To owners

KY510X Two-wheel Motorcycle Instruction Manual

First Version（Feb. 2023）

First of all, congratulations on your purchase of a new Kove motorcycle!

By choosing a Kove product, you have become a member of the Kove Motorcycle family.

The instruction manual introduces the main specifications, basic structure, adjustment methods and maintenance knowledge of the motorcycle. It will guide you to master the basic operation of the motorcycle as well as troubleshooting or reducing common faults, which will effectively guarantee the safety of driving, bring out the best performance of the bike, and improve the service life of the motorcycle.

This manual contains the basic configuration of the motorcycle, the content and pictures are for reference only, please refer to the real thing.

Due to the factory time, user requirements and design improvements, etc., may lead to differences between the actual bike and the manual content, we reserve the right to make changes at any time without further notice or obligation, so please understand the inconvenience caused.

The instruction manual is one of the necessary accessories for the motorcycle and should be attached to the motorbike when reselling it to another person.

To ensure your safety and increase your riding pleasure：

●Please read this instruction manual carefully.

●Please follow all recommendations and procedures in the instruction manual.

●Please pay more attention to the safety information written in the instruction manual and pasted on the motorcycle.

Security precautions

This Motorcycle is a non-road motorcycle, only in the professional track driving, the driver must have some physical fitness and off-road driving experience.

To help you make wise decisions about your safety , we have provided procedures and other information on the safety label and in the instruction manual that will alert you to potential hazards that could harm you or others.

Of course, it would be impractical for us to list all the dangers associated with motorcycle riding and maintenance, and you must make the correct judgment.

The addition of electrical equipment is prohibited because the battery used in this motorcycle is a lithium battery, which has a small capacity and may result in a loss of power if electrical equipment is added.

This motorcycle is equipped with a high-speed engine, and for your driving safety, it is recommended that you reduce violent driving.

You will see important safety information in various forms, including：

●Safety label on the body of the motorcycle；

●The safety message is preceded by a safety warning symbol ⚠ and one of the following three warnings: CAUTION, DANGER, WARNING.

The meanings of the three warning phrases are shown below：

⚠CAUTION If you do not follow the instructions, you may be injured.

⚠ DANGER Failure to comply with the instructions will result in serious injury or death.

⚠WARNING Failure to follow instructions will result in serious injury or death

Additional important information is listed below the following headings：

Note -Information to help you avoid damage to your motorcycle, other property, or the environment.

Catalog

Motorcycle Safety

This section contains important information for safe motorcycle riding, please read this section carefully.

Security Guide

To enhance the safety of your ride, please follow these guidelines:

- Perform all daily and routine checks specified in the operating instructions.
- Before filling the tank, turn off the engine and keep away from sparks and flames.
- Don't start the engine in a confined or semi-confined space because the exhaust gases contain carbon monoxide, a toxic gas that can be fatal.

Always wear a helmet

Helmets and protective clothing have been proven to significantly reduce the chances of injuries to the head and other parts of the body, as well as reduce the extent of injuries. For this reason, always wear a certified motorcycle helmet and protective clothing when riding.

Before riding

Make sure you're in good shape, focused, and not drinking alcohol or taking medication. Make sure you and your companions wear certified motorcycle helmets and protective clothing. Instruct your entourage to grip the rear armrest or hug your waist, keep their feet on the pedals, and lean with you when turning, even when the motorcycle stops.

Take the time to learn and practice

Even if you have ridden other motorcycles, practice driving this motorcycle in a safe area to become familiar with the operation and handling of this bike and to adapt to the size and weight.

Be aware of protection when riding a bike

Always pay attention to the surrounding situation, do not think that other drivers can see you, be ready to emergency brake or avoid detour.

Make yourself easily seen

Especially at night, wear bright reflective clothing to make yourself more visible, stop where other drivers can see you, turn on your signal before turning or changing lanes, and honk your horn to alert pedestrians when necessary.

Do not drink and ride

Never ride beyond your personal capabilities or exceed the speed limit set by your motorcycle. Fatigue and negligence can impair your ability to make good judgments and ride safely.

Keep your motorcycle in safe condition

It is important to keep your motorcycle in good condition at all times; check your motorcycle before each ride and complete all recommended maintenance and repairs, do not modify your motorcycle or add accessories that would affect safety, and strictly prohibit overloading

Dealing with unexpected events

Your personal safety is your first priority. If you or anyone else is injured, you should first carefully assess the severity of the injury and determine whether it is safe to continue riding. If necessary, call for emergency assistance. When other people or vehicles are involved in a collision, you should also follow the laws and regulations that apply.

If you decide to continue riding, first turn the ignition to the " ⊗ " (off) position, then evaluate the condition of the motorcycle and check for oil leaks. Check that critical nuts and bolts are tightened, and check the steering handles, steering posts, brakes and wheels to ensure that people and vehicles are safe and riding slowly and carefully.

Your motorcycle may have sustained damage that is not immediately apparent. Please take it to a special Kove repair shop or a qualified repair store for a thorough inspection as soon as possible.

Carbon monoxide hazards

Exhaust fumes contain toxic carbon monoxide. Carbon monoxide is a colorless, odorless gas, and inhaling higher concentrations of carbon monoxide can cause a person to lose consciousness and may even be fatal.

If you start your engine in a confined or semi-confined space, the air you inhale may contain dangerous amounts of carbon monoxide. Do not start your engine in a garage or other confined space.

⚠ Warning

·Running a motorcycle engine in a confined or semi-confined space can lead to a rapid build-up of toxic carbon monoxide gas.

·Inhalation of this colorless and odorless gas can cause rapid loss of consciousness and death.

·Start the motorcycle engine only in a well-ventilated outdoor area.

Safety Precautions

- Ride carefully, always keep your hands on the directional handlebars and your feet on the pedals.
- Be sure to grab the back armrest or hug your waist and put their feet on the pedals while driving.
- Always keep an eye on the safety of riders, followers, and other drivers on the road.

Protective clothing

Make sure you are wearing a certified motorcycle helmet, goggles and visible protective clothing, and ride carefully according to weather and road conditions.

Helmets

Certified by safety standards, eye-catching and sized to fit your head.

- Must be secure and comfortable and held in place with a chin strap.
- Face shield or other certified goggles that do not obstruct vision.

Gloves

High abrasion resistant full finger leather gloves.

Boots or riding shoes

Sturdy and slip-resistant boots that protect the ankle.

Clothing

Eye-catching long-sleeved shirt and durable pants(or protective suit) with protective effect for riding.

Warning

·Not wearing a helmet increases the chances of serious injury or death in an accident.

·Make sure you always wear certified helmets and protective clothing.

Riding Precautions

Break in period

Follow these guidelines during the first 500 miles of driving to ensure reliability and performance later in the motorcycle's life.

● Avoid full throttle starts or rapid acceleration.

● Avoid emergency braking and rapid downshifting.

● Ride with caution.

Brake

Follow these guidelines：

●Avoid excessive emergency braking and downshifting

▶Sudden braking can reduce the stability of your motorcycle.

▶Slow down before you turn, otherwise you will risk slipping.

●Always ride carefully on slippery roads

▶Tires on such surfaces are more likely to skid and require longer braking distances.

●Avoid continuous braking

▶When going downhill on long and steep slopes, repeated braking will cause the brakes to seriously overheat and affect the braking effect, so the brakes should be used intermittently to slow down with the help of engine braking.

●Using both front and rear brakes can achieve complete braking effect.

Anti-lock Braking System（ABS）

This model is equipped with an ABS system, which prevents tire lock-up during emergency braking.

- The ABS does not work when the vehicle speed is below 10 km/h.
- When braking, it is normal that the brake handle or rear brake pedal may bounce gently after the ABS intervenes.
- Always use the recommended tires to ensure that the ABS will operate correctly.

Engine Brake

When you release the throttle, the engine brake will help the motorcycle slow down. If you want to slow down even more, you can downshift to a lower gear; when going downhill on long and steep slopes, you should slow down with the help of the engine brake and use the brake intermittently.

Humid and rainy environment

In wet and rainy conditions, the road will be slippery and wet brakes will reduce braking efficiency, so be extra careful when braking. If the brakes are wet, you can intermittently and repeatedly brake while driving at low speeds, which helps to dry the brakes quickly.

Parking

- Park on a firm, level surface.
- If you must park on a slightly sloped or loose surface, make sure it is firmly parked and that the motorcycle cannot move or tip over.
- Make sure that hot parts do not come into contact with flammable materials.

●Do not touch the engine, muffler, brakes and other hot parts until they have cooled down.

●To avoid the possibility of theft, always lock the steering handlebars and remove the keys before leaving the motorcycle unattended.

▌Parking with side stand

1.Turn off the engine.

2.Lower the side stand.

3.Slowly lean the motorcycle to the left until its weight is concentrated on the side stand.

4.Turn the steering handle completely to the left.

▶ Turning the steering handle to the right will reduce stability and may cause the motorcycle to fall over.

5. Turn the ignition switch to the " 🔒 " (locked) position and remove the key.

Refueling/Brake Fluid and Fuel Guide

Follow these guidelines to protect your engine and catalytic converter：

●Use only unleaded gasoline.

●High octane gasoline is recommended; use of lower octane gasoline will reduce engine performance.

●Ethanol gasoline is not recommended; using ethanol gasoline can reduce engine performance.

●Do not use spoiled or contaminated gasoline, or oil-gasoline mixtures.

●Prevent dirt and water from entering the fuel tank.

●Prevent dirt and water from entering the fuel tank.

●Brake fluid has a corrosive effect. When adding it, be sure to avoid splashing in the eyes, adhering to the skin and avoiding contact with non-metallic materials of the motorcycle.

Accessories and modifications

We strongly recommend that you do not add accessories to your motorcycle other than those designed specifically for your motorcycle by Kove, and do not modify the original design of your motorcycle, as doing so may render it unsafe. Unauthorized modifications to your motorcycle may also void your warranty and render your motorcycle illegal to drive on public roads and highways. When you decide to add accessories to your motorcycle, first determine which modifications are safe and legal.

It is prohibited to attach a trailer or add a straddle bucket to your motorcycle; it is prohibited to modify or add other equipment at the engine mounting point. Your motorcycle is not designed for these accessories and their use can seriously damage the handling and safety of the motorcycle.

⚠ Warning

·Improper accessories or modifications may cause safety accidents in which you may be seriously injured or even endanger your life.

·Please follow all instructions in the instruction manual for accessories and modifications.

Loading Guide

● Carrying extra weight can affect the handling, braking and stability of your motorcycle. Please be sure to maintain a safe speed when riding with a heavy load

● Please stay within the specified loading limits.the maximum payload for the entire bike is 150kg, do not overload.

● Secure all luggage and place it evenly and smoothly near the center of the motorcycle.

● Do not place items at the lights or muffler.

⚠ Warning

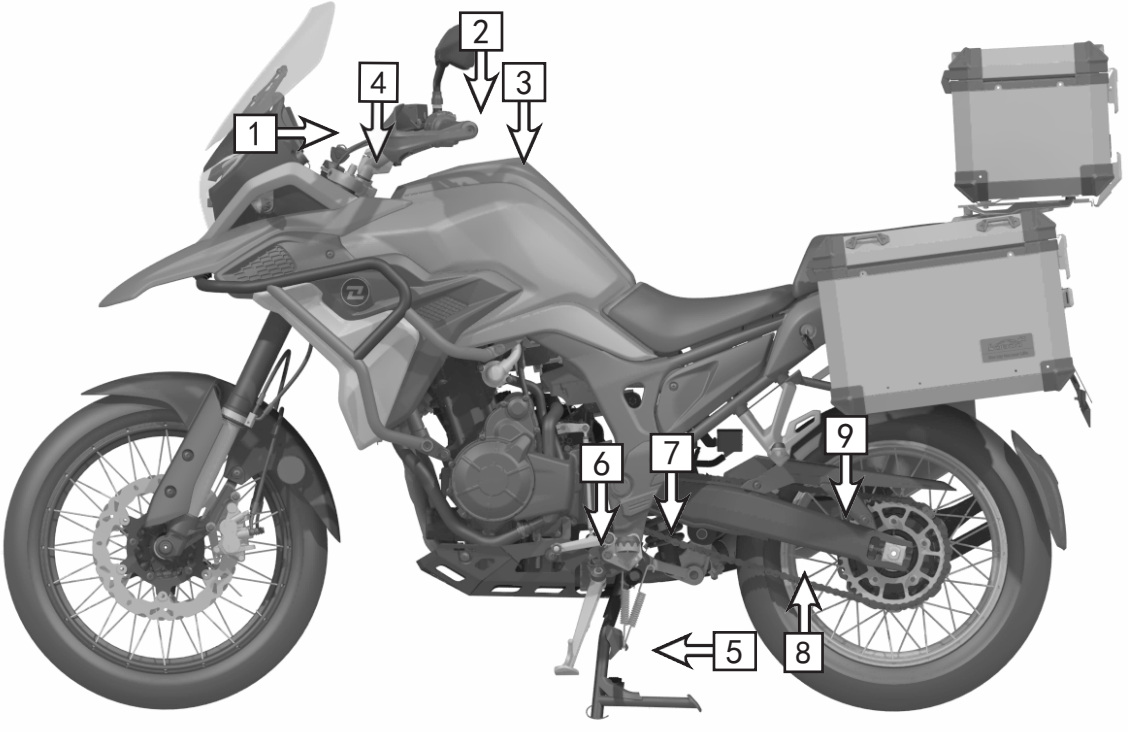
·Overloading or improper loading can lead to accidents and serious injury or death.

