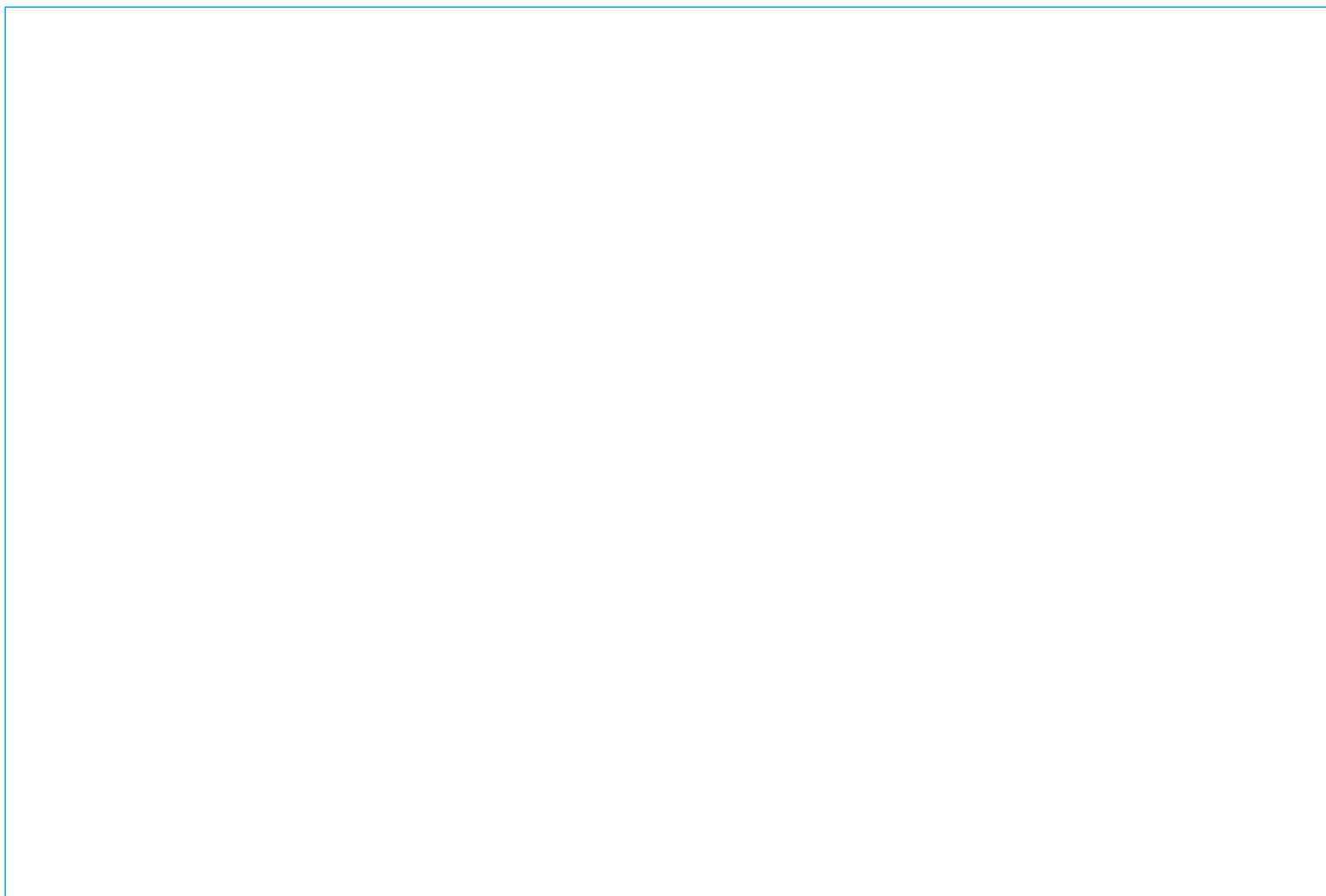




Owners manual



PREFACE

You have purchased our scooter, congratulations and thank you for putting your trust in us.

This model is a sturdy scooter in modern design.

Its sound construction, the meticulous selection of materials, the advanced manufacturing techniques and conscientious work of dedicated employees provides the scooter with all the characteristics such as economical operation, quality, reliability and its lasting value.

We cannot be held liable for any consequential damage caused by accessories not approved by the factory.

The scope of delivery and version of the scooter is solely determined by the purchase agreement concluded with the dealer.

This operating manual includes important instructions for handling your light scooter. Read it carefully, because professional handling combined with regular care and maintenance helps to maintain the scooter's value and is one of the requirements for warranty claims.

We wish you at all times a safe journey.

Yours

Safety symbols and notes

Please observe the following:

WARNING

Precautionary measures against the risk of accidents, injury and /or death.

FIRE HAZARD

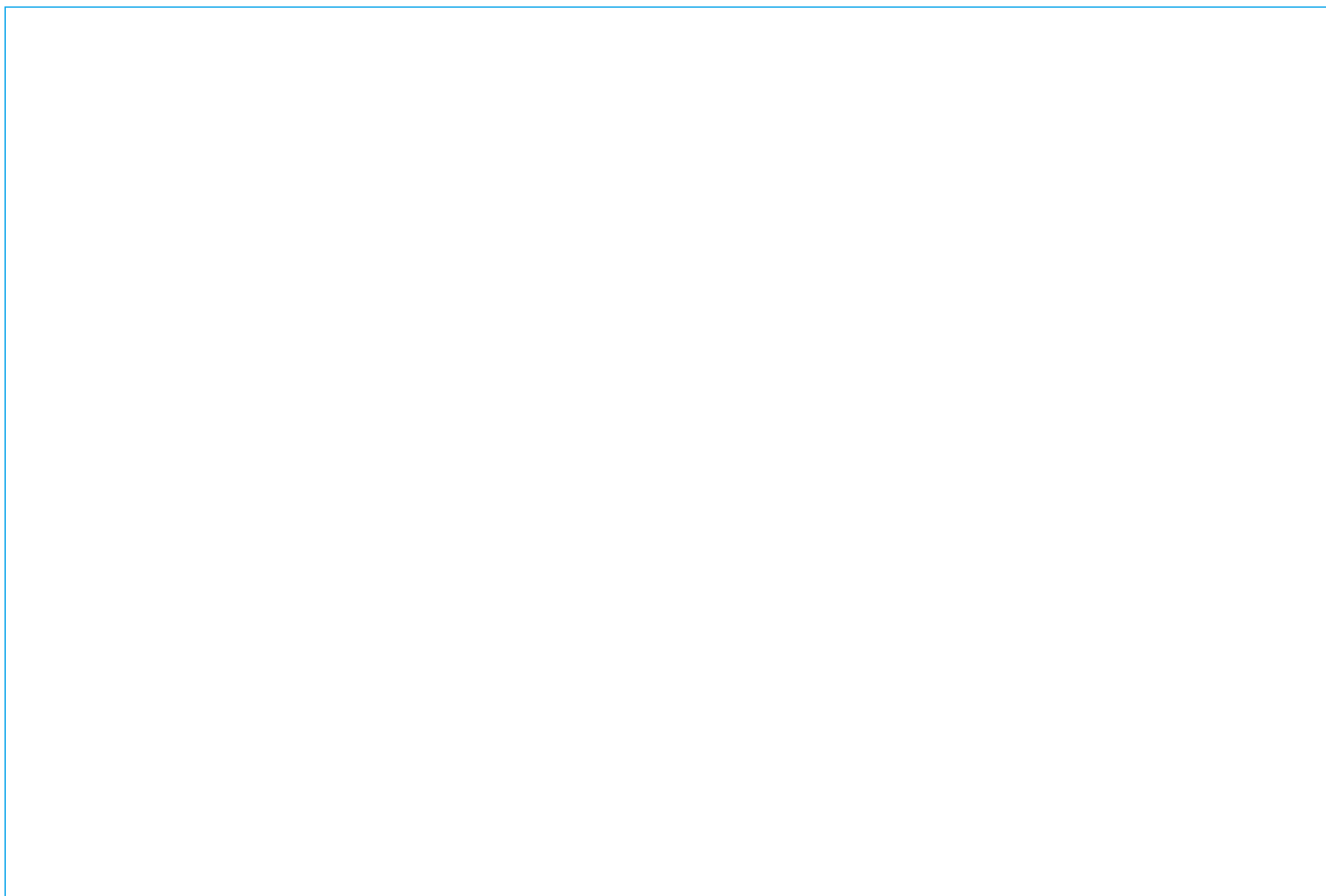
The vehicle is equipped with a catalyst, this results in extremely high temperatures on the exhaust system (risk of burning)

CAUTION

Important instructions and precautionary rules to avoid damage to the vehicle. Nonobservance can lead to the warranty becoming void.

NOTE

Special instructions for better handling during operation, inspection adjustments and service activities.



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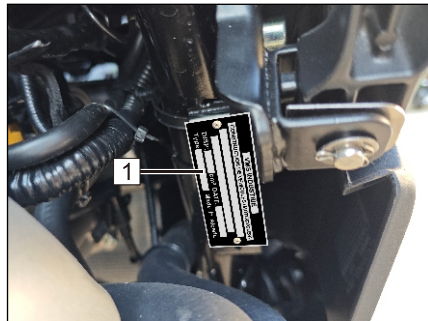
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SUMMARY AND OPERATION

Identification number

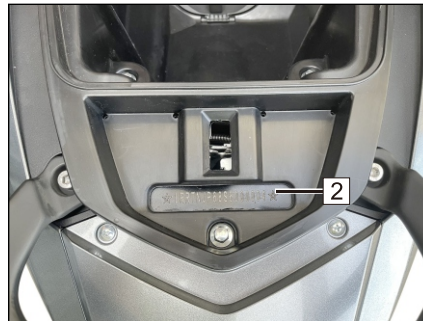


NOTE

The description for right-hand side is viewed from the driver.

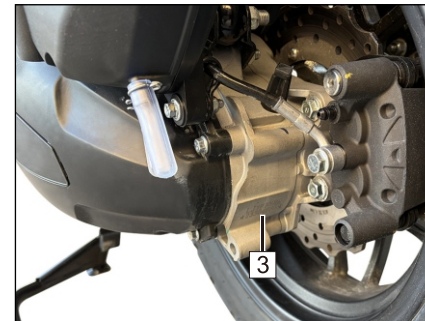
The identification number (1) is located on the frame below the right side cover.

Chassis number



The VIN locates in the rear part of luggage box (2).

Engine number



The engine number (3) is located on the rear side of the left crankcase.

Key

With the scooter you get two separate keys for:

- Ignition lock, Fuel tank cap and Storage box.

Keep the spare key at a safety place.

OVERVIEW AND OPERATION

Right-hand side view

- 1 Storage box with tool kit
- 2 Battery box and fuse
- 3 Ignition and fork-column lock
- 4 Brake fluid container for front wheel brake
- 5 Handbrake lever for front brake



OVERVIEW AND OPERATION

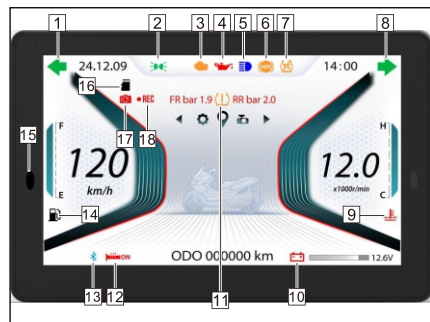
Left-hand side view

- 6 Dashboard
- 7 Handbrake lever for rear brake
- 8 Tank cap
- 9 Air filter
- 10 Engine oil filler cap
- 11 Parking stand
- 12 Side stand



OVERVIEW AND OPERATION

Instrument



1. Left turn indicator

It blinks at the normal frequency with the turning signals.

2. Position light indicator

When the position light is turned on, the indicator lights up at the same time.

3. EFI fault indicator

When the ignition switch is at "ON" position, and the right switch at "↻" position, engine is off and this indicator is on; turn on engine, this indicator goes off, it means engine works properly. If engine is on, and indicator is also on, there's fault with EFI system, contact your dealer for service.

4. Oil pressure warning indicator

When the vehicle is powered on, the indicator comes on if the engine cannot start. Once the engine starts, the indicator goes off, indicating that the oil pressure is normal. Alternatively, if the engine starts but the indicator remains on, it indicates abnormal oil pressure. Please contact after-sales service or go to an authorized dealer for inspection.

5. High beam indicator

It will be on at the same time when the high beam is on.

6. ABS fault light

When the vehicle is powered on and parked, the light will turn on. When the vehicle speed exceeds 8km/h, the light will turn off. If the light is on while the vehicle is in motion, it indicates that there is a malfunction in the ABS anti-lock system. Please contact after-sales service or visit an authorized dealership for inspection.

7. TCS indicator

When the vehicle is powered on and stopped, the lamp will be on. When the vehicle speed exceeds 8km/h, the lamp will be off.

The TCS function can be turned off in the instrument menu. After it is turned off, the indicator

light has a bar and is always on. The TCS defaults to ON each time the vehicle is powered back on. When TCS is turned on, TCS will actively reduce engine torque to reduce tire slip when rear tire slip occurs during riding. When the TCS operates, the TCS indicator will flash rapidly.

8. Right turn indicator

It blinks at the normal frequency with the turning signals.

9. Water temperature symbol

When the light turns red, the engine water temperature is high and there is an abnormality. At this time, please stop the vehicle to cool down to check.

10. Battery voltage display

When the light is up, it means that the battery voltage is low. At this time, you should stop the vehicle and check for abnormalities.

11. Tire pressure warning indicator

When the tire pressure is too low or too high, the indicator turns orange. At this time, the vehicle should be stopped and checked.

12. Handle heating indicator

When the handle heating is turned off, the light does; When the handle heating is turned on, the light displayed.

Instrument

13. Bluetooth symbol

When the instrument is successfully connected to the Bluetooth, the symbol will be sign lights up.

14.Oil level warning indicator

When the remaining fuel level is insufficient, the indicator will turn on. Please replenish the fuel in a timely manner.

15.Light sensor

It automatically determines the state of day and night.

16.Memory card installed symbol

The indicator light is gray when the memory card is not properly installed.

When the memory card is properly installed, the light is on (black in day mode, white in night mode).

17. snap light

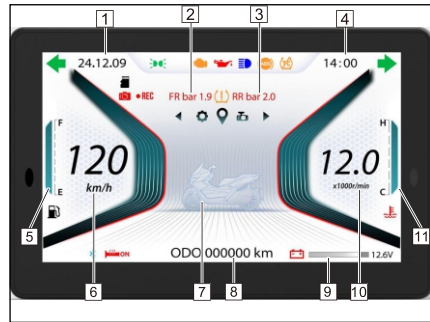
when the light is gray, it means that the camera is not working properly; when the light is on (black in day mode, white in night mode), it means that the camera is working properly. At this time, press the snap button (the downward button on the handle), and the light will turn red, indicating that the snap is successful.

18.Dash cam indicator

When the dash cam is working normally, the light is red flashing; when the dash cam is not working, the light is white; when the light is gray, it means that the dash cam is not working properly. Please check if the camera and memory card are properly installed.

OVERVIEW AND OPERATION

Multi-function Meter



1. Date display

After the Bluetooth connection of the mobile phone, the date display is automatically synchronized with the network without adjustment. It can also be adjusted by pressing the key, see page 19 (Menu operating instructions Day/clock setting).

2. Front tire pressure display

Real-time display of front tire pressure.

3. Rear tire pressure display

Real-time display of rear tire pressure.

4. Time display

After the Bluetooth connection of the mobile phone, the time display is automatically synchronized with the network without adjustment. It can also be adjusted by pressing the key, see page 19 (Menu operating instructions Day/clock setting).

5. Fuel gauge display

It shows the fuel level in the tank. 8 grids indicate full fuel. When there is only one grid remains and blinks, this means the fuel will run out, please refuel the fuel tank immediately.

6. Vehicle speed display

It shows the real-time speed of the vehicle. km/h and mph display can be adjusted by the menu (see page 20, Unit Conversion).

7. Multimedia display area

When the phone and the instrument area are interconnected, the area will display the singer and song name of the song when the phone plays music; when there is an incoming call, the area will display the name and phone number of the caller. See the following figure for details.



This area can also be adjusted by pressing the key to operate the menu. See the menu operation in instructions for details.

8. Total mileage (single mileage) display

It shows the total mileage of the vehicle, or the mileage of the vehicle at one time. The total mileage and single mileage display can be adjusted by the buttons see page 9 (Key Function Description).

9. Battery voltage display

When the area turns red and flashes, it means that the battery voltage is low. At this time, you should stop the vehicle and check for abnormalities.

