reduce the pollutants. In order to maintain the muffler's normal function, improve its service life and avoid reduction of exhaust gas conversion efficiency, corrosion, discoloration and other faults of the muffler due to improper use and maintenance, please observe the following:

! DANGER

The muffler is hot when the engine is working or has just stopped. Please do not touch the muffler to avoid burns.

! WARNING

It is prohibited to make the throttle full open at a high revolution speed for a long time when the scooter is motionless.

It is prohibited to add anti-rust oil or oil into the muffler.

It is prohibited to wash the muffler directly with cold water under warming-up engine condition.

It is prohibited to coast with engine off.

It is prohibited to use inferior oil.

Please use unleaded gasoline.

Please timely remove dirt from the muffler surface and tail.

Please keep the engine in good working condition and conduct regular maintenance and inspection, to avoid the catalyst burning due to excessive exhaust temperature caused by poor engine combustion.

Please install the muffler gasket correctly when installing the muffler.

If it is needed to remove and install the oxygen sensor, it must be performed by our Company's designated repair shops after the muffler and oxygen sensor are cooled to room temperature.

Scooter Overview

Installation positions of parts

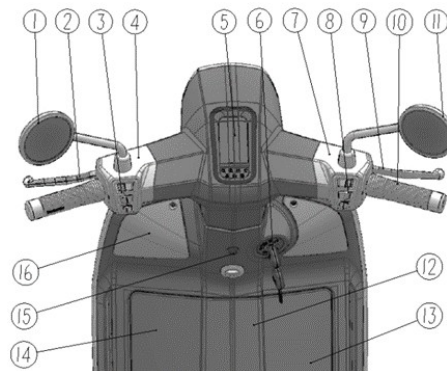
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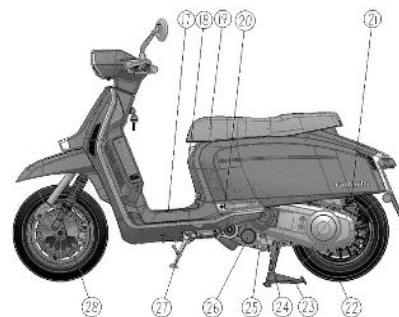
Installation positions of parts

1. Left rear-view mirror
2. Rear brake lever
3. Left switch combination
4. Rear brake fluid reservoir
5. Instrument
6. Steering lock
7. Front brake fluid reservoir
8. Right switch combination
9. Front brake lever
10. Accelerator
11. Right rear-view mirror
12. File box
13. Onboard tools (inside the file box)
14. USB power interface (inside the file box)
15. Seat button switch
16. Coolant reservoir (under the left cover plate)

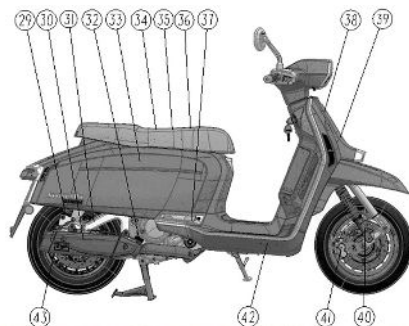


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- 17. Battery
- 18. Luggage hook
- 19. Seat
- 20. Left passenger footrest
- 21. Rear shock absorber
- 22. Gearbox drain bolt
- 23. Main stand
- 24. Engine
- 25. Engine drain bolt
- 26. Engine oil filter element
- 27. Side stand
- 28. Front shock absorber



- 29. Rear shock absorber
- 30. Muffler
- 31. Rear rocker arm
- 32. Oil filler
- 33. Fuel tank (inside the right cover plate)
- 34. ECU (under the storage box)
- 35. OBD diagnose interface (under the right side of storage box)
- 36. Fuse box (under the right side of storage box)
- 37. Right passenger footrest
- 38. BCM (inside the front cover plate)
- 39. Horn (inside the front cover plate)
- 40. Front shock absorber
- 41. Front brake caliper
- 42. Nameplate
- 43. Rear brake caliper



Operation

Key
Ignition steering lock
Remote key
Instrument
Left combination switch parts
Right combination switch parts
Seat switch
Fuel tank
Brake
Rearview mirror
Headlight
Parking
Front and rear shock absorbers

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Key



The scooter has two keys. Please keep one of them properly as spare key.

Ignition steering lock



The ignition switch has three positions:

(1)  (On) position. The ignition circuit is connected, and the engine can be started at any time. The key can't be removed when the switch is in this position.

(2)  (Off) position. The ignition circuit is disconnected, and the engine can't be started. The key can be removed.

(3)  (Steering lock) position. To unlock the file box, turn the key counterclockwise from the  to the  position, and the file box will be unlocked automatically. Afterwards, release the key, which will automatically return to the  position and can be removed. To lock the file box, just buckle the file box cap by hand.

To lock the steering mechanism, you must turn the handlebar to the far left first, push the key in  position to the end and then turn the key counterclockwise to the  position. The key can be removed. All circuits are disconnected.

 DANGER

- **Before turning the ignition switch to the  position, please stop the scooter first and park the scooter with the side stand.**
- **Never push the scooter when the steering mechanism is locked. Otherwise the scooter will be out of balance.**
- **Don't turn the ignition switch to the  position while riding the scooter. Otherwise the scooter will lose control.**

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Remote key



The scooter has two keys. Please keep one of them properly as spare key.



scooter search

When the key is in the  position, the whole scooter is powered off. At this time, Short press the search button  ① or unlock button  ②, and the front and rear turn signal lights of the scooter will flash to help the owner find it.

Unlock the seat

Long press the seat unlock button ① for 3s, then the seat will be unlocked, and the owner can take or put items in the storage box.

Note:

To ensure safe riding, this button is ineffective during riding.

**Low battery of the remote key**

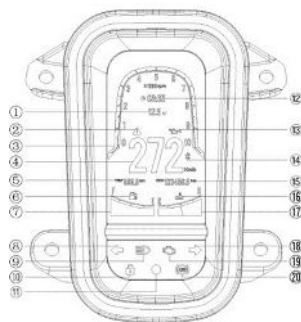
If the scooter does not respond when you Short press or long press the remote key, the following situations indicates that the battery of the remote key is too low. Please replace the battery of the remote key in time.

- The remote indicator ② is not working.
- When the key switch is unlocked, there is a pop-up window on the instrument interface: "Low battery of the remote key". Replace the remote key battery
 - (1) To avoid damage to the remote key, please turn on the remote key from the sidenotch①.
 - (2) Open the back cover of the remote key ③ and remove the battery ④.
 - (3) Dispose of the used batteries according to the laws and regulations, and do not throw them into household garbage.
 - (4) Select the specified battery type: CR2032, and install it.
 - (5) Install the back cover of remote key ③.
 - (6) Short press one of the remote key buttons once to get all ready again.

Note:

- Inapplicability or improper installation of the embedded battery may cause damage to parts.
- Ensure the correct polarity of the battery when installing it.

Instrument



When the key is switched from  to  position, the instrument will perform a power-on self-test:

- ↳ The rotation speed ③ increases from 0 to 10000r/min, then returns to 0;
- ↳ The riding speed ④ increases from 0 to 299km/h, then returns to 0
- ↳ Single mileage ⑤ increases from 000.0 to 999.9, then returns to the actual mileage.
- ↳ Total mileage ⑥ increases from 000000.0 to 999999.9, then returns to actual mileage.
- ↳ BCM fault indicator ②, left steering indicator ⑧, head beam indicator ⑨, anti-theft indicator ⑩, Bluetooth indicator ⑭, and right steering indicator ⑰ are lightened up and then turned off.

↗ Oil pressure indicator ③ , engine fault indicator ④ and ABS fault indicator ⑤ are lighted up. and will be off when the engine starts. The ABS fault indicator light turns off when the vehicle speed is > 5km. If there is a fault, the light will always be on.

⚠ WARNING

- **Don't flush the instrument directly with high pressure water. Don't wipe the instrument with a rag stained with gasoline, kerosene, alcohol, brake fluid and other organic solvents. Otherwise local cracks or discoloration will occur on the instrument due to the contact with organic solvents.**

Real-time display of battery voltage ①

Battery voltage indicates the current battery voltage. When the battery voltage is lower than or equal to 11V, the battery shall be removed and charged with a special charger. The voltage display will be hidden when there is a pop-up window for prompt.

⚠ WARNING

- **When the battery voltage is not more than 11V, if you do not remove the battery for charging, the service life of the battery will be reduced.**

BCM fault indicator ②

When the relevant actuator controlled by BCM has a fault, the light  will be constantly on. After this fault occurs, you can enter the instrument menu bar to check the cause of the fault. See the instrument menu bar settings for the check method.

WARNING

- When this fault indicator is on, please go to the authorized repair shops designated by our Company for inspection and repair.

Display of engine speed signal ③

When the engine starts to run, the engine speed will be displayed, and the error between the displayed speed and the actual speed is not more than 100r/min.

WARNING

- After the engine is started, the speed shall be controlled within the red zone as far as possible. The speed shall not remain in the red zone for too long, so as to improve the engine's service life.

The speed signal is not displayed, indicating that the instrument has not received the speed signal or there is a problem with the instrument. At this time, the throttle opening shall be kept less than 70%. Please contact a repair shop designated by our Company to check the engine speed signal.

Riding speed display ⑥

The LCD screen has two display functions, and through the instrument adjustment button, you can select metric system or imperial system. The detailed adjustment method is shown in the display and setting of the instrument menu bar.

⚠ WARNING

- **When the riding speed is not displayed after the scooter starts to run, it indicates that the instrument has not received the speed signal or the instrument is damaged.**
- **Please contact the authorized repair shops designated by our Company for check and repair.**

Single mileage display ⑥

The single mileage is displayed 0-999.9km, with TRIP displayed, and it will be cleared when exceeding the range.

When the ignition switch is in the  position, long press the MODE button on the right combination switch to clear the single mileage.

⚠ WARNING

- **When the scooter runs with speed, but the mileage displayed remains unchanged, the instrument goes wrong. Please contact the authorized repair shops designated by our Company for check and repair.**

Fuel icon ⑥

When the fuel level drops to about 2.6L, the fuel icon will change from white to red for alarm warning, while the voltage display ① and time display ② are hidden, and a pop-up window "Low fuel level" appears in the same position. When the fuel level drops to about 1.5L, the red fuel icon will flash slowly and a pop-up window "Empty" will appear in the same position. When there is no fuel, the red fuel icon will flash quickly.

