KOVE 凯越机车



ZF250GS-2

The Instruction Manual for The Two-wheeled Motorcycle

TIBET NEW SUMMIT MOTORCYCLECO, LTD

To the owner

Instruction Manual for The Two-wheeled Motorcycle ZF250GS-2

Edition (March 2023)

First of all, congratulations on your purchase of a brand new KOVEMOTO!

If you choose products of KOVEMOTO, you will become a member of the KOVEMOTO family.

This Instruction Manual introduces the main specifications, basic structure, adjustment method and maintenance knowledge of the motorcycle. It will guide you to master the basic operation of the motorcycle and eliminate or reduce common faults, which can effectively ensure driving safety, play the best performance of the vehicle, and improve the service life of the vehicle.

This Instruction Manual contains the introduction of the basic configuration of the motorcycle. The contents and pictures are for reference only, please refer to the physical object.

Due to the production time, user needs and design improvements, the actual motorcycle may be different from the contents of the Manual. We reserve the right to make changes at any time, and we will no longer notify and assume any obligations. Sorry for any inconvenience caused.

The Instruction Manual is one of the necessary accessories of the motorcycle, and when it is sold to others, it should be attached to the motorcycle.

The copyright of this Instruction Manual belongs to the company, and no reproduction is allowed without the written consent of the company, and violators will be prosecuted.

To ensure your safety, and increase your riding pleasure:

- Please read the Instruction Manual carefully.
- Please follow all recommendations and procedures in the Instruction Manual.
- Please pay close attention to the safety information recorded in the Instruction Manual and pasted on the motorcycle body.

Safety Precautions

The safety of you and others is very important, and the safe driving of this motorcycle is an important responsibility.

To help you make an informed decision about your safety, we provide steps and other information on the safety label and in the Instruction Manual to remind you. This information is intended to alert you to the potential danger of harm to you or others.

It is impractical for us to list all the hazards associated with motorcycle riding and maintenance, and you must make the right judgment yourself.

It is forbidden to install electrical equipment, because the battery used in the motorcycle is a lithium battery. Its battery capacity is small, and the installation of electrical equipment may cause a loss of power. The motorcycle is equipped with a high-speed engine. For your driving safety, it is recommended that you reduce violent driving.

You'll see important security information in a variety of forms, including:

- Safety labels on the body of a motorcycle;
- The safety information is preceded by a safety warning symbol ⚠ and one of the following three warnings : Caution, danger, and warning.

The meanings of the three warnings are as follows:

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

⚠ Danger - If you do not follow the instructions, you will cause serious casualties.

⚠Warning - If you do not follow the instructions, you will cause serious casualties.

Other important information is listed under the following headings:

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

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Motorcycle safety

This section contains important information about the safe riding of motorcycles, please read this section carefully.

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Safety instructions

To enhance your driving safety, please follow these guidelines:

- Perform all routine and routine inspections as specified in the Instruction Manual.
- Before filling the tank, turn off the engine and keep away from sparks and open flames.
- Do not start the engine for a long time in a closed or semi-closed space, because the exhaust gas contains carbon monoxide, which is a toxic gas and can be fatal.

Always wear a helmet

It has been proven that helmets and protective clothing can significantly reduce the chance of injury to the head and other parts, and reduce the degree of injury. Therefore, please be sure to wear a certified motorcycle helmet and protective clothing when driving.

Before the ride

Make sure you're in good physical condition, paying attention, and not drinking or taking medication. Make sure that you and your passengers are wearing a certified motorcycle helmet and protective clothing. You instruct your passenger to hold onto the rear handrail or hold your waist, place his/her feet on the pedals, and lean with you when you turn, even when the motorcycle is stopped.

Take time to study and practice

Even if you have driven other motorcycles, you should practice riding this motorcycle in a safe area to familiarize yourself with the operation and operation of this motorcycle and adapt to the size and weight of the motorcycle.

Have a sense of protection when riding

Always pay attention to the vehicles around you, do not think that other drivers can see you, always be prepared to make emergency brakes or avoid detours.

Make yourself easier to see

Especially at night, wear bright reflective clothing to make yourself more eye-catching, stop so that other drivers can see you, turn on the signal light before turning or changing the lane, and when necessary, use the horn to remind pedestrians.

Don't drink and ride

Alcohol and driving are not compatible. Never exceed your personal ability when driving, and do not exceed the speed specified by the vehicle, fatigue and negligence will weaken your ability to make correct judgments and safe driving.

Keep your motorcycle in a safe state

It is important to take good care of your motorcycle so that your motorcycle is always in good condition. Check your motorcycle before each ride and complete all recommended maintenance and repairs. **Do not modify motorcycles or add accessories that will affect safety without authorization, and overload is strictly prohibited.**

Dealing with incidents

Your personal safety is your first priority. If you or anyone else is injured, you should first carefully evaluate the severity of the injury and determine whether it is safe to continue driving, and call for emergency assistance if necessary. If other persons or vehicles are involved in a collision, the applicable local laws and regulations should also be followed.

If you decide to continue driving, first turn the ignition switch to the "  " (off) position, and then evaluate the condition of the motorcycle. Check whether there is oil leakage, check whether the key nuts and bolts are fastened, and check the steering handle, steering column, brake and wheel to ensure that the personnel and vehicle are safe. Please drive slowly and carefully.

Your motorcycle may have suffered damage that will not be immediately apparent, please submit it to a special repair shop or a qualified special repair shop of KOVEMOTO for a thorough inspection as soon as possible.

Carbon monoxide hazard

The exhaust gas contains toxic carbon monoxide, a colorless and odorless gas, and inhaling higher concentrations of carbon monoxide can cause people to lose consciousness and may even be fatal.

Do not start the engine for long periods of time in a garage or other enclosed space.

Warning

- If the engine is started for a long time in a closed or semi-closed space, it may cause a rapid accumulation of toxic carbon monoxide gas.
- Inhaling this colorless, odorless gas causes rapid loss of consciousness and death.
- Motorcycle engines should only be started in well ventilated outdoor areas.

Safety Precautions

- Be careful when riding, always keep your hands on the throttle grips and your feet on the pedals.
- Make sure that the passenger grasps the rear armrest or hugs your waist while driving, and puts his/her feet on the pedals.
- Always pay attention to the safety of riders, passengers and other drivers on the road.

Protective clothing

Make sure that you and any accompanying passenger are wearing a certified motorcycle helmet, goggles and eye-catching protective clothing, and drive carefully according to the weather and road conditions.

Helmet

It is certified to safety standards, eye-catching, and sized to fit your head size.

- It must be safe and comfortable and secured with a chin strap.
- It does not obstruct the line of sight of the mask or other certified goggles.

Gloves

High wear-resistant all-finger leather glove.

Boots or riding shoes

Boots that are strong and slip-resistant and protect the ankle.

Clothing

It includes a protective eye-catching long-sleeved shirt suitable for riding and wear-resistant pants (or protective suits).

Warning

- Not wearing a helmet increases the chance of serious injury in an accident.
- Make sure that you and your passengers always wear certified helmets and protective clothing.

Riding precautions

Run-in period

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

- Avoid full throttle start or rapid acceleration.
- Avoid emergency braking and rapid downshifting.
- Ride carefully.

Brake

Follow the following guidelines:

- Avoid excessive emergency braking and downshifting
  - Sudden braking will reduce the stability of the motorcycle.
  - Slow down before turning, or you may slip.
- Be careful when driving on slippery roads
  - Tyres are easier to slide on slippery surfaces and require longer braking distances.
- Avoid continuous braking
  - In the long and steep slope down the slope, repeated braking will lead to serious overheating of the brake, affecting the braking effect. You should use the engine brake and use the brake intermittently to slow down.
- The front and rear brakes can be used at the same time to achieve a complete braking effect.

▌ Anti-lock brake system (ABS)

This model is equipped with an anti-lock braking system to prevent tire lock-up during emergency braking.

- When the vehicle speed is less than 10 km / h, the anti-lock braking system does not work.
- During braking, after ABS intervention, the hand brake lever or Foot brake lever may slightly rebound, which is a normal phenomenon.
- Always use the recommended tyres to ensure that the anti-lock braking system works correctly.

▌ Engine brake

When you release the throttle, the engine brake will help the motorcycle slow down. If you want to slow down, you can downshift to a low gear. When descending a long and steep slope, the engine should be braked and the brake should be used intermittently to slow down.

▌ A humid and rainy environment

In a wet and rainy environment, the road surface will be wet and slippery, and the wet brake will also reduce the braking efficiency. You need to be very careful when braking. If the brake is wet, it can be intermittently repeated during low-speed driving and riding, which helps to dry the brake quickly.

Parking

- Stay on solid, flat ground.
- If you must stop on a slightly inclined or loose ground, make sure to stop the motorcycle and make sure that the motorcycle cannot move or tip over.
- Ensure that high temperature parts do not come into contact with flammable materials.
- Do not touch the engine, muffler, brake and other high temperature parts before cooling.
- To avoid the possibility of theft, be sure to lock the steering handle and remove the key before leaving the unattended motorcycle.

■ Stop the motorcycle with the side support

1. Extinguish engine.
2. Lower side support.
3. Tilt the motorcycle slowly to the left until its weight is concentrated on the side bracket.
4. Turn the steering handle completely to the left.

▶ If the steering handle is turned to the right, it will reduce stability and may cause the motorcycle to fall.

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

Fueling / brake fluid and fuel guide

Follow these guidelines to protect your engine and catalytic converter:

- Use only unleaded gasoline.
- It is recommended to use high octane gasoline. The use of low octane gasoline will reduce the performance of the engine.
- It is not recommended to use ethanol gasoline, which will reduce the performance of the engine.
- Do not use spoiled or contaminated gasoline, or oil-gasoline blends.
- Prevent dirt and water from entering the tank.
- Since the brake fluid has a certain corrosive effect, be sure to avoid splashing into the eyes, adhering to the skin and avoiding contact with non-metallic materials of the vehicle when adding.

Spare parts and modifications

We strongly recommend that you do not use any accessories other than KOVEMOTO, and do not modify the original design of the motorcycle, which will cause the motorcycle to be unsafe. Unauthorized modifications to your motorcycle will void your warranty service and result in your motorcycle being unable to legally drive on public roads and highways. Before you decide to add accessories to your motorcycle, first determine which modifications are safe and legal.