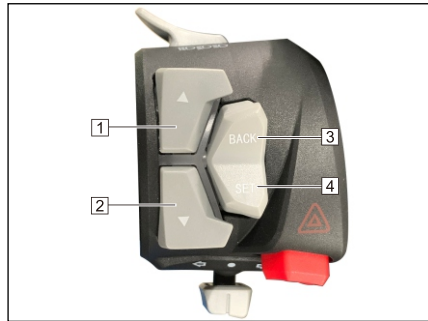
10. Engine speed display

The current number of revolutions per minute of the engine crankshaft.

11. Water temperature indicator

It turns red and flashes when the engine water temperature is high, which means there are abnormalities. At this time, the vehicle should be stopped to cool down and checked.

Key Function Description



The instrument is equipped with 4 external keys: UP key, DOWN key, BACK key, SET key.

1. Main interface function keys:

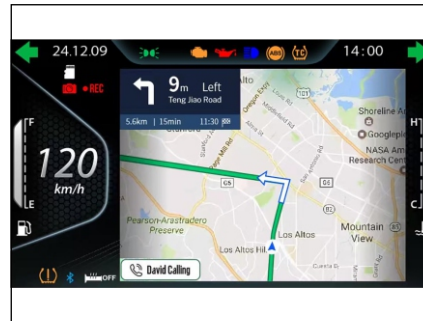
- ① UP key: Move the cursor to the left.
- ② DOWN key: Capture the current video recorder screen.
- ③ BACK key: Short press to switch to the total sub total; press and hold the return key in the subtotal status to clear the subtotal.
- ④ SET key: Short press to enter the selected item.

2. Submenu function key:

In the menu interface, short press the SET key to enter the submenu. When the SET key is not pressed, the submenu is gray. Short press the SET key to select the submenu, and the submenu is highlighted. Short press the up and DOWN keys to switch the submenu. Short press the BACK key to save and exit.

OVERVIEW AND OPERATION

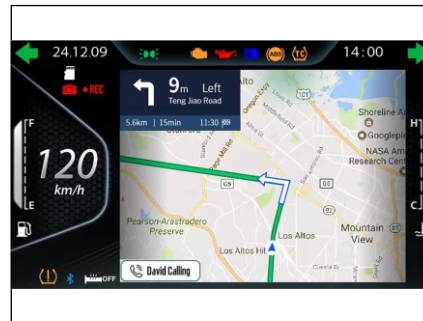
Multi-function meter (Navigation Interface-Main interface Entry)



Navigation Interface:

Short press the Up key: The cursor selects the Projection Screen. Short press the SET key: The interface will display an interconnectivity QR code. Scan the QR code with WeChat to download the APP. After successful phone interconnectivity, the map will be displayed. For detailed navigation operation methods, please refer to the Mobile Interconnectivity App User Manual.

Multi-function meter (Navigation Interface-Menu interface Entry)

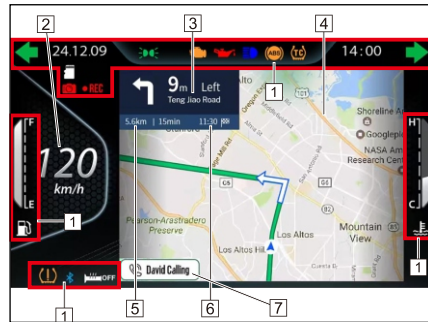


Navigation Interface:

Short press the confirmation key to enter the menu interface. Short press the Up key or DOWN key: The cursor selects the Projection Screen. Short press the SET key: The interface will display an interconnectivity QR code. Scan the QR code with WeChat to download the APP. After successful phone interconnectivity, the map will be displayed. For detailed navigation operation methods, please refer to the Mobile Interconnectivity App User Manual.

OVERVIEW AND OPERATION

Multi-function meter (Navigation Interface:)



1. Layout & Functions

Same as main interface layout and functions.

Refer to P6-P7 for indicator lamp descriptions.

2. Speed Display

Shows real-time vehicle speed.

It shows the real-time speed of the vehicle. km/h and mph display can be adjusted by the menu (see page 20, Unit Conversion).

3. Next Road Segment

Displays the name of the upcoming road segment.

4. Map Display

Shows real-time navigation map updated according to vehicle position.

5. Remaining Distance

Displays total remaining distance to destination.

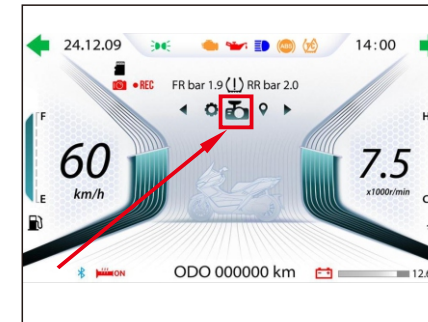
6. Estimated Time of Arrival

Shows estimated arrival time at destination.

7. Multimedia Display Area

- During phone connectivity
- Displays song title when music is playing.
- Shows caller name/number during incoming calls.

Multi-function meter (Dashcam interface)

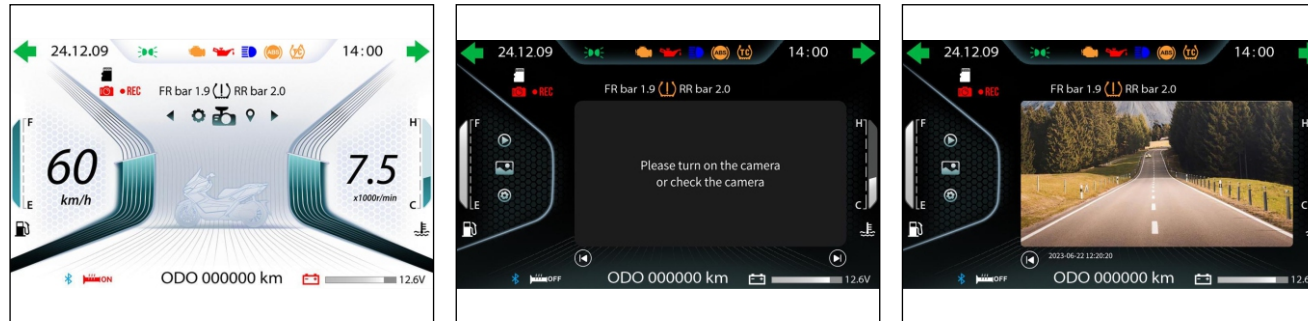


Dashcam interface:

Short press the UP key, select the dashcam icon, and short press the SET key to enter the dashcam interface.

OVERVIEW AND OPERATION

Multi-function meter (Dashcam interface - video recording)

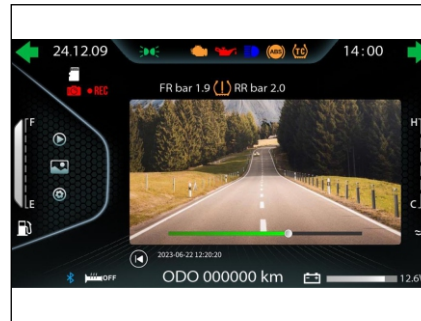
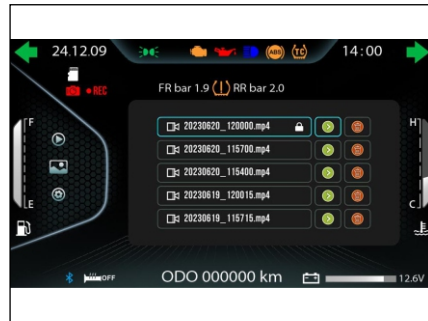


Video recording:

After entering the dashcam interface, short press the UP or DOWN key, and select the recording option with the cursor. At this time, the instrument interface displays the current captured image of the dashcam. Long press the SET key to stop or restart the camera function, and when powered on again, the camera function will be turned on by default.

OVERVIEW AND OPERATION

Multi-function meter (Dashcam interface - playback)



Playback:

Short press the UP or DOWN key to select the playback option. At this time, short press the SET key to enter the playback interface, and short press the UP or DOWN key to switch video files; Short press the SET key to switch the cursor to the play key on the right, short press the UP or DOWN key to switch between play and delete options, short press the SET key to perform corresponding operations; When playing back a video, short press the SET key to pause or continue playing the video; Short press the BACK key to return to the previous menu.

OVERVIEW AND OPERATION

Multi-function meter (Dashcam interface - image)

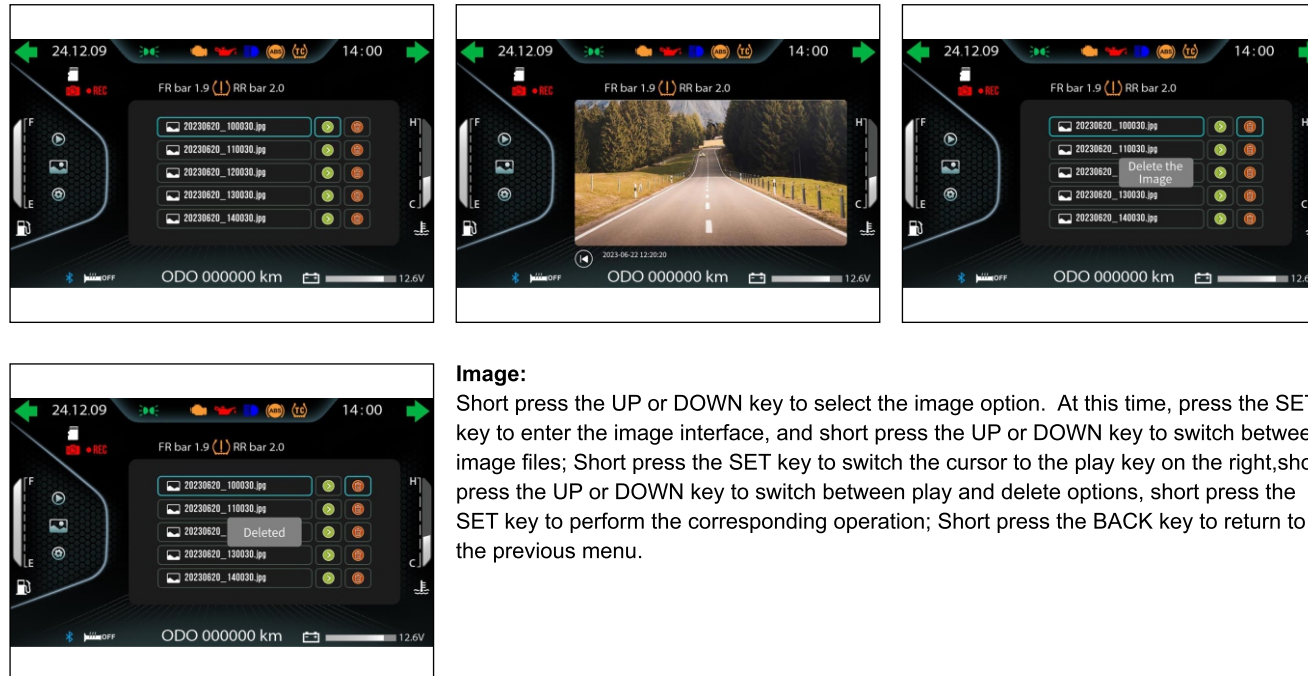
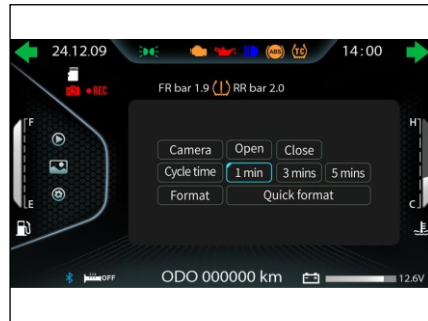


Image:

Short press the UP or DOWN key to select the image option. At this time, press the SET key to enter the image interface, and short press the UP or DOWN key to switch between image files; Short press the SET key to switch the cursor to the play key on the right, short press the UP or DOWN key to switch between play and delete options, short press the SET key to perform the corresponding operation; Short press the BACK key to return to the previous menu.

OVERVIEW AND OPERATION

Multi-function meter (Dashcam interface - settings)



Setting:

Short press the UP or DOWN key to select the setting option, and press the SET key to enter the setting interface. At this time, short press the UP or DOWN key to switch between camera - cycle time - format, and short press the SET key to enter the corresponding interface operation.

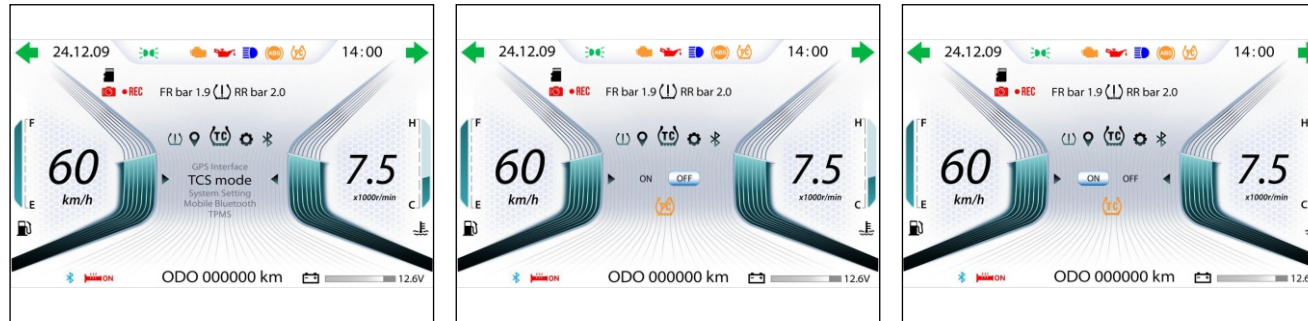
1. Camera: Short press the UP or DOWN key to select the camera option, and short press the SET key to move the cursor to the right submenu. At this time, short press the UP or DOWN key to switch between on and off, short press the SET key to confirm the option, and short press the BACK key to exit.

2. Cycle time: Short press the UP or DOWN key to select the cycle time option, and short press the SET key to move the cursor to the right submenu. At this time, short press the UP or DOWN key to switch between 1 minute - 3 minutes - 5 minutes. Short press the SET key to confirm the option, and short press the BACK key to exit.

3. Format: Short press the UP or DOWN key to select the format option, short press the SET key to move the cursor to the right submenu and select the quick format option. At this time, short press the SET key to perform the format operation. When the instrument panel prompts "Format Now", short press the SET key, then the instrument panel displays "Format In Progress" and "Format Completed", indicating that the memory card has been formatted. Short press the BACK key to exit.

OVERVIEW AND OPERATION

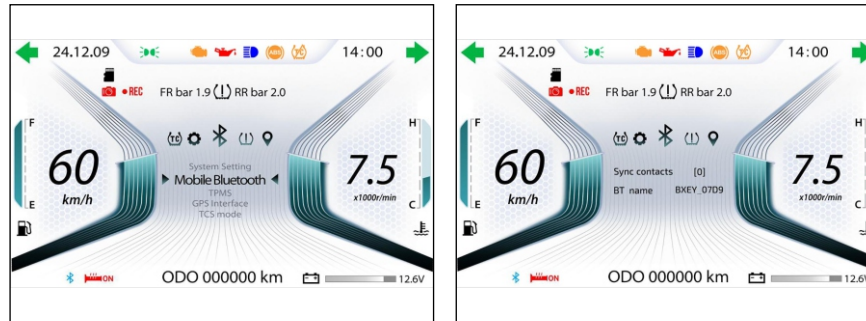
Multi-function meter (TCS Settings)



TCS Settings:

After entering the menu setting interface, short press the UP or DOWN key to select the TCS setting option. At this time, short press the SET key to move the cursor to the top to enter the TCS setting. Short press the UP or DOWN key to switch between TCS on and off states, and short press the SET or BACK key to save and exit.

Multi-function meter (Mobile Bluetooth)

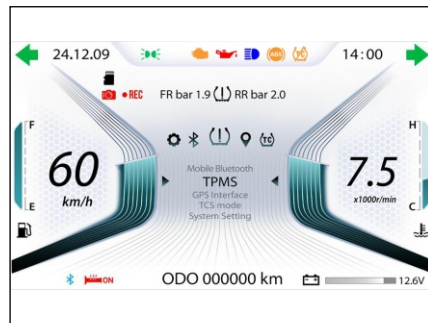


Mobile Bluetooth:

Short press the UP or DOWN key to select the Bluetooth setting option. At this time, short press the SET key to move the cursor top to enter the Bluetooth setting. You can view the Bluetooth name and the number of synchronizd contacts.