WARNING

- **Please refill the specified grade of fuel at a nearby gas station as soon as possible. If the fuel level display shows a stepwise flashing, you need to contact the authorized repair shops designated by our Company for check and repair.**

Real-time display of fuel level ⑦

The fuel level gauge shows the quantity of fuel left in the fuel tank. The fuel level gauge shows 6 sections, indicating that the fuel tank is full. When the fuel quantity decreases to about 2.6L and the fuel level section turns red, you shall refill the fuel as soon as possible.

Left turn indicator ⑧

When pushing the switch of turn signal lights to the left, the left turn indicator will flash.

Note:

If the turn signal lights do not work due to damaged turn signal lights or wrong wiring, the turn indicator on this plate will be constantly off or flash more frequently.

Note:

If the turn signal lights do not work due to damaged turn signal lights or wrong wiring, the turn indicator on this plate will be constantly off or flash more frequently.

High beam indicator ②

The high beam indicator will be on when the high beam light is turned on or the overtaking switch is pressed. When this indicator cannot be turned on, please check whether the circuit and the indicator are in good condition.

Anti-theft indicator ③

(1) When the key is in the  position:

> If the ignition switch has been in the  position within 24 hours, the anti-theft indicator will flash slowly;

> If the ignition switch has not been in the  position within 24 hours, the anti-theft indicator will go out. It can be activated by switching the ignition switch to the  position.

(2) When the key is in the  position:

> When the anti-theft indicator goes out, the scooter can be started.

> When the anti-theft indicator flashes rapidly, the scooter cannot be started.

 **WARNING**

- **When the anti-theft indicator flashes rapidly and the scooter cannot be started, please go to the authorized repair shops designated by our Company for check and repair.**

light-sensitive port ⓘ

The light-sensitive port is the position where the instrument detects the external light signals.

WARNING

- **Please do not cover the light-sensitive port, otherwise the automatic background switching function of the instrument will be disabled.**

Time display ⓘ

When a pop-up window appears, the time display will be hidden. The clock is displayed in 24-hour format. See the instrument menu bar settings for details.

Oil pressure indicator ⓘ

This indicator will flash when the oil pressure is below the normal range. When the ignition switch is turned on to the  position and the engine is started, this indicator light will be constantly on. Once the engine is started, the indicator light will go out.

WARNING

- **When the oil pressure indicator is flashing during the running of the scooter, riding the scooter will damage the engine and transmission system. Whenever the oil pressure indicator is turn on, it indicates that the oil pressure is too low and the engine shall be shut down immediately. Check the oil level to determine whether the oil quantity is correct. If the indicator does not go out, please go to the authorized repair shops designated by our Company for check and repair.**

Bluetooth indicator ④

Turn on and off the Bluetooth function on the instrument. See the instrument menu bar settings for turning on and off methods. The indicator will not light up when the Bluetooth function is turned off. Turn on the Bluetooth function. When a cell phone is connected to the instrument through Bluetooth, the indicator will be constantly on. After the phone is connected to the instrument via Bluetooth, if there is a call connected, the voltage display ① and time display ② are hidden at the same time, and the pop-up window of phone icon and phone number appears in the same position, short press the MODE button on the right combination switch to answer the call at this time and long press the MODE button on the right combination switch to hang up.

Total mileage display ⑤

Total mileage is displayed from 0-999999 km with ODO displayed, and the maximum value will be maintained when exceeding the range.



WARNING

- **When the scooter runs with speed, but the mileage displayed remains unchanged, the instrument goes wrong.**
- **Please contact the authorized repair shops designated by our Company for check and repair.**

**Water temperature icon and water temperature gauge display **

The water temperature gauge displays the water temperature at the engine cylinder head monitored in real time and show it on the instrument in time for the rider to observe the change of engine temperatures. During normal riding, the white water temperature icon and dark blue water temperature gauge are displayed. When the water temperature exceeds the normal value, the water temperature icon and water temperature gauge will turn red for alarm warning, and when the water temperature exceeds the alarm limit, the red water temperature icon and water temperature gauge will flash. When the scooter is not running and the water temperature is within the normal value, the water temperature gauge is displayed in light blue.

! WARNING

- When the water temperature is too high and the water temperature icon and water temperature gauge turn red, please stop to check. When the red water temperature icon and water temperature gauge flash, shut down the engine immediately. After the temperature drops, check the coolant volume. At the same time, contact the authorized repair shops designated by our Company for check and repair.

**Right turn indicator **

When the switch of turn signal lights is pushed to the right, the right turn indicator will flash.

Note:

⚡ If the turn signal lights do not work due to damaged turn signal lights or wrong wiring, the turn indicator on this plate will be constantly off or flash more frequently.

Engine system fault alarm indicator (system alarm) ④

When the electronic fuel injection system-related sensors and actuators go wrong, the light  will be constantly on. At the same time, the voltage display ① and the time display ② are hidden, and a pop-up window "Warning EFI system failure" appears in the same position.

If the sensor or other parts break down, the scooter can continue to run by limping when ECU adopts default values or in other ways. Please ride the scooter to the authorized repair shops for check and repair without delay.

If the actuator and other parts break down, ECU will not be able to control the scooter properly, so please contact the authorized repair shops for check and repair immediately.

ABS fault indicator ⑤

The ABS indicator will be turned on with the key and will go out when the scooter speed is more than 5Km/h. The ABS indicator will be on when the ABS braking system break down.

⚠ WARNING

- When the ABS indicator is on, you shall promptly contact the authorized repair shops designated by our Company for check and repair and shall not continue riding to avoid safety accidents.

Display and setting of the instrument menu bar

Enter and setup in the instrument menu bar by using the MODE button on the right combination switch.



When the key is in the  position, and after the self-test of the instrument is finished, short press the MODE button to enter the instrument menu bar. The instrument will automatically exit the menu bar when the scooter starts to run or there is no button operation within 8s.

Note:

⚡ Enter the instrument menu bar while the scooter is stationary; it is impossible to enter the instrument menu bar to set-up the instrument while the scooter is running.

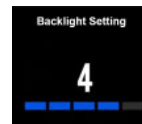
Clock Setting



① is the hour part, an ② is the minute part. In the instrument menu bar, short press the MODE button to select "Clock Setting", and long press the MODE button ($t \geq 2s$) to enter the setting interface. At the same time, enter the hour part to adjust the first number, which will increase by 1 every time the MODE button is shortly pressed and will be repeated from 0 to 2; after that, long press the MODE button ($t \geq 2s$) to adjust the second number of the hour part, which will be repeated from 0 to 9 when the first number is 0 or 1 and will be repeated from 0 to 3 when the first number is 2;

Afterwards, long press the MODE button ($t \geq 2s$) to enter the minute part to set the first number, which will be repeated from 0 to 5; after that, long press the MODE button ($t \geq 2s$) to adjust the second number, which will be repeated from 0 to 9; afterwards, long press the MODE button ($t \geq 2s$) to exit the time adjusting, and the time will be updated. During time adjusting, when there is no button operation within 8s, the instrument will automatically save the time set and exit the menu bar.

Backlight Setting



In the instrument menu bar, short press the MODE button to select "Backlight Setting", and long press the MODE button ($t \geq 2s$) to enter the setting interface. The brightness level will increase by 1 every time the MODE button is shortly pressed, and will be repeated from 1 to 5. After that, long press the MODE button ($t \geq 2s$) to exit. During the setting, when there is no button operation within 8s, the instrument will automatically save the backlight set and exit the menu bar.

Unit setting

In the instrument menu bar, short press the MODE button to select "Unit Setting", and long press the MODE button ($t \geq 2s$) to switch the unit displayed on the instrument between "Metric" and "Imperial".

Bluetooth Setting

In the instrument menu bar, short press the MODE button to select "Bluetooth Setting", and long press the MODE button ($t \geq 2s$) to turn on and off the Bluetooth function of the instrument cyclically.

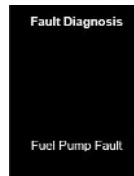
Theme Setting

In the instrument menu bar, short press the MODE button to select "Theme Setting", and long press the MODE button ($t \geq 2s$) to select the theme display modes "Auto, Day, Night" cyclically.

Language Setting

In the instrument menu bar, short press the MODE button to select "Language Setting", and long press the MODE button ($t \geq 2s$) to switch between Italian and English on the instrument cyclically.

Fault Diagnosis



When the BCM fault indicator  appears, enter the instrument menu bar and short press the MODE button to select "Fault diagnosis"; long press the MODE button ($t \geq 2s$) to enter the fault diagnose interface, and you can check the current fault. Short press the MODE button, the fault will switch to the next fault message. Long press the MODE button in the fault diagnose interface ($t \geq 2s$) to exit. During the fault checking, when there is no button operation within 8s or the scooter is running, it will automatically exit to the main interface.

Exit

In the instrument menu bar, short press the MODE button to select "Exit", and long press the MODE button ($t \geq 2s$) to exit the display interface of the instrument menu bar.

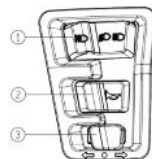
Version display

The current version of the instrument is displayed at the bottom of the instrument menu bar.

Note:

✎ The version of the instrument cannot be selected or changed.

Parts of left combination switch



↵ Dimmer switch button ①

The high beam light will be turned on when this switch is pressed to the left to the ③ position and will return to the ② position when the switch is released. Pressing the combination switch to the left repeatedly can improve your safety when ③ overtaking. When the switch is kept in the ③ position after pressing it to the right, the high beam light

among the headlights will be turned on and the high beam indicator on the instrument panel will also be turned on. When the switch is kept in the middle ② position, the low beam light will be turned on.

⚠ DANGER

. It is forbidden to deliberately press on the overtaking light switch for a long time and leave the high and low beam lights on, otherwise it may damage the scooter's headlights and other electrical components.

 WARNING

- **Adhesive tapes stuck on or objects covering the front of the headlights may prevent the headlights from dissipating heat and damage them. Do not stick tapes on the headlights or let objects cover the light from the headlights.**
- **Before the scooter is started, it is forbidden to light up the headlights by violence through the overtaking light switch for a long time to avoid power loss in the battery.**

 Horn switch button ②

Press this button, and the horn will sound.