It is prohibited to attach a trailer or a sidecar to a motorcycle and to modify or install other equipment at the engine installation point. Your motorcycle does not have the design of these accessories, and their use will seriously damage the maneuverability and safety of the motorcycle.

Warning

- Improper accessories or modifications may cause safety accidents, in which you may be seriously injured or even life-threatening.
- Please follow all instructions in the Instruction Manual for accessories and modifications.

Loading guide

- The additional load will affect the maneuverability, braking and stability of the motorcycle. When riding with heavy loads, be sure to maintain a safe speed.
- Please keep within the specified loading limit, the maximum payload of the whole vehicle is 163kg, do not overload.
- Fix all luggage and place it evenly and smoothly near the center of the motorcycle.
- Do not place objects in the headlights or silencers.

Warning

- Overloading or improper loading will lead to accidents, resulting in serious casualties.
- Please follow the loading instructions in the Instruction Manual.

Operating instructions

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

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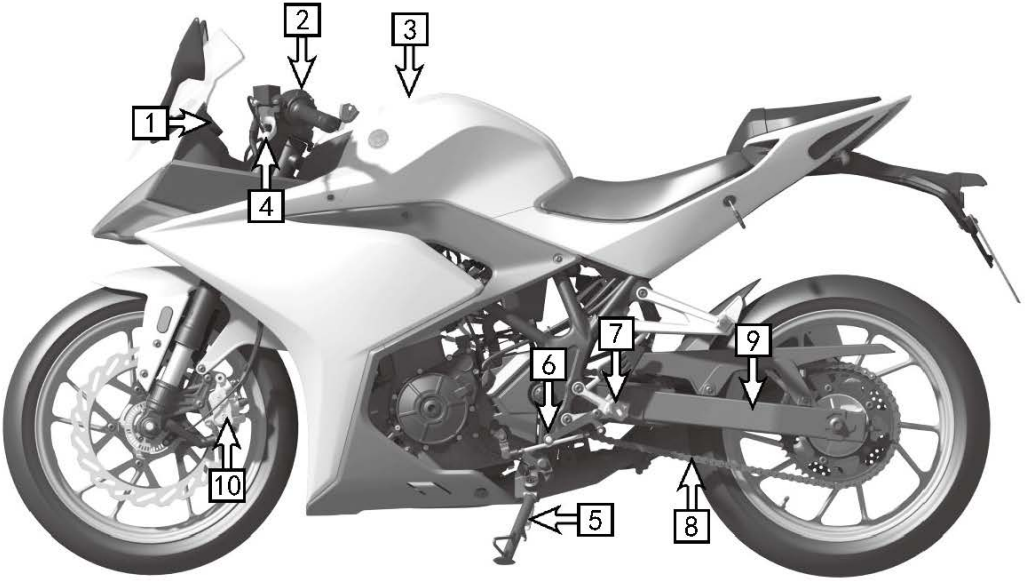
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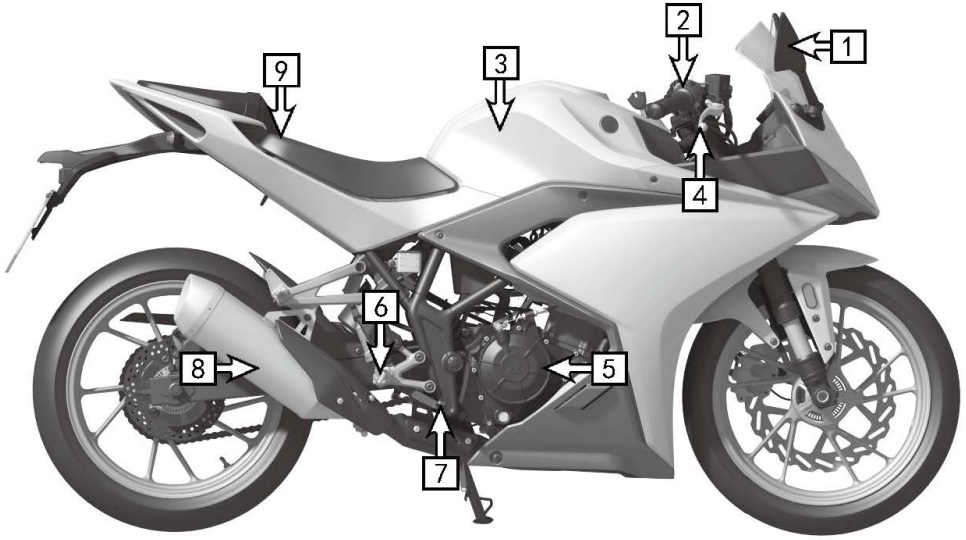
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Component location diagram



1.Instrument 2. Left combination switch 3. Fuel tank filler cap 4. Clutch lever 5. Side stand 6. Shift lever 7. Rider footrests 8. Chain 9. Link fork 10.Brake caliper

Component location diagram



1. Rearview mirror 2. Emergency OFF switch/electric starter button 3. Fuel tank 4. Hand brake lever 5. Engine 6. Rider footrests 7. Foot brake lever 8.Muffler 9. Front and rear seat cushions

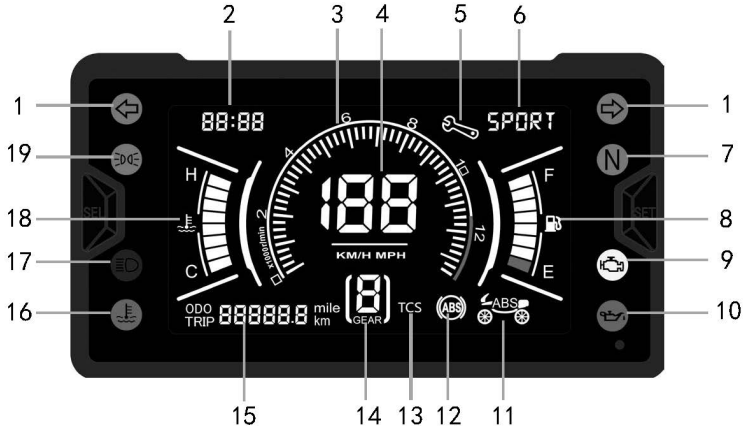
Instruments



Display check

When the ignition switch is turned to " ○ " (ON), the instrument is powered on to play the start-up animation, and then self-test is performed, and all functional modules and symbols are displayed. If the display is missing during self-test, Please go to the special repair shop of KOVEMOTO for repair.

Instrument interface description



Serial Number	Name	Functional description
1	Turn indicator light	When the left turn light is on, the left indicator flashes, and when the right turn light is on, the right indicator flashes
2	Time display	Display the instrument time
3	Tachometer	Engine speed display
4	Speedometer	Display the current speed
5	Service indicator light	When the motorcycle reaches the maintenance setting condition, this lamp is on
6	Riding mode	The economy mode displays ECO, and the sports mode displays SPORT

Serial Number	Name	Functional description
7	Neutral light	When in neutral, this light is on
8	Fuel display	It shows the amount of fuel ①When the oil level is lower than 1 bar, please replenish the fuel as soon as possible ②If the fuel symbol flashes with all the oil level color blocks at the same time, indicating that the oil level signal is abnormal, please submit it to the special repair shop of KOVEMOTO for repair as soon as possible
9	Electronic injection malfunction indicator light	When the electronic injection system fails, this lamp lights up (after the engine is powered on and started normally, the failure lamp goes out as a normal phenomenon)
10	Oil pressure indicator	This light is on when the oil pressure is insufficient
11	ABS status display	①Front and rear wheels show a white profile: Front and rear wheel ABS open ② The rear wheel shows yellow fill: Rear wheel ABS off ③ Front and rear wheels show a yellow fill: Front and rear wheel ABS off
12	ABS malfunction indicator light	①This light is on when a fault occurs ②After the whole vehicle is powered on, this lamp flashes as a normal phenomenon (0.5S on, 0.5S off). When the vehicle speed is > 5km / h, the ABS self-test is extinguished immediately after passing
13	TCS indicator light	①When the TCS function is on: The indicator goes out ②When the TCS function is off: The indicator is always on ③When TCS fails: The indicator is always on (function on) ④When TCS intervenes: The indicator flashes
14	Gear indication	Display the current gear
15	Odometer	Displays total vehicle mileage and subtotal mileage
16	Water temperature alarm indicator light	When the water temperature is too high, this light is on
17	High beam indicator light	This light is on when the high beam is switched on
18	Water temperature display	①When the water temperature indicator block displays red and lights up the water temperature alarm lamp, it means that the water temperature is too high. In the case of ensuring safety, stop for inspection, and continue driving after the water temperature drops ②When the water temperature data is abnormal, all water temperature color blocks and icons will flash together (when the flameout switch is off, the flashing is a normal phenomenon)
19	Position indicator light	When the position light is on, the light is on

The instrument functions operate as follows:

1.Briefly press the SET key to switch the ODO/TRIP display.

2.In the ODO display mode, long press the SET key to switch the male / female display.

3.In the TRIP display mode, long press the SET key to clear the subtotal mileage.

4.In IGN power-off state, press SEL key for a long time and turn on the ignition switch until about 3 seconds after the instrument self-test is completed to enter the clock setting mode. Short press SET key to set hour position (0-23), long press SET key after completion of hour setting, minute flashes, short press SET key to set minute. After completion, long press SET key or no key operation within 5 seconds, the meter automatically saves and exits the clock setting mode.

5. In the IGN power-off state, long-press the SET key until the electric door lock is opened. After the instrument self-test is completed, enter the automatic headlight setting mode for about 3 seconds, and the default display is OFF, indicating off; The SET key is briefly pressed to switch ON, indicating on.

6.Press the SEL key for a long time to enter the ABS working state setting mode, and the ABS characters in the icon 

will flash:

①Short press the SEL key to set the ABS working state.

② 

The constant light of the front and rear wheels indicates that the ABS function is fully open, the flashing of the rear wheel indicates that the ABS function of the rear wheel is closed, and the flashing of the front and rear wheels at the same time indicates that the ABS function of the front and rear wheels is fully closed.

③ If the setting is not successful, 

the entire icon will flash, please check the ABS or the line.

Note: When the instrument is powered on, the ABS function of the front and rear wheels is fully opened by default, and the icon 

is always displayed.