OVERVIEW AND OPERATION

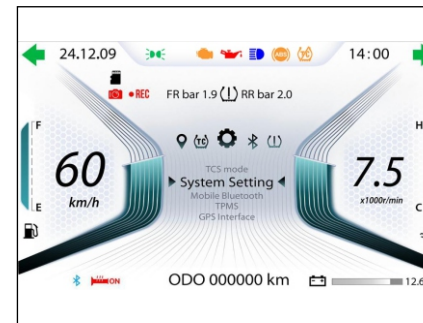
Multi-function meter (Tire Pressure Settings)



Tire Pressure Settings:

Short press the UP or DOWN key to select the tire pressure setting option. At this time, short press the SET key to move the cursor to the top to enter the tire pressure setting. Short press the UP or DOWN key to switch between front and rear wheels. Short press the SET key to match the corresponding tire pressure, and short press the BACK key to exit.

Multi-function meter (System Settings)



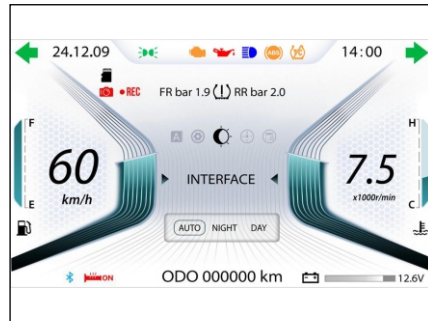
System setting:

Short press the UP key, and move the cursor to select the menu option, then short press the SET key to enter the system setting.

- 1.Interface setting;
- 2.Day/Clock display;
- 3.Imperial and metric units setting;
- 4.Language Settings;
- 5.Version Information.

OVERVIEW AND OPERATION

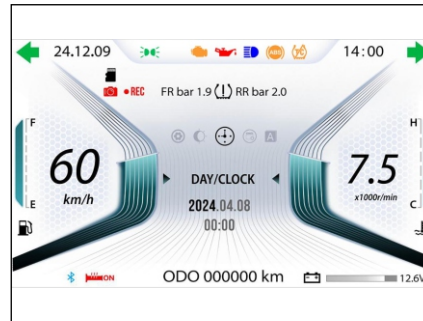
Multi-function meter (Interface setting)



Interface setting:

Short press the UP or DOWN key to select the interface setting option. At this time, short press the SET key to move the cursor to the top to enter the interface setting. Short press the UP or DOWN key to switch between daytime interface/night interface-automatic. Short press the BACK key to save and exit.

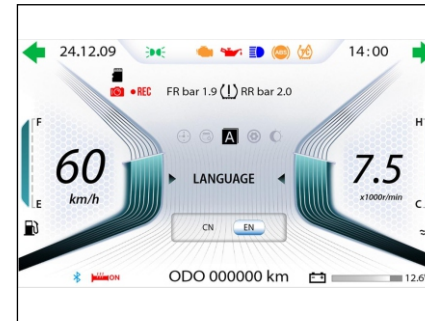
Multi-function meter (Day/Clock setting)



Day/Clock setting:

Short press the UP or DOWN key to select the time setting option. At this time, short press the SET key to move the cursor to the top to enter the time setting. Short press the UP key to accumulate, short press the DOWN key to decrease, short press the SET key to shift. After setting the minute, short press the SET key or BACK key to save and exit.

Multi-function meter (Language Settings)



Language settings:

Default English, cannot be switched, cannot enter language settings.

OVERVIEW AND OPERATION

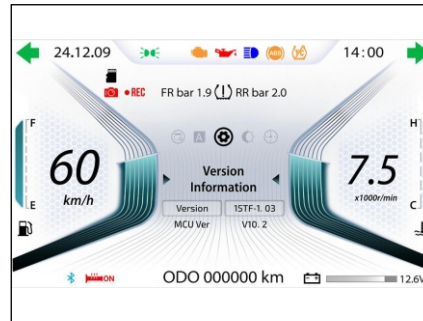
Multi-function meter (Imperial and metric units setting)



Imperial and metric units setting:

Short press the UP or DOWN key to select the metric and imperial units setting option. At this time, short press the SET key to move the cursor to the top to enter the metric and imperial units setting. Short press the UP or DOWN key to switch between metric and imperial units. Short press the SET key or BACK key to save and exit.

Multi-function meter (Version Information)

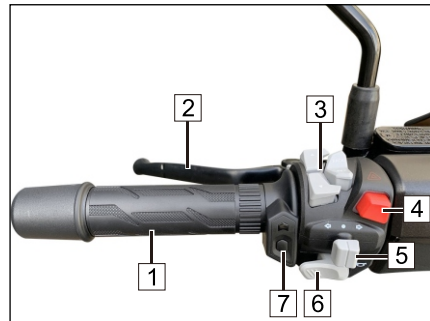


Version Information:

Short press the UP or DOWN key to select the vehicle setting option. At this time, the program version number will be displayed on the above subinterface.

OVERVIEW AND OPERATION

Handlebar instrument, left



- 1 Fixed grip
- 2 Handbrake lever for rear brake
- 3 Main interface function keys
- 4 hazard warning lamp switch
- 5 Direction-indicator switch
 - ⇐ Switch to left
Left indicator on
 - ⇒ Switch to right
Right indicator on
 - Push button for switch off
- 6 Push-button:horn
- 7 Handle heating key

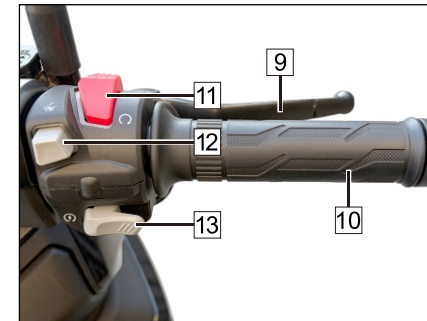
After the vehicle starts, press this key and the handle will enter the heating state. In the



working state,each time you press the key, the heating speed will increase. There are three levels in total, and the indicator colors will change in sequence: green, yellow, and red. When the battery voltage is too low or too high, the controller enters a protective state, cuts off the output, and the indicator flashes a few times to enter standby mode.

- 8 High beam indicator
 - high beam
 - low beam
 - Passing light switch

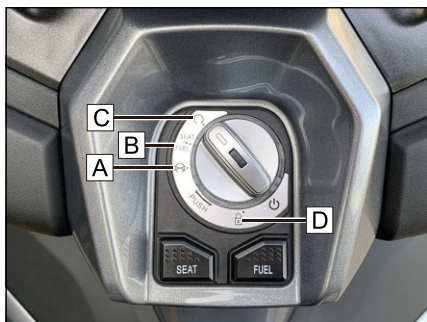
Handlebar instrument, right



- 9 Handbrake lever for front brake
- 10 Throttle
- 11 Engine off switch
 - When the switch on" " position, it has electric power, the engine can be start.
 - When the switch on" " position, it is not power, the engine can not be start.
- 12 When the lock is in the " " position, press the button to open the seat cushion.
- 13 Starter button

OVERVIEW AND OPERATION

Ignition and fork-column lock



Keyless ignition switch

When the remote key is within 1.5 meters to vehicle, the PKE function activates. Press down the keyless ignition switch, the Blue Indicate light on switch will be on, turn the switch to control the vehicle.

A. Turn off the engine and electric circuit.

B. Turn to this position, press the "SEAT" button to open the luggage box; press the "FUEL" button to open the fuel tank cap.

C. Turn on the electric circuit, engine is ready to start.

D. Turn the handle to the left, press down the switch, follow the direction of arrow and turn to the position, lock the handle bar.

E. Press this button on remote key, the vehicle seeking function activates, then all turn lights flash.

F. Press this button on remote key, turn lights flash one time, PKE function activates; press this button again, PKE function close and switch to energy saving mode, then can't turn on the vehicle even the remote key is within 1.5 meters to vehicle.

G. Press this button on the remote key, remote unlock the vehicle. The Blue indicate light will on, turn the ignition switch to control the vehicle without press down.

H. This model is equipped with the mechanical key, which is located inside the remote-control key. When the battery is out of battery or the remote-control key is out of battery, the mechanical key can be used to open the lock. For usage instructions, please refer to A-D.

Anti-theft alarm function

Considering the different application environments of motorcycles and the varying sensitivity requirements of customers, the sensitivity can be set to 5 levels or the anti-theft

alarm function can be turned off. The specific operation is as follows:

① In OFF mode, long press the unlock button (G key) for 3 seconds, and the key indicator will flash. After receiving the command, the turn signals will flash continuously (100ms on and 100ms off) until the controller exits the setting command or exits after timeout (30s).

② After entering the setting mode, short press the key search button (E key). The controller will receive the command and perform sensitivity cycle switching from 1st gear (horn beeps once) to 2nd gear (horn beeps twice), to 3rd gear (horn beeps three times), to 4th gear (horn beeps four times), then to 5th gear (horn beeps five times), and finally to 0th gear (off gear, and the horn beeps once, the time is slightly longer than 1st gear). There are five sensitivity levels from 1 to 5, with 1st gear having the highest sensitivity and 5th gear having the lowest sensitivity.

③ After adjusting the sensitivity, long press the lock button (F key) to exit the setting mode.

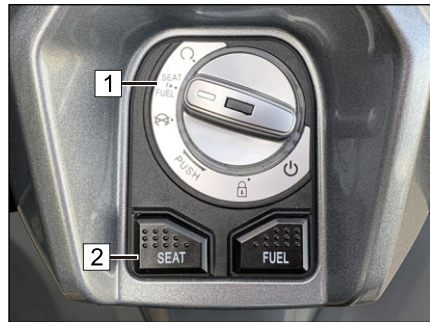
Note:

1. This model has an emergency braking and turn signal flashing alarm function. Once the speed exceeds 50km/h and the deceleration speed reaches the set value within a short period of time, the turn signal flashing alarm will alert the vehicle behind.

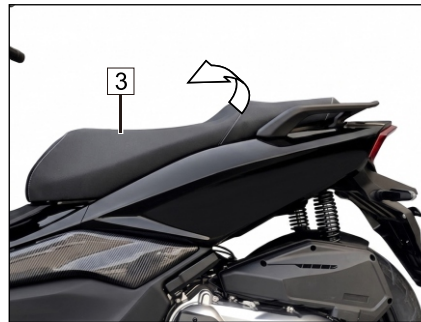
2. This model has an anti-theft alarm function. When the vehicle is powered down for 10 seconds, it will automatically enter the set-up function. At this time, if the key is 1.5m away from the vehicle and the vehicle is subjected to vibration caused by an external force, the vehicle horn will sound 8 times continuously and the turn signal flashes 10 times for alarm prompting.

OVERVIEW AND OPERATION

Storage box



- Do not store valuables in the box.
- Make sure that the seat has been locked completely after it was pressed down.
- Take out valuables before washing to avoid wetting these objects.
- Do not place thermal sensitive objects in the box because of engine's heat and high temperature.



Unlock

- Turn ignition switch to "SEAT FUEL" (1), press button "SEAT"(2), open the luggage box (3).

Lock

- Press down the seat (3) until the lock is engaged.

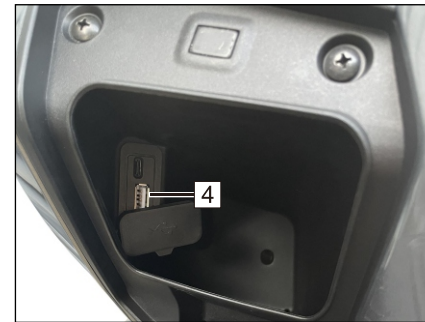
Never leave the key in the storage box.

WARNING

After the seat is closed check if it was locked firmly! -Risk of accidents!

Maximum load capacity: 10 kg

Storage/power outlet



- Storage is for small stuff.
- When the vehicle turn on, the 12V power (4) outlet works, it can connect to low voltage equipment, such like mobile phone, GPS, etc.

CAUTION

Maximum load capacity: 1.5 kg
Do not transport bulky loads.

OVERVIEW AND OPERATION

Fuel, fuel tank

WARNING

Fuel is highly inflammable and can explode. Do not smoke or bring a naked flame near the fuel tank.

Fuel expands under the influence of heat and the sun. Therefore, never fill the tank to the brim. Never fill the tank while the engine is running.

Never bring a glowing cigarette or naked flame near an open tank, because fuel vapour could suddenly ignite.

Fuel stock, tanking



NOTE

The fuel indicating (1) is active when the ignition is turned on.

The scale with the tank symbol  indicates fuel storage volume status.

E = Empty

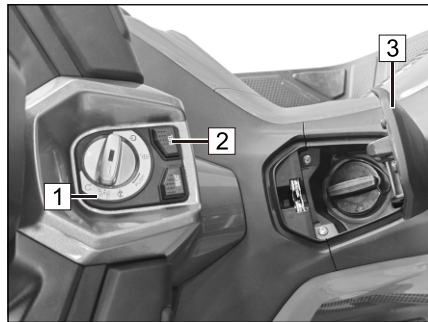
F = Full

When the fuel level is low, the last section of the fuel level indicator flashes, please replenish the fuel in time.

Filling up with fuel

- Use only premium lead-free fuel
 - Use fuel containing up to 5% ethanol by volume 
- Unleaded fuel min. 95 Octane.

Tank cap



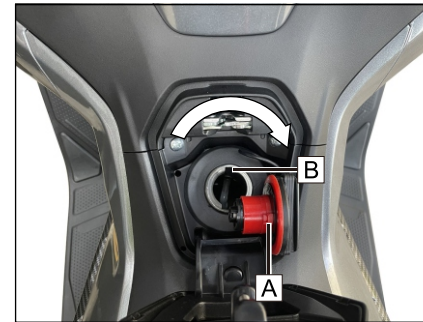
NOTE

The fuel tank cap is next to battery box.



Unlock:

- Main stand
- Turn the ignition switch to "SEAT FUEL" (1), press "FUEL" (2), open the fuel tank cap (3).
- Turn the tank cap (4) counter-clockwise and open the tank cap.



LOCK:

- Align A to B, press the tank cap and turn it clockwise, Until a green point appear on the cover.



NOTE

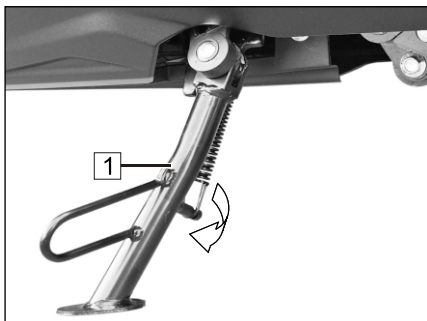
Fuel

- Use fuel containing up to 5% ethanol by volume (E5)

Unleaded fuel min. 95 Octane

OVERVIEW AND OPERATION

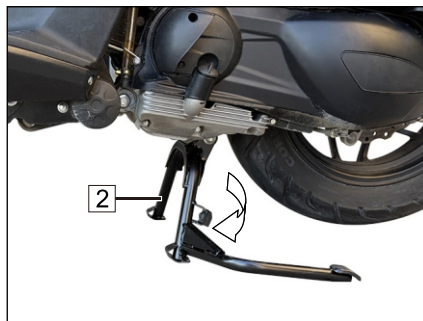
Side stand and parking stand



Propping up the scooter on the side stand.

WARNING

Always make sure that the stand is resting on firm ground. On sloping roads, always park the scooter facing uphill. It is essential that the side stand is folded up before starting off ! -Risk of accidents!



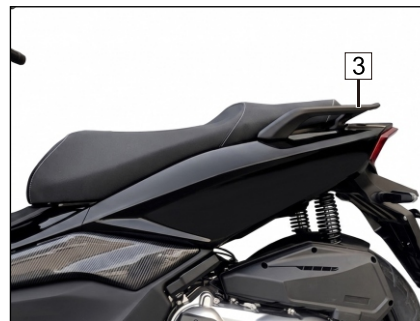
Side stand



NOTE

The scooter is equipped with a side stand switch. If the side stand is on vertical position, the engine is shut off and will not start

- Switch off the engine.
- Put your left hand on the left-hand handle-bar grip.
- Hold the holder grip with your right hand (3).
- Fold out the arm of the side stand(1) as far forward as it will go and stop by foot.
- Slowly tilt the scooter to the left until its weight is supported.



Parking stand

- Switch off the engine.
- Put your left hand on the left-hand handle-bar grip.
- Hold the holder grip(3) with your right hand.
- Push the parking stand (2) down until the two skids are on the ground.
- Put your full body weight on the operating mandrel of the main standard.
- Pull the scooter towards the rear and simultaneously upwards onto parking stand.
- Check that the scooter is standing firmly.

SAFETY TEST

Checklist

Before each ride, carry out a safety check using the checklist.

Take the safety check seriously. Carry out maintenance activities before you start your ride or ask a specialized dealer to do so.

This will provide you with the certainty that your motorcycle corresponds to traffic regulations. A technically faultless motorcycle is a basic requirement for the safety of both yourself and other road users.