·Please follow the loading instructions in the instruction manual for loading.

Operation Guide

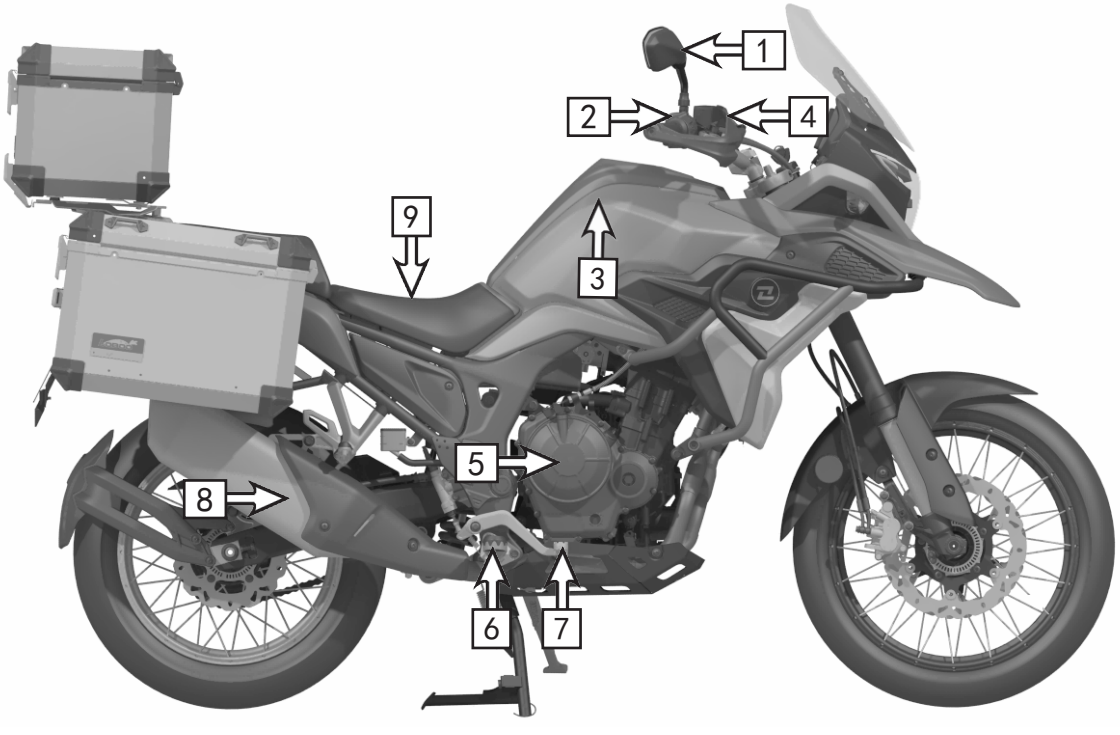
This section contains important information on the operation of motorcycle use, please read this section carefully.

Parts Location Diagram



1.Instrument Assembly 2.Left handlebar switch 3.Fuel tank lock 4.Ignition switch 5.Main stand 6.Shift pedal 7.Left front footrest 8.Chain 9.Flat fork

Parts Location Diagram



1.Rearview mirror 2.Right handle switch 3.Fuel tank 4.Front brake fluid reservoir 5.Engine 6.Right front footrest 7.Rear brake pedal 8.Muffler 9.Seat

Instrument

Display Check

When the ignition switch is turned to '◯ " (on), the instrument is energized to play the power-on animation, followed by a self-test, and all function modules and symbols are displayed; if the display is missing during the self-test, please refer to the Kove repair shop for repair.

Instrument Interface

NO.	Name	description
1	Steering light	The left indicator flashes when the left turn signal comes on.The right indicator flashes when the right turn signal comes on,
2	Message display	Display motorcycle message
3	Tachometer	Engine speed display
4	Riding mode	The economic model shows ECO; Sport mode displays SPORT
5	Neutral indicator	This light is on when in neutral
6	Speedometer	Displays the current speed
7	ABS fault indicator	① This light is on when a fault occurs; ② After the vehicle is powered on, this light flashes (0.5S on, 0.5S off) is normal, when the speed >5km/h, the ABS self-test is off after passing.
8	Gear indication	Displays the current gear
9	Oil pressure indicator	This light is on when the oil pressure is insufficient
10	ABS status display	Front and rear wheels show white outline: All ABS on Rear wheel shows yellow fill: Rear ABS off Front and rear wheel shows yellow fill: All ABS off
11	Low voltage indicator	The light comes on when the battery voltage is too low
12	Tire pressure alarm	This light is on when the tire pressure data is abnormal
13	Bluetooth and network display	Lights up after connecting with mobile phone Bluetooth or WIFI (gray symbol when not connected)
14	Maintenance indicatir	This light is on when the motorcycle reaches the maintenance set conditions

Description of the instrument's function

No.	Name	Description
15	Water temperature display	① When the water temperature is lower than 0℃, the first frame flashes, at this time, you need to confirm whether the coolant is frozen or not, after confirming normal, you can start ② When the water temperature indicator block shows red and lights up the "water temperature warning light", it means that the water temperature is too high, ensure safety, stop and check, wait for the water temperature to drop before continuing to drive ③ When the water temperature data is abnormal, all water temperature color blocks and icons will flash together. (Blinking is normal when the flameout switch is off)
16	Fuel display	Shows how much fuel is available ① When the oil level is below 1 cell (after a period of continued use, the red oil level will flash along with the oil level symbol), please replenish the fuel as soon as possible; ② If the fuel symbol flashes at the same time as all oil level color blocks, indicating that the oil level signal is abnormal, please go to the Kove repair shop as soon as possible for maintenance
17	Temperature and weather display	Display after Bluetooth connection with cellphone
18	Time display	Displays the gauge time
19	Bike data/ Easy navigation	Bike data display(when not navigating); Simple navigation display (need to connect the cell phone Bluetooth, and set the navigation in the cell phone side of the special APP)
20	Water temperature warning indicator	The light comes on when the water temperature is too high
21	EFI fault indicator	This light comes on when there is a fault in the EFI system (this light comes on when the engine is powered up. After normal start, this fault light goes off as normal)
22	High beam indicator	The light comes on when the high beam indicator is turned on
23	Position light	The light comes on when the position light is turned on

Instrument Full-screen Navigation Interface

No.	Name	Description
1	Navigation interface	Displays the full-screen navigation screen.
2	ABS status display	Front and rear wheels show white outline: All ABS on Rear wheels show yellow fill: Rear ABS off Front and rear wheels show yellow fill: All ABS off.
3	Gear indication	Displays the current gear.
4	Speedometer	Displays the current speed.
5	Oil level indication	Displays the amount of fuel remaining.

Menu description

Primary menu	Secondary menu	Description
Riding mode	SPORT	Set the engine power take-off mode. SPORT：Sport mode；ECO: Economic mode.Riding mode has a memory function.
	ECO	
ABS mode	Turn on the front and rear wheels	Set the ABS working status, and the current ABS working status is displayed through the instrument icon.
	Turn off the rear wheel	
	Turn off the front and rear wheels	
Tire pressure	Alarm limits	Set the upper and lower limits of tire pressure alarm, the factory default is the upper limit: 2.9bar, the lower limit: 2.0bar. Users can adjust according to actual usage.
	Single tire matching	Matched to tire pressure sensor. This feature is usually only used when replacing a tire pressure sensor.
	Tire pressure unit	Tire pressure unit conversion.
	ID code	Displays the tire pressure sensor ID.
	Version number (Italy)	Tire pressure mode version number.
Riding data setting	Subtotal mileage	Set the bike data display items on the main interface, and the selected items are displayed on the first page first (after the number exceeds the number of displayed columns, they are automatically rowed back), and the unselected items are arranged on the next page. Weather conditions can be set to show on or off. Note: 1.The average speed = 0, the average speed shows "--"; 2.When the bike needs to be refueled, the range is displayed "--"; 3.The average fuel consumption is affected by many factors such as bike working conditions and riding habits, and the display data is for reference only. 4. Long press the BACK button to pop up the subtotal mileage clearance menu, and follow the prompts.
	Average motorcycle speed	
	Average fuel consumption	
	Riding time	
	Range	
	Battery voltage	
	……	

Primary menu	Secondary menu	Description
Setting	Connection	Set up Bluetooth/WIFI connection with mobile phone (in order to ensure normal connection, the mobile phone dedicated APP needs to open relevant permissions according to the prompts; When WIFI is connected, you cannot choose to use the meter WIFI to surf the Internet, otherwise it will affect the mobile phone Internet function).
	Screen	Display mode: Users can choose the day/night UI mode that they prefer to use all the time, and th e factory default is auto; Display brightness: Users can modify the display brightness of the meter according to their preferences.
	Time/date	The instrument's time/date can be set manually by the user. If you select Automatic, when connected with the phone's Bluetooth, it will automatically synchronize with the phone's time.
	Language	Chinese and English menu switching.
	Maintenance	Setting and clearing of maintenance mileage or time. First warranty 1000km or one year, second warranty 6000km or one year, this default parameter can not be modified, after that the user can set the maintenance reminder cycle according to the actual situation. How to clear the maintenance reminder: Long press SET button under the maintenance service interface, the clear dialog box will pop up, and you can operate according to the prompts.
	Unit	Display unit switching.

The instrument functions are operated as follows:

Vehicle data viewing:

Under the main interface of the instrument, you can turn the page by pressing the up and down keys to view vehicle-related data.

Information view:

1.When the main interface appears with an information prompt (for example: fault message), you can press SET to view the details, and press the BACK button to clear.

2.When connected with the Bluetooth connection of the mobile phone, the message display section will reflect the mobile phone information push, short press the SET key to view details, short press the BACK button to clear.

Instrument navigation operation:

When normally connected with mobile phone Bluetooth/WIFI, and after setting navigation on the dedicated APP on the mobile phone, press and hold the up button to enter the instrument full-screen navigation, long press the key to enter the instrument simple navigation, and short press the BACK key to exit the instrument navigation interface.

Feature settings:

Press the SET key briefly to enter the gauge menu. ABS mode, instrument brightness, riding data, automatic headlights (on or off), time, language and other parameters can be set according to the man-machine dialogue menu.

Instrument and mobile phone interconnection:

1. The positioning function, navigation function, information push function, weather function, automatic time function, altitude display and other functions in the TFT instrument need to be connected with the mobile phone with the relevant APP installed.

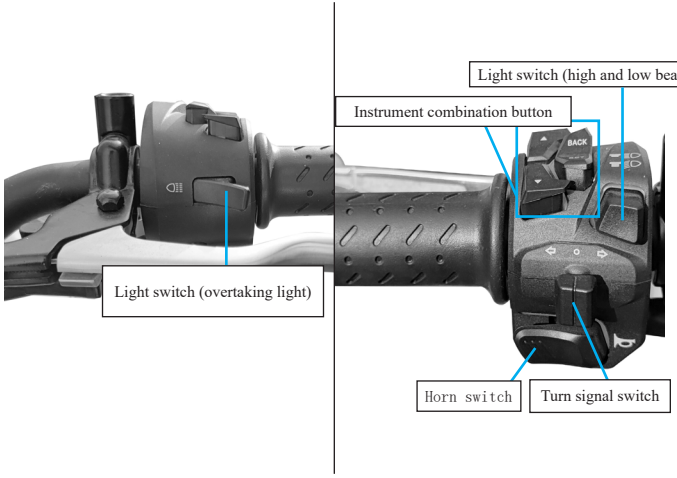
2.Mobile APP installation steps: (1) Enter the instrument setting menu; (2) Select Connection Settings; (3) Select Bluetooth connection, use the Internet-connected mobile phone to scan the QR code in the interface, and download and install the APP according to the prompts. (In order to get a better experience, when using the mobile app, please pay attention to the APP related usage.

Note

- You need to modify the ABS mode, which must be done while it is parked.