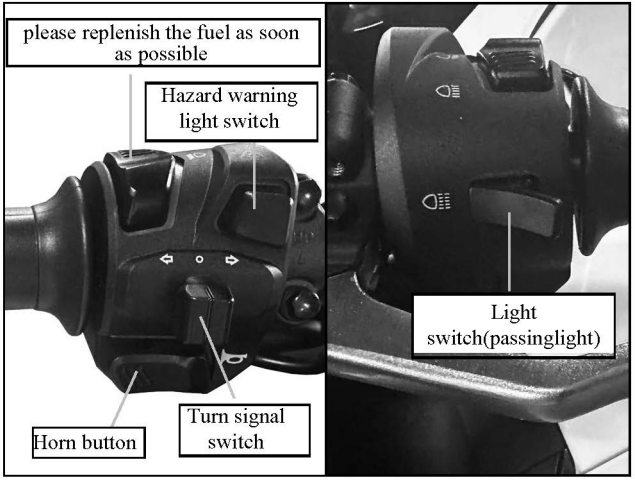
7. Press the SEL key briefly to select and set the TCS working status, and the TCS function status is on by default.

8.If the maintenance indicator is on, it will go off automatically after driving for 500Km, or press the SEL key for a long time to clear the maintenance indicator.

Notes

- To modify the ABS mode, it must be done in the parking state.

Switch



Hazard warning light switch:

It is used in emergency. After pressing the switch, turn on the left and right turn lights at the same time.

Turn signal switch:

Turn on the left turn signal: Turn the switch to the left, and after operation, the turn signal switch returns to the original position.

Turn on the right turn signal: Turn the switch to the right, and after operation, the turn signal switch returns to the original position.

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

Light switch:

Turn on the passing light (the passing light switch is located on the back of the throttle grip switch)

Turn on the high beam

Turn on the dipped beam

Ignition switch

When the key is in the “ ” position, turn the steering handle to the leftmost position, push in the key downward at the same time, and turn counterclockwise to the “ ” position to lock the direction; To unlock, turn the key clockwise.



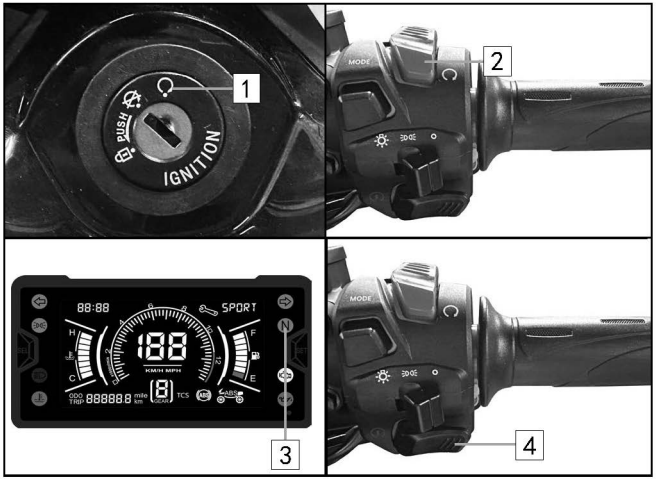
Location	Function	Note
	Use when parking (whole motorcycle power off)	The key can be removed
	Used when starting or driving	The key cannot be removed

Warning

- When parking (including long-term parking), the ignition switch must be in the “ ” or “ ” position to ensure the safety of the motorcycle and prevent the battery from losing power.
- When the steering mechanism is locked, do not push the motorcycle, otherwise it will lose its balance.

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Start the engine



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

1. Turn the ignition switch to the " ◯ " (ON) position.
2. Verify that the engine shutoff switch is in the " ◯ " (Run) position.
3. When the gear is shifted to neutral or the clutch lever is tightened, the side bracket is retracted, and the motorcycle is started with the transmission in gear.
4. Press the electric starter button with the accelerator fully closed.

If the engine is not started:

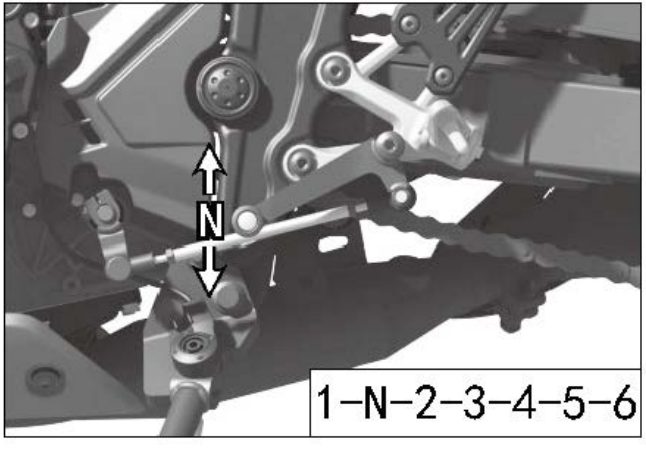
If the engine does not start within 3 seconds, wait 10 seconds before repeating step 4 above.

Notes

- If the engine starts and the idle speed is unstable, the throttle should be slightly increased.
- Prolonged high-speed idling and rotation can damage the engine and exhaust system.
- Hot fill or high idle speed for more than 5 minutes may cause discoloration of the exhaust pipe.
- If the throttle is fully open, the engine will not start.

Gear shift

Your motorcycle has 6 forward gears and adopts 1 down 5 up shift mode.



Method of shift:

Warm up the engine for normal operation.

1. When the engine is idling, disengage the clutch and press down on the Shift lever to move the transmission into the low (1st) gear position.

2. Gradually increase the engine speed and slowly release the Clutch lever. These two actions can be coordinated to ensure a natural start.

3. When the motorcycle reaches the balanced driving state, reduce the engine speed and then disengage the clutch, hook up the Shift lever to enter the second gear, and so on.

Precautions during 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. When the clutch is running in a semi-separated state, the clutch plate will wear quickly.
3. If you feel that the engine horsepower is insufficient when climbing, you should switch to low gear in time.
4. It is not allowed to use the front brake alone or to taxi in neutral in case of steep slope, curve and vehicle loss of control, and it is not allowed to drive off the handle.
5. When parking, you should put away the small throttle, cut off the clutch at the same time, and then brake.

Traction Control System (TCS)

As this motorcycle is equipped with TCS function (traction control system), it can make the motorcycle get the best traction during driving, which can effectively inhibit the rear wheel slip of the motorcycle under the conditions of starting on a smooth road surface (such as ice and snow, rainy days, mud) and rapid acceleration, thereby improving the stability and safety of driving.

You can turn off or turn on the TCS function through the instrument setting, and it is recommended to turn on the TCS function under no special circumstances.

When the rear wheel loses grip after the TCS is closed, the system will not make a torque-down request. At this time, it may cause the motocycle to swing and fall, and the driver should adjust the corresponding driving method.

If the engine itself is braked, the TCS will not operate on a slippery road. If you suddenly slow down and lose the throttle, it will cause uncontrollable rear wheel slip. Do not suddenly turn off the accelerator, especially when riding on slippery roads.Since TCS may not be able to handle rapid refueling operations on rough roads, be sure to take into account road and weather conditions as well as your technical and physical conditions when throttling up the engine. If the motorcycle gets stuck in mud, snow or sand, temporarily closing the TCS will make it easier for the motorcycle to get out. Closing the TCS helps maintain control and balance during cross-country riding.

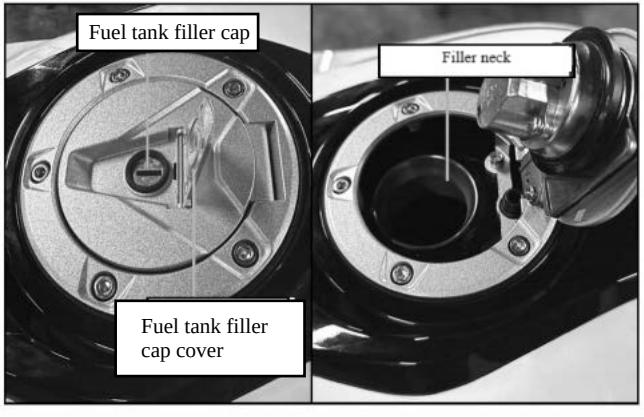
Always use the recommended tire size, wheel speed sensor and gear ring to ensure proper TCS operation.

When the TCS function is active, the vehicle power output is weak, which is a normal phenomenon, and there is no need to worry and take other measures.

Caution

- During a ride, when the TCS indicator lights up, it may be that you turn off the TCS function or that the TCS function is faulty. Turn it back on after turning off the key switch, and turn on the ignition of the right throttle grip switch.
- If the indicator is still on, the TCS function is abnormal. You should send it to the special repair shop of KOVEMOTO for troubleshooting as soon as possible.

Refueling



Open the fuel tank cover:

Turn over the lock cover, insert the ignition key, and turn clockwise to open the fuel tank cover.

Close the tank cap:

1. After refueling, press the fuel tank cover down until it locks.
2. Remove the key and close the Fuel tank filler cap cap. If the tank cap is not locked in place, the key cannot be pulled out

When filling with fuel:

After using the side bracket to stop stably, open the fuel tank cover for filling, and the filling should not be higher than the neck plate of the injection port, and the fuel tank capacity is 13L. It is recommended to use 95# or more unleaded gasoline. After filling in the fuel, close the fuel tank cap and lock it.

Warning

· When refueling, please do it outdoors. Be sure to extinguish the engine, away from heat sources, sparks or open flames. If there is a splash, please immediately wipe clean.

Maintenance

Please read “Maintenance” and “Maintenance Specifications” carefully before prepar-ing for maintenance. For maintenance data, please refer to “Technical Parameters”.

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Maintenance

The importance of maintenance

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

Maintenance is an important responsibility of the motorcycle owner to ensure that the inspection is carried out before each ride and that the periodic inspection is carried out as described in the maintenance cycle table.

The safety of maintenance

Please read the maintenance instructions before each maintenance to ensure that you have the necessary tools, components and skills. We are unable to alert you to every hazard that may arise during maintenance. Only you can decide whether the motorcycle should be maintained or repaired.

Please follow the following guidelines for maintenance:

- Turn off the engine and remove the key.
- Park the motorcycle on a firm and flat ground with side brackets, or support it with maintenance brackets.
- Please wait for the engine, muffler, brake and other high temperature components to cool before starting the operation, otherwise it may cause burns.
- Please start the engine under the specified conditions and in a well-ventilated environment.