Before starting your ride, check the following:

- Steering (smooth and free play)
- Engine oil quantity
- Fuel quantity
- Front brake
- Rear brake
- Tyres (profile and pressure)
- Telescopic fork
- Load / lights
- Total weight
- Lights
- Brake fluid (lever)
- Brake (operation)

In case of problems or difficulties, contact a dealer, who will do everything possible to assist you.

 WARNING

While the engine is running or the ignition is on, do not touch the ignition system.

 FIRE HAZARD

The exhaust system becomes very hot. While riding, idling or parking, make sure that no inflammable materials (e.g. hay, leaves, grass, coverings or luggage, etc.) can come into contact with it!

SAFETY TEST

Load / lights



WARNING

For the sake of your safety, use only original accessories or products released by us.

We cannot judge for each third-part product whether it can be safely used in combination with your scooter.

Nor can an official approval give such a guarantee in all cases, since the test scope is not always sufficient.



NOTE

Our accessories and approved products as well as qualified advice are available from all specialized dealers.

Correctly loaded

- Make sure that the left-right weight distribution is balanced.
- Check that fastenings are correct and tight.
- Do not transport bulky loads.
- Do not cover the lights.



WARNING

The total allowable weight may not be exceeded.

Check the tyre pressure.

Checking the lights



WARNING

Before any ride, check the operation of all lighting components.

- Check that the headlamps and lenses are clean.

Ride safely



CAUTION

Riding safety is largely also determined by the manner of riding.

Therefore:

- Put on a tested / approved safety helmet and correctly close the buckle.
- Wear suitable protective clothes.
- Rest your feet on the footrests.
- Do not ride if your riding ability has been compromised.

Your reactions can be adversely affected not only by alcohol, but also by drugs and medicines.

- Strictly observe all traffic regulations.
- Always adapt your riding speed to the traffic and road conditions.

On smooth, slippery roads take into account that your riding stability and braking power are limited by the grip of the tyres on the road top.

RIDING INSTRUCTIONS

Ride economically and be aware of the environment

Fuel consumption, environmental pollution and wear of engine, brakes and tyres depend on various factors.

Your personal riding style is highly determinant for economical fuel consumption and exhaust gas and noise generation.

While idling, the engine takes a long time to warm up to operational temperature.

Avoid rapid acceleration

Open the throttle not further than needed, in order to reduce fuel consumption as well as pollution and wear levels.

Do not use excessive revs; change up as soon as possible and do not change down until it is necessary to do so.

Ride as evenly as possible and look ahead as far as possible.

Unnecessary acceleration and hard braking cause high fuel consumption and increased pollution levels.

Different riding conditions affect fuel consumption. The following conditions are unfavourable for fuel consumption:

- High traffic density, especially in big cities with many stops for traffic lights.
- Frequent short rides with repeated starts and warm-ups of the engine.
- Riding in a column of motorcycles at low speed, meaning riding with relatively high revs.

Plan rides ahead of time in order to avoid heavy traffic.

Fuel consumption is also affected by conditions that are out of your control, for instance, poor road condition, hills, riding in winter.

Observe the following aspects for economical fuel consumption:

- The planned inspection intervals must be closely observed.
- Regular service by a specialized dealer will guarantee not only continued operability, but also economical fuel consumption, low environmental pollution and a long lifespan.
- Check the tyre pressure every two weeks.

Low tyre pressure increases rolling resistance. This increases fuel consumption and tyre wear and adversely affects riding behaviour.

- Continually check fuel consumption.
- Frequently check the engine-oil level.

RIDING INSTRUCTIONS

Running-in

Running-in instructions for engine and transmission.



CAUTION

Excessive revs while running-in the engine increases the wear of the engine. Engine faults during the running-in period must be immediately reported to a specialized dealer.



NOTE

During the running-in period, ride in frequently changing load and rpm ranges. Select winding and slightly hilly routes. Avoid constantly low rpm counts and full throttle under load.

- During the first 500 km:
Less than 1/2 throttle.

- Up to 1.000 km:
Less than 3/4 throttle.



CAUTION

The first inspection must be carried out immediately after the first 1.000 km.

You can save yourself delays by making an appointment with a specialized dealer in advance.

Running-in new tyres



CAUTION

New tyres have a smooth surface. They must therefore be roughened by carefully running them in at various slanted positions.

Only then will the surface obtain its full grip!

Running-in new brake linings



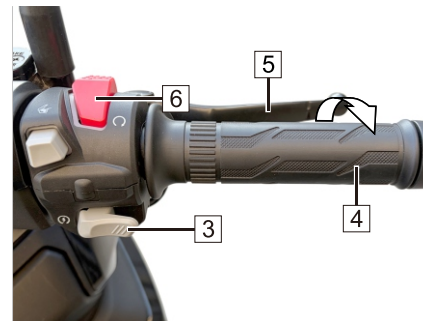
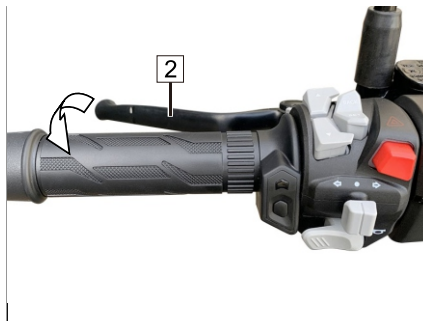
WARNING

New brake linings must be run-in and will not have their full friction power until after 500 km.

The slightly reduced braking effect can be compensated for by an increase in the pressure on the brake lever.

During this period, avoid unnecessary hard braking actions.

Starting with the electric starter



WARNING

Propping up the scooter with the parking stand. Operate the rear handbrake lever to avoid a moving of the scooter.

Avoid high engine rpm's while the vehicle is standing still, otherwise the clutch will engage.



NOTE

Every scooter is equipped with side stand switch. When the side stand is fold up, can start the engine. When the side stand is released, can't start the engine.

When the key turn to "⤵" position and right switch (6) at "⤵" position. When the side stand is fold up, please wait 2-3 seconds.

When the fuel pump star to work fuel in tube reach standard pressure, then turn on engine.

Before starting

- Propping up the scooter with the parking stand.
- Turn the ignition lock (1) with the ignition key to its operating position "⤵".
- Side stand at horizontal position.
- Press button (6) to "⤵".
- Do not open the throttle (4).
- Pull and hold the handbrake lever (2) or (5).
- Operate the start button (3).
- If the engine can not be started after the starter motor is running for 3-5 seconds, open the throttle (4) 1/8-1/4 turns and start again.
- Push the scooter off its parking stand.
- Mount the scooter.
- Release the brake before riding.



CAUTION

If the engine won't start immediately, release the start button, wait a few seconds and push it again. Each time, push the start button for just a few seconds in order to save the battery. Never push the start button for more than 10 seconds.



WARNING

Never allow the engine to run in an enclosed space. Exhaust gases are highly toxic and can kill.

RIDING INSTRUCTIONS

Braking

Wet brakes

Washing the scooter or riding through water or rain can delay the braking effect due to wet or (in winter) ice-covered brake discs and linings.



WARNING

The brakes must first be operated until they are dry.

Salt film on the brakes

When riding on salted streets without braking for a while, the full braking effect may be delayed.

Oil and grease



WARNING

The brake discs and linings must be free of oil and grease!

If the scooter is not used for a while , a rust film may form on the brakes and thus increase the braking effect. A thick rust film can cause the brakes to lock up. When setting out on a ride after a long lay-up period, carefully operate the brakes several times until they work normally.



NOTE

Make sure you practice braking for emergency situations, but do so where you will not pose a risk to yourself or others(e.g.a deserted parking area).



WARNING

Operate the brakes to grind off the salt deposited on the brake discs.

Dirty brakes

When riding on dirty streets, the braking effect can be delayed due to dirty brake discs and linings.

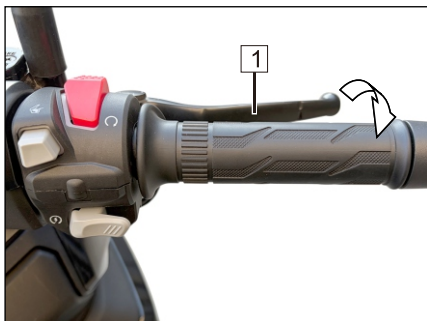


WARNING

Operate the brakes until they are clean. Lining wear is increased by dirty brakes!

RIDING INSTRUCTIONS

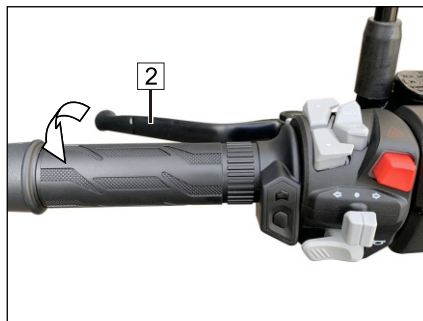
Braking



Braking

The front brake is operated via the right-hand brake lever (1) on the handlebars, and the rear brake is operated via the left-hand brake lever (2).

When stopping or slowing down, release the throttle grip and operate both brakes at the same time.

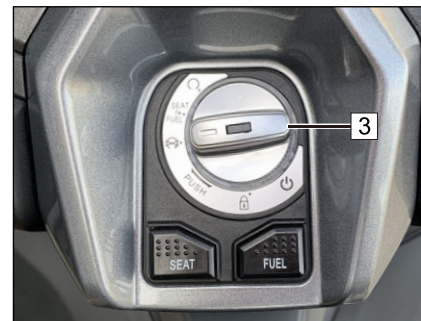


On tight curves, sandy / dirty streets, wet asphalt and icy roads, use the front brake carefully: if the front wheel locks, the bike will slide sideways.

Brake with care. Locked wheels do not have much braking effect and can lead to skidding / crashing. In principle, do not brake on a curve, but before the curve.

Braking on a curve increases the danger of sliding.

Stopping the engine



- Turn the ignition lock (3) with the ignition key to the position "X".
- Pull out the ignition key.
- Take away the ignition key.

SERVICE INSTRUCTIONS

Servicing the scooter / cleaning agents



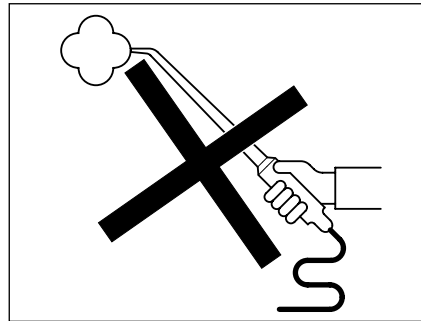
NOTE

Regular, expert service will help maintain the value of your scooter and is a condition for guarantee claims for corrosion and other such damage.



CAUTION

Rubber and plastic parts will be damaged by caustic or penetrating cleaning agents or solvents.



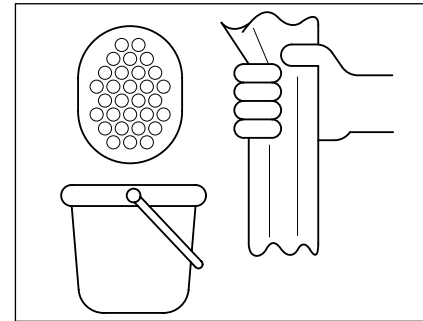
WARNING

Always carry out a brake test after cleaning and before starting a ride!



CAUTION

Do not use steam or high-pressure jet devices!
Such devices can damage seals, the hydraulic braking system and the electrical system.

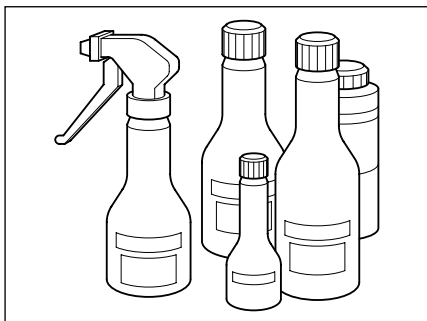


CLEANING

- To wash the motorcycle, use a soft sponge and clean water.
- Afterwards, dry off with a polishing cloth or chamois.
- Do not wipe off dust or dirt with a dry cloth, to avoid scratching the paint or covering.

SERVICE INSTRUCTIONS

Servicing the scooter / cleaning agents



PRESERVATION AGENTS

When necessary, the scooter must be preserved with commercially available preserving and cleaning agents.

- By way of precaution (especially in winter), regularly treat parts liable to corrosion with preservation agents.



CAUTION

Never use paint-polishing agents on plastic parts.

- After a longish ride, thoroughly clean the chassis and the aluminium parts and preserve them with a commercially available anti-corrosion agent.

Operation in winter and anti-corrosion protection



NOTE

Protect the environment by using only environmentally friendly preservation agents, and use them frugally.

Use of the motorcycle in the winter can cause considerable damage due to the presence of salt on the roads.



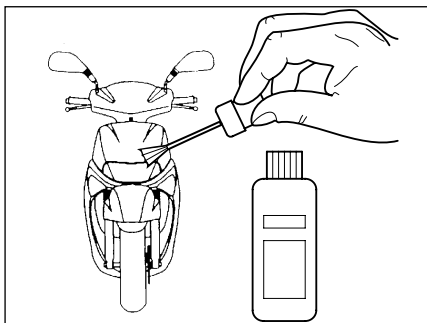
CAUTION

Do not use hot water, which would increase the effect of the salt.

- At the end of each ride, wash the motorcycle with cold water.
- Thoroughly dry the motorcycle.
- Treat parts liable to corrosion with waxborne anti-corrosion agents.

SERVICE INSTRUCTIONS

Repairing paint damage



Minor paint damage should be immediately repaired.

Servicing tyres

If the scooter is not used for a longer period, it is recommended to support the scooter so that its weight is not on the tyres. You can prevent the tyres from becoming dry and brittle by spraying them with a silicone-rubber treatment. First thoroughly clean the tyres.

Do not store the scooter or the tyres in hot spaces (such as a boiler room) for longer periods.

WARNING

A minimum tyre-profile depth of 2.0 mm must be maintained at all times.

Lay-up / commission

Lay-up

- Clean the scooter.
- Remove the battery. Observe the maintenance instructions.
- Spray suitable lubricants onto the brake lever, clutch lever joints, the side standard and main-standard bearings.
- Rub bright / chromium-plated parts with acid-free grease (Vaseline).
- Store the scooter in a dry room and jack it up so that its weight is not on the wheels.



NOTE

Combine lay-up / commission activities with an inspection by a dealer.

Commission

- Remove the preservation agents from the outside.
- Clean the motorcycle.
- Install the charged battery.
- Preserve the battery terminals with terminal grease.
- Check / adjust the tyre pressure.
- Check the brakes.
- Carry out activities according to the inspection plan.
- Carry out the safety checks.

SERVICE INSTRUCTIONS

Technical changes, accessories and spare parts

WARNING

Technical changes to the scooter can lead to invalid warranty.

Should you want to make technical changes, observe our guidelines. This will serve to prevent the scooter from being damaged and the traffic and operational safety being retained. A specialised dealer can carry out these activities with meticulous care.

Always consult a dealer before buying accessories or making any technical changes.



CAUTION

We recommend using only approved accessories and original spare parts for our scooter.

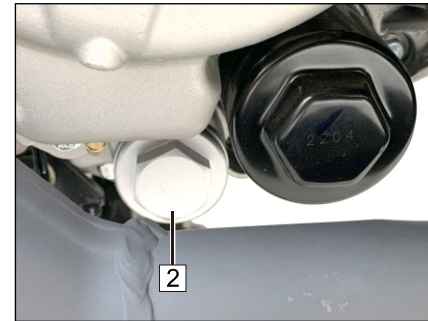
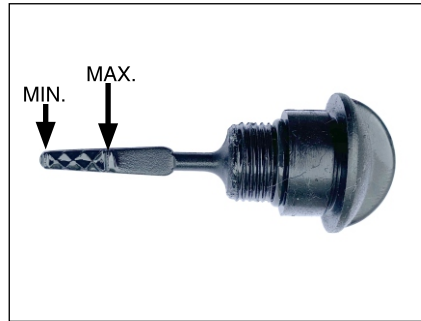
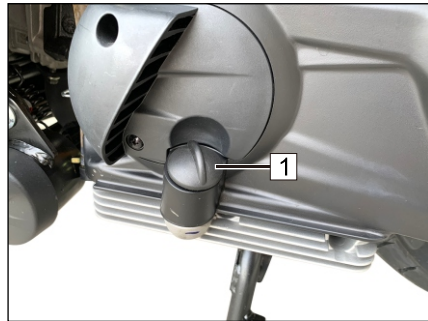
This is in your own interests : the safety, suitability and reliability of these accessories and parts will have been tested specifically for the scooter.

Although we keep track of the market, we neither can evaluate nor be held liable for the quality of non-approved accessories and parts , even if they have a certificate of acceptance from an officially recognised technical testing / supervision agency, or a license issued by the authorities.

For approved accessories and original spare parts, see a specialised dealer. He will also ensure that they are professionally installed.