Switch

Left handlebar switch



Light switch:

Turn on the overtaking light (the overtaking light switch is located on the back of the handlebar switch)

Turn on high beam

Turn on low beam

Instrument combination button:

This combination button is used to set the functions of the meter:

▲▼ The function selection toggles up and down

BACK Back button

SET Set the instrument function button

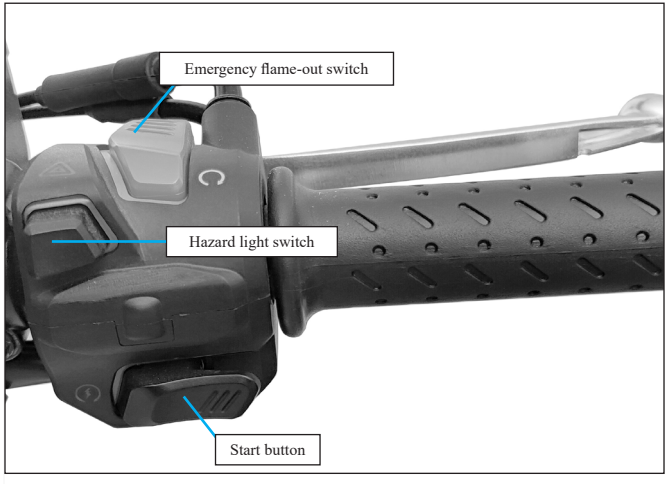
Danger warning light switch:

Turn on the left-hand turn signal: toggle the switch to the left and return the turn signal switch to its original position after operation.

Turn on the right-hand turn signal: toggle the switch to the right and return the turn signal switch to its original position after operation.

● Turn signal off: When the turn signal switch is in the middle position, press this button to turn off the turn signal.

Right handlebar switch



Emergency flame-out switch:

The engine can only be started when the switch is in the "◯" (running) position;

When the switch is in the "⊗" (stop) position, the engine does not start.

▶In an emergency, switch to the "⊗" (stop) position to extinguish the engine.

Danger warning light switch:

△ For emergency use, press and turn on the left turn signal and right turn signal at the same time.

Start button:

When the emergency kill switch is set to the "◯" position:

① The engine is in neutral, press this button to start the engine.

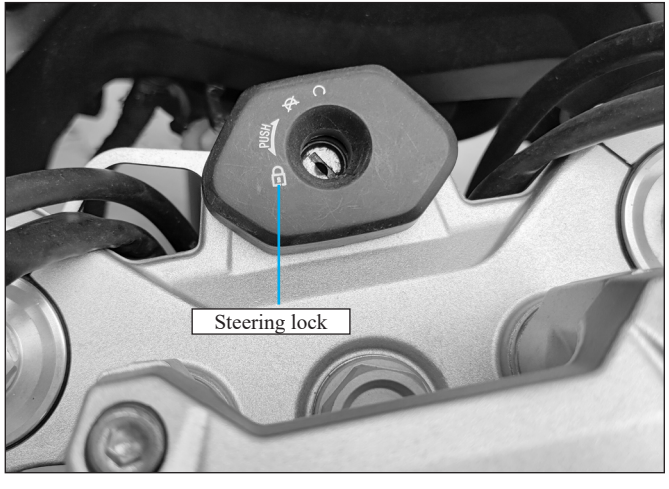
② If the engine is not in neutral, you need to retract the side bracket and pinch the clutch handle, and press this button to start the engine.

Note

·After a wash or heavy rain, etc., use compressed air to blow out the stagnant water inside the switch to avoid abnormal function of the switch.

Ignition switch

When the key is in the " ⊗ " position, turn the direction handle to the far left, press the key inward, rotate counterclockwise to " 🔒 "



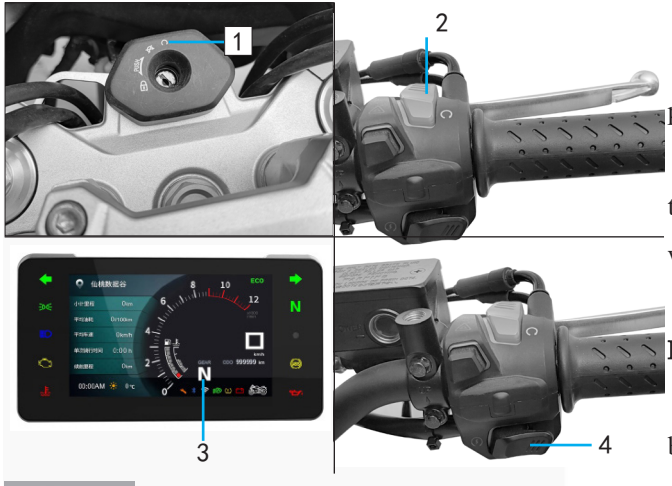
Position	Function	Remark
⊗	Use when parking (motorcycle power off)	The key can be removed
○	Use when starting or driving	The key can't be removed

⚠ Warning

- When parking (including long stops), the ignition switch must be placed in the "⊗" or "PUSH" position to ensure vehicle safety and prevent battery "battery loss".
- Do not push the motorcycle with the steering mechanism locked, otherwise it will lose its balance.

Start the engine

Whether the engine is hot or cold, follow the instructions below to start the engine.



1.Rotate the ignition to the “ ”(on) position.

2.Verify that the engine kill switch is in the "" (running) position.

3.Switch gears to neutral (N neutral indicator lights up), or retract the side brackets, pinch the clutch handles, and start the motorcycle with the transmission in gear.

4.With the throttle fully off, press the start button.

If the engine does not start:

1.If the engine does not start within 3 seconds, wait 10 seconds before repeating step 4.

Note

·If the engine starts and the idle speed is unstable, gently apply the throttle.

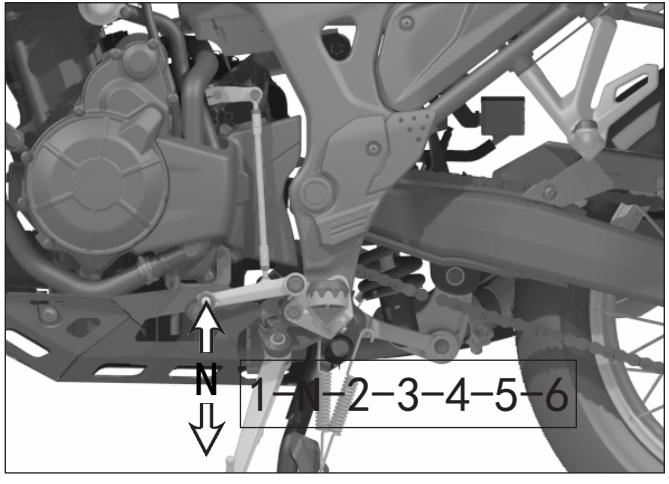
·Prolonged high-speed idling and spinning can damage the engine and exhaust system.

·Vigorously applying the throttle or idling at high speed for more than 5 minutes may cause discoloration of the exhaust pipe.

·If the throttle is wide open, the engine will not start.

Shift gears

Your motorcycle has 6 forward gears with a shift mode on 1 under 5.



Way to change gears:

Warm up the engine to keep it running normally.

1.When the engine is idling, disengage the clutch and press the gear shift pedal down so that the transmission enters the low gear (first gear) position.

2.Gradually increase the engine speed, slowly release the clutch handle,these two actions coordinate and cooperate to ensure a natural start.

3.When the motorcycle reaches a balanced driving state, reduce the engine speed and then disengage the clutch, hook the gear pedal upwards into the second gear, and so on, and the rest of the gear changes can be carried out in the same way.

Things you should pay attention to while driving:

1.Avoid unnecessary engine idling, and do not allow the engine to idle at high speed, otherwise it will seriously damage the parts.

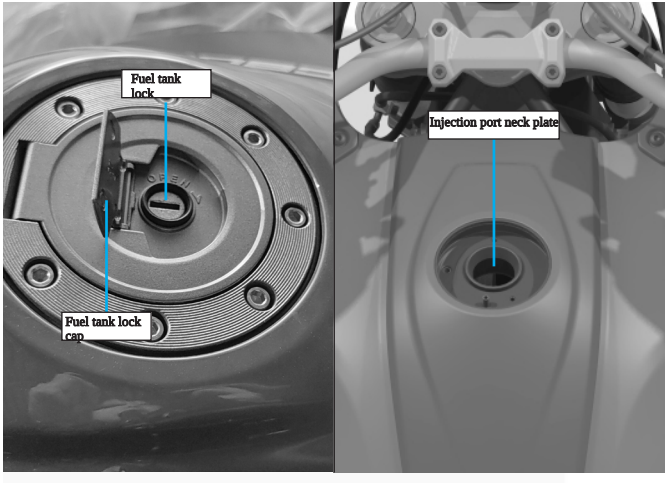
2. The clutch is driven in a semi-disengaged state, which will make the clutch plate wear out quickly.

3.If you feel that the engine horsepower is insufficient when climbing, you should switch to low gear in time.

4. In driving, especially downhill and high-speed driving, it is not allowed to use the front brake alone or neutral coasting, and it is not allowed to drive without the handle.

5.When parking, retract a small throttle while cutting off the clutch and then braking.

Refueling



Open the tank cap:

Open the fuel tank cap by flipping the lock cover, inserting the ignition key, and rotating it clockwise.

Close the tank cap:

1.After refueling, press down on the tank cap until locked.

2.Remove the key and close the fuel tank lock cap. If the fuel tank cap is not locked in place, the key cannot be removed.

Refueling should not be higher than the injection port tube neck plate, the fuel tank capacity is 20L, After stopping with the side stand , open the tank cap for filling. After injecting the fuel, close the fuel tank cap and lock.

Unleaded gasoline of 92# or above is recommended.

Warning

·When refueling, please do it outdoors, be sure to turn off the engine, keep away from heat sources, sparks or open flames, and wipe clean immediately if it spills.

Maintenance

Please read the "Maintenance" and "Maintenance Specifications" carefully before preparing for maintenance. For maintenance data, please refer to "Technical Parameters".

Maintenance

The importance of maintenance

It's important to keep your motorcycle in good service condition, which is essential for your safety, as well as protecting your property, getting the best performance, preventing breakdowns and mitigating air pollution.

Maintenance is an important responsibility of motorcycle owners, ensuring that inspections are carried out before each ride and that regular inspections are carried out as described in the maintenance cycle table.

Safety of maintenance

Read the service instructions before each service to ensure you have the necessary tools, parts and skills. We cannot alert you to every hazard that may arise during maintenance. Only you can decide if you should have maintenance or repairs done.

Follow these guidelines for maintenance:

●Turn off the engine and remove the key.

●Park the motorcycle on a firm and flat ground with a side bracket or support it with a maintenance bracket.

●Please wait for the engine, muffler, brake, and other hot parts to cool down before starting operation, otherwise it may cause burns.

●Please start the engine under specified circumstances and in a well-ventilated environment.

⚠ Warning

· Failure to perform proper maintenance prior to riding or to properly remove malfunctions may result in serious injury or fatal accidents.
· Follow the inspection, maintenance recommendations and maintenance cycle table provided in the instruction manual.

Maintenance cycle table

The motorcycle should be maintained within the specified time, and for safety, it should only be serviced by the Kove repair shop.

The symbols in the table have the following meanings:

I：Inspection, cleaning, adjustment　R：Replacement　A：Adjustment　L：Lubrication

Items \ Times		Project period	MILEAGE TABLE Km(Remark 2)				
			1000Km	4000Km	8000Km	12000Km	
※	Fuel system oil circuit			I	I	I	
※	Fuel filter					R	
※	Throttle Operation System		I	I	I	I	
	Air filter element	Remark 1			R		
※	Spark plug		I	I	I	I	
	Exhaust valve clearance		I	I	I	I	
	Intake valve clearance		I	I	I	I	
※	Engine oil		1000Km,6000Km, replace every 6000km。				
※	Oil filter		Change it together with the oil change				
※	Timing chain tension		A	A	A	A	
	EFI system			I	I	I	
	Drive chain			I、L	I、L	I、L	
	Battery	Every month	I	I		I	
	Brake shoes wear			I	I	I	
※※	Brake system		I	I	I	I	
※	Headlight dimming		I	I	I	I	
※	Clutch		I	I	I	I	
※※	Fastener			I	I	I	
※※	Directional bearing		I	I	I	I	

The item is repaired by the personnel of the special repair store of Kove repair shop. If the user has special tools, repair parts and repair ability, he can also repair by himself, and the repair knowledge can refer to this instruction manual.

※※To ensure safety, this project can only be repaired by the personnel of the special repair store of Kove.

Remark:

1.When driving in dusty areas, cleaning should be done frequently.

2.When the odometer reading exceeds the given maximum number, its maintenance cycle is still repeated at the mileage interval specified in the table.

Service outlets：

（Offical seal of the unit）

Service Personnel：_____

User Signature：_____

Date：_____

Torque cycle inspection schedule for critical parts

No.	Name of the fastening parts	Recommended detection period
1	Front and rear wheel axles, flat fork shafts are fastened	Torque check required at each maintenance interval.
2	The upper and lower couplings are fastened before the front shock absorbing fastening	
3	The upper plate is fastened with the direction column	
4	Directional column four-slot nut fastening	
5	Steering handle lower mount fastening	
6	Engine small sprocket installation tightening	
7	Eccentric wheel fastening	
8	Engine Suspension Fastening	
9	Rear Shock Tightening	
10	Rocker bolt tightening	
11	Muffler front section connected to engine	
12	Front and rear brake caliper tightening	
13	Rear brake pump fastening	
14	Shift lever and adjusting lever end bearing tightening	
15	Cushion body and bracket	
16	Buffer body cushioning rubber	
17	Brake pedal and adjusting rod end bearing tightening	
18	Full brake line tightening	When the oil circuit is cleaned, the maintenance is performed according to the required torque.
19	Oil rail fastening	
20	Fuel Pump Fastening	
21	Front and rear brake disc fastening	When checking or replacing each maintenance cycle, the maintenance is carried out according to the required torque and gluing method.
22	ABS gear ring	
Note: The torque cycle check items not expressed in this instruction manual, torque standard according to our “Maintenance Manual”.		