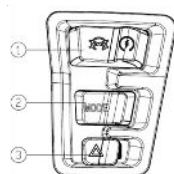
 Turn light switch button ③

Push the switch to the left  and the left turn signal light will flash and the left turn indicator on the instrument will also flash at the same time. Push the switch to the right , and the right turn signal will flash and the right turn indicator on the instrument will also flash at the same time. Press the switch inward or push the switch to the middle position to turn off the turn signal lights.

 DANGER

- **When you change then lane or turn during riding, you must send out a turn signal first. After you change the lane or turn, you shall turn off the turn signal.**

Parts of right combination switch



Buttons of starting and shut-off switches ①

When pressing the switch to the left in the ☒ position, the starting circuit will be cut off and the engine cannot work. This is also an emergency shut-off switch. When the switch is kept in the middle ○ position, the starting circuit will be connected and the engine can work. Make sure the side stand has been folded up; at the same time, hold firmly the brake levers

and press the switch to the right in the ⚡ position, and you can start the scooter directly. Release the switch, which will return to the ○ position.

! DANGER

- When using electric starting continuously, the starting time shall not exceed 5 seconds each time. The interval between every two startings shall be about 10 seconds. A large amount of discharge will cause abnormal heating in the starting circuit and starting motor.
- Try to start the engine for several times, if the engine still cannot be started, you shall go to a designated authorized repair shop for check and repair.

- When washing the car, do not flush the electrical components directly, especially the handle switch.
- Do not start the scooter when there is a lack of coolant, fuel or oil.

🔑 Instrument mode switch button ②

The instrument mode switch combination enables operation on the instrument, clearing of the single mileage, and answering and hanging up of calls. The usage is shown in the instrument single mileage display, the display and setting of the instrument menu bar and the Bluetooth indicator respectively.

🔑 Emergency light switch button ③

Press this switch  ③ and all turn signal lights will flash.

Lambretta

Seat switch



The ignition switch is in the  position, Press the switch to unlock the seat and open it.



Note:

🔑 When the scooter is out of power, the seat lock switch button will be ineffective. The seat can be unlocked by hand  ① by unlocking the file box with a mechanical key.

Fuel tank



The fuel tank is under the seat at the rear of the scooter. Open the seat and fuel tank cap before refilling, and pay attention to the highest fuel level.

! WARNING

• Don't refill excessive fuel to avoid the spilled fuel flowing to the high-temperature engine. The level of refilled fuel shall not exceed the bottom of the fuel tank filler as shown in the figure. Otherwise the fuel will spill due to thermal expansion and damage the scooter components.

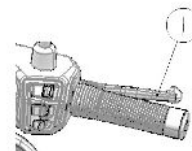
When refilling, shut down the engine and turn the ignition switch to the  position. Don't get close to smoke and fire.

⚠ DANGER

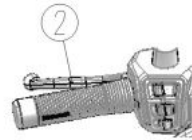
Reliable preventive measures shall be taken when refilling the fuel. Otherwise it will cause a fire or the user may inhale the fuel vapor. Please refill the fuel in a ventilated space, and confirm the engine is shut down to avoid fuel spilling. Smoking is prohibited and make sure there is no any heat or fire source nearby. Avoid inhaling the fuel vapor. Keep children and pets away from the fuel refilling.

Brake**↪ Front brake**

Hold the brake lever ① firmly to engage the front wheel brake and the brake light will light up. The hydraulic disc brake is adopted for the front brake, which doesn't require great grip strength for braking.

**↪ Rear brake**

Hold the brake lever ② firmly to engage the front wheel brake and the brake light will light up. The hydraulic disc brake is adopted for the front brake, which doesn't require great grip strength for braking.

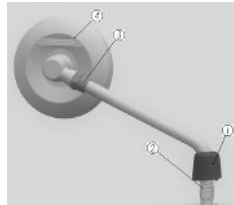


Rearview mirror

↳ Rearview mirror adjustment

Move ① and adjust ② , ③ , ④ to move the rear-view mirrors to the position required.

Tighten up ② and ③, and cover ① .



Headlight

The scooter is equipped with a headlight with integrated high and low beams. When the scooter leaves the factory, relevant parameters of the headlight have been adjusted according to relevant national standards, and there is no need to make other changes to them.

Headlight adjustment

Loosen the headlight adjusting screw ① , adjust the headlight to the desired angle, and then tighten up the adjusting screw ① .

If you have any questions about the correct lighting angle setting, please seek help from a professional technician, preferably a local agent.



Parking



① Side stand ② Main stand ③ Rear armrest

The scooter is equipped with a side stand ① , a main stand ② and rear armrests ③.

Rotate the side stand or the main stand to the extreme lower position with foot and confirm the scooter is supported stably before leaving.

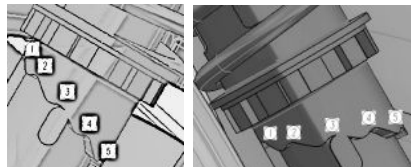
⚠ WARNING

- **Park the scooter on solid and flat ground to avoid rollover. If you have to park the scooter on a gently slope, please park the scooter toward the uphill direction.**

⚠ DANGER

- **Before riding, check if the side stand is rotated to the extreme upper position or if the connection is loose. Never let the side stand stop at other positions.**

Front shock absorber, rear shock absorber



The spring preload can be adjusted to 5 different settings by adjusting and turning the adjustment ring at the bottom of the shock absorber.

- ↪ Set ① minimum preload: rider only
- ↪ Set ② minimum preload: rider only
- ↪ Set ③ minimum preload: rider only
- ↪ Set ④ minimum preload: rider and passenger
- ↪ Set ⑤ minimum preload: rider, passenger and luggage.



Instructions for use fuel, engine oil, coolant and gear oil

Fuel

Engine oil

Coolant

Gear oil

(47)

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Lambretta

Fuel, engine oil, coolant and gear oil

Instructions for Use

Fuel

Please use clean #92, #95 unleaded gasoline only. The unleaded gasoline can prolong the service life of the spark plug and muffler.

If you judge based on experience that there is knocking noise, you can use gasoline of higher octane rating or other brands, because there is difference between different brands.

Engine oil

Using quality four-stroke engine oil can prolong the service life of engine. Please use the SAE 10W-40 level or higher level "four-stroke engine oil for scooters".

WARNING

- **Leaded gasoline, inferior fuel and oil will damage the components of electronic fuel injection system and reduce the service life of spark plug and catalyst in the muffler. Don't use unclean fuel, because it will block the fuel pipe and cause abnormality of engine.**

Note:

Please dispose of the waste engine oil properly and avoid environmental pollution. It is recommended to put the waste oil in a sealed container and send it to local recycling center. Don't pour it into a dustbin or directly pour it on the ground.

Coolant

Please use the coolant suitable for aluminum radiator. The coolant consists of the mixture of ethylene glycol and water.

DANGER

- **Engine coolant is harmful or fatal if ingested or inhaled, and is toxic to animals. Don't drink antifreeze or coolant. If swallowed, do not induce vomiting and contact the poison control center or hospital immediately. Avoid inhalation of coolant vapor or hot vapor; if inhaled, immediately go to a ventilated environment with fresh air. If the coolant runs into eyes, please rinse with clean water and consult a doctor.**

Wash your hands thoroughly after operation, and keep children and pets away from the coolant.

DANGER

- **The spilled coolant can damage the paint surface of the scooter. Take care not to spill the coolant when adding it. If the coolant is spilled, wipe it off immediately.**

↪ Coolant usage amount

Coolant capacity: approximately 2.5L.

↪ Gear oil

Gearbox gear oil type : 85W-140 gear oil.

Gear oil capacity

Gear oil capacity : about 0.2-0.25L.

Running-in and Pre-operation checks

Recommended maximum engine speed
Running-in of new tires
Circulate oil before riding
First maintenance
Pre-operation check

Lambretta

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Running-in and pre-operation checks

The proper running-in of a new scooter can prolong its service life and give full play to its performance. The correct methods for running-in are as follows.

Recommended maximum engine speed

The running-in mileage of a new scooter's engine is 1000km, and the engine speed during the running-in period shall be in accordance with the following recommended values.

Mileage	Engine speed
First 500km	Below 5000r/min
Over 500km	Below 6000r/min

Running-in of new tires

Like the engine, new tires do also need a proper running-in to ensure its best performance. In the first 160km of a new tire, gradually increase the tilting angle of the turn for the running-in of the tire surface in contact with the ground to achieve the optimum performance. Avoid quick acceleration, sharp turn and emergency braking in the first 160km of a new tire.



DANGER

- Imperfect running-in of the tires will cause the slipping and losing control. Take care especially after replacing with a new tire. Perform the correct tire running-in as per the contents specified in the current section, and avoid quick acceleration, sharp turn and emergency braking in the first 160km of a new tire.**

Circulate oil before riding

No matter under warm or cold engine conditions, let the engine have sufficient idle running time before starting to let the oil flow to all lubricating parts.

First maintenance

The maintenance after the first 1,000km is the most important. By then, all engine parts have been run in. Therefore, in this maintenance, all parts and components shall be readjusted, all fasteners shall be tightened up and all oil polluted by parts wear debris shall be replaced. A careful maintenance after the first 1,000km will ensure your scooter's best performance and extend its service life.

Note:

The 1,000km overhaul shall be carried out according to the contents as specified in the section "Inspection and Maintenance". Please pay special attention to the contents identified by "Danger" and "Warning" in that section.

Pre-operation checks



DANGER

- Failure to carefully check the scooter before riding and conduct maintenance correctly will increase the possibility of accidents and scooter damage. The scooter shall be checked before each use to make sure it is safe to operate. Refer to the contents specified the section "Inspection and Maintenance".**

• If unsuitable tires are used, or the scooter is operated incorrectly or the tire pressure is incorrect, you will lose control of the scooter. Please only use the tires with the size and specifications as specified herein, and always check and maintain proper tire pressure as per the section of "Inspection and Maintenance".

Make sure to check the following items before riding. Never neglect the importance of these checks, and complete all checks and necessary maintenance before riding.

 DANGER

• It is dangerous to conduct the check if the engine is running. If your hands or cloths are caught by the scooter's moving parts, you will be seriously injured. Except for checking the engine stop switch and throttle, please shut down the engine during other checks.