NOTES ON MAINTENANCE

Engine oil



Checking the oil level



CAUTION

Checking the oil while the engine is cold will lead to a wrong measurement and therefore the wrong oil quantity. In order to avoid engine damage, neither exceed the maximum oil level nor let it drop below the minimum level.



NOTE

Make sure that the scooter during oil-level checks stands level in all respects. Even the slightest inclination towards the side will produce measurement errors.

- Stop the warmed-up engine, wait for approx. 5 minutes and hold the scooter up-right.
- Keep the scooter vertical with two wheels on the ground.
- Stop the engine and remove the oil filler cap (1) on the lower right of the crankcase.
- Clean the oil filler cap at the MIN-MAX area with a clean rag.



CAUTION

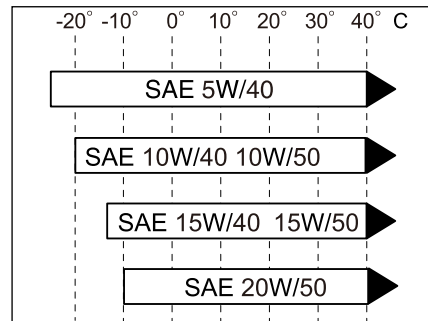
For checking the oil level only insert the oil filler cap and don't screw in! Otherwise there will be a wrong measurement in order to avoid engine damage.

- The oil level must be between the minimum and maximum marks.
- Tighten the oil filler cap by hand.

If required, replenish the engine oil SAE 5W /40 via the oil level up to the MAX level mark.

- When change new engine oil, open the oil hole screw (2), till all engine oil is flow out, then tighten the screw (2) and add new oil until the oil level up to the MAX. level mark.
- Tighten the oil filler cap (1).

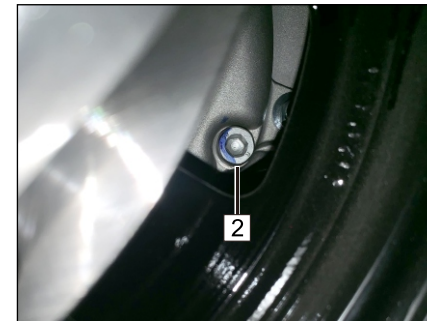
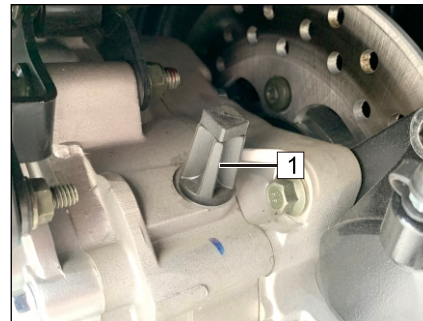
Engine oil



CAUTION

Do not use additives . Since the oil also serves to lubricate the clutch, do not use car engine oils supplemented with friction modifiers (such energy-conserving oils can lead to the clutch slipping). Use a suitable, light engine oil for scooters , such as Motorex SAE 5W/40 mineral oil API (SFor higher).

- If required, replenish the engine oil(for classification and viscosity, see the table) via the oil-filler opening up to the maximum level marking.



Recommended grade:

Per API:SJ or higher or also with additional release status: ACEA A3/96 (CCMC G5)

Recommended viscosity:

Viscosity depends on the outside temperature. For short while, the temperature may exceed or fall short of the limits of the SAE grades.

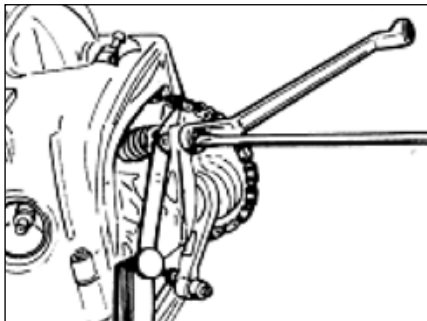
The recommended viscosity grade SAE 5W/40 covers the ambient temperature range -15°C to +40°C and therefore represents the optimum for our latitudes.

Checking the transmission oil level

- Stop the warmed-up engine, wait for approx. 5 minutes.
- Propping up the scooter on the parking stand.
- remove the oil filler cap (1)and check if the oil level is below the oil-filler opening.
- If required, replenish transmission oil Hypoid SAE 85W-90 via the oil-filler opening.
- When change new transmission oil, open the oil hole screw(2),till all transmission oil is flow out, then tighten the screw (2) and add new oil via the oil-filler opening.
- Tighten the oil filler cap(1).

NOTES ON MAINTENANCE

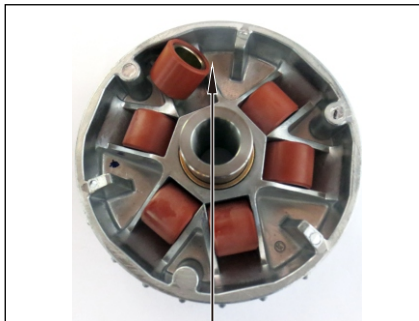
Regulating valve



- When checking the valve clearance, the valve gear phase marker must be aligned according to the above instructions.
- Use the thickness gauge to check whether the clearance between the valve and the adjusting gasket conforms to the specified value. If the inlet and exhaust valve clearance is different from the specified value below, loosen the locknut as shown in the figure and adjust the valve clearance.

Inlet valve(not started and state of cooling): 0.10mm

Exhaust valve (not started and state of cooling): 0.15mm



Correct assembly: from the inside out, all the rollers are placed in the position shown in the picture. The exposed iron surface is on the right side and the plastic wrap surface is on the left side.

Drive belt、roller

- It is recommended that 6000 km first check whether the transmission belt ball slider is damaged.
- Belt detection:
 - Standard Value: $21.3 \pm 0.2\text{mm}$;
 - Limit use width: 19.5mm;
 - Limit use crack: Tear to core wire position;
 - More than 10,000 km can be replaced belt;
- Driving wheel detection:
 - Ball standard diameter: $\varnothing 21 \pm 0.1\text{mm}$.
 - Minimum allowable ball diameter: $\varnothing 20\text{mm}$ (No metal lining is allowed to leak out of the edge and the pressing end).
 - Nylon slider opening $\geq 4.7\text{mm}$ need to change.
- It is recommended that 12,000 to 15,000 km of ball be replaced.
- Ball replacement assembly requirements (must be assembled according to this requirement).

Precautions for engine maintenance

1. When starting the engine, the throttle should be gently operated to start the engine for 30-60s, and then the cooler should be moderately opened to start the engine. Do not accelerate immediately after starting, and accelerate after 1-3min of running.
2. When starting by pedal, the starting time should not exceed 5s (excluding auxiliary time). The starting lever should be able to bounce back flexibly after pressing.
3. During electrical start-up, the starting time should not exceed 5s, and the starting time should be 10 seconds apart. If the starting time cannot be started for 5 consecutive times, then need check for no fault. It is strictly prohibited to press the starting button after starting.
4. After the engine starts normally, Idle running for 3-5 seconds. Let the engine lubricate before driving. At the same time, attention should be paid to avoid high speed and heavy load operation before the engine is preheated.
5. The new machine is mounted on the motorcycle after the first 1,000 kilometers of driving, It cannot operate at high speed for long periods of time, nor can it rotate beyond its maximum speed of 80. Do not operate the throttle valve in full open condition, after 500 kilometers, a repair should be carried out to compensate for the slight wear and tear in the run-in period, so as to ensure the good performance of the engine.
6. Clean the oil /gas separator and check and clean the air filter every 2000 km, the main purpose is to remove the oil stored in the oil and gas separator, check the sealing condition of each binding surface of the air filter, and remove the sand and dust on the air filter chamber and filter element. When assembling, pay attention to the sealing of each joint face, and replace or repair the parts that have lost the sealing function to ensure the air filtration effect, prolong the service life of the engine piston block, effectively avoid burning oil or power shortage.

NOTES ON MAINTENANCE

Checking the steering bearings



NOTE

The telescopic fork should not jam up when turned and it should swing back lightly to both end positions.

- Pull the hand brake lever to block the front wheel brake.
- Hold the handlebar with both hands and try to move the handlebar(1)back and forth.

If the fork bearing shows noticeable play, it must be adjusted by a specialised dealer.

Checking the telescopic fork

- Pull the hand brake lever to block the front wheel brake.
- Now pump the fork girders (2) several times up and down using the handlebar.
- The suspension should respond perfectly.
- Check the fork girders for oil leaks.

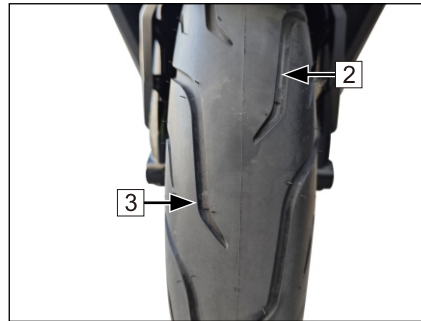


NOTE

If damage to the telescopic fork or the spring strut is found, have the scooter examined by a professional dealer.

NOTES ON MAINTENANCE

Tyre profile



Checking the tyre profiles

WARNING

Observe the minimum profile depth prescribed by law.
Never ride without valve caps(1) . Firmly tightened valve caps prevent the tyre from suddenly losing pressure.

- Measure the profile depth at the centre (2) of the tyre's tread.
- Recommended minimum profile depth:
2.0 mm
- Observe the wear marks(3).

Checking the tyre pressure

WARNING

Adjust the tyre pressure according to the total weight load. Never exceed the rated total weight or the bearing capacity of the tyres.

Incorrect tyre pressure will have a considerable effect on the riding properties of the scooter and the lifespan of the tyres.

- While the tyres are cold:
- Twist off the valve caps.
- Check / adjust the tyre pressure.
- Twist on the valve caps.

Tyre pressure

Front: 2.25Kg/cm² Rear: 2.50Kg/cm²

Tyre size

The standard scooter is provided with the following tyre sizes:

Front	120/70-14	55P
Rear	130/70-13	63P

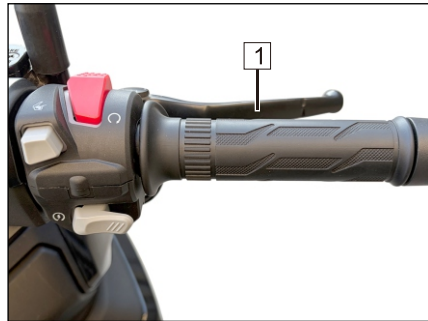
All Tyres are tubeless.

WARNING

Use only tyres approved by the manufacturer. The use of non-approved tyre brands, types or sizes leads to the operating permit of the vehicle becoming null and void. Use only pairs of tyres produced by the same manufacturer.

NOTES ON MAINTENANCE

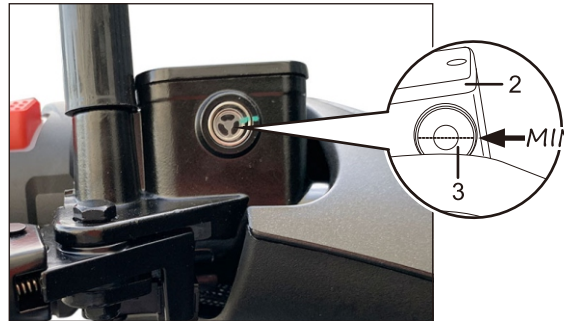
Front wheel brake



WARNING

Sudden changes in play or a spongy feel of the brake lever (1) can be caused by faults in the hydraulic system. Do not ride on when in doubt about the operability of the brake system. Immediately consult a dealer.

Front brake-fluid tank



Checking the brake-fluid level

WARNING

Every two years, the brake fluid must be changed by a dealer. The level must not drop below the MIN mark. Use only brake fluid of the DOT 4 classification.



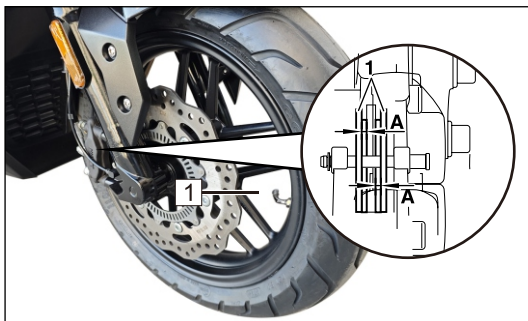
CAUTION

Do not spill any brake fluid on painted or plastic surfaces as it will damage the surface severely.

- Turn the handlebars until the brake-fluid tank (2) is level.
- The brake fluid level (3) should be between the minimum (MIN) and the maximum marking (MAX).
- If air bubbles can be seen, check the brake linings for wear; if necessary, replenish the brake fluid by a dealer.

NOTES ON MAINTENANCE

Front wheel brake



Checking the brake linings



CAUTION

The minimum lining thickness must be maintained



NOTE

For your own safety, we recommend having activities to the brake system carried out by a dealer.

- Check the thickness of the brake lining.

Minimum thickness: **A = 2.0 mm**

- If the lining thickness is below the minimum, **have the brake lining (1) replaced by a dealer.**



Checking the disc brake

- Visually inspect the disc (2).

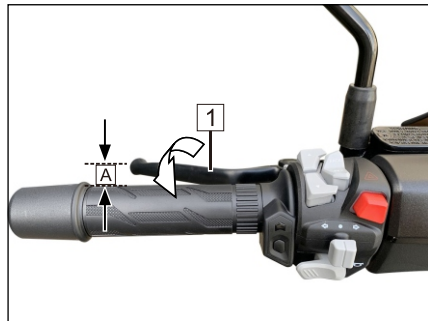
- Check the thickness of the disc.

Minimum thickness: **B = 3.0 mm**

- If the disc thickness is below the minimum, **have the disc (2) replaced by a dealer.**

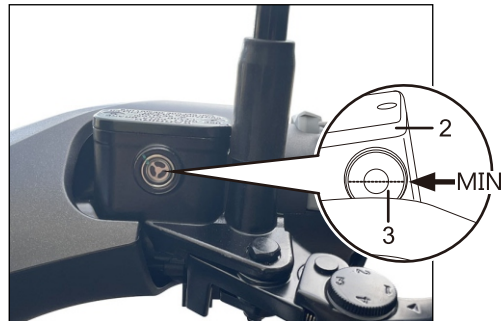
NOTES ON MAINTENANCE

Rear wheel brake(For disk brake)



WARNING

Sudden changes in play or a spongy feel of the brake lever (1) can be caused by faults in the hydraulic system. Do not ride on when in doubt about the operability of the brake system. Immediately consult a dealer.



Checking the brake-fluid level

WARNING

Every two years, the brake fluid must be changed by a dealer. The level must not drop below the MIN mark. Use only brake fluid of the DOT 4 classification.

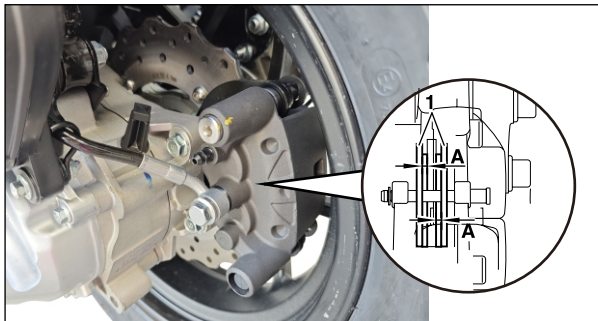
CAUTION

Do not spill any brake fluid on painted or plastic surfaces as it will damage the surface severely.

- Turn the handlebars until the brake-fluid tank (2) is level.
- The brake fluid level (3) should be between the minimum (MIN) and the maximum marking (MAX).
- If air bubbles can be seen, check the brake linings for wear; if necessary, replenish the brake fluid by a dealer.

NOTES ON MAINTENANCE

Rear wheel brake



Checking the brake linings



CAUTION

The minimum lining thickness must be maintained



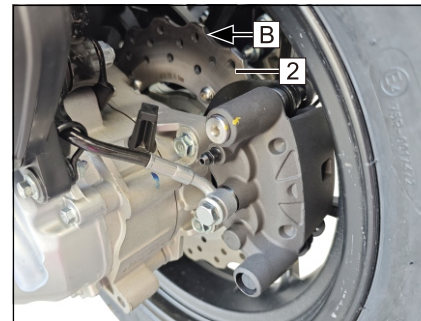
NOTE

For your own safety, we recommend having activities to the brake system carried out by a dealer.

- Check the thickness of the brake lining.