Bearing parts checklist

<table>
<tr><th>No.</th><th>Bearing part name</th><th>Recommended testing period</th><th>Recommended Maintenance Intervals</th></tr>
<tr><td>1</td><td>Steering column upper and lower taper bearings</td><td>Each maintenance interval</td><td>10000KM/one year</td></tr>
<tr><td>2</td><td>Eccentric wheel needle roller bearings</td><td>Each maintenance interval</td><td rowspan="2">20000KM/one year</td></tr>
<tr><td>3</td><td>Flat fork needle roller bearings</td><td>Each maintenance interval</td></tr>
<tr><td>4</td><td>Eccentric wheel deep groove ball bearings</td><td colspan="2" rowspan="5">Each maintenance cycle to check the wobble without jamming, disassembly and inspection in case of failure, and replacement of bearings if necessary.</td></tr>
<tr><td>5</td><td>Brake pedal bearing</td></tr>
<tr><td>6</td><td>Shift lever bearing</td></tr>
<tr><td>7</td><td>Front wheel bearings</td></tr>
<tr><td>8</td><td>Rear wheel bearings</td></tr>
<tr><td colspan="4">Note: When the bearing parts are inspected, the matching oil seals and bushings need to be inspected, maintained or replaced at the same time.</td></tr>
</table>

Maintenance specifications

To ensure safety, it is your responsibility to conduct a pre-ride inspection and ensure that any problems you find have been corrected. A pre-ride check is required.

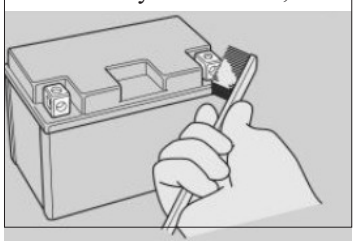
Items	Content
Handlebar	Flexible rotation, no clearance and loosening
Brake system	Check its health, check the front and rear brake fluid levels and the amount of brake pad wear
Fuel level	Sufficient fuel storage for the planned distance (refueling if necessary)
Throttle	Check that it opens smoothly and closes completely in each steering position
Clutch	Check its health and, if necessary, adjust the free itinerary
Wheels and tires	Check its condition of use and tire pressure, and replenish air pressure if necessary
Drive chain	Check its condition and sag status, adjust and lubricate if necessary
Lighting, horns	Check whether the lighting system and horn performance is good
Oil level	If necessary, add engine oil and check for leaks
Instrument indication	Check whether the indicators on the meter are displayed normally

Replace parts

Battery

To ensure reliability and safety, please use the original parts of Kove repair shop.

You do not need to check the battery electrolyte volume and add distilled water. If the battery terminals are dirty or corroded, clean the battery terminals.



Clean battery terminals

1.Remove the battery.

2.If the terminal has just started to corrode and is covered with white material, wash it with warm water and wipe it clean.

3.If the terminals are severely corroded, clean and polish them with a wire brush or sandpaper. Please wear safety glasses when polishing.

4.After cleaning, replace the battery.

The battery life is limited, consult the special repair store of Kove Motorcycle when you need to replace the battery, be sure to replace the same type of battery.

Note

·Improper disposal of batteries may cause harm to the environment and human health, please dispose of waste batteries in accordance with local environmental regulations.

·Retrofitting the entire vehicle electrical may lead to battery loss and even cause electrical system failure.

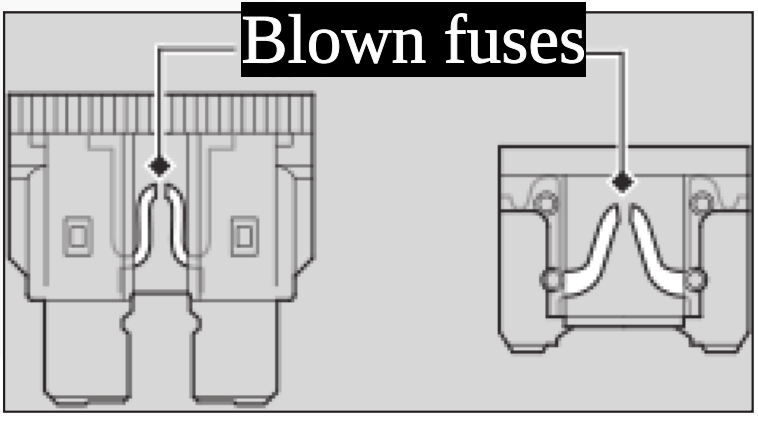
Fuse

Fuses protect your motorcycle's circuitry. If some of your motorcycle's electrical components stop working, check and replace the blown fuse.

After cleaning, replace the battery

Turn the ignition switch to the " OFF) position to remove and check the fuse. If the fuse is blown, replace it with a fuse of the same size. Please refer to "Technical Data" for fuse specifications.

If the fuse blows frequently, there may be a hidden problem with the appliance, so please have it serviced by the Kove Repair Shop.



Note

·Fuses need to be replaced in equal amounts, if a higher rated fuse is replaced it will increase the chance of damaging the electrical system and risk burning the motorcycle.
·Installing non-Kove moto parts can overload the electrical system, cause the battery to discharge, and can even damage the system.

Engine oil

The consumption of engine oil and the drop in oil quality will vary depending on the riding conditions and use time, the higher the operating speed, the faster the oil consumption rate, long-term high-speed or high speed operation, should shorten the oil change interval, check the engine oil level frequently, if necessary, add the recommended engine oil.

When used in extreme temperatures, the oil quality drops faster, and the oil that has become dirty or has been used for a long time should be replaced as soon as possible.

Brake fluid

Do not add or replace brake fluid except in an emergency.

Use only brake fluid freshly removed from the sealed container, and if you add brake fluid, have the brake system checked by a Kove repair shop as soon as possible.

Coolant

Only the original undiluted Kove pre-mixed coolant can be used, the original Kove pre-mixed coolant can be excellent in preventing corrosion and overheating, please pay attention to the coolant capacity, if the liquid level is lower than the lower limit, please add it in time. Coolant freezing point -38 °C, boiling point 125 °C.

Select engine oil

Motor oil should be selected from the SN grade of the API classification, which is SN 5W/40 and above.

Note

·Brake fluid can damage plastic and painted surfaces. If spilled, wipe up immediately and clean thoroughly.

·Recommended brake fluid: DOT4 brake fluid or equivalent.

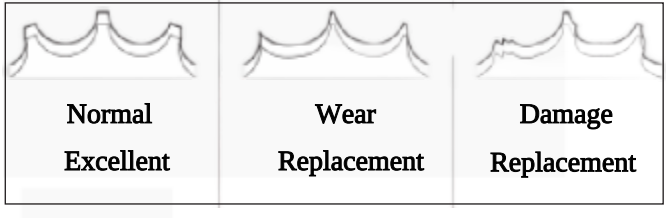
·The use of coolants not designed for aluminum engines, ordinary tap water or mineral water can cause corrosion.

Drive chain

The drive chain must be checked and lubricated regularly. If you are constantly driving in poor road conditions, driving at high speeds, or repeatedly increasing the speed, you need to check the chain more often.

If the drive chain does not run smoothly, makes abnormal noises, has damaged rollers or loose latches, or the oil seal is missing or bent, please refer the chain to Kove Repair Shop for inspection.

Also check the active sprocket and driven sprocket, if any of them have worn or damaged teeth, please take it to the Kove repair shop for replacement.

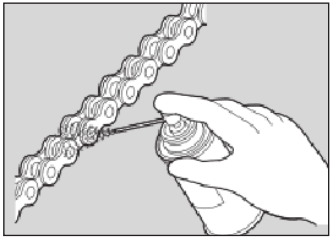


Clean and lubricate

After checking the sagging, turn the rear wheel while cleaning the chain and sprocket, you can use a dry cloth, special cleaner for the oil seal chain or neutral detergent, if the chain is dirty, you can use a soft brush; After cleaning, wipe dry and lubricate with the recommended oil.

Do not use steam cleaners, high-pressure cleaners, wire brushes, volatile solvents such as gasoline and benzene, scrubs, chain cleaners and lubricating oils that are not dedicated to oil seal chains, otherwise the chain oil seal may be damaged.

Avoid getting oil on the brakes or tires, and avoid using excessive amounts of oil to avoid splashing on clothes or motorcycles.



Note

·Using a new drive chain on a worn sprocket will accelerate chain wear, and both the drive chain and sprocket should be replaced at the same time.

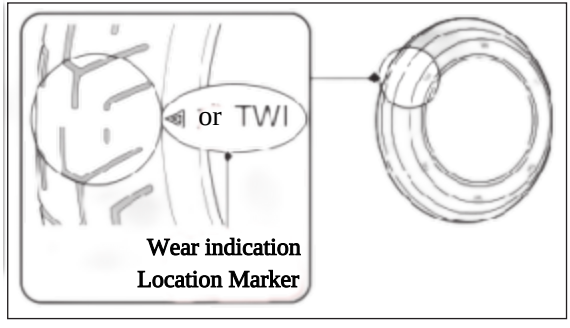
·Recommended lubricant: chain oil seal special lubricant SAE80 or 90 gear oil.

Tires (inspection/replacement)

Tire specifications

Front:110/80R19

Rear:150/70R17



Abnormal wear check

Check the contact surfaces of the tires for signs of abnormal wear.

Check the depth of the tread

Check the tread wear indicator and replace the tire immediately if the wear reaches the indicator mark.

Check your tire pressure

Check the current tire pressure through the instrument, when there is low tire pressure or alarm indication, please replenish the tire pressure in time. Cold tire pressure: front tire 230KPa; rear tire 250KPa.

Injury examination

Inspect the tire for cuts, cracks, exposed fabric, tire threads, nails or other foreign objects embedded in the side tread of the tire, and check the sidewall of the tire for any abnormal bulges or swelling.

Whenever you change your tires, follow these guidelines:

- Use recommended tires or equivalent products with the same size, construction, speed class and load capacity.
- After the tires are installed, use the original balance positioner or equivalent equipment of Kove to balance and position the wheels.
- This motorcycle rim is designed to use tubeless tires, please do not install your own inner tube in the tubeless tire; if you install an inner tube, the inner tube will rub against the rim when accelerating or braking sharply, and the excessive heat will cause the inner tube to burst.

⚠ Warning

·Using over-worn or improperly inflated tires can lead to accidents and serious injuries, please follow the relevant tire maintenance guidelines in the instruction manual.
·Installing unsuitable tires can affect handling and stability and lead to accidents that can seriously injure you or even endanger your life.
·Always use the size and type of tires recommended in this instruction manual.

Air filter

This motorcycle is equipped with an air filter made of sponge, please do not maintain it by yourself, and it should be cleaned or replaced by Kove repair shop.

Air filter element

Tool

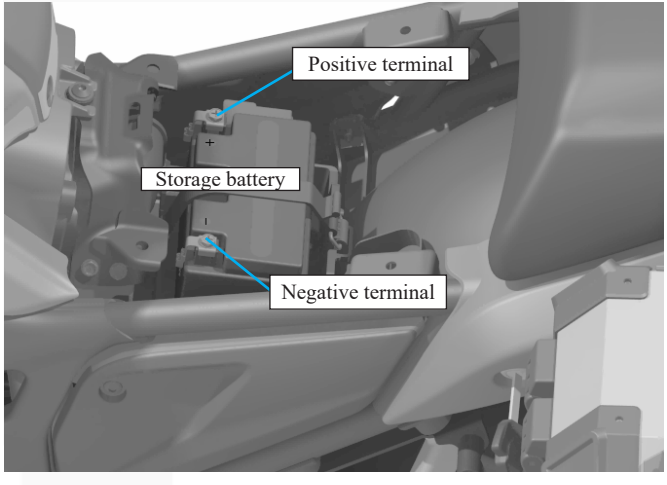
The accompanying tools are embedded under the rear seat cushion.

You can use the on-board tool for simple repairs, minor adjustments, and parts replacement.

- Double-ended screwdriver
- Double head wrench 8X10
- Double head wrench12X14
- Allen Key 5
- Allen Key 6
- Fishtail pliers
- Tool bag

Disassembly and installation of body components

Battery



Disassembly

Confirm that the ignition is turned to the " ⊗ " (off) position.

1.Remove the seat cushion.

2..Loosen the rubber band from the rear side.

3..Disconnect the negative (-) terminal of the battery.