⚠ Warning

- Failure to carry out normal maintenance before riding or failure to correct the fault can lead to serious injury or fatal accidents.
- Please follow the inspection, maintenance recommendations and maintenance schedule provided in the instruction manual.

Maintenance schedule

The motorcycle should be maintained within the specified time. In order to ensure safety, it can only be repaired by a special repair shop of KOVEMOTO. The symbols in the table have the following meanings:

I: Carry out inspection, cleaning and adjustment R: Change A: Adjust L: Lubrication

Maintenance times / Maintenance items		Maintenance cycle					
		1000~1500Km	Per 5000Km	Per 10000Km	Per 20000Km	Every 1 year	Every 2 years
※	Throttle operating system	I	I	I	I	I	I
	Air filter element	I/R	I/R	I/R	R	R	R
※※	Valve clearance				I		
※	Engine oil	R	R	R	R	R	R
※	Oil filter element	R	R	R	R	R	R
※	Timing chain tension	A	A	A	A	A	A
	Transmission chain		I &L	I&L	I&L	I &L	I &L
	Brake shoe worn	I	I	I	I	I	I
※	Brake system	I	I	I	I	I	I
※	Clutch	I	I	I	I	I	I
※	Fasteners	I	I	I	I	I	I
※	Directional bearing	I	I	I	I	I	I
※※	Deep groove ball bearing with buffer	I	I	I	I	I	I
※	Front and rear wheel bearings	I	I	I	I	I	I
	Accumulator			I	I	I	I
※	Fuel system oil circuit / filter			R	R	R	R
※	Spark plugs			I	I	I	I
※	Plain fork bearing				I&L	I&L	I&L
※	Brake fluid					R	R
	Coolant	I	I	I	I	I	R

※This item is maintained by the personnel of the special repair shop of KOVEMOTO. If the user has special tools, maintenance accessories and maintenance capabilities, they can also repair themselves, and the maintenance knowledge can refer to this Instruction Manual.

※※In order to ensure safety, the project can only be repaired by the personnel of the special repair shop of KOVEMOTO.

Pay special attention (when riding in dusty or polluted areas): :

1. Clean the air filter element every day.
2. Clean the shock absorber every day

Check list of torque cycles at off-weight position

Serial Number	Name of fastening location	Recommended test cycle
1	Front and rear axle, flat fork shaft fastening	A torque check is required for each maintenance cycle.
2	Shock absorption and fastening before upper and lower connecting plates are hugged tightly	
3	The upper connecting plate is fastened to the steering column	
4	Fastening of steering column four-slot nut	
5	Fastening of the lower card holder with the steering hand	
6	Fastening of installation of small engine sprocket	
7	Fastening of engine suspension	
8	Fastening of rear shock absorber	
9	Fastening of cradle bolts	
10	The front section of the muffler is connected with the engine	
11	Fastening of front and rear brake calipers	
12	Fastening of rear brake pump	
13	Fastening of shift lever and adjusting lever end bearing	
14	Fastening of brake pedal and adjusting rod end bearing	
15	Fastening of all-vehicle brake oil pipe	When cleaning the oil circuit, carry out maintenance according to the required torque.
16	Fuel rail fastening	
17	Fuel pump fastening	
18	Fastening of front and rear brake discs	When checking or replacing each maintenance cycle, carry out maintenance according to the required torque and gluing method.
19	ABS ring gear	
Note: The torque cycle inspection items and torque standards not stated in this instruction manual shall be implemented in accordance with our Maintenance Manual.		

Maintenance specifications

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

Inspection items	Inspection contents
Steering hand	Flexible rotation, no play and loose
Brake system	Check its operating condition, check the front and rear brake fluid level and brake pad wear
Fuel level	Enough oil for the planned driving distance (please refuel if necessary)
Throttle	Check that it opens smoothly and closes completely in each steering position
Clutch	Check its operation and adjust the free travel if necessary
Wheels and tyres	Check the use condition and tire pressure, and supplement the air pressure if necessary
Drive chain	Check its use and sag, adjust and lubricate if necessary
Lighting and horn	Check the lighting system and horn for good performance
Oil level	Add engine oil if necessary and check for leaks
Instrument indication	Check whether the indicators on the instrument display normally

Replace part

Battery

Check and replace the battery

1. Before installing the battery, if the electrode is dirty, please wipe it clean and then install it, otherwise the function may fail due to poor contact.
2. In the process of use, if the battery is deformed, abnormal heat, smoke and other abnormal phenomena, please immediately stop using, and timely handed over to the special repair shop of KOVEMOTO for inspection.
3. If the battery is placed in a high temperature and humid environment for a long time, functional failure and short life may occur. Before using it again, please ensure that the battery appearance and function are normal before installation and use.
4. If the entire motorcycle can not start, please check whether the battery is normal, such as battery damage, please replace it in time.
5. When installing the battery, be sure to lock the battery pole bolt

If the battery is not used for a long time, please pay attention to the following conditions:

- To prevent the occurrence of excessive discharge, the battery should be charged every two months.
- When the battery is not used, it should be placed in a cool and dry environment to prevent short circuit of the positive and negative electrodes of the battery.

Notes

- Improper handling of batteries may cause harm to the environment and human health, please dispose of waste batteries in accordance with local environmental regulations.
- The installation of complete vehicle electrical appliances may lead to a loss of battery power and even cause electrical system failure.

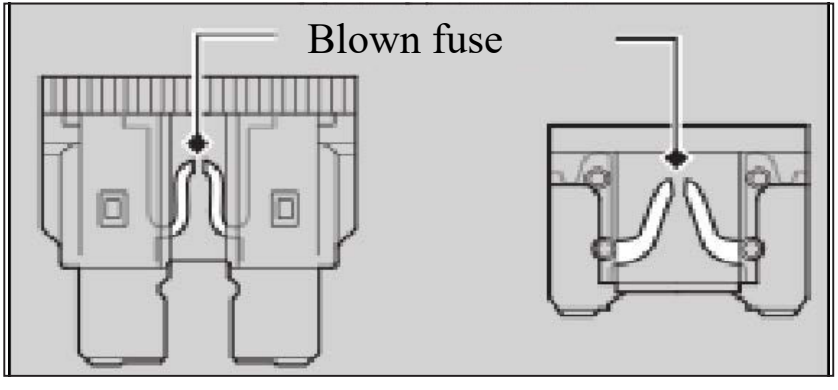
Fuse

Fuses protect the electrical circuit of your motorcycle. If some electrical parts of your motorcycle stop working, check and replace the blown fuses.

Check and replace fuses

Turn the ignition switch to the " ⊗ " (OFF) position to take out and check the fuse. If the fuse is blown, please replace it with a fuse of the same specification, and refer to "Technical Parameters" for fuse specification.

If the fuse is often blown, there may be hidden problems in the electrical equipment, please go to the special repair shop of KOVEMOTO.



Notes

- The fuse needs to be replaced in an equal amount, and replacing a fuse with a higher rating will increase the chance of damage to the electrical system and the risk of burning the motorcycle.
- Installing non-KOVEMOTO locomotive electrical accessories will overload the electrical system, causing the battery to discharge, and even destroy the system

Engine oil

The consumption of engine oil and the decline in oil quality will vary depending on the driving conditions and the use time. The higher the operating speed, the faster the oil consumption rate. When running at high speed or high speed for a long time, the oil change cycle should be shortened, and the engine oil level should be checked frequently. If necessary, add the recommended engine oil.

When used at extreme temperatures, the oil quality drops faster, and the dirty or long-used oil should be replaced as soon as possible.

Select engine oil

When the oil is initially installed, its grade should be selected as SL10W-40, and the maintenance oil should be selected with SL grade and above of API classification.

Brake fluid

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

Only use the brake fluid newly removed from the sealed container.If you add the brake fluid, please go to the special repair shop of KOVEMOTO to check the brake system as soon as possible.

Coolant

Use only the original KOVEMOTO premixed coolant that is not diluted with water. The original KOVEMOTO premixed coolant can prevent 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. The freezing point of coolant is -40℃ and the boiling point is 110℃.

Notes

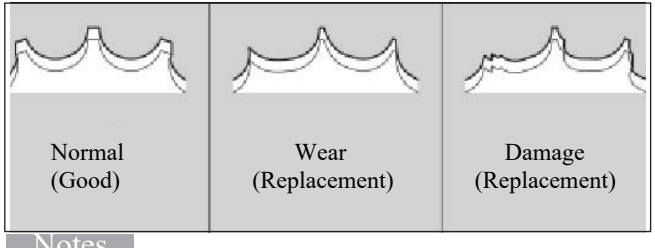
- Brake fluid can damage plastic and paint surfaces. If it spills, wipe off immediately and clean thoroughly.
- Recommended brake fluid: DOT4 brake fluid or equivalent.
- Since ordinary tap water or mineral water can cause corrosion, use a special coolant for non-aluminum engines.

Drive chain

The drive chain must be checked regularly and lubricated. If you often drive in poor road conditions, high speed or repeated speed increases, you need to check the chain more frequently.

If the drive chain is not running smoothly, it makes abnormal noise, there is a damaged roller or a loose bolt, and the oil seal is lost or bent, please check the chain with the special repair shop of KOVEMOTO.

Simultaneously check the driving sprocket and the driven sprocket. If any one has worn or bad teeth, please go to the special repair shop of KOVEMOTO for replacement.

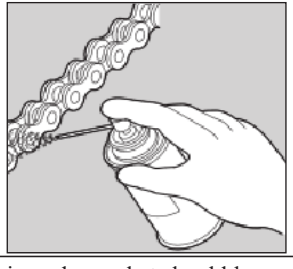


Cleaning and lubricating

After checking the sag, turn the rear wheel and clean the chain and sprocket at the same time. Use dry cloth, oil seal chain special cleaning agent or neutral detergent. If the chain is dirty, use a soft brush, clean and dry and lubricate with the recommended lubricant.

Do not use non-oil seal chain-specific steam cleaners, high-pressure cleaners, wire brushes, volatile solvents such as gasoline and benzene, scrubbers, chain cleaners and lubricants, otherwise they may damage the chain oil seal.