Minimum thickness: **A = 2.0 mm**

- If the lining thickness is below the minimum, **have the brake lining (1) replaced by a dealer.**



Checking the disc brake

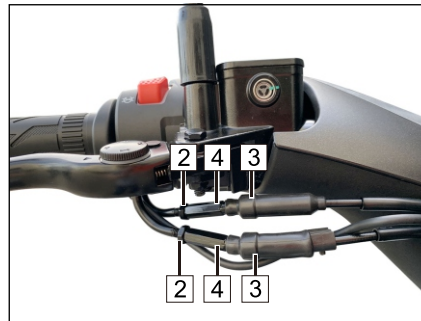
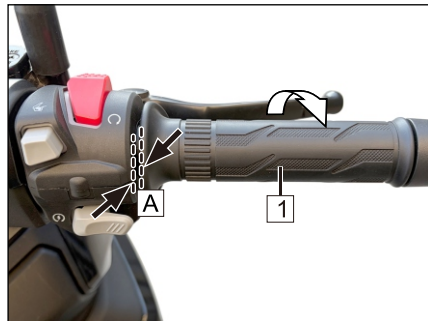
- Visually inspect the disc (2).

- Check the thickness of the disc.

Minimum thickness: **B = 4.0 mm**

- If the disc thickness is below the minimum, **have the disc (2) replaced by a dealer.**

Adjusting the play of the twist grip throttle control



Check:

- Check the throttle cable for light movement by turning the twist grip (1) from closed to open position.
- Move the handlebar to check whether the throttle cable moves freely.
- Check whether the throttle cable is obstructed by other parts.
- Open the twist grip throttle control until resistance can be felt.
- Measure the play.

Nominal value: **A = 1-2 mm**

Adjustment:

- Push over the protective cap (2).
- Slacken the lock nut (3) on the handlebar.
- Turn the setscrew (4) accordingly.
- Tighten the lock nut (3).
- Check the clearance (A).
- Push back the protective cap (2).

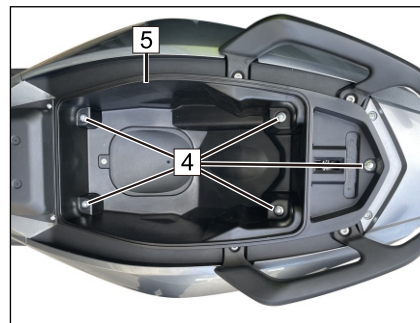
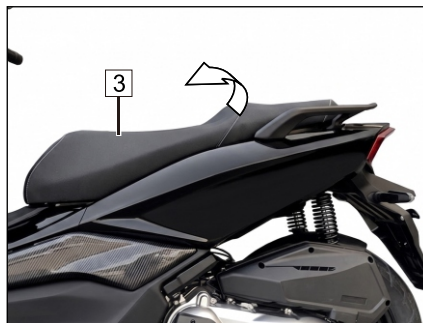
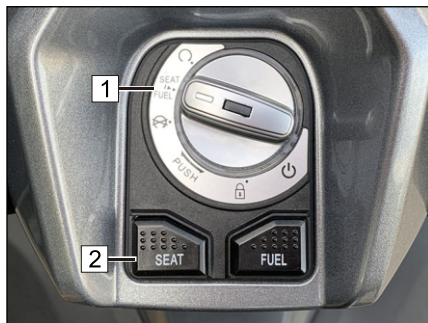


NOTE

If the play cannot be corrected this way, have the scooter checked by your dealer.

NOTES ON MAINTENANCE

Cleaning the air filter



Check and change



NOTE

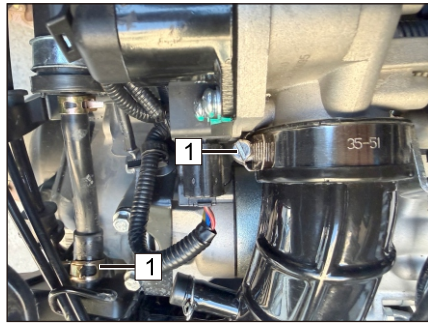
Check or change the spark plug only when the engine is cold.

- Turn ignition switch to "SEAT FUEL" (1), press button "SEAT"(2), open the luggage box (3).

- Remove five bolts (4) with washers from the storage.
- Take off the storage (5) with the seat.

NOTES ON MAINTENANCE

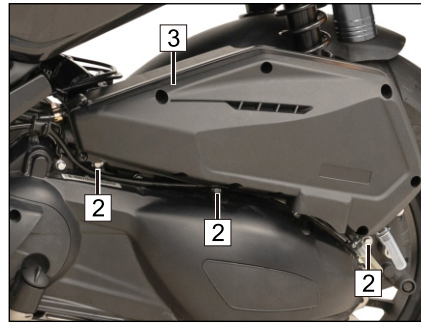
Cleaning the air filter



NOTE

Disassembly and cleaning

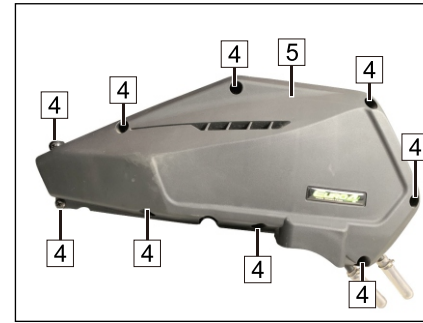
- Remove the clamp(1)
- Remove the screws (2) and take off the air filter (3).



Disassembly and cleaning

- Remove the clamp(1)
- Remove the screws (2) and take off the air filter (3).

Replacing the air filter

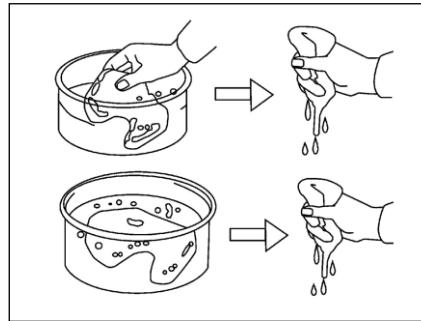
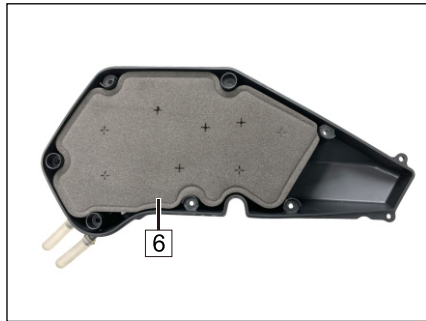


Disassembly and cleaning

- Use cross screws (4) and take off the air filter cover (5).

NOTES ON MAINTENANCE

Cleaning the air filter



- Remove the foam (6).
- Clean the foam with Motorrex air cleaner.
- Afterward soak and wring out the foam with air filter oil.

Installation



NOTE

- Usually the installation takes place in reverse order to disassembly.

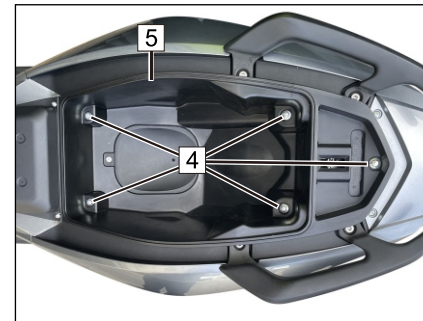
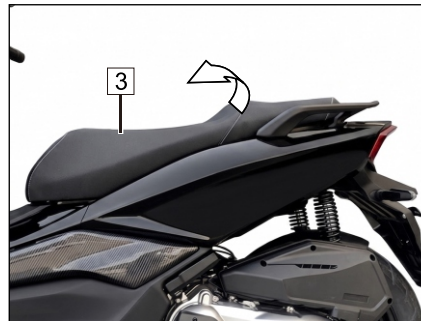
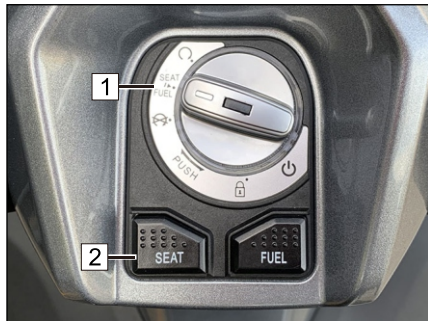


CAUTION

Never run the engine without air filter.

- Dust deposit is one of the major causes of reducing output horsepower and increasing fuel consumption.
- Change the air cleaner element more frequently to prolong the engine's service life if the scooter is ride on dusty roads very often.
- Check for properly installation of the foam housing in the filter case.
- Otherwise the engine runs poorly or lead to serious engine damage.
- Be careful not to soak the air cleaner when washing the scooter. Otherwise it will cause engine hard to start.

Checking the spark plug



Check and change



CAUTION

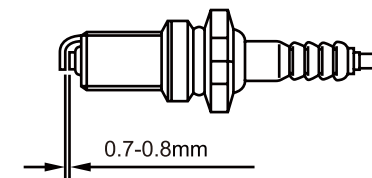
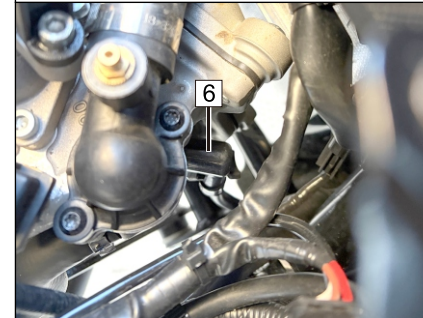
Check or change the spark plug only when the engine is cold.

- Turn ignition switch to "SEAT FUEL" (1), press button "SEAT" (2), open the luggage box (3).
- Remove five bolts (4) from the storage.
- Take off the storage (5) with the seat.
- Pull the spark plug connector (6).
- Unscrew the spark plug with the spark wrench from the on-board toolkit.

- Check the electrode gap (0.7-0.8mm) replace the spark plug if it is severely burnt away.
- Use a new spark plug **NGK CR8EKB** and tighten up.
- Screw in the spark plug by hand and then tighten up with the spark wrench.

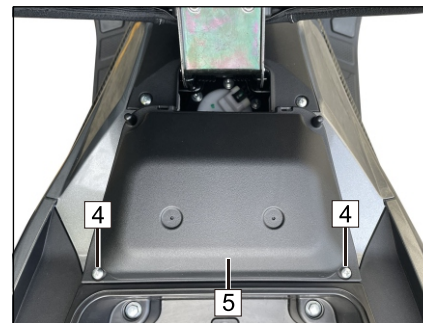
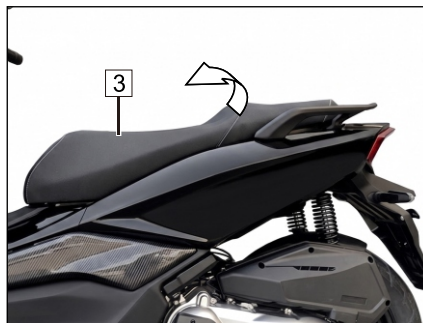
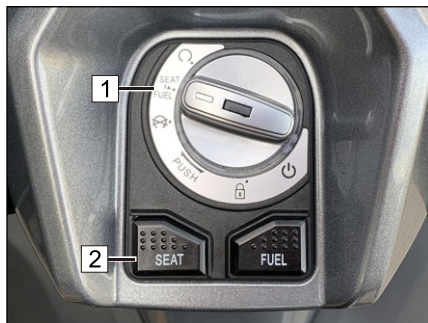
Torque 11 Nm.

Installation takes place in reverse order to disassembly.



NOTES ON MAINTENANCE

Checking the fuse



CAUTION

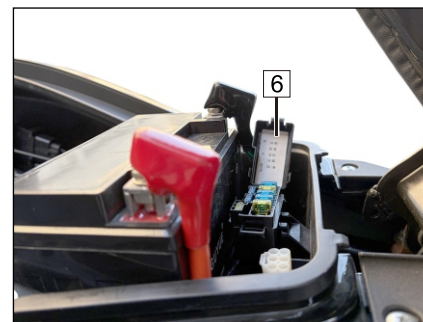
Never install a fuse with a larger rating, since this could destroy the entire electrical system.

The fuse is located beneath the battery cover.

- Turn ignition switch to "SEAT FUEL" (1), press button "SEAT"(2), open the luggage box (3).
- Remove the two screw (4) and open the battery cover (5).
- Open the fuse case (6) and remove the fuse.

- A faulty or blown fuse must be replaced by a new one with corresponding specification.
- Check the fuse for correct contact. Loose fuse will blow.

Installation takes place in reverse order to disassembly.



NOTES ON MAINTENANCE

Battery

WARNING

Always wear safety glasses.
Keep children away from acids and batteries.

EXPLOSION DANGER

A battery being charged produces a highly explosive gas, which is why fire, sparks, naked flames and smoking are prohibited.

FIRE HAZARD

Avoid generating sparks and electrostatic discharges when handling cables and electrical devices.
Avoid short circuits.

DANGER-CAUSTIC ACTION

Battery acid is highly caustic, so always wear safety gloves and glasses.
Do not tilt the battery as acid can leak from the ventilation openings.

FIRST AID

If acid comes into contact with an eye, immediately flush the eye for several minutes with fresh water. Then immediately visit / call a doctor.

Acid on the skin or clothing must immediately be neutralised using acid converter or soap suds, and the spots must be flushed with plenty of water.

If acid is swallowed, immediately visit / call a doctor.

CAUTION

Do not expose batteries to direct sunlight. Discharged batteries can freeze, so they must be stored in a place where the temperature remains above 5-15°C.

Professional maintenance, charging and storage will increase the lifespan of the battery.

WARNING

Take a dead battery to a collection point.
Never dispose of one with household refuse.

Charging the battery

After a long lay-up(3-4 months), charge the battery. The charging current (in amperes) must not exceed 1/10th of the battery capacity (Ah).

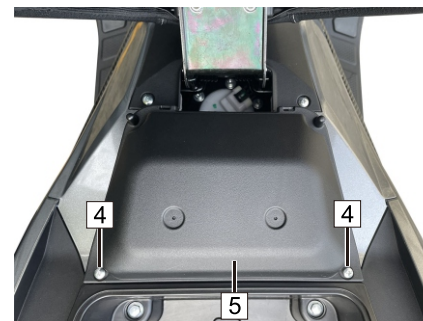
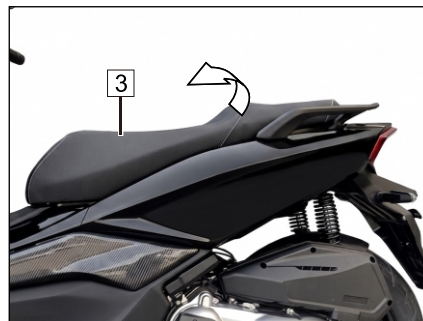
The battery must not be fast-charged. The battery may only be charged using a special charger approved for maintenance-free batteries.

Maintenance

Although the battery is maintenance-free. Never leave the battery discharged. Keep the battery clean and dry and make sure that the connection terminals are firmly seated.

NOTES ON MAINTENANCE

Removing and installing the battery



CAUTION

The battery may only be connected or disconnected while the ignition is inactive.

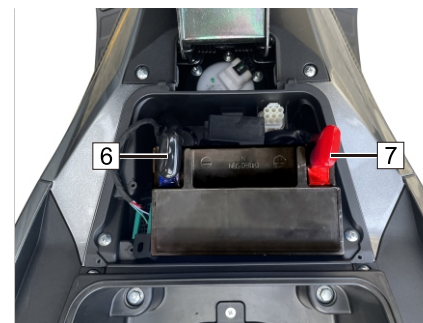
First disconnect the negative terminal (6, black cable).

Then disconnect the positive terminal (7, red cable).

When installing the battery, first connect the positive terminal (7, red cable).

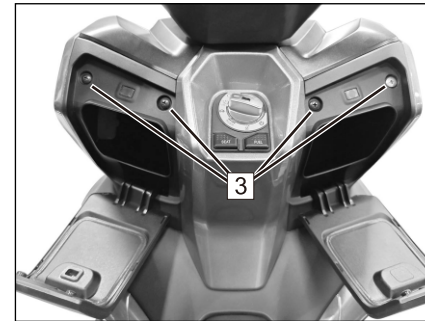
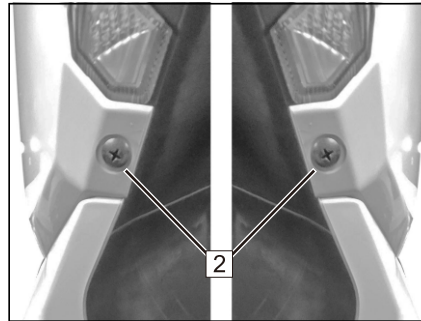
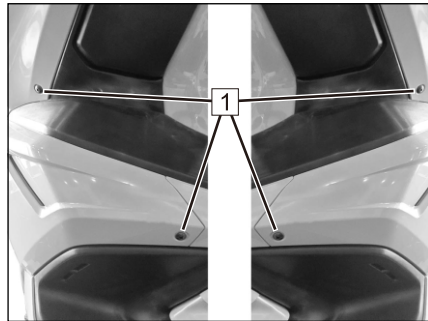
The battery is maintenance-free. Do not try to open it.