Check Content	Key Items
Steering system	1. Flexible steering
	2. No interference with motion
	3. No shifting or loosening
Throttle	1. Correct throttle free play
	2. Smooth operation and throttling back
Brake	1. Normal operation of front and rear brake levers
	2. Brake fluid above the "MIN" line of brake fluid reservoir
	3. No dragging (brake dragging) phenomenon
	4. No brake fluid leakage phenomenon
	5. Brake disc/ pad wear not exceed the prescribed limit
Shock absorber	1. Steady and flexible motion
Fuel	1. Enough fuel for the planned distance
Tire	1. Correct tire pressure
	2. Appropriate tread depth
	3. No crack or damage

Check Content	Key Items
Engine	1. Correct oil level
Coolant	1. Correct coolant level
	2. No coolant leakage
Lighting	1. Lights of the whole scooter work normally
Instrument	1. Instrument lights and indicator work normally
Horn	1. Work normally
Brake switch	1. Work normally
Engine stop switch	1. Work normally

Riding essentials

Starting the engine
Riding the scooter
Running downhill
Braking and parking
ABS system

Lambretta

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Riding essentials

DANGER

- If it's your first time to ride this type of scooter, you are recommended to find a nonpublic road to practice until you are familiar with the scooter's controlling and operating methods.
- It's very dangerous to ride the scooter only with one hand. You shall hold the handles firmly with both hands and put your feet on the rider footrests. Don't move both of your hands off the handles under any circumstances. Slow down to a safe speed before turning.
- The tire friction decreases on wet and slippery road, and the braking capacity and turning capacity are reduced accordingly,

so you must reduce the speed in advance.

- The crosswind always occurs when there is tunnel exit, valley or large vehicle overtaking from behind. You shall take care, calm down and slow down.

Please observe traffic rules and speed limits.

Starting the engine

Check if the engine stop switch is in the operation position. Insert the key into the keyhole of ignition switch and turn clockwise to the  (On) position.

Note:

When starting, you shall fold up the side stand and hold tightly the front brake (rear brake) lever.

Note:

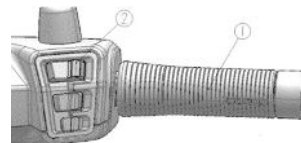
When the scooter overturns, the overturning sensor will cut off the power and stop fuel supply to stall the scooter. To restart the scooter, you need to turn off the ignition switch, and one minute later, turn on the ignition switch and start the engine.

Under cold engine conditions

- ✎ Fold up the side stand and hold tightly the (front brake or rear brake) lever.
- ✎ Rotate the throttle grip to the idle position .
- ✎ Press the electric starting button to start the scooter.
- ✎ After the engine starts, let the engine continue running until it is fully warmed up.

Note:

The colder the weather, the longer it takes for the engine to warm up. Riding after the engine is fully warmed up can reduce the wear of engine.

When it is difficulty to start the engine under cold engine conditions

- ✎ Fold up the side stand and hold tightly the front brake (rear brake) lever.
- ✎ Hold the accelerator ① with your right hand and press ② the electric starting button (⚡) at the same time to start.

↳ After the engine starts, let the engine continue running until it is fully warmed up.

Under warm engine conditions

↳ Fold up the side stand and hold tightly the front brake (rear brake) lever.

↳ Rotate the throttle grip to the idle position (turn off the throttle).

↳ Press the electric starting button (🔌) to start.

When it is difficult to start the engine under warm engine conditions

↳ Fold up the side stand and hold tightly the front brake (rear brake) lever.

↳ Hold the accelerator ① with your right hand and press ② the electric starting button (🔌) at the same time to start.

! DANGER

• **Don't start the engine in a poorly ventilated area or unventilated room, because the exhaust fumes are toxic. Don't allow the engine to run under unattended circumstance. Don't start the scooter when it is short of fuel or oil.**

! WARNING

• **When the scooter is not running, don't let the engine run at a too high speed or idle for too long. The engine overheating caused by idling for too long will damage the internal parts and cause the discoloration of exhaust pipe and muffler.**

Riding the scooter

Fold up the side stand, and hold firmly the front brake (rear brake) lever to start the engine. Slowly release the brake lever and slowly rotate the throttle grid toward the acceleration direction to start riding the scooter. Gradually throttle up to accelerate.

⚠ DANGER

- **Before the scooter starting, make sure the side stand is in the extreme upper position instead of stopping at any other positions.**
- **Before riding, please wear a helmet, protective glasses and striking clothing.**
- **Don't ride the scooter after drinking alcohol or taking medicine.**
- **Slow down in case of slippery road or poor visibility.**

- **Overspeeding easily leads to losing control of the scooter and accidents. Ride the scooter at the speed as specified by national regulations. Choose proper speed according to the terrain, visibility and driving environment. Ride a scooter within your scope of skills. Never overspeed.**
- **It's very dangerous to ride the scooter only with one hand. You shall hold the handles firmly with both hands and put feet on the footrest. Don't move your hands off the handles under any circumstances.**
- **The crosswind always occurs when there is tunnel exit, valley or large scooter overtaking from behind. You shall take care, calm down and slow down.**

Running downhill

WARNING

- If you use the rear wheel brake for a long time when riding downhill, the brakes effect will be reduced easily.
- After braking for a long time, the brake will lose braking effect or be damaged due to overheating.
- The correct method is to use the front wheel brake and the rear wheel brake at the same time.

Braking and parking

- ↳ Release the throttle grip to let the throttle completely return.
- ↳ Use the front brake lever and rear brake lever at the same time to brake.

↳ If you want to park the scooter with the side stand on a gently slope, please try to park the scooter toward the uphill direction, so as to avoid overturning due to the rotation of side stand.

↳ Turn the ignition switch to the  (Off) position to shut down the engine.

↳ Lock the steering lock to ensure the safety.

↳ Remove the key.

WARNING

- **Braking only with the rear brake will accelerate the braking system wear, increasing the braking distance.**

Dangers:

- **The braking distance will be increased accordingly if the scooter speed is too high.**

 WARNING

Make sure the distance to the vehicle or object ahead is far enough for you to brake the scooter, or it may cause rear-end collisions.

- It is dangerous to only use the front brake or the rear brake, which may cause skidding and loss of control. Use the braking system carefully and gently on slippery roads and bends. Emergency braking on uneven or slippery roads may cause loss of control of the scooter.**
- Emergency braking while turning may cause loss of control of the scooter. Brake and reduce the scooter speed before turning.**

- The muffler is hot when the engine is working or has just stopped. Please do not touch the muffler to avoid burns.**

Anti-lock Braking System (ABS)

How ABS works?

The maximum braking force that can be transmitted to the road may depend on the friction coefficient of the road surface. The friction coefficient of gravel pavement, ice and snow covered pavement as well as wet and slippery roads is far lower than that of dry and clean asphalt pavement. The lower the road friction coefficient, the longer the braking distance.

If the braking pressure given by the rider exceeds the maximum braking force that can be transmitted, the wheels will lock up and lose the riding stability, which will lead to a rollover.

Before this happens, ABS intervenes to make the braking pressure match with the maximum braking force that can be transmitted, so that the wheels can continue to rotate and the riding stability will not be affected by road conditions.

Rear wheel lifting

When the adhesivity between tires and the road is high, the braking force will increase, and the front wheel will be locked very late or not at all. Accordingly, you must delay or not intervene at all in the adjustment of ABS. In this case, the rear wheels may lift, causing the scooter to roll over.



WARNING

- **Strong braking keeps the rear wheels off the ground**

Rollover

Please note that the ABS adjustment system cannot always prevent the rear wheels from lifting when braking strongly.

Special situation

In order to identify the tendency of wheel locking, the rotation speeds of the front and rear wheels are also compared. If an untrustworthy value is identified during a long period, the ABS function will be turned off and an ABS fault will be displayed for safety reasons. The precondition for outputting fault information is that the self-diagnosis has finished.

In addition to the problem on the ABS self-recognition, abnormal riding may also lead to fault information.

Abnormal riding

↺ The rear wheel rotates in place when the front wheel brake is tightened.

(Commonly known as burning tires)

↺ The rear wheel coasts on a smooth road for a long time.

↺ If the fault information is generated due to abnormal riding, the function can be reactivated by turning the ignition switch on again and after turning it off.

Note:

To ensure that the ABS remain in the best maintenance state, please observe the specified maintenance and inspection cycle.



Inspection and maintenance

Maintenance schedule	(65-69)
Toolkit	(70)
Brief instructions for fuel tank removal and installation	(70-73)
Battery	(73-76)
Air filter	(76-80)
Spark plug	(80-81)
Engine oil	(81-84)
Oil filter element and gearbox	(84-86)
Throttle body	(86)
Throttle cable clearance	(87)
Idle speed	(88)
Evaporation emission control system	(88)
Coolant	(88-90)
Fuel pipe	(90)
Braking system	(90-95)
Tire	(95-99)
Fuses	(99-100)

Lambretta

Inspection and maintenance

Maintenance schedule

The table below shows the inspection to be conducted for each regular maintenance and the inspection interval period shall be based on the number of months used or the number of kilometers traveled, whichever is earlier. Every inspection shall be performed according to the items as shown in the table below.

If your scooter has been used under harsh conditions, namely continuously running at large throttle opening or running under sandstorm conditions, special maintenance shall be performed after that to maintain the scooter reliability. The repair shop can provide you with further consultation.

Especially for key components like steering system, shock absorber and wheels, specialized technique and careful maintenance are required.

For the sake of safety, you are suggested to go to a qualified repair shop.



DANGER

- **The maintenance of a new scooter after the first 1,000km must be conducted, which can make your scooter always work reliably and show superior performance.**
- **The muffler is hot when the engine is working or has just stopped. Please do not touch the muffler to avoid burns.**

- Improper maintenance or problems existing after maintenance may cause accidents. To maintain your scooter in a good condition, items marked with " * " are required to be completed by our company's qualified repair shops. By reference to contents in this section, if you have experience in machinery maintenance, you can maintain items not marked with " * ". If you are not sure how to deal with the task, please let your repair shop perform the maintenance.
- The engine exhaust contains carbon monoxide, which is dangerous and barely perceptible because it is colorless and odorless. Inhalation of carbon monoxide may cause death or serious injury.

Don't start or run the engine in a room, small space or poorly ventilated places.

 WARNING

- Seriously check if the regular maintenance is carefully performed in strict accordance with the instructions herein.
- The maintenance after the first 1,000km shall be performed according to the method as stated in this section. Pay special attention to the contents identified by "Danger" and "Warning" in this section.
- Replacement with improper parts will accelerate wear and reduce the scooter's service life. When replacing parts for your scooter, use our Company's genuine parts only.