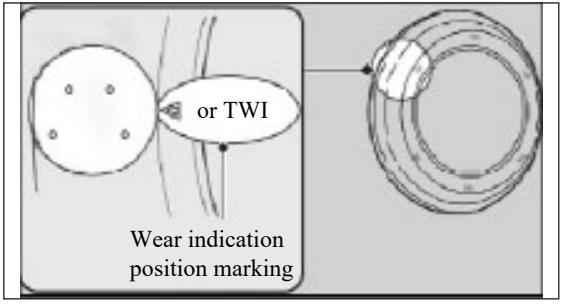
Avoid getting lubricating oil on the brakes or tires, and avoid using excessive lubricating oil to avoid splashing on clothes or motorcycles.



Notes

- The use of a new drive chain on a worn sprocket will speed up chain wear, and the drive chain and sprocket should be replaced at the same time.
- Recommended lubricating oil: Special lubricating oil for chain oil seal.

Tyres (check / replace)



Tyre size

Front：110/70R17

tyres：140/60R17

Abnormal wear check

Check the contact surface of the tire for signs of abnormal wear.

Check tread depth

Check the tread wear indication mark. If the wear reaches the indication mark, replace the tire immediately.

Check tire pressure

When you feel that the tire pressure is insufficient, use a barometer to measure the tire pressure, and check the tire pressure when the tire is cold at least once a month. Ensure that the valve core cover is tight and replace it with a new one if necessary.

The tire pressure standard value is: Front tire: 230KPa; rear tire: 250KPa

Damage check

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

Whenever changing tyres, follow the following guidelines:

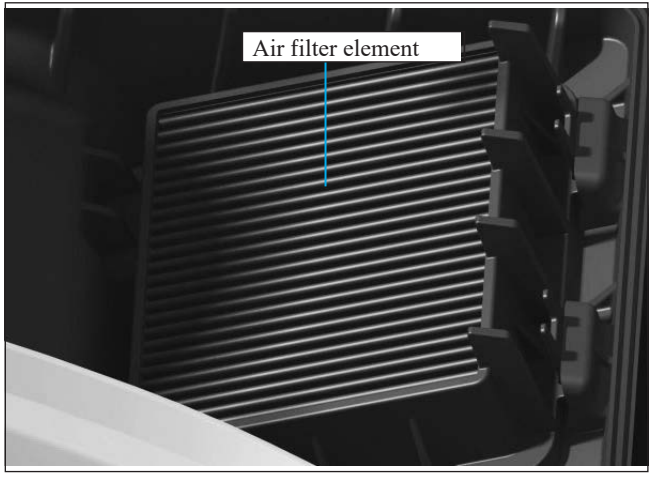
- Use recommended tyres or equivalent products of the same size, construction, speed class and load capacity.
- After the tire is installed, use the original balance positioner of KOVEMOTO or equivalent equipment to carry out balance positioning on the wheel.
- This motorcycle rim is designed as a tubeless tire. Do not install the inner tube in the tire. If the inner tube is installed, the inner tube will rub against the rim during rapid acceleration or braking, and excessive heat will cause the inner tube to burst.

Warning

- The use of excessively worn or improperly inflated tyres can lead to accidents and serious casualties. Please follow the relevant tyre inflation and maintenance guidelines in the instruction manual.
- Installing an unsuitable tire can affect handling and stability, and lead to accidents and even endanger life.
- Always use tyres of the size and type recommended in this Instruction Manual.

Air cleaner

This motorcycle is equipped with an air filter element made of paper, please do not maintain it by yourself. It should be cleaned or replaced by a special repair shop of KOVEMOTO.



Tools

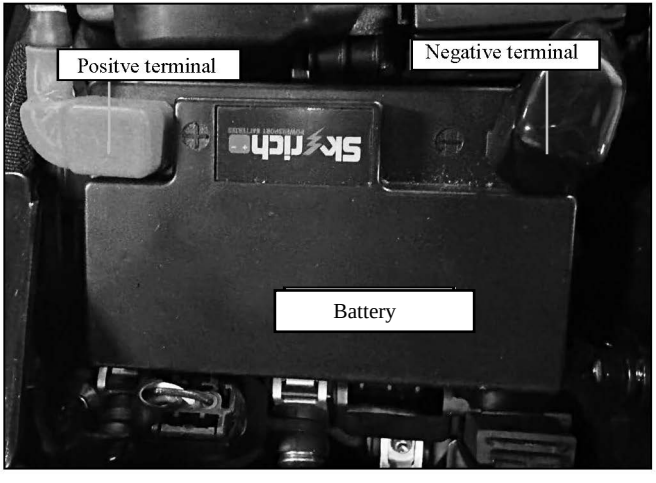
The on-board tool is embedded in the rear position under the rear seat cushion.

You can use the on-board tools for some simple repairs, minor adjustments and component replacements.

● Double-head inner ring spanner T25×T30

Remove and install body component

Battery



Remove

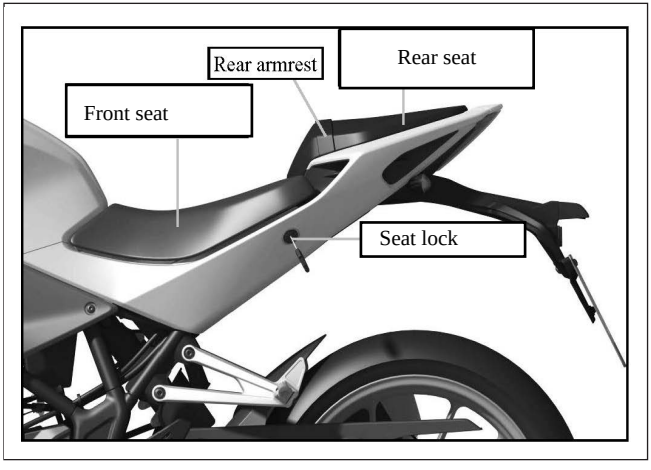
Confirm that the ignition switch is turned to the " " (OFF) position.

1. Remove seat cushion.
2. Unclip rubber strip 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 the bolts and nuts.

Install

Install the components in the reverse order of removal, be sure to connect the positive terminal (+) first and the negative terminal (-) last; Make sure the bolts and nuts are tightened.

Seat cushion



Remove

1. Insert the key into the seat lock and press the rear end of the rear seat cushion assembly down slightly. Turn the key clockwise, pull the rear end upward to disengage from the lock, and then remove the rear seat cushion assembly with a slight force to the rear.

2.Remove the bolts at the rear left and right of the front seat cushion assembly with the on-board tool and pull up.

Install

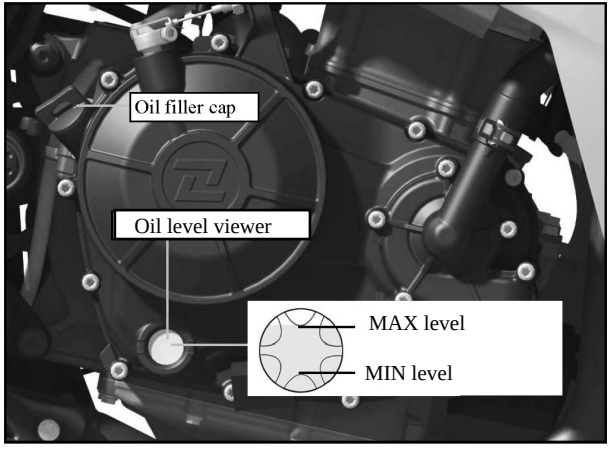
1. Align the rear end of the front seat cushion assembly to the rear hole position and install the screws.
2. Clip the front and rear pins of the rear seat cushion assembly into the frame clip slots respectively.
3. Align the seat lock pin with the lock hole, press down the rear of the seat cushion, insert the lock pin into the lock hole of the seat lock seat. The lock tongue automatically locks, and pull up slightly to ensure that the seat cushion is firmly locked in place.
4. When the seat cushion is closed, the seat lock automatically locks

Notes

- Make sure that the seat cushion pin is correctly inserted into the frame card slot, otherwise the seat cushion product will not withstand your weight and the seat cushion product may be crushed.

Engine oil

Check and add engine oil



Check engine oil

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

2.Place the motorcycle vertically up on a firm flat ground and remove the left windshield. Remove the oil filler cap and check the oil level viewer to see if the oil level is between the upper and lower limit marks.

Add engine oil

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

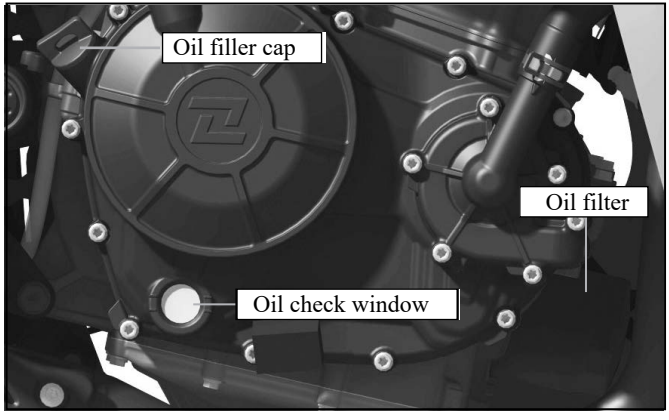
1. Remove the engine oil filler cap, add the recommended oil to the oil level mark, do not exceed the upper oil level mark, and ensure that no foreign substances enter the engine oil filler. If there is any spillage, wipe it off immediately.

2.Refit the engine oil filler cap and tighten.

Notes

- Long-term skin contact with oil should be avoided, and the oil should be thoroughly washed after contact.
- Excessive oil or insufficient oil will damage the engine, please do not mix different brands and grades of oil, which will affect the lubrication and clutch operation.
- Used oil and containers are harmful to health and the environment and cannot be disposed of as daily waste. The treatment method should be consistent with local environmental regulations.

Replace engine oil and oil strainer



Replace engine oil and oil strainer:

Since the replacement of engine oil and oil filter requires special tools, we recommend that it be repaired by special repair shop of KOVEMOTO. Please refer to the Maintenance Cycle Table for the engine oil and oil filter maintenance cycle.

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

2.Park the motorcycle on a stable level and place an oil drain plugs under the oil oil drain plugs.

3.Remove oil filler cap, oil drain plugs and sealing gasket. Drain the oil and make sure that the old rubber ring does not stick to the engine.

4. Remove the engine oil filter with the oil filter wrench, drain the remaining oil, and ensure that the old rubber ring does not stick to the engine.