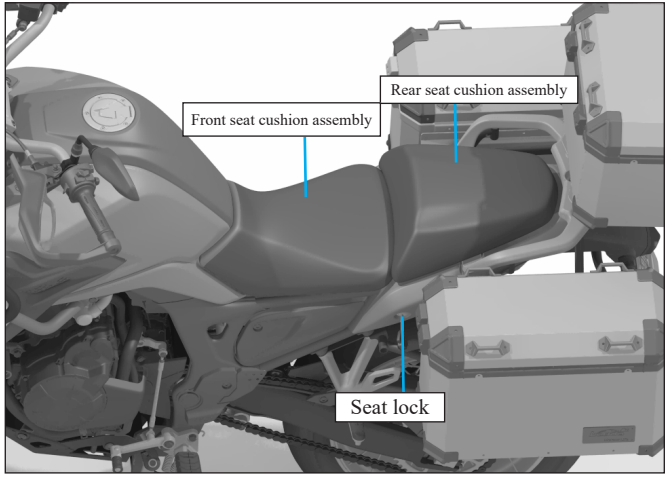
4.Disconnect the positive (+) terminal of the battery.

5.Remove the battery and be careful not to leave bolts and nuts behind.

Installation

Install the parts in the reverse order of removal, always connecting the positive terminal first (+) terminal, and finally the negative (-) terminal, make sure that the bolts and nuts are tightened.

Seat



Disassembly

1.Insert the ignition key into the seat cushion lock, rotate the key clockwise, and pull the rear end of the rear cushion assembly up and away from the lock, then remove the rear cushion assembly with a little force forward.

2.Remove the bolts in the left and right positions behind the front seat cushion assembly with the vehicle tool and pull them up.

Installation

1.Snap the front and rear pins of the front saddle assembly into the frame slot respectively, push the saddle to align with the rear hole and install the screws.

2.Snap the front and rear pins of the rear saddle assembly into the frame slot respectively, align the saddle locking pin with the locking hole, press down the rear part of the rear saddle assembly, the locking pin will be inserted into the saddle locking hole and automatically locked by the latch, gently pull up to ensure the saddle has been firmly locked in place.

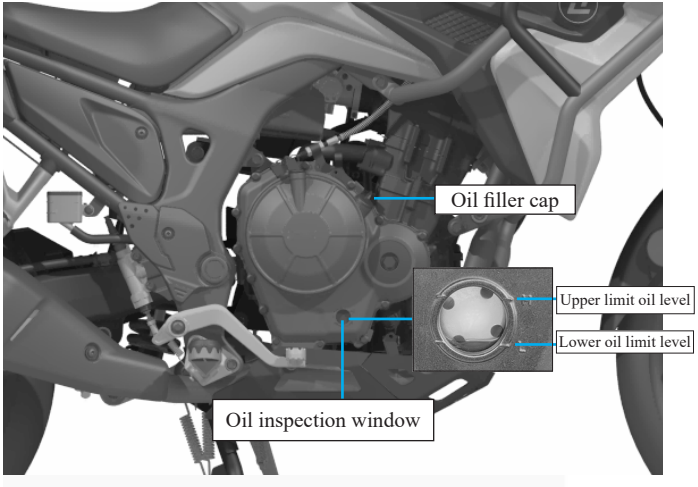
3. When the seat is closed, the seat lock will lock automatically.

Note

· Please ensure that the seat latch is inserted accurately into the frame card slot, otherwise the seat product will not be able to support your weight and the seat product may be crushed.

Engine oil

Check and add engine oil



Check the engine oil

1.Idle for 3-5 minutes, turn the ignition switch to (off) position, and wait for 2-3 minutes.

2.Place the motorcycle vertically upward on a firm, flat surface and check through the oil check window to see if the oil level is between the upper limit mark and the lower limit mark.

Add engine oil

If the engine oil is below or near the lower oil level mark, add the recommended engine oil.

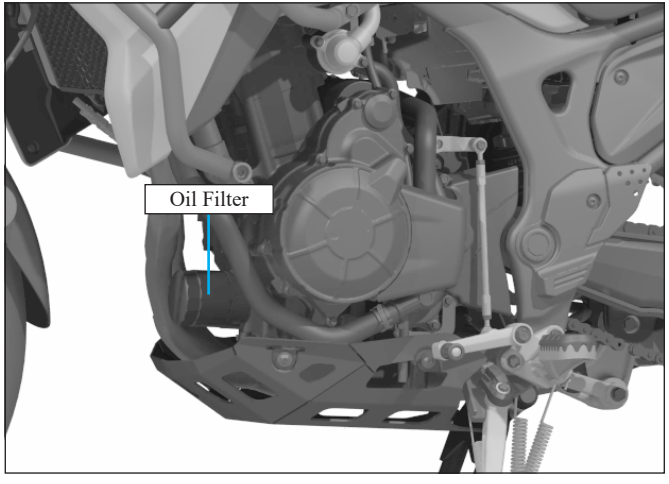
1.Remove the engine oil filler cap, add the recommended oil to the upper oil level mark, do not exceed the upper oil level mark, and make sure no foreign objects enter the engine oil filler port, if any spills, wipe them off immediately.

2. Reinstall the engine oil filler cap and tighten.

Note

·Avoid prolonged skin contact with oil, and wash thoroughly after contact with oil.
·Overfilling or underfilling can damage the engine. Please do not mix different brands and grades of oil, as this will affect lubrication and clutch operation.
·Overfilling or underfilling can damage the engine. Please do not mix different brands and grades of oil, as this will affect lubrication and clutch operation.

Change engine oil and oil filter



Change engine oil and oil filter

Changing the engine oil and oil filter requires the use of special tools and we recommend having them serviced by a Kove repair store.

1.If the engine is cold, please idle for 3-5 minutes, turn the ignition switch to "⊗" (off) position, and wait for 2-3 minutes.

2.Park the motorcycle on a firm level surface and place a drain pan under the drain bolt.

3.Remove the oil filler cap, oil drain bolt and sealing gasket, and drain the oil until it becomes a drop.

4.Remove the engine oil filter with an oil filter wrench and drain the remaining oil, making sure the old rubber ring is not stuck to the engine.

5.Apply a thin layer of engine oil to the rubber seal of the new oil filter.

6.Install a new engine oil filter and tighten it. (Torque:26N-m).

7.Install a new sealing gasket to the drain bolt and tighten the drain bolt. (Torque: 24Nm)

8.Add the recommended original engine oil to the crankcase, and after filling, tighten the oil injection cap. (Torque: 4-6Nm).

The amount of oil required when replacing the filter element：3.0L；

The amount of oil required without replacing the filter element：2.8L；

When disassembling the engine and reassembling it, the amount of oil required: 3.2L.

9.Check the oil level and see if the oil is leaking.

Note

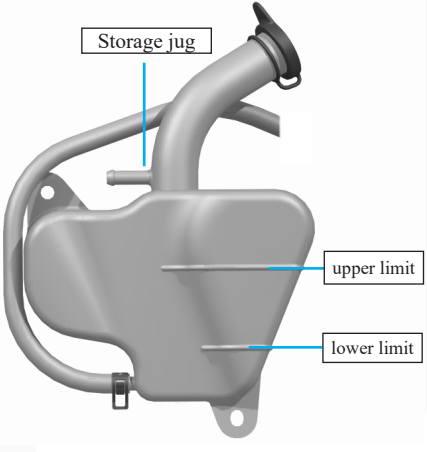
·Using the wrong engine oil and oil filter can damage the engine.

·Oil and oil filters should be discarded at the relevant recycling center.

·Use the original engine oil and oil filter of the Kove repair shop.

Coolant

Check the coolant



While the engine is cooling, check the coolant level in the reservoir.

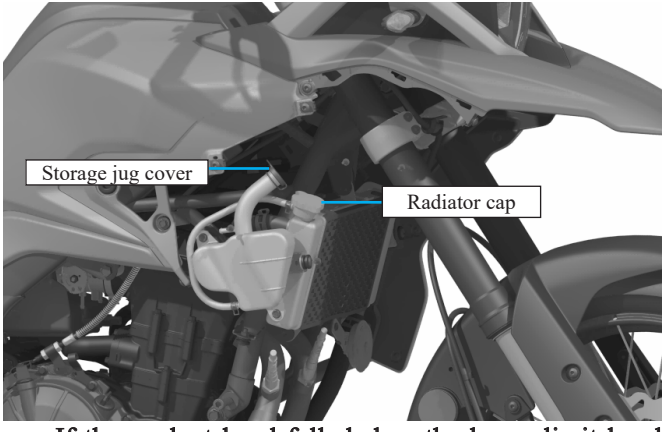
1.Park your motorcycle on a solid, flat level.

2.Keep your motorcycle upright.

3.Check that the coolant level in the reservoir is between the upper and lower markers.

4.Check that the coolant level in the reservoir is between the upper and lower markers.

Add coolant



If the coolant level falls below the lower limit level mark, add the recommended coolant until the level reaches the upper level mark.

When adding coolant, the radiator cap should be opened while the engine is cooled to relieve pressure, and then the reservoir lid at the other end should be opened to add, making sure that no foreign objects enter the cap and be careful not to exceed the upper limit level mark.

Replace the coolant

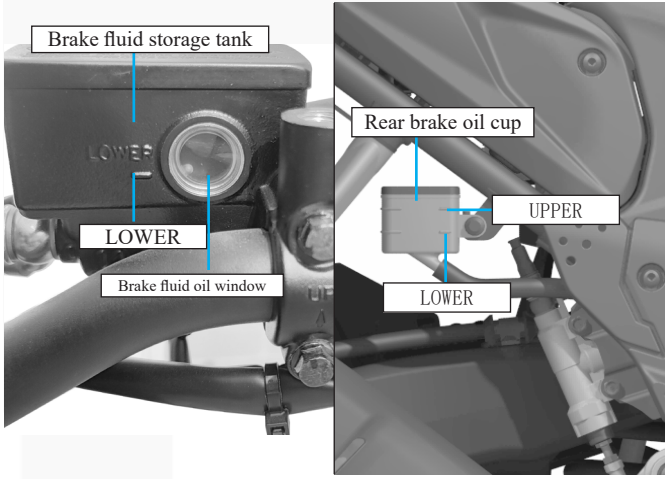
Unless you have the right tools and qualified mechanical skills, leave the coolant to a Kove Repair Shop.

Warning

·Do not remove the radiator cap while the engine is not cooling, as this will cause coolant to spray out, which may cause you burns.

Brake

Check the brake fluid



1. Place the motorcycle vertically upwards on stable flat ground.

2. Check that the brake fluid reservoir is level.

3.Check whether the brake fluid can be seen in the oil window, if the brake fluid is lower than the lower limit of the oil window, please add it immediately.

If the brake fluid level in the reservoir is below the lower level mark (LWR), or if the free travel of the brake lever and pedal exceeds the mark, the brake pads must be checked for wear, if they are not worn, there may be a leak, please have them serviced by an authorized Kove repair shop.

Check the brake pads

Check the condition of the brake pad wear indicator mark, if the brake pad is worn to the indicator mark, it needs to be replaced.

Front

Check the brake pads from under the calipers

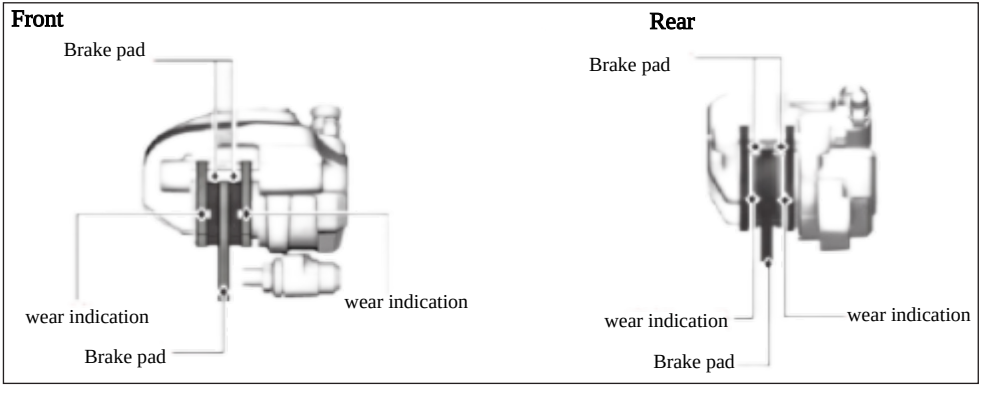
Brake pad lining thickness：5.5mm（indicated as wear limit）

Rear

Check the brake pads from the right rear of the caliper

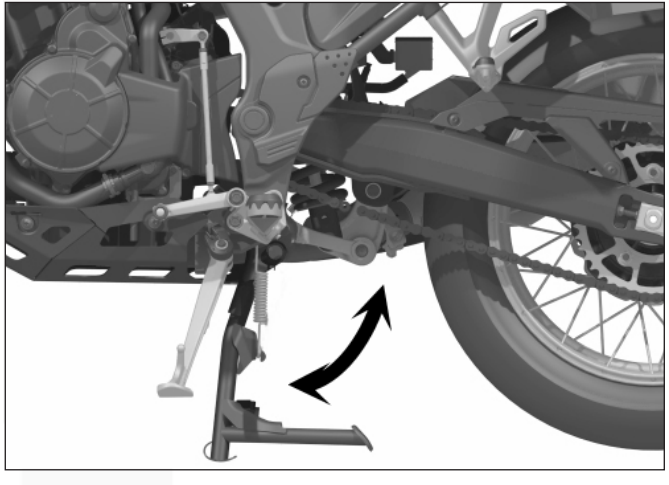
Brake pad lining thickness: 5.5mm（(indicated as wear limit）

If necessary, please take the brake pads to the Kove Repair Shop to replace the brake pads, when the wear limit is reached, the left and right brake pads must be replaced at the same time.