Note:

The waste generated in the maintenance process, such as detergent, waste oil, etc. shall be properly disposed of to avoid environmental pollution.

Note:

The maintenance table specifies the minimum maintenance items required. If your scooter is often used in harsh conditions, more maintenance items shall be performed than those specified in the table. If you have questions about the maintenance cycle, please consult our Company's qualified repair shop.

Regular maintenance schedule

Period Inspection Items	Inspection	Mileage/Km	First 1000	Every 5000	Every 10000	Every 15000	Every 20000
		Time/Month	First 3M	Every 15M	Every 30M	Every 45M	Every 60M
Safety fastener			J		J		
Spark plug *					J		R
Drive belt *					J	R	
Throttle controller			J		A		
Side stand and main stand buffer					R		
CVT gearbox and dust cover				J			
Air filter elements					R		
Engine oil			R	R			
Transmission oil			R		R		
Sliding shoe block / CVT roller *					R		
Oil filter *			R	R			
Coolant * / ▲			J	J			

Period Inspection Items	Inspection	Mileage/Km	First 1000	Every 5000	Every 10000	Every 15000	Every 20000
	Time/Month	First 3M	Every 15M	Every 30M	Every 45M	Every 60M	
Tire pressure and wear		J	J				
Throttle clearance *							A
Suspension *		J		J			
Brake friction lining *		J	J				
Brake liquid * / ▲		J		J			
Steering system *				A			

J : Check and clean, adjust or replace if necessary.

R : Replace.

A : Check and clean.

▲ : Replace every two years

Note:

The maintenance cycle of the scooter after running for 20000km shall be performed in accordance with the requirements of the above *Regular maintenance schedule*.

Toolkit



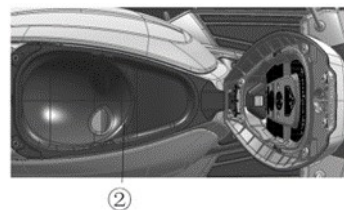
The toolkit is fixed inside the file box. You can see it after uncovering uncover the file box. It is pasted with a mushroom buckle and can be removed directly.

Brief instructions for fuel tank removal and installation

➤ Press the key ① for 3 seconds to unlock the seat.



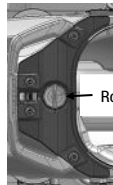
➤ Remove the storage box body.



- Remove the mounting bolt ③ in the right cover and the right passenger footrest ④ , and remove the right cover.

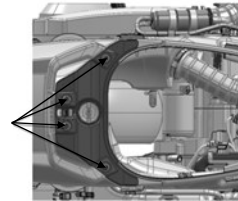


Remove the fuel tank cap

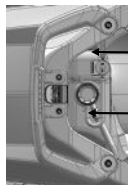


- Remove the trim plate of the fuel filler and the rear armrest. (It is recommended to install the fuel tank cap back on the fuel tank after removing the trim plate of the fuel filler)

Remove 4 bolts and remove the trim plate of the fuel filler

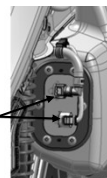


Remove the oil pipe A and the connecting pipe between the overturning stop valve and the carbon canister.



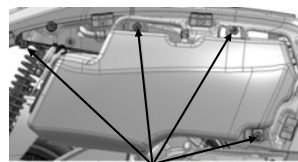
Remove the connecting pipe between the overturning stop valve and the carbon canister.
Loosen the hoop and remove the air pipe.

⚡ Remove the connector of the fuel pump and the fuel pipe.



Remove the connector of the fuel pump and the fuel pipe.

⚡ Remove 4 mounting bolts and remove the fuel tank.



Remove 4 mounting bolts and remove the fuel tank

Note:

⚡ Don't leak the fuel when removing the fuel pipe.

⚡ The fuel tank is unstable during removing the fuel tank. It is recommended that 2 persons cooperate on removing the fuel tank.

⚡ Don't drag the fuel tank hard or bend the fuel pipe to avoid the fuel pipe folding.

⚡ Take care not to damage the end of the fuel pipe when removing or placing the fuel tank.

Battery

The battery is fully sealed and doesn't require regular inspection on the level and specific gravity of electrolyte. But the charging performance shall be inspected regularly.

Standard charge is at 0.1C for 8 to 10 hours and fast charge at 0.3C for 2 to 3 hours. Do not exceed the maximum charge current.



DANGER

• **The battery terminals and associated components contain lead or lead compounds, which can harm your health if they get into the bloods system. Please wash your hands after handling any parts that contain lead. Sulfuric acid in the battery can harm eyes and burn the skin. Please wear protective glasses and gloves. If you are injured by sulfuric acid, rinse with plenty of water and seek medical treatment immediately. Keep children away from the battery.**

Note:

Please dispose of the waste battery and electrolyte properly to avoid environmental pollution. It is recommended to send the waste battery and electrolyte to local recycling center. Don't throw them in a dust-bin or directly on the ground.

Note:

Inspect the battery regularly and charge the battery if the voltage is below 11.5V.

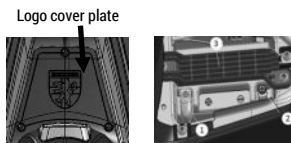
Note:

Overcharging will shorten the battery life. Don't overcharge it.

Removal of battery**Follow the steps below to remove the battery:**

🔧 Park the scooter with the side stand or the main stand.

🔧 Remove the mounting bolts on the logo cover plate and remove the logo cover plate.



🔧 Dismantle the negative terminal (-) ②.

🔧 Remove the protective cap to dismantle the positive terminal (+) ①.

🔧 Remove the pressing plate of the battery ③.

🔧 Remove the battery

⚠ DANGER

- The battery contains toxic substances, such as sulfuric acid and lead, which will harm human and pollute the environment. Used batteries must be disposed of or recovered according to local laws and are not allowed to be dropped like ordinary household garbage. Do not damage the battery when removing it. Leakage of sulfuric acid will cause harm to human.

⚠ WARNING

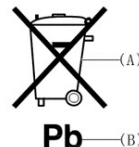
- For connecting the battery, install the red wire to connect the positive pole first, then install the black wire to connect the negative pole. Reverse connection will damage the electric parts.

Note:

- Please select a MF battery of the same model when replacing the battery.

Note:

- The battery shall be charged every 3 months if it is not used for a long time.



The symbol (A) on the battery indicates that the used battery shall be collected separately from ordinary domestic waste.

The used battery shall be disposed of or recovered correctly, or it will have a negative impact on the environment and human health. Materials recycling can protect the natural resources. For matters about correct disposal and recycling of used batteries, please consult local dealer.

Air filter

The air filter is on the engine. If the air filter is blocked by dust, it will increase the intake resistance, which will reduce the output power and increase fuel consumption. If the scooter is used under dusty environment, the air filter element shall be cleaned or replaced more frequently. Inspect and clean the air filter by the following steps.

WARNING

• If the scooter is used under dusty environment, the air filter element shall be cleaned or replaced more frequently.

• It's very dangerous to run the engine without an air filter. Without the blocking of the element inside the air filter, the engine flame will burn back from the engine to the intake chamber of the air filter.

Dirt will get into the engine and damage it. Don't run the engine without an air filter.

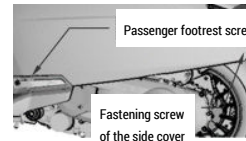
Note:

If the scooter is often used in a dirty, wet and muddy environment without regular inspection, the scooter will be damaged. Under such circumstance, the air filter will be blocked, causing damage to the engine. After riding the scooter in harsh environment, make sure to inspect the air filter, and clean or replace it if necessary. If water enters the air filter, it shall be cleaned immediately.

🔑 Unlock the seat with the key



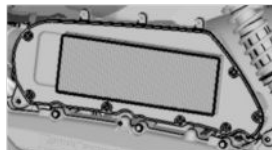
🔑 Remove the left side cover: remove the fastening screw (1 piece) of the side cover and the passenger footrest screws (2 pieces) as shown in the figure below to take down the passenger footrest and the left side cover forward.



↪ Loosen the screws of the air filter cap to remove the air filter cap.



↪ Remove the air filter element for cleaning.



! WARNING

- **Broken air filter will let dirt enter the engine, causing damage to the engine. If the filter element is broken, please replace it with a new filter element. When cleaning the air filter, check if the filter element is broken.**

Install the cleaned filter element or a new one by above steps in reverse order. Make sure the filter element is installed in the correct position and properly sealed.

! WARNING

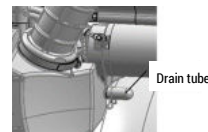
- **If the air filter element is not installed correctly, dust will bypass the filter element and enter the engine, causing damage to the engine. Make sure the filter element is installed in the correct position.**

⚠ WARNING

• If the scooter is used in dusty conditions, the interval period for the filter element inspection and replacement shall be shortened. If you find the blocking, damage or dust leaking of the filter element, obvious reduction of engine power, increase of fuel consumption and other similar circumstances, please immediately replace the filter element and don't wait until the scheduled maintenance to handle it. Starting the engine without an filter element will increase the engine wear. Please frequently check the filter element, because this component always affects the life of the engine.

Note:

Don't let water enter the air filter when washing the scooter.

Drain tube

Remove the drain tube to drain the waste fuel inside during regular maintenance.

Note:

The inspection frequency shall be increased appropriately under conditions of high air humidity.

Note:

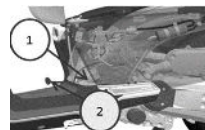
Make sure to install the drain tube back in place after the operation.

Spark plug

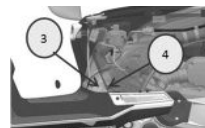
Remove the spark plug

- ↳ Support the main stand.
- ↳ Unlock the seat and storage box.
- ↳ Remove the spark plug cap ① from the left side of the frame.

Remove the spark
plug cap here



- ↳ Remove the spark plug hole cap ②.



- ↳ Remove the spark plugs ④ with a special tool by entering through the frame hole ③ to the spark plug installation position.

! WARNING

- Dirt can enter the engine through the spark plug installation hole, causing damage to the engine. Please cover the spark plug installation hole after removing the spark plug.