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

6. Fit 1 new engine oil filter and tighten (torque: 17 N m).

7. Install a new sealing washer to the oil drain plugs and tighten the oil drain plugs（torque: 20N m）

8. Add the recommended original engine oil to the crankcase and, after filling, tighten the oil filler cap.

9. Check for oil leakage and fit left windshield.

Only after draining from the oil drain plugs, the amount of oil required is: 2.2L

After removing or replacing the oil filter, the required oil quantity is 2.4L.

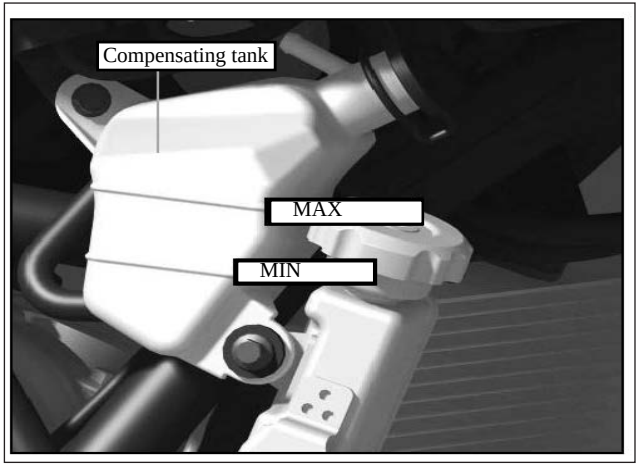
After the whole machine is disassembled and reassembled, the required oil amount is 2.5L

Notes

- Using the wrong engine oil and oil filter can damage the engine.
- Please discard the oil and oil filter at the relevant recycling center.

Coolant

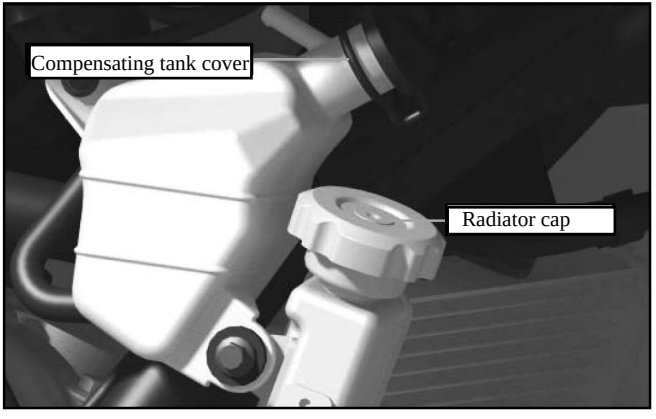
Check coolant



Check the coolant level in the compensating tank cover while the engine is cooling。

1. Park the motorcycle on a stable, flat, and level surface.
2. Keep the motorcycle straight.
3. Check that the coolant level in the compensating tank cover is between the upper and lower limit marks
4. If the coolant level drops significantly or the water tank is empty, there may be a serious leak, which should be repaired by the special repair shop of KOVEMOTO.

Add coolant



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

When adding coolant, the radiator cap should be opened to relieve pressure when the engine is cool.

Open the cover of the water storage kettle at the other end to add. During the addition process, make sure that no foreign objects enter the closure opening and take care not to exceed the upper limit liquid level mark. After the addition is completed, reinstall the relevant cover.

Change coolant

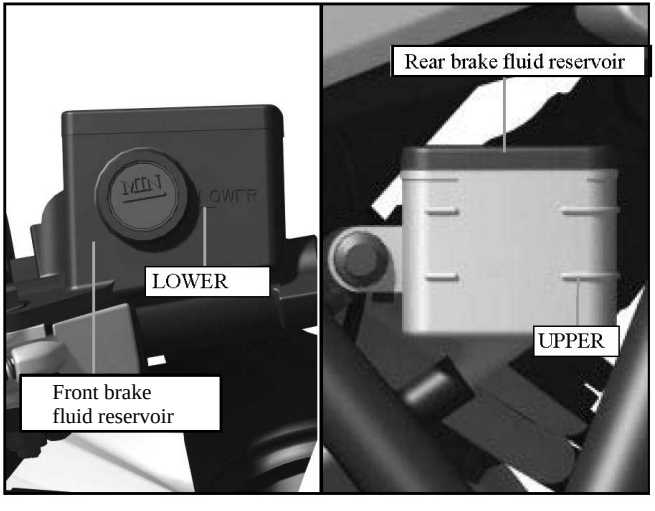
Unless you have the appropriate tools and have qualified mechanical technology, please go to special repair shop of KOVEMOTO to replace the coolant.

⚠ Warning

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

Brakes

Check brake fluid



1. Place the motorcycle vertically up on a stable flat ground.
2. Check brake fluid reservoir for level.
3. Check that the brake fluid is visible through the brake fluid sight glass. If the brake fluid is lower than the lower limit of the oil window, add it immediately.

If the brake fluid level in the reservoir is below the LOWER level mark or the free travel of the brake lever and pedal exceeds the limit, the brake pads must be checked for wear. If the brake pads are not worn, there may be leakage, please go to the special repair shop of KOVEMOTO.

Check brake pads

Check the condition of the brake pad wear indication mark. If the brake pads wear to the indicator mark, they need to be replaced.

Front

Check brake pads from under the brake caliper

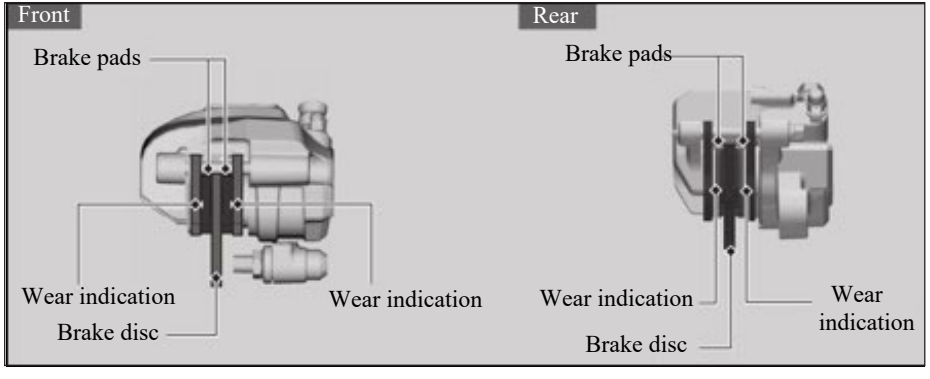
Brake pad lining thickness: 6.5mm (indicated as wear limit)

Rear

Check brake pads from the rear right of the brake caliper

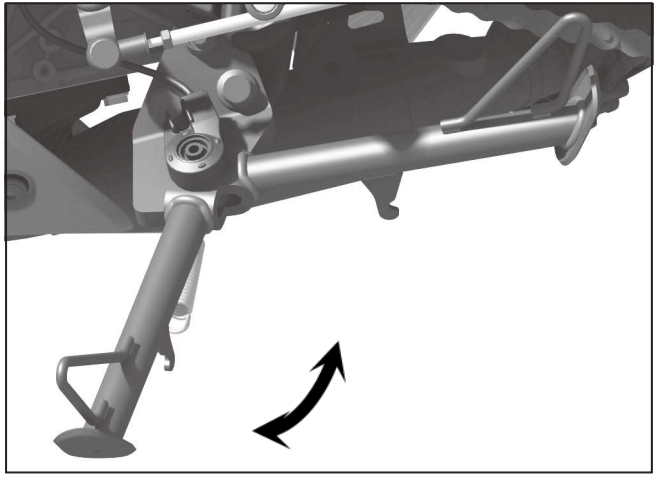
Brake pad lining thickness: 6.8mm (indicated as wear limit)

If necessary, please hand over the brake pads to the special repair shop of KOVEMOTO for replacement (when the wear limit is reached, the left and right brake pads must be replaced at the same time).



Side support

Check side support



1. Check that the side supports are free to operate. If the side bracket operation is jammed or “squeaky”, clean the pivot area and grease the pivot bolt with clean grease.

2.Check the spring for damage or loss of elasticity.

Drive chain

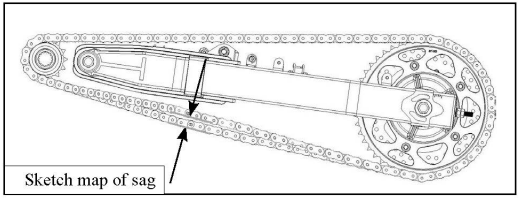
Check the sag of the drive chain

Check the sag at different points along the chain. If the sag at all points is not uniform, some links may have been bent and kinked. Please check the chain at the special repair shop of KOVEMOTO.

1. Put the transmission into neutral and extinguish the engine.
2. Place the motorcycle vertically on a firm, flat ground.
3. Push the chain closer to the fork to determine if the chain sag is in the area behind the chain guard.
4. Turn the rear wheel forward to check that the chain runs smoothly.
5. Check sprockets.
6. Clean and lubricate drive chain.

Drive chain sag: 10-15mm

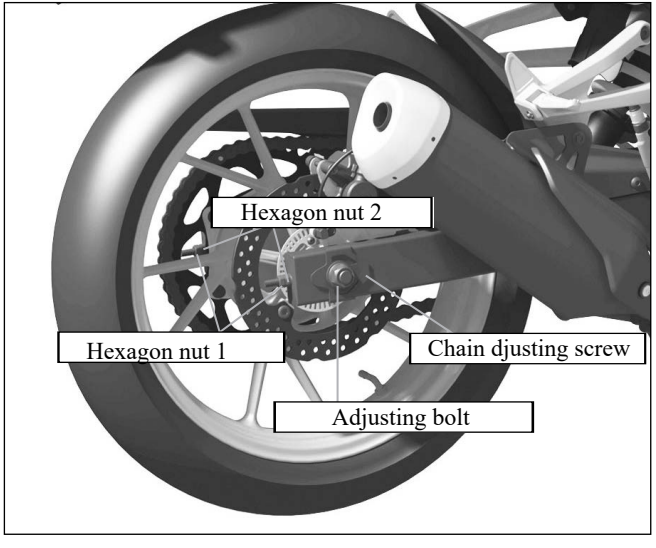
If the sag exceeds 20mm, you cannot continue to drive the motorcycle.