Side bracket

Check the side bracket and main bracket



1.Check whether the side bracket operates freely, if the side bracket operation is stuck or makes a “squeaking”sound, clean the pivot area and lubricate the pivot bolt with clean grease.

2.Check whether the spring is damaged or loses its elasticity.

Drive chain

Check the sag of the drive chain

Check the sag of different points along the chain, if not all points have the same sagging, some links may have been bent and kinked, please leave the chain to the Kove repair shop.

1.Hook the transmission into neutral and turn off the engine.

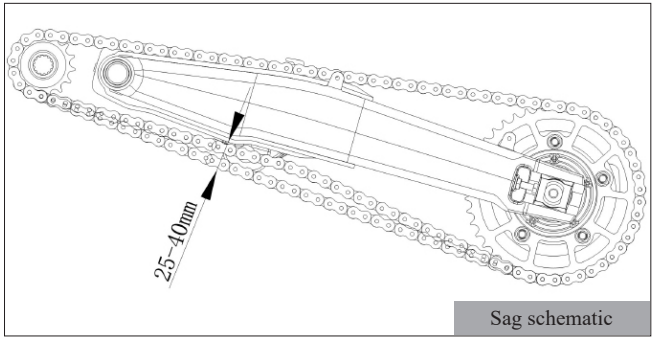
2.Place the motorcycle vertically on a stable and flat ground.

3.In the area behind the chain guard, push the chain in the direction close to the flat fork to determine the sag of the chain.

4.Turn the rear wheel forward to check whether the chain runs smoothly.

5.Check the sprocket.

6.Clean and lubricate the drive chain.



Sag schematic

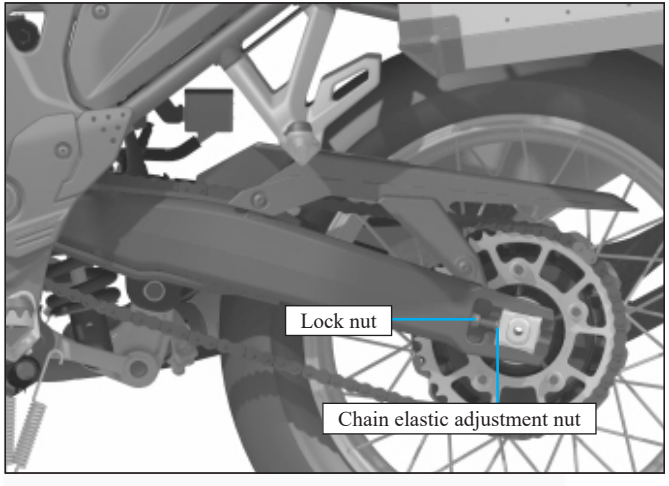
Drive chain sagging: 25-40mm

If the sag exceeds 40mm, you can't continue to ride the motorcycle.

Note

·When checking the drape of the drive chain, make sure that the upper part of the chain must be tensioned.

Adjust the sag of the drive chain



When adjusting the drive chain sag：

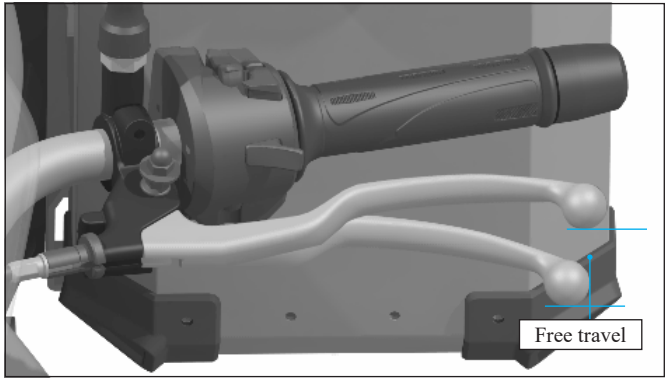
1. Hook the transmission into neutral and turn off the engine.
2. Place the motorcycle vertically on a stable and flat ground.
3. Loosen the rear axle nut, lock nut and chain tightening adjustment nut.
4. Rotate the chain tightness adjustment nut to adjust the tightness of the chain, the chain tightness adjustment range is：25-40mm.
5. In the middle position of the upper part of the rear flat fork, push the chain in the direction of the flat fork to determine the reasonable sag of the chain.
6. There is a scale on the adjuster to ensure that the left and right sides of the sag are adjusted on the same scale line.

Note

·When adjusting the drive chain sag, make sure that the upper part of the chain must be tensioned.

Clutch

Free travel of clutch lever: 10-15mm



Check whether the clutch cable is bent or broken. If necessary, please leave it to Kove repair shop for replacement.

Please lubricate the clutch cable with a special cable oil to prevent premature wear and corrosion.

Note

· Incorrect adjustment of free travel can cause premature clutch wear.

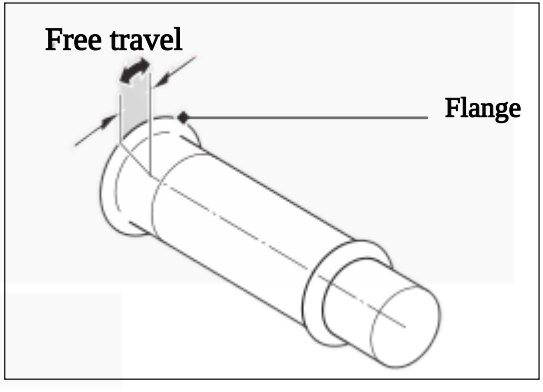
Throttle

Check the throttle

When the engine is off, check that the throttle smoothly shifts from full off to full open in all directions and that the free stroke is correct.

If the throttle operation is not smooth, the automatic closing or the cable is broken, please refer it to the Kove repair shop for maintenance.

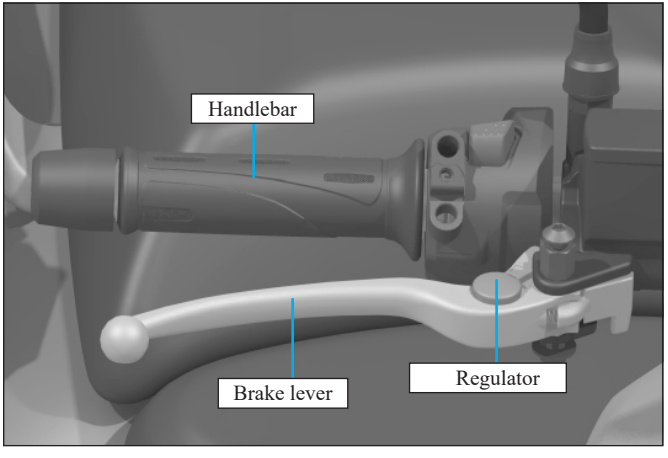
Free travel of throttle handle flange: 2-6mm



Note

·Do not spin the regulator beyond its natural limits.

Adjust the brake lever



You can adjust the distance from the top of the brake lever to the handlebars.

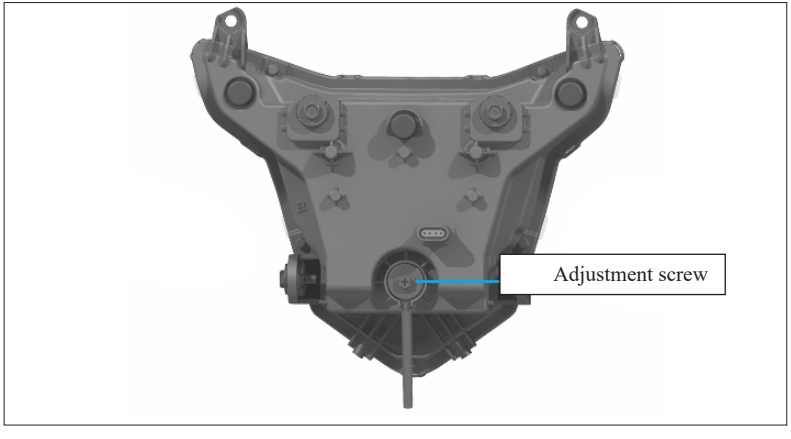
Methods of adjustment

Push the brake lever inward to the desired position while rotating the adjuster until the numbers align with the reticle; After adjustment, check that the brake lever works correctly before riding.

Headlight

Adjust the front headlight beam

You can adjust the angle of the headlight beam by rotating the adjustment screw, and rotate clockwise to make the headlight beam descend as a whole; Rotate counterclockwise to raise the headlight beam as a whole, please comply with local laws and regulations.



Troubleshooting

Please read "Maintenance" and "Maintenance Specification" carefully before maintenance, please refer to "Technical Specs" for maintenance data

The engine doesn't start

The starter motor runs, but the engine fails to start

Check the following items:

●Check that the correct engine start sequence is being used

● Check the tank for gasoline

● Check whether the battery voltage is too low

The starter motor isn't working

Check the following items：

●Confirm that the engine starting sequence is correct.

●Make sure the engine flameout switch is in the running position.

●Check for low battery voltage, blown fuses and loose battery connections, if the problem persists, have it serviced by an authorized Kove repair shop.

Note

· ntinuing to ride while the engine is overheating can seriously damage the engine.

·The engine runs at high speed in neutral gear for a long time, which may cause the water temperature to be too high alarm.

Overheating (water temperature alarm indicator on)

If the engine overheats when the water temperature alarm indicator is on and the speed is slow, please push the motorcycle to a safe side of the road and take the following measures:

1. Turn off the engine with the ignition switch and rotate to the "◯" (on) position.

2. Check whether the radiator fan is running normally, and then turn the ignition switch to the "⊗ " (off) position.

If the fan isn't running: Do not start the engine and take your motorcycle to a Kove repair shop.

If the fan is running: Leave the ignition in the " ⊗" (off) position and wait for the engine to cool.

3. After the engine cools down, check whether the radiator hose is leaking.

If there is a leak: Do not start the engine, transport your motorcycle to the Kove Repair Shop for service.

4. Check the coolant level in the reservoir and add if necessary.

5. If all 1–4 checks are normal, you can continue riding, but keep an eye on the indicators.

The warning light is on or flashing

Oil pressure indicator

If the oil pressure light comes on, push the motorcycle to a safe side of the road, turn off the engine, and take the following measures:

1.Check engine oil level, add oil if necessary.

2.When the light goes off, you can continue to drive.

3.Rapid acceleration when the oil is at or near the lower limit may cause the indicator light to illuminate.

4.If the oil level is at a normal level and the indicator light is still on, turn off the engine and contact a Kove repair shop.

5.If the engine oil drops quickly, your motorcycle may be leaking oil or have other serious problems, so please have it serviced by an authorized Kove repair shop.

EFI fault indicator

If the EFI fault light comes on while riding, you may have a serious problem with your EFI system. Please slow down and have it serviced by an authorized Kove repair shop as soon as possible.

Note

·Continuing to ride at low oil pressure can seriously damage the engine.

ABS fault indicator (Anti-lock Braking System)

If any of the following conditions appear in the ABS fault indicator, it means that your ABS is faulty, and the emergency braking will not be able to provide anti-lock braking function, please hand it over to Kove repair shop for maintenance as soon as possible.

●ABS fault indicator light is always on or flashing when riding.

●When the ignition switch is rotated from "⊗" (off) to "◯" (on), the indicator light does not light up.

●Speed higher than 5 km / h, the light does not go off.

The ABS indicator may flash or stay on when：

●Turning the front wheel alone.

●Turning the rear wheel alone.

●Rear wheel slipping.

●When riding on special roads.

You can turn the ignition switch to the '⊗' (off) position and then to the "◯" (on) position to re-power the system and reset it.

Puncture the tire

Repairing a puncture or removing a wheel requires special tools and specialized skills. We recommend that you leave such repairs to an Kove Repair Shop. If you have had an emergency tire repair, be sure to have your tire checked or replaced by Kove repair shop.

Emergency repair with tire repair kit

If you have a minor tire puncture, you can use the Tubeless Tire Repair Kit for emergency repairs.

Follow the instructions provided in the emergency tire repair kit; it is dangerous to ride a motorcycle with a temporarily repaired tire, and do not exceed 50 km/h. Please have your tires replaced by an authorized Kove repair shop as soon as possible.