Inspection of the spark plug

Clean the carbon deposit on the spark plug with a hard iron wire or a steel needle, then check the spark plug electrode gap with a feeler gage and adjust the electrode gap to 0.8 ~ 0.9mm.

Replacement of the spark plug**! WARNING**

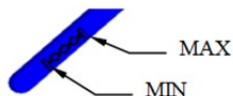
- The heat value range of an unsuitable spark plug can't fit the engine running. It will cause damage to the engine, which can't be claimed. Please use the spark plug with the model as specified below.

The spark plug shall be replaced according to the regular maintenance schedule. The removal and installation of the spark plug shall be performed by the dealer.

Engine oil

The selection of high-quality oil and regular replacement of the engine oil are very important for the durability of the engine. Daily inspection on the oil level and regular replace of oil are two important tasks that must be performed in the maintenance schedule.

🔧 Inspection of the oil level



Follow the steps below to inspect the engine oil level.

- 🔧 Park the scooter with the side stand on a flat ground.
- 🔧 Clean the oil filler.
- 🔧 Remove the dipstick.
- 🔧 Clean the dipstick within the measurement range with a dry fabric.
- 🔧 Insert the dipstick into the oil filler, but do not screw it in.
- 🔧 Take out the oil dipstick and read the oil level.

⚠ WARNING

- **Running the engine with too much or too little engine oil will damage the engine. Park the scooter on flat ground for 5 minutes, then check the oil level through the dipstick. The oil level shall be above the MIN line and below the MAX line.**

Engine oil change

Replace the engine oil in every maintenance cycle. Replace the oil under warm engine condition to drain the used oil more thoroughly. The steps are as follows:

- 🔧 Tilt the scooter to the left and unscrew the drain bolt.



🔧 Collect the oil from the crankcase with an oil drip pan and clean the drain bolt.

! DANGER

- The engine oil and muffler exhaust pipe can burn people. Before draining the used oil, wait until the drain bolt and exhaust pipe cool down.
- Children and pets may be harmed if they drink the oil by mistake. **Reiterate: long-term exposure to engine oil can lead to skin cancer. Short-term exposure to engine oil can irritate the skin. Keep children and pets away from the engine oil. When replacing the engine oil, please wear long-sleeved clothes and protective gloves (such as the gloves used for washing clothes) to reduce the irritation.**

If the skin contacts with engine oil, please wash thoroughly with soap and water. Wash the clothes and rag stained with engine oil. Recycle and dispose of the used engine oil correctly.

Note:

Recycle and disposal of the used engine oil correctly.

🔧 Install the drain bolt after the oil has been drained, and tighten up the drain bolt to the specified torque (tightening torque 25 N.m);

🔧 Please refill the new SAE 10W-40 level or higher-level "four-stroke engine oil for scooters" through the oil filler. (If the engine oil filter element is replaced at the same time, about 200ml more engine oil needs to be refilled.)

! WARNING

- **After the oil has been refilled, please recheck if the oil level is between the MAX and MIN lines.**

↪ Install the oil dipstick.

↪ Run the engine at different speeds for 3 minutes. Check if there is any leakage of oil from reinstalled parts during the engine running.

↪ Shut down the engine and wait for 3 minutes. Check the engine oil level according to the above methods. If the engine oil is below the MIN line, fill more oil to the MIN line. Recheck if there is any leakage.

Oil filter element

Replace the engine oil filter element in every maintenance cycle. The engine oil filter element shall be replaced when the engine oil is drained. The steps are as follows:

↪ Drain the used engine oil thoroughly by reference to the section "Engine oil change".

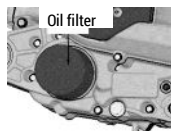
! DANGER

• Children and pets may be harmed if they drink the oil by mistake. Reiterate: long-term exposure to engine oil can lead to skin cancer. Short-term exposure to engine oil can irritate the skin. Keep children and pets away from the engine oil and used oil filter element. When replacing the engine oil, please wear long-sleeved clothes and protective gloves (such as the gloves used for washing clothes) to reduce the irritation. If the skin contacts with engine oil, please wash thoroughly with soap and water. Wash the clothes and rag stained with engine oil. Recycle and dispose of the used engine oil and oil filter element correctly.

Note:

Recycle and disposal of the used engine oil and oil filter element correctly.

✚ Remove the oil filter element by rotating it counterclockwise with a special tool for cap or special tool for belt of appropriate size.



✚ Use a rag to wipe up the mounting surface of the oil filter element on the engine.

✚ Apply a little new oil to the seal ring of the new oil filter element.

! WARNING

• **Replacing with wrong oil filter element or an oil filter element with a wrong thread can damage the engine. Our Company's genuine parts shall be used.**

✚ Screw the new oil filter element by hand until the seal ring of the oil filter element touches the mounting surface (You will feel a little resistance at this time).

Note:

It is very important to install the oil filter element correctly. The accurate positioning starts when the seal ring of the oil filter element contacts the mounting surface.

Tighten up the oil filter element for 2 turns or according to the specified torque.

✚ When installing the oil filter element with a special tool, pay attention to the marked position and tighten up the oil filter for 2 turns or according to the specified torque.

✚ The torque for installing the oil filter element: 12 N·m

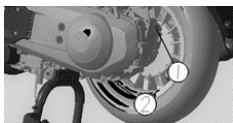
🔧 Install the drain bolt with its washer and refill new engine oil by reference to the section "Engine oil change" and refill new oil. Install the oil filler plug. Run the engine to check if there is any leakage. Check the oil level after running the engine.

Note:

If the special tool for the oil filter element is needed, please consult our Company's designated repair shops.

Replacement of gearbox gear oil

When each maintenance cycle is reached, it is necessary to replace the gearbox gear oil.



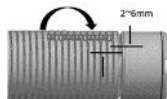
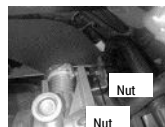
🔧 Stand up the main support, unscrew the oil filler bolt, then unscrew the oil drain bolt and drain the gear oil.

Tighten the oil drain bolt (tightening force: 25N.m), add 0.2-0.25L gear oil, and then tighten the oil filler bolt (tightening force: 25N.m).

Throttle body

The throttle stop screw on the throttle body has been precisely set and can't be adjusted. Check if the idle speed is stable (after the engine is fully warmed up, the engine idle speed shall be 1200 ± 120 revolutions per minute), if not, please look for professional service personnel of our Company's designated repair shops to inspect and handle.

Throttle free play



↪ Adjustment method

Fine adjustment: unlock the seat to remove the storage box, loosen the locking nut M6, rotate and adjust the screw so that the throttle will have a satisfactory free play. Then tighten up the locking nut M6.

! DANGER

- After adjust the clearance of the throttle cable, ensure that the throttle grip will automatically return in place and the idle speed will not increase. At the same time, the engine idle speed shall not increase when turning the scooter head after the adjustment.

Idle speed

The engine idle speed shall be checked under warm engine conditions. The engine idle speed shall be in the range of 1200±120 revolutions per minute.

Note:

If the engine idle speed is not within the specified range, please let our Company's designated repair shops to inspect the scooter.

Evaporation emission pollutant control system (EVAP)

The scooter is equipped with a control system that prevents fuel from evaporating into the atmosphere. The following items shall be checked regularly (every 5,000km or every 18 months).

☞ Check if every pipe line is connected reliably;

☞ check if there is any cracks or damage of every pipe line or the activated carbon canister, and replace them if so;

☞ check if any pipe line or the activated carbon canister is blocked, and dredge or replace if necessary.

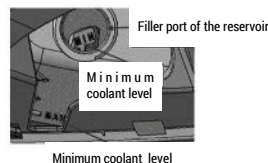


DANGER

• If the EVAP needs to be inspected and repaired, you are strongly recommended to go to a qualified repair shop.

☞ Coolant

☞ Coolant Level



The coolant level in the coolant reservoir shall be maintained between the "MAX" line and the "MIN" line at any time. Please check the coolant level frequently. Before checking, park the scooter on flat ground with the main stand and observe the liquid level of the coolant. If the coolant is below the MIN line, please refill appropriate coolant by the following method.

↳ Park the scooter with the main stand.

↳ Remove the cover L.

↳ Uncover the coolant reservoir and refill appropriate coolant till the MAX line.

Note:

Check the coolant level under cold engine conditions.

Note:

If the coolant reservoir is empty, please immediately check the cooling system and refill the coolant.



DANGER

The coolant is harmful even fatal if ingested or inhaled, and is toxic to animals. Don't drink antifreeze and coolant. In case of swallowing, don't induce vomiting, and contact the poison control center or a doctor immediately. In case of inhalation, move to an environment with fresh air. If the coolant runs into eyes, rinse with clean water and consult a doctor. Wash your hands thoroughly after the operation. Keep children and pets away from the antifreeze and coolant.

Replacement of coolant

↗ Replace the coolant every 2 years.

Note:

For replacing the coolant, you need to refill approximately 2.5L coolant into the reservoir and radiator.

Fuel pipe

Unlock the seat, remove the storage box and remove the right side cover to check if the fuel pipe is damaged or leaked. If there is any problem, the fuel pipe must be replaced.

Braking system

Both front and rear wheels of the scooter are equipped with disc brakes. A correct operating braking system is very important for safe riding. Remember to let qualified repair shops check the braking system regularly.



! DANGER

- **Brakes are very important for ensuring the rider's personal safety. You shall check and adjust the brakes frequently and clean the mud on the brake calipers regularly to prevent it from impeding the piston motion.**
- **If the maintenance of the braking system is needed, you are strongly recommended to go to qualified repair shops. They have complete tools and proficient skill, and can complete the task in the safest and most economical way.**
- **Failure to check and maintain the braking system will increase the chance of an accident. Make sure to check the braking system according to the section of "Pre-operation checks" every time before riding the scooter.**

Maintain the braking system according to the regular maintenance table.

Check the braking system according to the following items:

- ↳ Check the fluid level of the brake fluid reservoir.
- ↳ Check if there is any sign of leakage of the front and rear braking systems.
- ↳ Check if the brake liquid hose is leaking or broken.
- ↳ Check the wear of brake discs and brake pads.
- ↳ Operate the front and rear brakes to check if they are flexible and effective.

! WARNING

The disc braking system adopts the high pressure braking. To ensure safety, the replacement cycle of the brake fluid hose or brake fluid shall not exceed the duration that is specified in the section of "Inspection and Maintenance" herein.