- Turn ignition switch to "SEAT FUEL" (1), press button "SEAT"(2), open the luggage box (3).
 - Remove the two screw (4).
 - Open the inspection cover (5).
 - Disconnect the battery.
 - Remove the battery.
- Installation takes place in reverse order to disassembly.



NOTES ON MAINTENANCE

Headlight and position light



Changing the bulb



NOTE

Use only tested, genuine bulbs from the manufacturer.

Do not touch the bulbs with bare fingers.
Hold bulbs with a clean, dry cloth when
installing or removing them.

Low beam-high beam

bulb: LED 12V 18.5W / LED 12V 24W

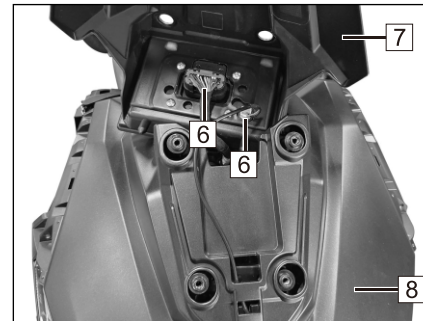
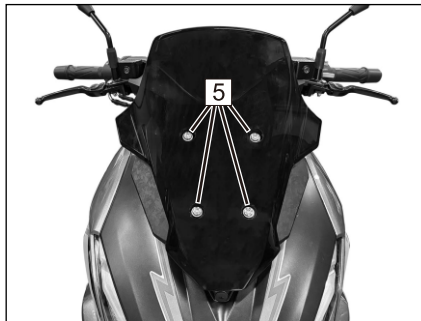
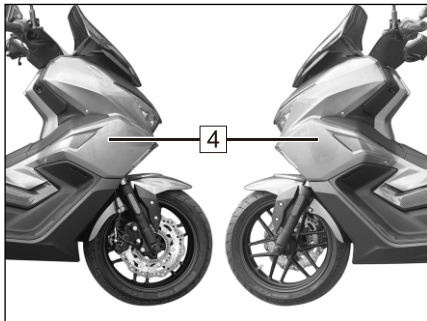
Position light

bulb: LED 12V 3.6W

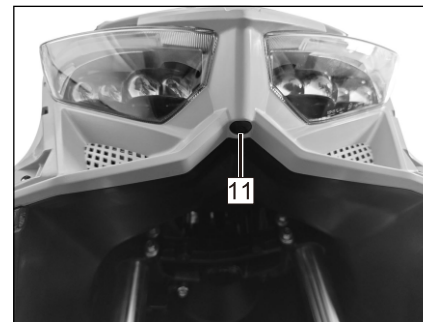
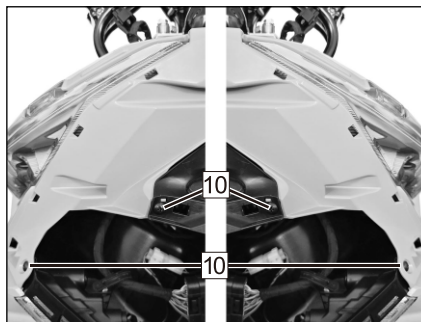
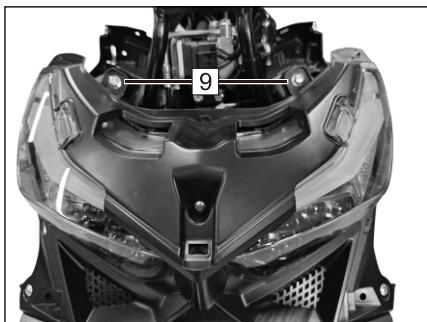
- Remove screws (1) (2)(3) can remove the
left and right front side panels (4).

NOTES ON MAINTENANCE

Headlight and position light



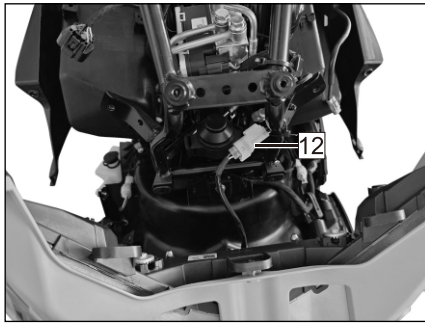
- Remove screws (5) and connectors (6), remove the headlight fender (7) and remove the central panel(8).



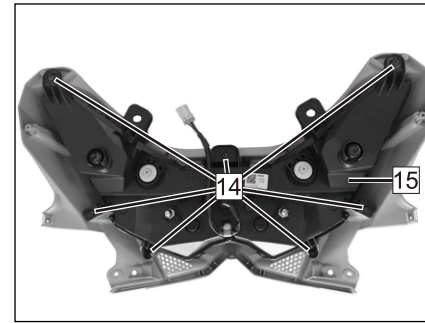
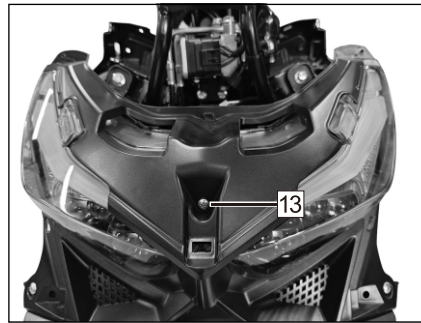
-Remove screws(9)(10) and Remove anchors (11) .

NOTES ON MAINTENANCE

Headlight and position light



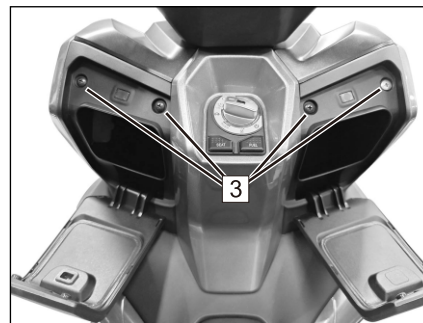
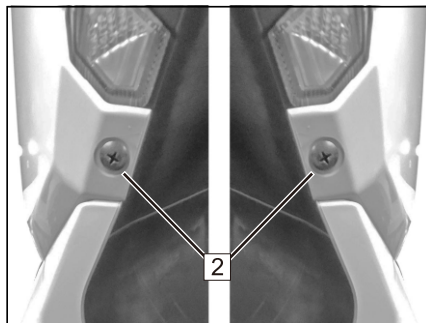
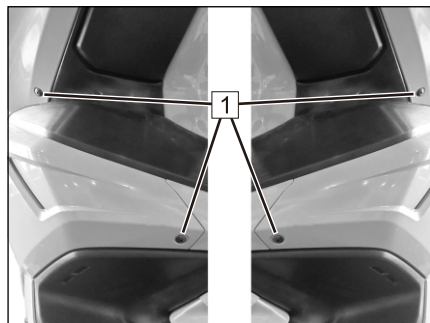
- Disconnect the front headlight plugs(12)
- Remove screws (13)(14) and replace the front headlights as needed.(15).



- The front headlight light source is LED, and the entire headlight needs to be replaced.
- Installation takes place in reverse order to disassembly.

NOTES ON MAINTENANCE

Front direction indicator



Changing the bulbs



NOTE

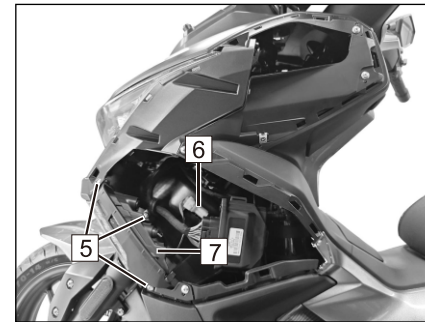
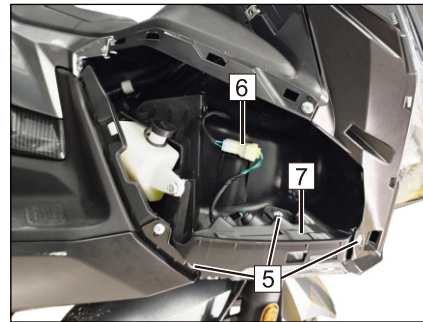
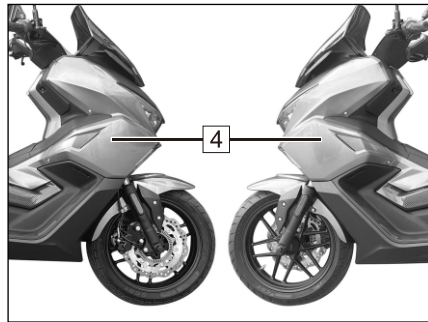
Do not touch the bulbs with bare fingers.
Hold bulbs with a clean, dry cloth when
installing or removing them.

- Remove screws (1) (2)(3) can remove the
left and right front side panels (4).

Front turn signal light

bulbs: LED 12V 1W

Front direction indicator

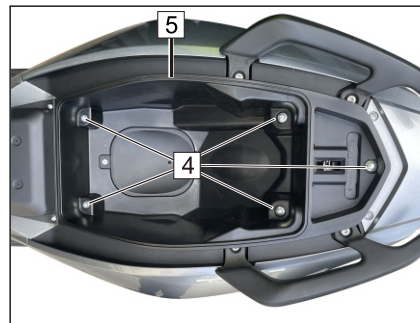
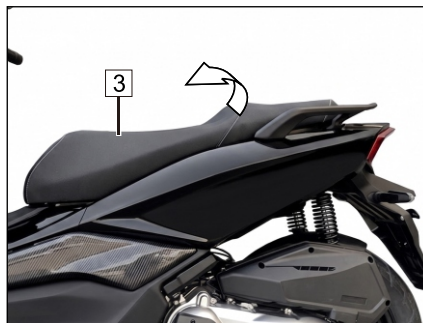


- Remove screws(5) and connectors(6) can remove the front direction indicator(7) .
- The left and right front turn lights are LED light source and need to be replaced as a whole.

Installation takes place in reverse order to disassembly.

NOTES ON MAINTENANCE

Rear direction indicator/tail/brake lamp/rear registration plate lamp



Changing the lamp



NOTE

Do not touch the bulbs with bare fingers. Hold bulbs with a clean, dry cloth when installing or removing them.

- The rear direction indicator/tail/brake lamp is LED.

Please change the whole lamp.

Rear direction indicator/tail/brake lamp

bulbs: LED 12V 0.66W/1W/4.8W

rear registration plate lamp

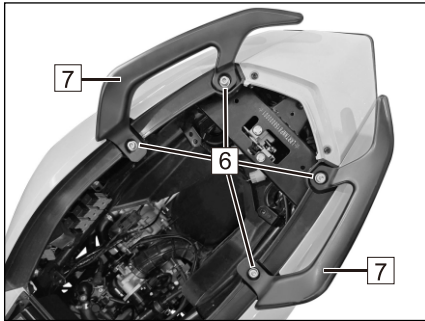
bulbs: LED 12V 0.5W

- Turn ignition switch to "SEAT FUEL" (1), press button "SEAT"(2), open the seat(3) .

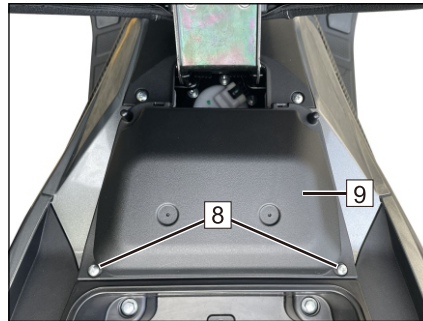
- Remove five bolts (4), take out the luggage box (5).

NOTES ON MAINTENANCE

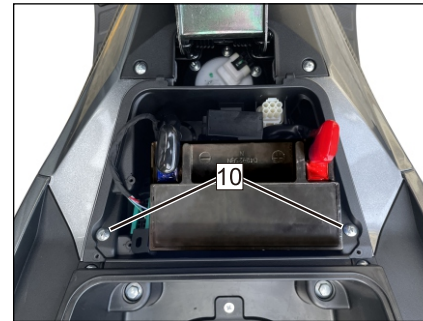
Rear direction indicator/tail/brake lamp/rear registration plate lamp



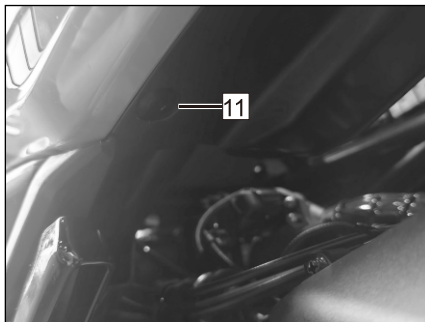
- Remove socket head cap screws (6), take out the rear armrests (7).



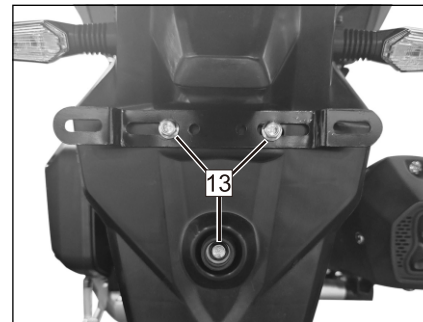
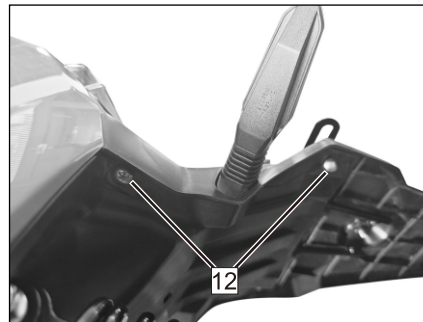
- Remove the screw (8) take out the Battery Box Cover (9).



- Remove the screw (10) take out the Battery Box.

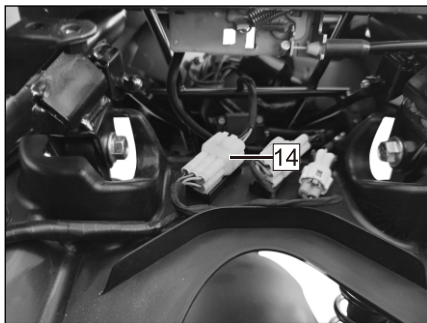


- Remove anchors (11), remove screw (12) remove socket head cap screws (13).

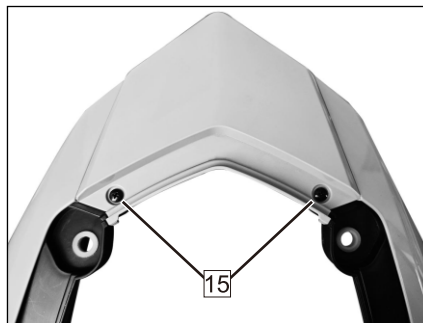


NOTES ON MAINTENANCE

Rear direction indicator/tail/brake lamp/rear registration plate lamp

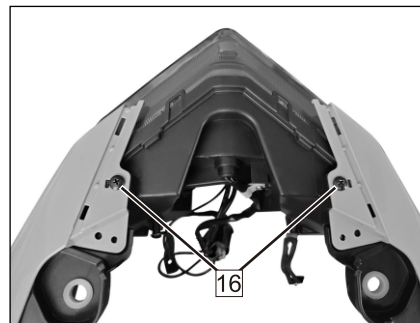


- Unplug the taillight connector(14)remove the screws(15)(16)(17)change the taillight.



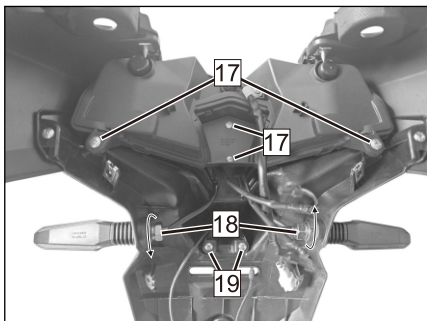
- Rotate in the direction of the arrow to remove the nut(18)change the Rear direction indicator.

- Remove the screw (19)change the license plate light .



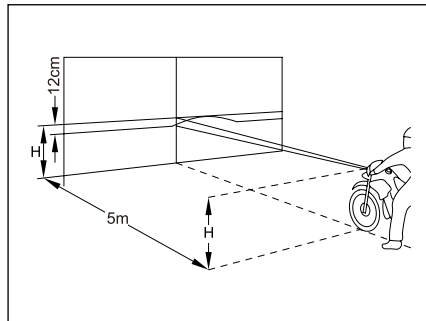
- The light source of taillight and license plate light is LED and need to be replaced as a whole.

Installation takes place in reverse order to disassembly.



NOTES ON MAINTENANCE

Check the headlamps



WARNING

Do not run the engine in an enclosed space (risk of asphyxiation).