⚠ Warning

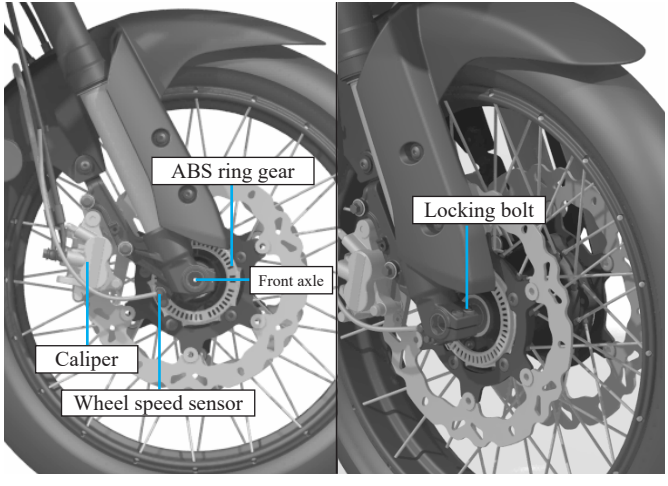
·Riding a motorcycle with temporarily repaired tires is dangerous, and if the temporary repair fails, an accident will occur, resulting in serious injury or death.

·If you must ride a motorcycle with temporarily repaired tires, please ride carefully and slowly, not exceeding 50 km/h, until new tires are put on.

Disassemble the tire

Front wheel

If you need to remove the wheel to repair the tire, follow these steps, being careful not to damage the wheel speed sensor and ABS ring gear when you remove and install the wheel.



Disassembly：

1.Securely support your motorcycle with a maintenance stand or crane and lift the front wheel off the ground.

2.Removing the front fender.

3.Removing the left and right brake calipers.

●Support the brake caliper assembly, do not hang on to the brake hose and do not twist the brake hose.

●Avoid getting lubricant, oil or dirt on the brake discs or pads.

●When the brake caliper is removed, do not pull the brake handle.

●Be careful to prevent the brake caliper from scratching the wheel during removal.

4. Loosen the axle locking bolt and front axle.

5. Remove the front axle, front wheel.

Installation

1.Place the front wheel in the middle of the front shock absorber, the front wheel bushing (left) into the left side of the front wheel mounting hole, the brake disc is stuck into the brake caliper.

2.Put the front axle through the front wheel from right to left, tighten the front axle, and then install the 2 locking bolts on the right side. (Front axle M16, torque:70N.m; Front axle locking bolt M8, torque::22N.m)

3.Install the brake caliper and tighten the bolt. (Torque: 22N·m)To prevent the brake caliper from scratching the wheel during installation, use new assembly bolts when installing the brake caliper.

4.Install the front fender. (Torque:8N·m)

5. Place the front wheel on the ground.

6. Operate the brake handle several times, then shake the fork up and down several times.

7. Raise the front wheels off the ground again and check that the wheels turn smoothly after you release the brake handle.

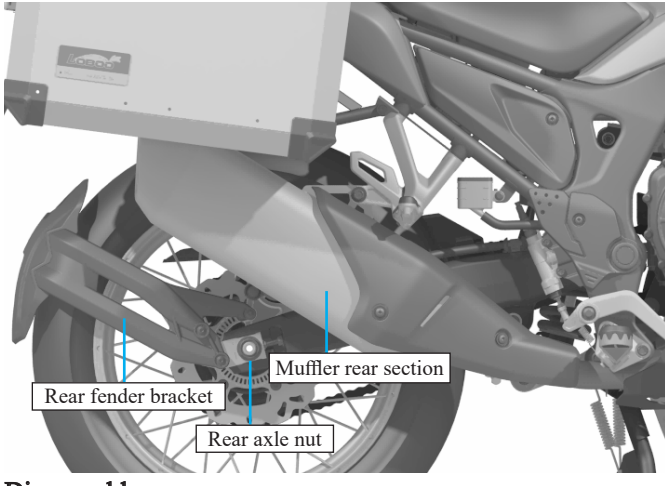
If a torque wrench was not used during installation, take it to a kove repair shop as soon as possible; improper installation can result in reduced braking performance.

Note

·When installing a wheel or caliper into place, install the disc between the brake pads carefully to prevent scratching them.

·When installing the front wheel, the front axle bolt must be installed first, followed by tightening the right locking bolt of the front axle, and the order of the two cannot be interchanged.

Rear wheel



Disassembly

1.Park the motorcycle on a solid level surface.

2.Support your motorcycle firmly with the maintenance bracket and raise the rear wheel off the ground.

3.Remove the rear section of muffler, rear fender bracket and chain box.

4.Remove the rear axle nut, rear axle, and rear wheel bushing.

5.Remove the rear wheel.

Installation

1.Install the rear wheels in the reverse order of removal, taking care to prevent the brake calipers from scratching the wheels during installation.

2.Align the rear wheel holes, install the rear wheel bushings first (the bushings should be greased), and then insert the rear wheel shaft from left to right into the rear wheel assembly holes.

3.Tighten the rear axle nut. (Torque:128 N·m)

4.Install the upper chain box, rear fender bracket, and rear section of muffler.

5.Check the wheels, they should turn freely.

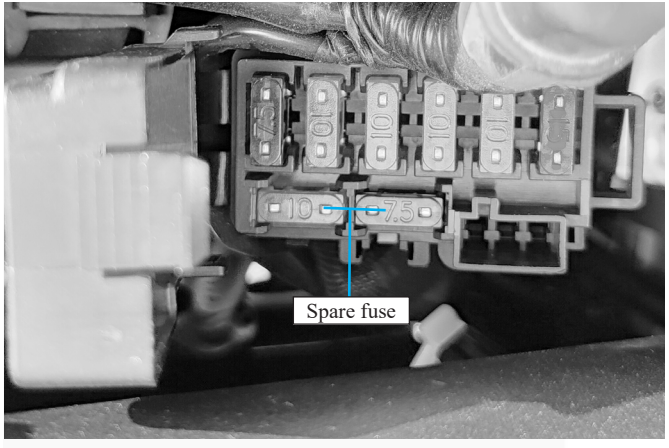
If a torque wrench is not used during the installation process, please refer it to a Kove repair shop as soon as possible Improper installation can lead to a decrease in brake performance.

Note

·When installing the wheels or calipers into place, install the discs between the brake pads carefully to prevent scratching.

Electrical Failure

Fuse blown



Fuse replacement

1.Remove the seat.

2.Open the fuse box cover, take out the fuse, and check whether the fuse is blown. If it blows, be sure to replace it with a spare fuse of the same specification.

3.Close the fuse box cover and install the seat.

The battery is dead

Please charge the battery with a special charger for motorcycle lithium batteries, and remove the battery from the motorcycle before charging. If the battery still does not recover after charging, please contact the Kove Repair Shop.

Note

·It is forbidden to use car battery chargers or motorcycle lithium battery chargers for charging, which may lead to battery damage or even fire.

·Before handling the fuse, please refer to "Checking and Replacing Fuses".

Related Information

Key

Ignition key

The motorcycle has two ignition keys, which are used to start the engine.

- Do not bend the key or subject it to excessive pressure.
- Avoid prolonged exposure to the sun or high temperatures.
- Do not grind, punch or change its shape in any way.

Note

·To prevent loss, please take good care of your keys, and if you are worried about losing them, please have one replicated immediately.

Gauges, controls, and other features

Ignition switch, engine flame-out switch

Ignition switch

When parking, please set the ignition switch to the "⊗" or " 🔒 " position to avoid unnecessary loss of the battery, which will cause excessive battery power loss and will cause it to not start.

While riding, do not rotate the key.

Engine flame-out switch

Do not use the engine kill switch except in an emergency. Doing so while riding can cause the engine to stop suddenly, making the ride unsafe.

Odometer, Chronometer (subtotal mileage)

Odometer

When the reading exceeds the 999,999, the display locks at the 999,999.

Chronometer

When the meter's reading exceeds 999.9, it is automatically cleared.

Maintenance of motorcycles

Frequent cleaning and polishing ensure that the motorcycle lasts for a long time, and a clean motorcycle is more likely to detect potential failures, especially noting that the anti-icing seawater and salt spilled on the road will accelerate the formation of corrosion, and it is important to thoroughly clean the motorcycle after driving along the coast or on the above-mentioned treated roads.

Clean

Wait for the engine, muffler, brakes and other hot parts to cool before cleaning.

1. Thoroughly flush the motorcycle with water using a low pressure hose to remove loose dirt.
2. If necessary, use a sponge or soft towel dipped in flexible detergent to remove the dirt on it.
3. Rinse the motorcycle thoroughly with enough clean water and dry it with a clean, soft cloth.
4. After drying the motorcycle, lubricate the moving parts to make sure that no lube oil spills on the brakes or tires; Oil-contaminated brake discs, brake pads, brake drums, and brake shoes will have a greatly reduced braking performance and may cause accidents.
5. After washing and drying the motorcycle, lubricate the drive chain immediately.
6. Waxing can prevent corrosion.

Avoid products containing strong stain removers or chemical solvents that can damage metal, paint and plastic parts of motorcycles; Do not wax tires and brakes. If your motorcycle has parts with matte paint, do not wax on these matte paint.

Cleaning precautions

- Do not use high-pressure water guns：
  - High-pressure water cannons can damage moving and electrical parts beyond repair.
  - Moisture from the air intake may be drawn into the throttle body or into the air filter.
- Do not use water to flush the muffler directly:
  - Water ingress in the muffler can cause the muffler to fail to start and the muffler to rust.
- Drying brake:
  - Water will reduce braking performance, after cleaning, you should intermittently use the brake at low speed, repeatedly press the brake pedal, and use the heat generated by brake friction to dry the water until the braking efficiency is restored.
- Do not rinse directly under the seat with water:
  - Water getting into the seat compartment can damage your documents and other items.
- Do not flush the air filter directly with water.
  - If water gets into the air filter, the engine may not start.
- Do not rinse the area near the headlamp directly with water:
  - After washing or when cycling in the rain, the internal lens of the headlamp may temporarily fog up, which will not affect the function of the headlamp. However, if you notice a large amount of water or ice accumulating in the lens, please refer it to a Kove repair shop for inspection.
- Do not wax and polish matte pain:
  - Clean the matte paint finish with plenty of water and mild detergent and dry it with a soft, clean cloth.

Aluminum components

Aluminum can be corroded after contact with dirt, mud or salt, clean aluminum parts regularly and follow these guidelines to prevent scratches:

● Do not use stiff brushes, steel wool balls or other abrasive cleaning products.

● Do not drive or scratch on the curb.

Panel

Follow these guidelines to prevent scratches and damage:

●Wash gently with a sponge and enough water.

●Clean with diluted detergent and wash thoroughly with plenty of water to remove stubborn dirt.

●Please avoid contact with corrosive liquids such as gasoline and brake fluid on the instrument panel and lampshade.

Muffler

The muffler is stainless steel, but it can also be dirty due to mud or dust, which can be removed with a wet sponge dipped in detergent, then carefully rinsed with clean water and dried with suede or a soft towel. If necessary, burn marks can be removed with commercially available compounds with a fine texture and then rinsed in the same way as mud and dust.

If the muffler has been painted, use a neutral stain remover to clean the exhaust pipe and muffler paint, and if you are unsure whether the muffler has been painted, contact the Kove Repair Shop.

Note

·Although the muffler is stainless steel, it can also rust. Once found, remove all traces and dirt immediately.

Storage of motorcycles

If you leave your motorcycle outdoors, you should consider using a motorcycle full body shield. If you don't ride for a long time, follow these guidelines:

●Wash the motorcycle and wax all paint surfaces (except matte paint) and apply anti-rust oil to all chrome parts.

●Lubricate the drive chain.

●Place the motorcycle on the maintenance stand and raise it with a wooden block so that both tires are off the ground at the same time.

●After it rains, remove the body cover and let the motorcycle dry.

●Remove the battery to prevent discharge.

Fully charge the battery and place it in a cool and ventilated place, and if you leave the battery in place, disconnect the negative terminal to prevent discharging. Before reusing the stored motorcycle, check all items required on the maintenance cycle.

Transportation of motorcycles

If your motorcycle needs to be transported, a motorcycle trailer, a flatbed truck loaded with ramps or lifting platforms should be used, and motorcycle straps should be used. Never try to drag a motorcycle with its wheels on the ground.

Note

·Towing a motorcycle can seriously damage the transmission.

You and the Environment

Owning and riding a motorcycle is enjoyable, but you have to do your duty to protect the environment.

Choose the right detergent

Use biodegradable stain removers when washing motorcycles and avoid sprays containing chlorofluorocarbons (CFCs) as it destroys the protective layer of the atmosphere (the ozone layer).