Brake liquid

- ↳ Front brake fluid reservoir



- ↳ Rear brake fluid reservoir



⚠ DANGER

• If swallowed, the brake fluid is harmful to human body or even fatal. The brake fluid is harmful in contact with skin and eyes, and is toxic to animals. If swallowing the brake liquid, don't induce vomiting, and contact the poison control center or hospital immediately. If the brake fluid runs into eyes, rinse with clean water and consult a doctor. Wash your hands thoroughly. Keep children and pets away from the brake fluid.

⚠ WARNING

The brake fluid (DOT4) used by the scooter shall not be mixed with dust, impurities, and silicate or petroleum liquids, or it will seriously damage the braking system.

Don't use brake fluid stored in open containers. Don't use brake fluid left over from last maintenance. Only special brake fluid for scooters can be used. The brake fluid spilled can corrode the surface of paint or plastic.

Check the brake fluid levels in the front and rear brake fluid reservoirs. If the level is below the MIN mark, check brake pad wear and brake fluid leakage.

Brake pad

↙ Front wheel

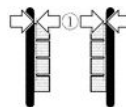


Rear wheel



Check if the front and rear brake pads have reached the wear limit mark. If the wear limit is reached, please go to our Company's designated repair shops to replace the front and rear brake pads at the same time.

Front wheel brake pad / Rear wheel brake pad



① Wear limit



DANGER

- If the brake pads are not inspected and maintained frequently or are not timely replaced while the replacement is recommended, it will increase the chance of accidents. If the brake pads need to be replaced, please go to our Company's designated repair shops. Inspect and maintain the brake pads according to the recommended method.
- After the braking system is maintained or the brake pads are replaced, if you don't operate the front and rear brake levers for several times before riding the scooter, the braking effect will become poor, which may cause accidents.

After the braking system is maintained or the brake pads are replaced, operate the front and rear brake levers for several times until the brake pads can press on the brake discs normally, and the hydraulic resistances of the rear and front brake levers return to normal.

! WARNING

- The replacement of only one of the two brake pads will cause unbalanced braking. Please replace the two brake pads simultaneously.
- Don't operate the brake lever if the brake pad is in a wrong position. If the brake lever is operated, it will cause the piston difficult to reset and lead to brake fluid leakage.

Brake disc

Front wheel



The key point of checking the front brake disc is: to check if the thickness of the brake disc is less than 4.0mm. If the thickness is less than 4.0mm, replace with a new brake disc.

Rear wheel



⚠ DANGER

- Don't ride the scooter immediately after new brake discs or brake pads are replaced. Hold and release the brake lever for several times to make the brake discs and brake pads fully fit to restore the normal grasping force, and make the brake fluid stably circulate.
- After new brake discs or brake pads are replaced, the braking distance may be longer than the original braking distance. The optimal braking effect can be achieved after the brake discs and brake pads realize fully break-in about 300km later, and before that, enough braking distance shall be maintained during riding.

Tire

• Failure to pay attention to the following items may cause accidents due to tire failure. The tires are very important because they connect the scooter to the ground. Please follow the rules: check tire conditions and tire pressure, and adjust the tire pressure before riding the scooter every time. Avoid overload of the scooter.

Replace the tire when the tire reaches the wear limit or there are cracks and damages on the tire surface. Always use tires with the size and specifications as specified herein. Balance the tires after installation. Read the present section hereof carefully.

Imperfect running-in of the tire will cause the slipping of tire and losing control. Take care especially when the scooter is using a new tire.

. Perform the tire running-in as per the contents specified in the section "Running-in of new tires", and avoid quick acceleration, sharp turn and emergency braking in the first 160km of a new tire.

Tire pressure and load

Correct tire pressure and correct tire load are important factors. Overload will cause tire faults and make the scooter out of control.

Check the tire pressure every time before riding the scooter to make sure that the tire pressure and load comply with contents in the following table.

Check and adjust the tire pressure before riding. After riding, the tire will get hot and the tire pressure will increase.

Too low tire pressure will make it difficult to turn, resulting in accelerated tire wear.

Too high tire pressure will decrease the contact area between tires and the ground, which can easily lead to skidding and loss of control.

Recommended tire pressures at room temperature conditions:

Load Tire	Rider only	Rider & passenger
Front wheel	200kPa	200kPa
Rear wheel	220kPa	240kPa

Note:

Check the tire pressure regularly and the tire pressure shall not be less than the above criteria.

Note:

When you find the tire pressure drop, check if the tire is pierced by nail, has small hole, or is damaged on the rim side. Tubeless tires will gradually deflate when they have small holes.

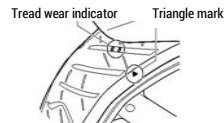
Note:

When you find the tire pressure drop, check if the tire is pierced by nail, has small hole, or is damaged on the rim side. Tubeless tires will gradually deflate when they have small holes.

Tire conditions and specifications

Incorrect tire conditions and incorrect tire specifications will affect the performance of the scooter. The damage and scratch on tires will cause tire faults and make the scooter out of control. Over-worn tires will cause the tires punctured, resulting in the loss of control of the scooter. The tire wear will also affect the tire appearance and change the tire operating performance.

Please check the tire conditions and pressure before use every time. If the tire has many obvious damages, such as cracks and scratches, or the tire reaches the wear limit mark, the tire must be replaced.

**Note:**

🔑 **The tread wear is indicated by a triangle mark. If the tread wear indicator contacts with the ground, it indicates that the tire reaches the wear limit. The tire must be replaced.**

↩ **When replacing the tire, make sure that the sizes and models of new tires comply with the contents as shown in the table below. If tires of different sizes or different models are replaced with, the handling of the scooter will be affected, which may cause loss of control of the scooter.**

Front wheel	Rear wheel
120/70 - 12 51P	130/70 - 12 62P

! DANGER

- Use of tires other than the standard ones may cause problems. We sincerely advise you to use the standard tires.

After repair or replacement, the tires need to be balanced. It is very important to balance the tires correctly, which can avoid the unstable contact between tires and the ground, and also can avoid uneven wear.

! DANGER

- Failure to maintain tubeless tires according to the following contents may cause accidents. The maintenance methods for tubeless tires and tubed tires are different. The contact part between the rim and bead of tubeless tire is sealed. To avoid flat tire, special tools and special tire changer are needed for the removal and installation of tubeless tires to protect the tire rims and beads.

To repair the small hole of a tubeless tire, the tire shall be removed and patched from inside. Don't adopt the exterior patching method, because the patch may be loosened due to the tire centrifugal force during turning. The scooter speed shall not exceed 60kph within 24 hours after the tire repairing and not exceed 95kph after that. If the speed exceeds the limits, the sharply increased heat generated by tires can make the patches ineffective, causing flat tires. If the tire side is damaged or the damaged part is larger than 6mm, the tire can't be repaired and continue to be used.



DANGER

- The tire pressure and surface conditions are very important for the functions and safety of the scooter. Please check the tire pressure and surface frequently.**

Fuse list

- ⚡ 30A ABS working power.
- ⚡ 15A Ignition lock and its related electrical parts.
- ⚡ 15A ABS constant current.
- ⚡ 20A BCM controller and its related electrical parts.
- ⚡ 5A instrument and ECU constant current.
- ⚡ 5A USB power output.

No.	Specification (A)	Corresponding parts
1	15	Spare
2	20	Spare
3	5	Spare
4	15	Ignition switch
5	15	ABS
6	20	Electronic fuel injection system
7	20	BCM
8	5	Instrument / ECU
9	5	USB
10	30	ABS
11	30	Spare

! DANGER

• Don't use fuses other than the ones of the prescribed specifications, or directly connect without any fuse. Otherwise, it will have serious impacts on the electric system, even cause fires, burn the scooter or lose the engine power.

! WARNING

• Take care to use a fuse with specified rated current. Do not use substitutes, such as aluminium foil or iron wire. If the fuse often blows in a short time, it indicates there is a fault in the electrical system. It shall be inspected by a repair shop immediately.

Troubleshooting

Inspection of the ignition system

Engine not working

Lambretta

(102-103)

(103)



Troubleshooting

The contents of the Troubleshooting can help you to find out causes for ordinary problems.



WARNING

- **Incorrect maintenance and adjustment will damage the scooter and make it difficult to identify the fault causes. Such damages are not in the scope of three guarantees (for repair, replacement and return). If you are not sure how to operate correctly, please consult authorized repair shops designated by our Company.**
- **Before the Troubleshooting, you'd better to consult our Company's authorized repair shops first. The repair shops will manage to solve the problems for you.**

If the engine can't be started, please identify the causes by the following inspection.

Inspection of the ignition system

- ✚ Remove the spark plug and connect the spark plug cap



Stick the spark plug to the engine; turn the ignition switch to the  position and the engine stop switch to the running position and hold the brake lever firmly. Press the electric starting button  and if the ignition system works normally, blue spark will occur between the spark plug electrodes. If there is no spark, please contact our Company's designated repair shops to repair.

! DANGER

- **Don't fix the spark plug around the spark plug hole to conduct the above inspection, because the combustible mixture in the cylinder may be ignited by the spark.**
- **To reduce the possibility of electric shock, the metal part of the spark plug housing is better to be stuck close to the unpainted metal part of the engine body.**
- **To avoid the possibility of electric shock causing accidents, the inspection shall not be conducted by anyone with heart disease or cardiac pacemaker.**

Engine not working

🔧 Make sure that there is enough fuel in the fuel tank.

🔧 If the symbol  is displayed, it means the system has problems. Please send the scooter to authorized repair shops designated by our Company. Check the scooter by reference to the fault content displayed on the ECU diagnose interface.

🔧 Check if the ignition system works normally.

🔧 Check the idle speed. (The correct idle speed is 1500±120 revolutions per minute)

! DANGER

- **Don't let the fuel flow everywhere and collect the fuel in a container. Don't let the fuel get close to high-temperature engine and muffler. During the inspection, stay away from smoke and fire and don't get close to any fire or heat source.**



Storage method, scooter cleaning and transportation

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Iambrella

Storage method, scooter cleaning and transportation

↳ Storage method

If your scooter is not used for some time and requires special maintenance, it will need some special materials, equipment and techniques. Therefore, it is recommended that you choose one of our Company's designated repair shops to carry out such maintenance task. If you would like to complete the maintenance by yourself, please do the following:

↳ scooter

Clean the scooter thoroughly. Park the scooter with the side stand on a flat ground. Turn the handlebars to the left, lock the front end and remove the key.