Position the motorcycle on a level floor 5 m (measured from the headlamp) from a light coloured wall with a rider seated on the motorcycle and the tyres filled at the correct pressure.

- Measure the distance from the floor to the centre of the headlamp and mark the height on the wall with a cross. Draw a second cross 12 cm beneath the first cross.

Adjusting the headlamps



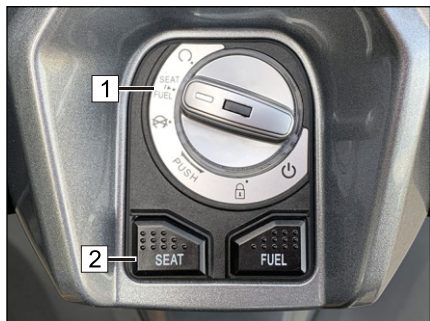
NOTE

If you have problems adjusting the headlamps, see a specialised dealer. An incorrect adjustment is punishable by law. Remember, you are responsible for the correct adjustment of the motorbike's headlamp.

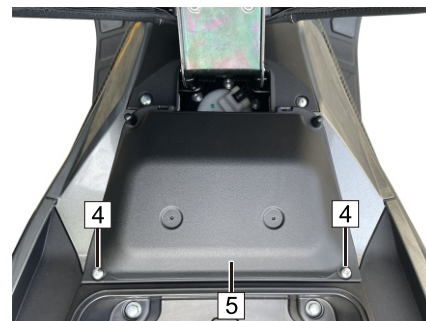
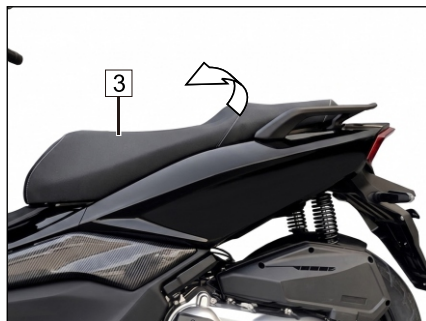
- Start the scooter and run the engine.
- Activate the dipped beam.
- Use the knob (shown in 1) to adjust the light vertically. Turn clockwise to raise the light height, counterclockwise to lower it.

NOTES ON MAINTENANCE

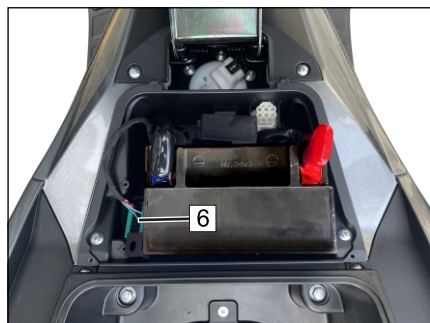
Fault diagnosis tester



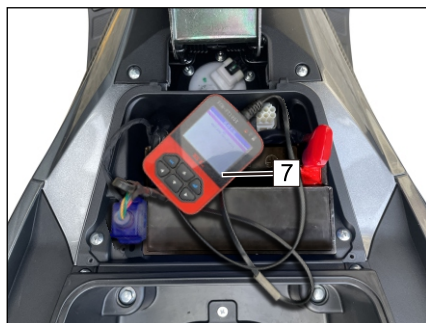
1. Turn ignition switch to "SEAT FUEL" (1), press button "SEAT"(2), open the luggage box (3).



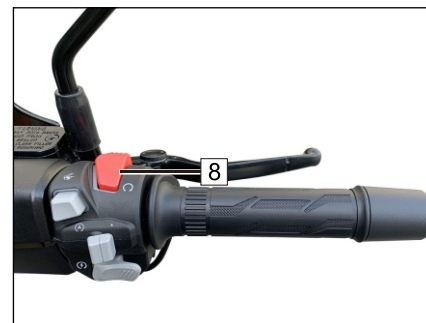
2. Remove the two screws (4), Open the inspection cover(5).



3. Fault diagnosis tester connector (6).

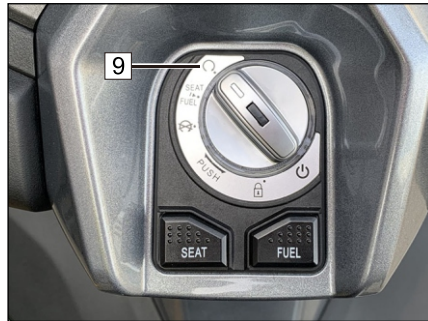


4. Connect fault diagnosis tester (7).

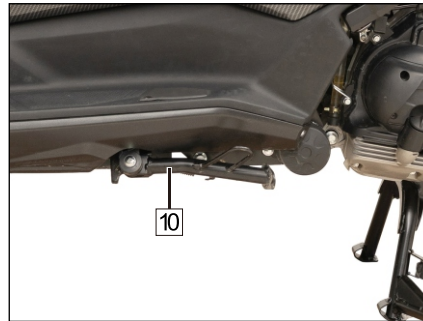


5. Right switch(8) at "↻"position.

Fault diagnosis tester



6. The ignition key(9) at "OFF" position.



7. Side stand (10) at horizontal position.

WARNING

When connect the fault diagnosis tester, right switch(8), ignition key(9) must be at "OFF" position, side stand (10) at horizontal position.

TECHNICAL DATA

	LJ250T-18E
Engine type	LJ1P72MM
Construction:	One cylinder 4-stroke petrol engine
Piston displacement:	244 cm ³
Bore:	φ 72 mm
Stroke:	60 mm
Compression ratio:	11.0:1
Cooling:	water cooling
Maximum net power output:	17.0 kW at 8750rpm
Maximum net torque:	20.5 Nm at 7500rpm
Ignition system:	Transistorized ignition system with electronic ignition control (ECU)
Spark plug:	NGK CR8EB
Electrode gap:	0.7-0.8 mm
Fuel supply:	EFI
Idle speed:	1700±150 r/min
Air-filter:	Oil filter air filter
Type of starter:	Electric starter

TECHNICAL DATA

	LJ250T-18E
Power transmission	
Clutch:	Centrifugal type
Transmission:	CVT
Chassis	
Scooter version:	LJ250T-18E
Front suspension:	Telescopic fork
Rear suspension:	Unit swing, hydraulic shock absorption
Wheels front:	Light metal (Alu) MT 2.50 × 14
Wheels rear:	Light metal (Alu) MT 3.50 × 13
Tires front:	120/70-14
Tires rear:	130/70-13
Tire pressure:	Front: 2.25Kg/cm ² Rear: 2.50Kg/cm ²
Brakes, front:	Disc brake φ 260 mm,hydraulic
Brakes, rear:	Disc brake φ 220 mm, hydraulic

TECHNICAL DATA

	LJ250T-18E
Lubricants and operating fluids	
Fuel tank capacity:	11.5±0.1 Liter
Fuel:	Use fuel containing up to 5% ethanol by volume: E5. Unleaded fuel min. 95 Octane
Engine oil:	SAE 5W 40 mineral oil API(SJ or higher)
First filling quantity:	1.3 Liter
Usual filling quantity:	1.1 Liter
Engine oil filter change filling quantity:	1.15 Liter
Transmission oil:	Hypoid-oil SAE 85W-140 or SAE 80W-90 GL5
Electrical Equipment	
Generator:	12V 239W
Battery:	12V 10Ah
Fuse:	15A/20A
Head light:	Dipped beam:12V 18.5W/ High beam:LED 12V 24W
Front position light:	LED 12V 3.6W
Instrument lights Speedometer:	12V 0.2W
Control lights indicator and high beam:	12V 0.01W
Brake/rear light:	LED 12V 4.8W/1W
Front turn signal light:	LED 12V 1W
Rear turn signal light:	LED 12V 0.66W

TECHNICAL DATA

	LJ250T-18E
Dimensions and weights	
Overall length:	1960 mm
Width across handlebars:	810 mm without rear view mirror
Maximum height:	1200 mm with windshield -1315mm without rear view mirror
Wheel base:	1410 mm
Seat height:	780 mm
Dry weight:	153 kg
Curb weight:	161 kg
Max. permitted total weight:	321 kg
Top speed:	120 km/h

WARRANTY

Warranty conditions

In case of an occurring fault we will provide the customer with the following performances through the authorized dealer (seller) within the scope of its statutory warranty obligations:

1. Within warranty period, we will rectify any deficiencies caused by material or manufacturing faults through the authorized dealer (seller) by repairing or replacing the affected part according to the statutory warranty regulations. We may deny the requested repair or replacement of the faulty part if this would only be possible with disproportionately high costs. In this case we rectify the deficiency through the authorized dealer (seller) by applying the other possible type of subsequent fulfillment. If both types of subsequent fulfillment are only possible with unproportionately

high costs, we deny the subsequent fulfillment all-together through the authorized dealer (seller). The customer is then entitled to legal claims. Replaced parts pass over into the possession of us.

2. The installation of spare parts within the scope of warranty does not extend the warranty period.

3. The warranty does not cover normal wear and tear caused by normal use as well as wear and tear caused by inappropriate handling and inappropriate use. Oxidation and corrosion are caused by environmental influences and are also not covered under warranty.

4. Warranty claims lodged by the customer will be rejected in case of: Manipulations to the motorcycle, installation of a different exhaust system, changes to the gearbox or secondary transmission ratio and

installation of accessories or spare parts which have not been approved by us. Repairs carried out in workshops not authorized by us and the non-compliance with the maintenance intervals in the workshop of an authorized dealer will also cause the rejection of warranty claims.

5. When submit a warranty claim the customer must present the correctly filled in service book to the seller.

6. The following table gives the customer an overview of the average limits of the respective wear parts.

WARRANTY

List of wear parts

Wear parts	Wear limits
Tires, houses, rims	Depending on riding style, load and tire pressure the wear limit may already be reached after only 500 km or even earlier.
Wheels, hubs	Depending on riding style, load and tire pressure the wear limit may already be reached after only 1500 km or even earlier. Check during each maintenance. Oxidation is a lack of maintenance!
Oils, air filter, leakage inspection on engine	During the first inspection, then with every maintenance interval(every 3000 km/6000 km). Check oil level before every ride.
Spring fork, spring strut	Cleaning / inspection during every maintenance.
Lamps, incandescent bulbs, electric system	Depending on road conditions / unevenness of the road surface the lifetime will be reduced, this may already occur after 500 km.
Brake linings, brake shoes, brake lines	Depending on riding style and load these may already be worn after 1500 km, in cross-country operation even earlier.
Rings, sealants, O-rings	Inspection during every maintenance and replace if necessary.
Radial seals on engine, gearbox, fork and wheels	Depending on road conditions and care wear may start after 500 km. Dirt reduces the lifetime. Do not clean with a high pressure cleaner!
Wheel bearings, steering bearings	Depending on road conditions and care wear may start after 1500 km. Soiling of the wheel hub reduces the lifetime. Check during each maintenance interval, do not clean with a high pressure cleaner!
Swing arm bearing	Depending on load and care after 1500 km, check with every maintenance.
Cables	Depending on care starting after 500 km. Check with every maintenance.
Coverings	Plastic parts will be damaged by caustic or penetrating cleaning agents or solvents.

WARRANTY

List of wear parts

Wear parts	Wear limits
Air cleaner, oil filter	With each maintenance interval.
Starter battery, batteries, fuses, starter brushes	Depending on ambient temperatures failures can be expected in the 6th month, when used for short rides even earlier.
Mirror glasses	Depending on ambient temperatures and care failures can be expected in the 6th month, in winter operation even earlier. Oxidation is a lack of maintenance!
Bowden cables, brake cables, throttle cables	Depending on use and care from the 6th month
Self-locking nuts, cotter pins locking plates bonded screw connections	During each maintenance interval or after unscrewing the nut or unlocking the lock.
Variomatic, CVT, rolls, belts	Depending on riding style and load these may be worn after 500 km.
Clutch linings / friction discs	Depending on riding style and load these may be worn after 500 km.
Pistons, cylinders, crankshaft, conrods, engine bearings	Depending on riding style, load and care these parts may be worn after 200 hours. When riding mainly with full throttle even earlier.
Spark plug	With each or every second maintenance interval.
Exhaust system, inspection of mountings	Depending on use and care from the 6th month, in winter and short distance operation even earlier. Oxidation is a lack of maintenance!

INSPECTION PLAN

Please observe the following:

- During and after the warranty period all inspections should solely be performed by a specialised dealer approved by us.
- Observe the inspection intervals and have the specialised dealer confirm them on the guarantee certificate.
- Use only original spare parts.



CAUTION

In case of non-compliance, the warranty will become null and void.

The various activities carried out are listed on the inspection plan.

During the warranty period the following inspection intervals must be complied with:

At 1.000 km (1st service)
Every 3.000 km / or after 6 months
Every 6.000 km / or after 12 months

After the warranty period the inspection intervals specified in this manual must be applied as follows:

Every 3.000 km / 6 months
Every 6.000 km / 12 months



WARNING

For safety reasons, do not carry out any repair or adjustment activities to the scooter and chassis that exceed a closely restricted scope. Tinkering with safety-relevant parts could threaten the safety of yourself and third parties.

This applied especially to the exhaust system, carburettor, ignition system, fork column, brake system and lights.

Before starting work on the electrical system, disconnect the minus terminal of the battery.

INSPECTION PLAN

Checking and maintenance

The follow chart show the kilometers for maintenance. When reach the kilometer, it must follow the instruction to check and make maintenance. Turning system, engine, electronic system, side stand and wheels are key important parts. It is necessary to have a professional technician to handle.

The symbol means: I: checking, clean, adjust C: clean R: change A: adjust L: lubrication T: tight

Maintenance period Maintenance content	Odometer (KM)(Remark 2)								
	1000km New	4000km 3 months	7000km 6 months	10000km 9 months	13000km 1 year	16000km 15 months	19000km 3 months	22000km 21 months	Everyday check before riding
Oil for crankcase	R	R	R	R	R	R	R	R	I
Oil net	C	C	C	C	C	C	C	C	
Oil filter	R	Replace every 9000km							
Oil gas separator	I,C	I,C	I,C	I,C	I,C	I,C	I,C	I,C	
Air filter(Remark 1)	Every 3000km clean filter, Every 6000km replace the filter element								
Fuel filter			R		R		R		
Drive belt	I		I		R	Check every 6000km, replace every 15000km			
Front clutch roller	I		I		R	Check every 6000km, replace every 15000km			
Spark plug	I			R	Replace every 12000km				
Valve clearance	I		I		I		I		
Brake pedal	I	I	I	I	I	I	I	I	I
Brake oil	Every 2 years or 24000km change. The brake fluid must be change after it turns black.								I

* Remarks: Engine oil is checked every 1000km, if the oil level is lower than the lower scale of the dipstick, it is necessary to add supplemental oil in time.

INSPECTION PLAN

Maintenance period Maintenance content	Odometer (KM)(Remark 2)								
	1000km New	4000km 3 months	7000km 6 months	10000km 9 months	13000km 1 year	16000km 15 months	19000km 18 months	22000km 21 months	Everyday check before riding
Friction disc		I	I	I	I	I	I	I	
Brake system	I,A	I,A	I,A	I,A	I,A	I,A	I,A	I,A	
Brake		I	I	I	I	I	I	I	
Front headlight beam adjustment		I	I	I	I	I	I	I	
Clutch	I	I	I	I	I	I	I	I	
Transmission oil	R	Replace every 18000km							
Stand		I	I	I	I	I	I	I	
Suspension		I	I	I	I	I	I	I	
Screw/bolt/fasteners (Remark 3)	I		I		I		I		
Wheel(Remark 3)	I	I	I	I	I	I	I	I	
Turning system	I				I				
Cooling fluid	I	I	I	I	I	I	I	I	
	Replace every two years								

- * When the mileage is over the highest on the table, please perform according to the period set on the table.
- * Driving on dusty place, it is recommended to clean it frequently.
- * Often drive on bad road condition, make the maintenance and service more frequently.

MAINTENANCE CONFIRMATION

1.000 km/1 months 1st service dealer stamp: km..... date.....	After 3.000 km/6 months dealer stamp: km..... date.....	After 6.000 km/12 months dealer stamp: km..... date.....	After 9.000 km/18 months dealer stamp: km..... date.....
After 12.000 km/24 months dealer stamp: km..... date.....	After 15.000 km/30 months dealer stamp: km..... date.....	After 18.000 km/36 months dealer stamp: km..... date.....	After 21.000 km/42 months dealer stamp: km..... date.....

MAINTENANCE CONFIRMATION

New brake fluid
Yes no

km.....
date.....

Stamp, signature

New brake fluid
Yes no

km.....
date.....

Stamp, signature

New brake fluid
Yes no

km.....
date.....

Stamp, signature

New brake fluid
Yes no

km.....
date.....

Stamp, signature

Circuit diagram