Sketch map of sag

Notes

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

Adjust the sag of the drive chain



When adjusting the sag of the drive chain：

1. Shift the transmission into neutral and extinguish the engine.

2. Place the motorcycle vertically on a stable flat ground and support the vehicle with side brackets.

3. Loosen the adjusting bolt and the hexagon nuts 1 on both sides of the fork.

4. Adjust the hexagon nut 2, tighten the chain clockwise, and loosen the chain counterclockwise.

5. Rotate the hexagon nut 2 to adjust the chain sag, so that the left and right chain djusting screws are adjusted on the same scale line, and the chain sag adjustment range is: 13- 20mm (see the sag diagram for details).

6. Check the chain tightness to ensure that the requirements are met.

7. Lock the hexagon nut 1 and lock the adjusting bolt (torque: 128N ·m).

Notes

- When checking 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 the clutch cable for bending and damage. If necessary, please go to the special repair shop of KOVEMOTO for replacement.

Lubricate the clutch cables with special cable oil to prevent premature wear and corrosion.

Notes

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

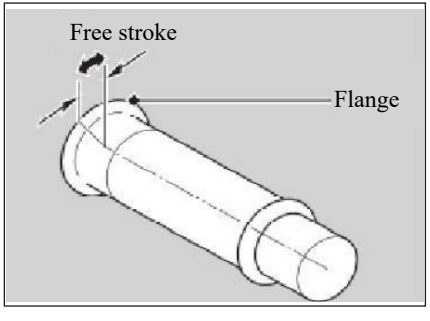
Throttle

Check throttle

When the engine is off, check whether the throttle can be smoothly turned from the fully closed to the fully open position in all directions and the free stroke is correct.

If the throttle operation is not smooth, automatically closed or the cable is damaged, please go to the special repair shop of KOVEMOTO for repair.

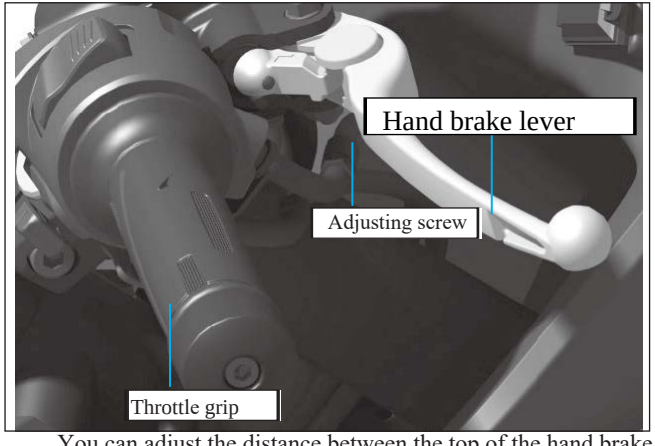
Free travel of throttle handle flange: 2-6mm



Notes

· Do not turn the adjusting screw beyond its natural limits.

Adjusting the hand brake lever



You can adjust the distance between the top of the hand brake lever and the handle rubber.

Adjustment method

Push the hand brake lever inward to the desired position while turning the adjusting screw until the numbers align with the reticle. After adjustment, check whether the hand brake lever works correctly before riding

Inspection of shock absorbers

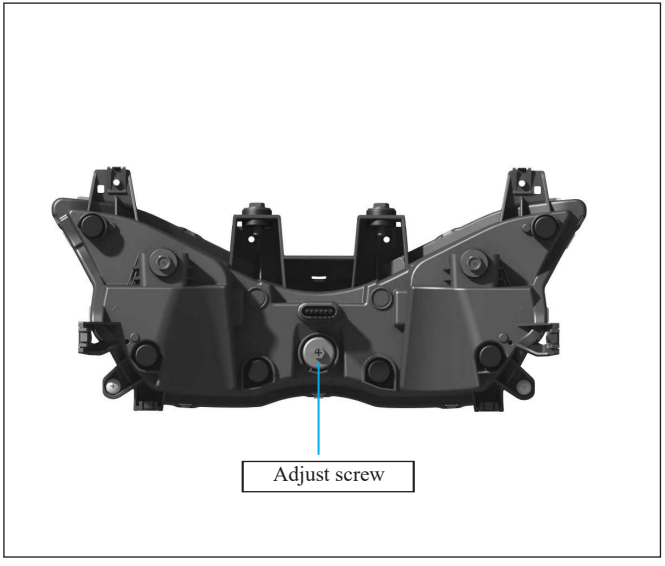
Check and clean all parts of the shock absorber regularly to ensure optimum performance:

1. Check that the front shock absorber trim and dust seal are clean and that there is no soil or dirt on the front shock absorber.
2. Check for oil stains under the spring strut dust seal. If there are signs of oil leakage, replace the damaged dust seal and oil seal.
3. Pinch the hand brake lever and press the throttle grip back and forth several times to check whether the front shock absorber rebounds smoothly.
4. Press the seat cushion several times to check whether the rear shock absorber works smoothly.

Headlight

Adjust the headlight beam

You can adjust the angle of the headlight beam by rotating the adjusting screw, and the clockwise rotation is the overall decline of the headlight beam; The counterclockwise rotation is the overall rise of the headlight beam. Please comply with local laws and regulations.



Troubleshooting

Please read “Maintenance” and “Maintenance Specification” carefully before maintenance, and refer to “Technical Parameters” for maintenance data.

The engine could not start ····· 53

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Puncture ····· 56

Remove wheel ····· 57

Electrical fault ····· 61

The engine could not start

The starter motor ran but the engine failed to start

Check the following items:

- Check that the correct engine start sequence is used.
- Check if there is gasoline in the tank.
- Check if the battery voltage is too low.
- Check side support for retraction.

The starter motor does not work

Check the following items:

- Verify that the engine start sequence is correct.
- Verify that the engine shutoff switch is in the run position.
- Check whether the battery voltage is too low, whether the fuse is blown, and whether the battery connection is loose. If the problem still exists, please go to the special repair shop of KOVEMOTO.

Notes

·Continuing to drive while the engine is overheated can seriously damage the engine.
·The engine runs at high speed in neutral for a long time, which may cause the water temperature to be too high.

Overheating (water temperature alarm indicator light up)

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

1. Turn off the engine with the ignition switch and turn to the " ◯ " (on) position.
2. Check that the radiator fan is operating properly, and then turn the ignition switch to the " ⊗ " (OFF) position.

If the fan is not running: Do not start the engine, send your motorcycle to the special repair shop of KOVEMOTO.

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

3. After the engine has cooled, check the radiator hose for leaks.

If there is a leak: Do not start the engine, send your motorcycle to the special repair shop of KOVEMOTO.

4. Check the coolant level in the water reservoir and add if necessary.
5. If items 1-4 are normal, you can continue to drive, but please pay close attention to the indicator light.

The warning indicator lights up or blinks

Oil pressure indicator

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

1. Check engine oil level and add oil if necessary.
2. You can continue to ride only after the indicator goes out.
3. When the oil is at or near the lower limit, a rapid increase in speed may cause the indicator light to illuminate.
4. If the oil level is at a normal level and the indicator is still on, please turn off the engine and contact the special repair shop of KOVEMOTO.
5. If the engine oil drops quickly, your motorcycle may leak oil or have other serious problems, please send it to the special repair shop of KOVEMOTO.

Electronic injection malfunction indicator light

If the electronic injection malfunction indicator light up during driving and riding, your electronic fuel injection system system may have serious problems. Please slow down and send it to the special repair shop of KOVEMOTO

Caution

- Continued driving at low oil pressure can seriously damage the engine.

ABS Malfunction indicator (anti-lock braking system)

If any of the following conditions occurs in the ABS fault indicator, indicating that your ABS is faulty. The emergency brake will not be able to provide the anti-lock function, please send it to the special repair shop of KOVEMOTO as soon as possible.

- ●The ABS malfunction indicator is always on or flashing when riding.
- ●When the ignition switch is turned from “ ” (OFF) to “ ” (ON), the indicator light does not illuminate.
- ●When the speed is higher than 5 km / h, the indicator light will not go out.

The ABS malfunction indicator light may flash or stay on when:

- ●Turn the front wheel separately.
- ●Turn the rear wheel separately.
- ●Rear wheel slip.
- ●When riding on a special road.

The system can be reset by turning the ignition switch to the “ ” (OFF) position and then to the “ ” (ON) position.

Puncture

Since repairing the tire or disassembling the wheel requires special tools and professional technology, we recommend that such repairs be completed by a special repair shop of KOVEMOTO. If you have done emergency repair tires, please be sure to check or replace the tires by special repair shop of KOVEMOTO.

Use the tire repair kit for emergency repairs

If your tire is slightly punctured, you can use the tubeless tire repair kit for emergency repair.

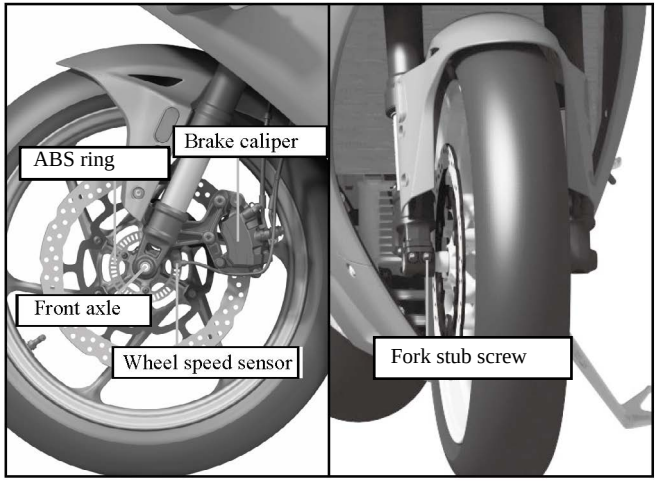
Follow the instructions provided in the tire emergency service kit. Riding a motorcycle with temporarily repaired tires is very dangerous, and the speed should not exceed 50 km / h. Please send it to the special repair shop of KOVEMOTO for tire replacement as soon as possible.

Warning

- It is dangerous to ride a motorcycle with temporarily repaired tires. If the temporary repair fails, an accident will occur, causing serious casualties.
- If you have to ride a motorcycle with temporarily repaired tires, please drive slowly and carefully, and do not exceed 50 km/h until you replace the new tires.

Remove wheel

If you need to remove the wheel to repair the tire tie, follow these steps. When you remove and install the wheel, be careful not to damage the wheel speed sensor and the ABS ring .



Remove:

1.Firmly support your motorcycle with a service bracket or crane and lift the front wheels off the ground.