↳ Fuel

Drain the fuel from the fuel tank in an appropriate container by siphon or other proper methods.

↳ Engine

↳ Remove the spark plug and fill a spoonful of new oil into each spark plug hole, then reinstall the spark plugs and let the engine crankshaft run for several times.

↳ Drain the engine oil thoroughly and refill the crankcase with new oil.

↳ Cover the intake port of air filter and exhaust port of muffler with rags containing new oil to prevent moisture from entering.

Battery

-  Remove the battery by reference to the section of "Battery".
-  Clean the surface of the battery with neutral soapy water to eliminate rust and corrosion from the terminals and wiring connectors.
-  Store the battery indoors above 0 °C.

Tire

-  Adjust the tire pressure to the specified pressure.

Scooter surface

-  Spray the rubber protective agent onto the surfaces of the resin and rubber parts.
-  Spray anti-rust paint onto the surfaces of parts without surface treatment.

-  Coat the painted surface with automotive wax.

Maintenance during storage

-  Charge the battery once a month. Standard charging method: 8-10 hours at 0.1C.

Method for reuse

-  Clean the scooter thoroughly.
-  Remove the sundries and flying dust covering the intake port of air filter and the exhaust port of muffler.
-  Drain the engine oil. Replace the oil filter and refill new engine oil according to relevant contents herein.
-  Remove the spark plugs. Let the engine run for several times. Reinstall the spark plugs.

↪ Reinstall the battery by reference to the section of "Battery".

↪ Make sure the scooter is properly lubricated.

↪ Conduct the checks according to the contents as specified in the section of "Pre-operation checks".

↪ Start the scooter according to relevant contents herein.

Rust prevention

↪ Maintain the scooter carefully and pay attention to rust prevention, so that the scooter will look like a new one after many years.

↪ **Key points for rust prevention**

↪ **Factors leading to rusting damage:**

↪ Accumulation of salt on salty roads, dirt, moisture and chemicals.

↪ Surface of painted part damaged by small stones or gravel, or collided and scratched. Salty roads, sea breezes, industrial pollution and high-humidity environment can all cause rusting.

How to prevent rusting

↪ Wash the scooter at least once a month. Keep the scooter clean and dry as much as possible.

↪ Remove dirt on the surface of the scooter. Salty roads, chemicals, asphalt, tree sap, bird droppings and industrial emissions can all damage your scooter, so remove the dirt as soon as possible. If it is difficult to clean with water, you clean with detergent, but you shall comply with the detergent requirements when using the detergent.

☞ Deal with damages as soon as possible. Carefully check the damages on the scooter paint surface. If any burr or scratch is found, fix it immediately to avoid further damage. If the burr or scratch runs through the whole part surface, please have it repaired by our Company's designated authorized repair shops.

☞ Park the scooter in a dry and ventilated place. If you often clean your scooter in the garage and park it there, the garage will get very wet. The high humidity will facilitate rusting. If the space is poorly ventilated, the wet scooter will also rust even under hot temperature environment.

☞ Cover the scooter. Protect the scooter from the midday sun, because the sunlight will cause the discoloration of painted and plastic parts, the color fading of instrument. The use of quality breathable cover can protect the scooter from

ultraviolet rays in sunlight, and reduce the accumulation of dirt and air pollutants on the scooter. Our Company's dealers can help you choose the right cover for your scooter.

scooter cleaning

☞ scooter washing

Wash the scooter according to the following instructions:

☞ Wash the dirt and mud on the scooter surface with cold water. You can use soft sponge or soft brush to clean the scooter. The use of hard materials will scratch the appearance parts.

☞ Wash the scooter thoroughly with neutral detergent or automotive soap, gauze or soft cloth. The gauze or soft cloth shall be frequently dipped in detergent.

Note:

If the scooter is used on a salty road or at the seaside, it shall be washed with cold water immediately after use. Make sure cold water is used, because hot water will accelerate the corrosion.

Note:

Wash the scooter by spraying and prevent water from flowing to the following positions:

- 🔧 Ignition switch
- 🔧 Spark plug
- 🔧 Fuel tank cap
- 🔧 Fuel injection system
- 🔧 Brake fluid reservoir

! WARNING

• The high-pressure water from the coin washer can damage the scooter, and also can cause rusting, corrosion and accelerated wear. The parts washer can damage the scooter. Don't wash the scooter with high-pressure water. Don't use the parts washer to clean throttle body and fuel injector.

- 🔧 After cleaning the dirt on the scooter surface, flush the residual detergent with running water.
- 🔧 After rinsing thoroughly, wipe up the scooter with a wet soft leather or cloth and leave it to dry in the shade.
- 🔧 Carefully check the damages on the paint surface. If there is any damage, fix the damaged surface with repair materials by the following steps:

- ↳ Wash the damaged position and let it dry.
- ↳ Mix the repair materials and apply to the damaged position gently with a brush.
- ↳ Let the repaired position dry thoroughly.

**WARNING**

• Don't wash the scooter with alkaline or acid detergent. Don't use gasoline, brake liquid or other solvents that can damage the scooter. Wash the scooter with soft cloth and warm water with neutral detergent.

scooter waxing

After cleaning, it is recommended to wax the scooter, which can not only protect the parts, but also make the parts more beautiful.

- ↳ Use quality scooter wax and polishing agent.
- ↳ Pay attention to the cautions for the use of scooter wax and polishing agent products.

Check after cleaning**WARNING**

• It is very dangerous to ride the scooter with wet brakes, which cannot provide the same braking force as dry brakes. This may cause accidents. After cleaning, test the braking system at low speed. If necessary, operate the brake for several times to dry the brake pad.

↪ Check the problems occurring after use by referring to the section of "Pre-operation checks".

Transportation

The fuel must be drained before transporting the scooter, because the fuel is highly combustible and can cause explosions under certain conditions. The draining, storing or refilling of fuel shall be performed in places without any open fire, and shall be performed in well-ventilated places after the engine stops running. The steps for draining the fuel are as follows.

↪ Shut down the engine and remove the key of ignition switch.

↪ Drain the fuel in the fuel tank in an appropriate container by siphon or other proper methods.

WARNING

- **Make sure to drain the fuel in the fuel tank thoroughly before the transporting the scooter.**
- **Keep the scooters in normal running state during transportation to avoid oil leakage.**

Instructions for Battery Use

↪ Use of new battery

↪ Check the appearance of the battery that the battery case has no scratch or crack, the battery cap is not loose and the terminals are not tilted or deformed.

↪ Installation

↪ Connect the positive (+) wire (red lead) first, then the negative (-) wire. Make sure not to connect the polarities reversely, or it will damage the regulated rectifier and other electric parts.

⚡ After tightening up the bolts, apply butter or vaseline onto the bolts, nuts and terminals to avoid the poor contact due to rusting.

⚡ **Use and maintenance**

⚡ The starting duration shall not exceed 5 seconds each time and if it is still not started after several attempts, please check the fuel supply system, starting system and ignition system.

⚡ The following circumstances will cause the over-discharge or undercharge of the battery, which will shorten the battery service life.

- a. Frequent electric starting and short running distance;
- b. Run at a low speed for a long time;
- c. Hold the brake lever during running to make the brake light always on; and

d. Install additional electrical accessories or replace with bulb of higher power.

⚡ Recharge immediately in case of the speed reduction of starter motor, dimming of lights and falling of horn sound.

⚡ If the scooter will not be used for a long time, recharge the battery before storage, and recharge it once a month after that.

⚡ **Charge**

⚡ Please use special charger for the scooter battery. Don't remove the battery cap while charging; keep the room well ventilated and avoid open fire while charging.

⚡ The charge methods include standard charge and quick charge. Unless in emergency, try to adopt the standard charge to extend the battery life.

⚡ Cautions

⚡ Never remove the battery cap, nor refill electrolyte or water.

⚡ Don't get close to open fire during the use or charging of battery. Avoid the short circuit between the positive and negative poles and the loosening of positive and negative terminals to prevent the battery explosion.

⚡ The electrolyte contains strong acid, so avoid spilling onto skin, cloths or into eyes. Once contact, please rinse it immediately with plenty of water and then go to hospital. In case of swallowing by mistake, go to hospital immediately.

⚡ Keep the electrolyte out of reach of children.

Fuel Consumption

"Fuel consumption" means, for fuel-powered scooters, the fuel consumption of the scooter running at a given speed at which it consumes the least amount of fuel.

Technical data

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Technical data

Size and curb weight	
Length	1956mm
Width	770mm
Height	1129mm
Wheelbase	1400mm
Ground clearance	153mm
Seat height	790mm
Curb weight	183kg
Gross mass	343kg
Engine	
Type	liquid cooled, One-cylinder, 4-stroke, 4-valve SOHC
Number of cylinders	1
Cylinder diameter	82mm
Stroke	62.5mm
Displacement	330 cm ³
Compression ratio	10.7:1

Starting mode	Electric starting
Lubrication type	Pressure and splash
Power	19Kw/7500rpm
Torque	25.5Nm/6250rpm
Transmission System	
Clutch	Centrifugal clutch
Transmission structure type	CVT (Continuously Variable Transmission)
Primary speed ratio	0.81-2.20
Final speed ratio	6.790
Main performance indicators	
Fuel consumption	≤3.8L/100km
Max. speed	128 km/h
Gradeability	≥20°
Traveling system	
Turning circle diameter	4,8m
Front tire specifications	120/70-12/51P
Rear tire specifications	130/70-12/62P

Electric system	
Ignition method	ECU control
Spark plug model	DCPR7E
Battery specifications	12V/8Ah
Fuse specifications	5A (2), 15A (2), 20A (2), 30A (1)
Headlight specifications	13.5V, 31W/15.5W
Front position light specifications	13.5V, 1.5W
Front and rear turn signal light specifications	13.5V, 3.2W/3.3W
Taillight / brake light specifications	13.5V, 2.3W/2.8W
Rear license plate light specifications	13.5V/0.6W
Volume	
Fuel tank effective volume	9.5L
Engine oil	1.4L~1.8L
Gearbox gear oil	0.2L~0.25L
Coolant volume	2.5L
Oil brand	SAE 10W-40
Coolant brand	LEC-II-40, antifreeze coolant
Gearbox gear oil type	85W-140
Brake fluid model	DOT4 (meeting quality criteria of GB 12981-HZY4)



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