Waste recycling

Separate motor oil and other toxic wastes in approved containers and take them to a recycling center, call your local National Public Affairs or Environmental Services office to find a recycling center in your area, and instructions on how to dispose of non-recyclable waste, do not dump used engine oil in trash cans, sewers or on the ground because used motor oil, gasoline, coolants and cleaning solvents contain Toxic substances that can harm cleaners, pollute drinking water, lakes, rivers and the sea.

Frame number, engine number, nameplate

The frame number and engine number are required for motorcycle registration, which are unique and used to identify your motorcycle and may be required when ordering replacement parts, please keep these numbers on record and keep them in a safe place.

Frame number

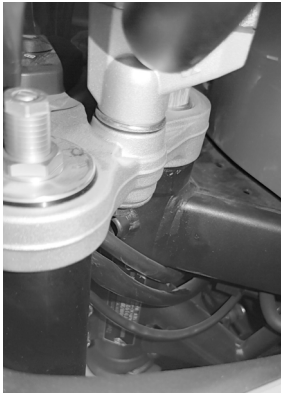
The frame number is engraved on the right side of the frame riser

Engine number

The engine number is engraved above the right crankcase of the engine

Nameplate

The nameplate is attached to the left side of the frame riser.



Catalytic converters

The motorcycle is equipped with a three-way catalytic converter. The catalytic converter contains precious metals as high-temperature chemical reaction catalysts to convert hydrocarbons (HC), carbon monoxide (CO) and nitrogen oxides (NOx) in the exhaust gas into a regulatory-compliant mixture.

A faulty catalytic converter can pollute the air and degrade your engine's performance, so be sure to use original Kove parts when replacing.

Follow these guidelines to protect your motorcycle's catalytic converter:

- Use only unleaded gasoline, which can damage the catalytic converter.
- Keep the engine in good working order.
- If the engine does not catch fire, backfire, stall or other bad running, please stop riding immediately, turn off the engine, and hand over the motorcycle to the Kove Repair Shop for maintenance.

Technical Specs

Motorcycle related specs-1

Model	KY510X	**Engine model**	Z272MR
Length（mm）	2200	**Bore(mm)× stroke(mm)**	72.0×61.2
Width（mm）	935	**Compression ratio**	10.6：1
Height（mm）	1400	**Max.net power（kW/r/min）**	36±5%kW/8500±1.5%（r/min）
Wheelbase（mm）	1479	**Max. torque（N·m/r/min）**	45±5%N·m/6500±1.5%（r/min）
Wheelbase（mm）	/	**Idle speed（r/min）**	1400±140
Curb weight (kg)	206	**Cylinder working volume（ml）**	498.4
Preload (kg)	150	**Spark plug**	CR8EI
Front tire	110/80R19	**Spark plug gap(mm)**	0.6-0.8
Rear tire	150/70R17	**Valve clearance(mm)**	Intake valve：0.1-0.15
Max. speed（km/h）	170		Exhaust valve：0.15-0.2

Motorcycle related specs-2

Lubricating oil capacity（L）	3.2	**Main fuse**	30A
Gasoline capacity（L）	20	**Headlamps**	LED light
Primary gear ratio	2.029	**Headlights**	LED light
First gear	3.214	**Rear position light/brake light**	LED light
Second gear	2.105	**Front turn signals**	LED light
Third gear	1.600	**Rear turn signals**	LED light
Fourth gear	1.350	**Rear license plate light**	LED light
Fifth gear	1.150	**Neutral light**	LED light
Sixth gear	1.043	**Steering indicator**	LED light
Final gear ratio	2.867	**Gauge indicator**	LCD light
Battery	12V 8.6Ah	**Ignition method**	ECU Control Ignition

Torque Specs

Fastener type	Torque （N·m）	Fastener type	Torque （N·m）
5mm bolts and nuts	5.2	5mm screws	4.2
6mm bolts and nuts	10	6mm screws	9
8mm bolts and nuts	22	6mm flange bolts(8mm head: samll flange)	10
10mm bolts and nuts	34	6mm flange bolts(8mm head;Large flange)	12
8mm flange bolts and nuts	27	10mm flange bolts and nuts	39
12mm Bolts and nuts	54	6mm flange bolts (10mm head) and nuts	12

Note

·This vehicle uses the standard torque values in the above table except for the specified torque.

Frame tightening torque

Item	Thread diameter（mm）	Torque（N·m）	Remark
Headlight housing and headlight connecting screw	ST4.2	1	
Fuel tank lower shield and lower shield connecting screw	ST4.2	1	
Tail light and left and right body connection screws	ST4.2	1	
Instrument and instrument case connection screws	ST4.2	1	
Under the headlight and headlight connection screws	ST4.8	1	
Rear fender rear section and front section connection screw	ST4.8	1	
Rear mudguard iron bracket and mudguard rear section connection screw	ST4.8	1	
Rear small mudguard bracket and rear wheel small mudguard connecting screw	ST4.8	1	
Body and rear fender front attachment screw	ST4.8	1	
Rear wheel mudguard rear section lower guard and rear mudguard rear section connection screw	ST4.8	1	
Rear fender rear section and front section connection screw	ST4.8	1	
Brake pedal and brake lever bolts	M5	6	
Throttle cable clamp and handgrip holder connection screw	M5	1	
Front upper mudguard and the left and right decorative block part of the installation of connecting screws	M5	5	
Instrument housing and headlight housing connection screw	M5	5	
Fuel tank lower shield and side shield connecting screws	M5	5	
Fuel tank middle shield and left and right side shield connecting screws	M5	5	
Beak and fuel tank guard screws	M5	5	
Beak and headlight housing screws	M5	5	
Bird’s beak fuel tank left and right shield connecting screws	M5	5	
Tailgate bottom plate and rear armrest connection (three boxes optional) screws	M5	4	
Rear small mudguard bracket and rear wheel small mudguard connecting screw	M5	4	
Windshield and headlight bracket connection screw	M5	4	
Lock cover and upper coupling plate attachment screw	M5	4	

Item	Thread diameter（mm）	Torque （N·m）	Remark
Air filter and throttle valve body connection screw	M5	4	
Oil pump and oil tank connection nut	M5	6	
License plate light and rear fender connection nut	M5	2	
Carbon tank bracket and frame connection bolts	M6	12	
Front shock hoop and left front shock connecting bolt	M6	8	
Horn and frame connection bolts	M6	12	
Air filter bracket and frame connection bolts	M6	12	
Rear brake main pump and frame connection bolt	M6	12	
ABS bracket and ABS connecting bolt	M6	12	
Battery box and frame connection bolts	M6	12	
Rear mud bracket and frame connecting bolt	M6	12	
Saddle lock and frame connection bolt	M6	12	
Front brake hose holder and frame connection bolt	M6	8	
Upper mudguard and headlight bracket connecting bolt	M6	8	
Rear mudguard front section front left and right and frame connection bolts	M6	6	
Lower engine guard bracket and engine connecting bolt	M6	12	
Oil sensor wire hook bolt	M6	12	
Oil rail and throttle valve body connecting bolt	M6	12	
Rear brake oil cup bolt	M6	8	
ECU assembly and rear mudguard front section screw	M6	4	
OBD assembly with rear mudguard front section screw	M6	4	
Water tank and frame connection bolts	M6	10	
Fuel tank left and right side shield and frame connection bolts	M6	10	
Rear mudguard front section after about and frame connection bolts	M6	4	
Water bottle and frame connection bolts	M6	4	
Left and right hand windshield and handle bolt connection nut	M6	5	

Item	Thread diameter（mm）	Torque （N·m）	Remark
Left and right fuel tank lower shield and frame connection bolts	M6	10	
Gear lever bearing and gear lever bolt	M6	10	
Air filter and seat cushion bracket bolts	M6	10	
Saddle and frame connection bolts	M6	10	
Gear lever rocker arm and engine connecting bolt	M6	10	
Brake lever and rod end adjusting bearing connecting bolt	M6	10	
Headlight and headlight bracket connecting bolt	M6	10	
Engine small sprocket cover and engine connecting bolt	M6	8	
Rear small fender bracket and right chain adjuster connecting bolt	M6	10	
ABS and frame connection bolt	M6	10	
Rectifier and frame connection bolts	M6	12	
Lower engine guard left front bracket and engine connecting bolt	M6	12	
The right rear bracket of the lower engine guard and the engine connecting bolt	M6	12	
Anti-hot cover and engine connection bolt	M6	12	
Rear small fender bracket and rear sensor brake caliper connecting bolt	M6	10	
Right footrest bracket (hanging brake spring) bolt	M6	10	
Mud register and right front shock absorber connection screw	M6	8	
Front brake fluid pipe and lower coupling plate connection screw	M6	8	
Rear brake fluid pipe and flat fork connection screw	M6	8	
Chain box hook and flat fork connection screw	M6	8	
Right hand windshield and handgrip connection screw	M6	8	
Instrument housing and headlight bracket connection screw	M6	8	
Head cover and headlight bracket connection screw	M6	8	
Left and right body and frame connection screws	M6	8	
Rear shock absorbing small fender screws	M6	8	

Item	Thread diameter（mm）	Torque （N·m）	Remark
Left and right frame trim block and frame attachment screws	M6	8	
Chain box and flat fork attachment screw	M6	8	
Tailgate bottom plate and rear armrest connection (three boxes optional) screws	M6	8	
Rear tailcap with body and frame attachment screws	M6	8	
Left and right flat fork axle trim block and frame attachment screw	M6	8	
Lower engine guard and lower guard bracket connecting screws	M6	8	
Front fender and left and right front shock absorber connection screws	M6	8	
Muffler shield and muffler connecting screw	M6	8	
Side bracket switch and side bracket bolt fastening screw	M6	8	
Fuel tank middle shield and left and right shield connecting screws	M6	6	
Chain retainer and flat fork attachment screw	M6	8	
Hand windshield special bolt right screw	M6	8	
Shift Adjustment Lever (Orthodontic)	M6	5	
Shift adjustment lever (reverse tooth)	M6	5	
Tailgate hook and rear armrest connection (three boxes optional) nut	M6	5	
Tailgate hoist and left and right side box bracket connection (three boxes optional) screws	M6	10	
Tailgate hoist and tailgate bracket connection (three boxes optional) screw	M6	10	
Left and right chain adjustment bolts	M8	10	
Steering handle lower mount and lower coupling plate nut	M8	22	
Muffler front section and engine connection bolt	M8	22	
Left and right side box bracket and side box bracket rear bumper connecting bolt	M8	22	
Left and right bumper connecting bolts, bumper and headlight bracket connecting bolts	M8	22	
Rear armrest front mounting holes and frame connection bolts	M8	22	
Left and right front pedals and frame connecting bolts	M8	22	

Headlight bracket and frame connection bolts	M8	22	
Brake pedal and frame connection bolt	M8	22	
Item	**Thread diameter（mm）**	**Torque（N·m）**	**Remark**
Shift lever and frame connecting bolt	M8	22	
Fuel tank and frame connection bolts	M8	22	
Left and right front brake calipers and left and right front shock absorber connection bolts	M8	22	
Muffler (front) section and frame connecting bolt	M8	22	
Muffler (rear) and right footrest connecting bolt	M8	22	
Left and right chain adjustment bolts	M8	10	
Front shock bottom barrel locking front axle bolts	M8	22	
Side box bracket and frame connection bolts	M8	22	
Steering column lower coupling plate and front shock absorber attachment screw	M8	22	
Electric door lock and upper link plate connection screw	M8	22	
Steering handle upper mount screw	M8	22	
Directional upper plate and front shock absorber fastening screw	M8	22	
Left and right side box bracket front and frame connection screws	M8	22	
Left/right rear footpegs and frame connection screws	M8	18	
Front and rear brake disc and hub attachment screws	M8	30	
U-shaped rocker and frame connection bolts	M10	60	
Engine rear suspension and frame connection bolts	M10	60	
Bumper and frame connection screws	M10	60	
Rear shock absorber under and rocker connection (standard) bolt	Ml0	60	
Small sprocket and engine connection bolt	M10	45	
Bolts on the rear shock absorber connected to the frame	M10	60	
Rear armrest rear hole and frame connection bolt	M10	33	
Rear shock absorber under the connection with the rocker frame (high end) bolt	M10	60	

Engine upper suspension and frame connection bolts	M10	60	
Triangle rocker and flat fork connecting bolt	M10	60	
Triangle rocker and U-shaped rocker connecting bolt	M10	60	
Item	**Thread diameter（mm）**	**Torque（N·m）**	**Remark**
Bumper right and engine connection screw	M10	60	
Steering handle lower mount and lower coupling plate connection thread post	M10	30	
Special bolts for side brackets	M10	Bolt 2N.m, and then stuck tight bolt hexagonal not moving tighten the nut torque 22N.m	
Side bracket and frame connection bolts	M10	22	
Upper coupling plate and steering column connecting bolt	M14	80	
Front axle	M16	70	
Flat fork shaft	M16	88	
Rear axle	M20	128	
Directional bearing adjustment	M25	The first level of 40N.m, the second level of two turns loose adjust the nut after tightening the nut to 10N.m, the third level of fixed direction does not move loose 1/4 turn	