2.Remove the left brake caliper.

- ●Support the brake caliper assembly, do not hang on the brake hose, and do not twist the brake hose.
- ●Avoid getting lubricating oil, oil or dirt onto the brake discs or pads.
- ●Do not pull the hand brake lever when the brake caliper is removed.
- ●Be careful not to scratch the wheel when removing the brake calliper.

3. Loosen the axle fork stub screw and the front wheel axle.
4. Remove front wheel axle and front wheel.

Install

1.Place the front wheel in the middle of the front shock absorber, insert the front wheel bushing (left) into the left mounting hole of the front wheel, and clip the brake disc into the brake caliper.

2. Thread the front wheel axle from right to left through the front wheel and tighten the front wheel axle (front wheel axle M16, torque 88N ·m). After operating the hand brake lever several times, shake the front fork up and down several times, and then install the right two fork stub screw (front wheel axle fork stub screw M8, torque: 22N ·m)

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

4.Position the front wheel to the ground.

5.Shake the front fork up and down several times after operating the hand brake lever several times.

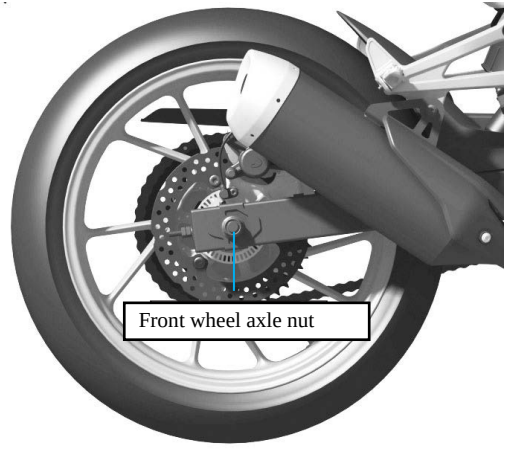
6.Lift the front wheels off the ground again, and after you release the hand brake lever, check whether the wheels turn smoothly.

If the torque wrench is not used in the installation process, please send it to the special repair shop of KOVEMOTO as soon as possible, and improper installation will cause the brake performance to decrease.

Notes

·When installing the wheel or caliper in place, carefully install the brake disc between the brake pads to prevent it from being scratched.
·When installing the front wheel, you must first tighten the front wheel axle, and then tighten the fork stub screw on the right side of the front wheel axle, and the order of the two cannot be exchanged.

Rear wheel



Remove

1.Park the motorcycle on a stable surface.
2.Firmly support your motorcycle with side brackets or service brackets and lift the rear wheels off the ground.
3.Remove the front wheel axle nut and washer.
4.Hold the rear wheel and take out the rear wheel axle and the rear wheel left and right bushings.
5.Exit the chain adjustment blocks on the left and right so that the wheels can move forward all the way.
6.Push the rear wheel forward to disengage the chain from the large sprocket.
7.Remove rear wheel.

Install

1.Install the rear wheels in the reverse order of removal to prevent the brake callipers from scratching the wheels during installation.
2.Spread butter evenly over the bearing.
3.Align the rear wheel bore to the dowel pin on the rear wheel axle and insert into the rear wheel assembly bore.
4.Install the rear wheel left and right bushings and gaskets (evenly grease the rear wheel bush contact gaskets).
5.Tighten the Adjusting bolt (torque: 128 N · m).
6.Check that the wheels turn smoothly.

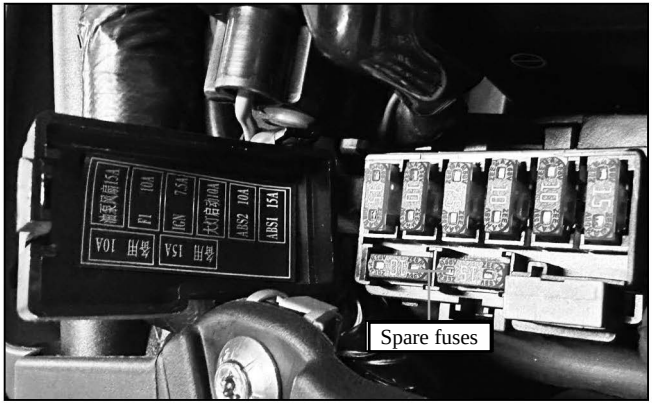
If the torque wrench is not used in the installation process, please send it to the special repair shop of KOVEMOTO as soon as possible, and improper installation will cause the brake performance to decrease.

Notes

- When installing the wheel or caliper in place, carefully install the brake disc between the brake pads to prevent it from being scratched.

Electrical fault

Fuse blown



Replace fuses

1.Remove seat cushion.
2.Open the cover of the fuse box, take out the fuse, and check whether the fuse is blown.
If it melts, be sure to replace it with a fuse of the same specification.
3.Close the safety box cover and install the seat cushion.

Run out of battery

Please use the special charger for motorcycle lithium battery to charge the battery. Remove the battery from the motorcycle before charging. If the battery is not recovered after charging, please contact the special repair shop of KOVEMOTO.

Notes

·It is forbidden to use car battery chargers or motorcycle lead-acid battery chargers for charging, which may cause battery damage or even fire.
·Please refer to “Check and Replace Fuse” before handling the fuse.

Relevant information

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Key

Ignition keys



The motorcycle has two ignition keys to start the engine.

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

Notes

・In order to prevent loss, please take good care of your key. If you are worried about loss, please immediately re-engrave one.

Instruments, controls and other functions

Ignition switch, engine OFF switch

Ignition switch

1.In the parking state, please place the ignition switch in the "⊗" or " 🔒 " position to avoid unnecessary loss of the battery, and excessive battery power loss will lead to failure to start.

2.Do not turn the key while riding.

Engine OFF switch

Do not use the engine flameout switch unless in an emergency. Doing so while driving will cause the engine to stop suddenly, resulting in unsafe driving.

Mileage meter, milometer (subtotal mileage)

Odometer

When the reading exceeds 999,999, the display is locked at 999,999.

Milometer

When the milometer reading exceeds 999.9, it is automatically cleared.

Maintenance of motorcycles

Regular cleaning and polishing can ensure that the motorcycle is used for a long time, and the clean motorcycle is easier to find potential faults. In particular, it should be noted that the sprinkling of anti-icing seawater and salt on the road will accelerate the formation of corrosion, and the motorcycle must be thoroughly cleaned after driving along the coast or on the road after the above treatment.

Cleaning

Wait for the engine, muffler, brake and other high temperature components to cool before cleaning.

1. Wash the motorcycle thoroughly with low-pressure hose and water to remove loose dirt.
2. If necessary, use a sponge or soft towel dipped in a soft detergent to remove the above dirt.
3. Wash the motorcycle thoroughly with sufficient water and dry it with a clean soft cloth.
4. After drying the motorcycle, lubricate the moving parts to ensure that no lubricant splashes on the brakes or tires. Oil-contaminated brake discs, brake pads, brake drums, and brake shoes will greatly reduce their braking performance and may cause accidents.
5. After cleaning and drying the motorcycle, lubricate the drive chain immediately.
6. Waxing can prevent corrosion.

Avoid using products containing strong detergents or chemical solvents, which can damage the metal parts, paint layers and plastic parts of the motorcycle. Do not wax the tires and brakes.

If your motorcycle is equipped with matte painted parts, do not wax these matte painted parts.

Cleaning notes

●Do not use high-pressure water guns:

▶ High-pressure water guns can damage moving parts and electrical components, making them impossible to repair.

▶ Moisture from the intake port may be sucked into the throttle body or into the air cleaner.

●Do not flush the muffler directly with water:

▶ Water entering the muffler may cause the muffler to fail to start and the muffler to rust. Once found, remove all traces and dirt immediately.

●Dry brake:

▶ Since the water will reduce the braking performance, the brake should be used at low speed intermittently after cleaning, and the brake pedal should be lightly depressed repeatedly, and the heat generated by the brake friction should be used to dry the water until the braking performance is restored.

●Do not flush directly under the seat cushion with water:

▶ Water entering under the seat cushion may damage the electrical accessories.

●Do not flush the air filter directly with water:

▶ If water enters the air filter, the engine may not start.

●Do not flush directly with water near the headlights:

▶ The internal lens of the headlamp may be temporarily fogged after cleaning or when cycling in the rain, which does not affect the function of the headlamp. However, if you find that a large amount of water or ice has accumulated in the lens, please send it to the special repair shop of KOVEMOTO.

●Do not wax and polish the matt finish:

▶ Clean the matte finish with sufficient water and mild detergent and dry with a clean soft cloth.

Aluminium components

Aluminum will corrode after contact with dirt, mud or salt, clean aluminum parts regularly, and follow the following guidelines to prevent scratches:

●Do not use hard brushes, wire balls, or other abrasive cleaning products.

●Do not drive or scratch on the curb.

Panel

Follow the following guidelines to prevent scratches and damage:

●Wash lightly with a sponge and enough water.

●Clean with diluted detergent and wash thoroughly with sufficient water to remove the scale.

●Please avoid contact of instrument panel and lamp cover with corrosive liquids such as gasoline and brake fluid.

Motorcycle storage

If you leave your motorcycle outdoors, you should consider using a motorcycle full-body shield. If you do not ride for a long time, follow the following guidelines:

- Clean the motorcycle and wax all paint surfaces (except for matte paint surfaces) and apply anti-rust oil to all chrome-plated parts.
- Lubricate drive chain.
- Place the motorcycle on the maintenance bracket and pad it up with a wooden block so that both tires are off the ground at the same time.
- After rain, remove the body cover and put it in a ventilated place to dry.
- Remove the battery to prevent discharge.

Fully charge the battery and place it in a cool, ventilated place. If you leave the battery in place, disconnect the negative terminal to prevent discharge. Before the stored motorcycle is reused, all items required in the maintenance cycle table should be checked.

Transport of motorcycles

If you need to transport your motorcycle, you should use a motorcycle trailer, a flat truck that loads a slope or a lifting platform, and you should use a motorcycle fixing belt. Never try to tow a motorcycle with its wheels on the ground.

Notes

- Towing a motorcycle can seriously damage the transmission.

You and the environment

Owning and driving a motorcycle is a pleasure, but you must protect the environment.

Select the appropriate cleaning agent

Use biodegradable detergents when cleaning motorcycles and avoid sprays containing chlorofluorocarbons (CFCs) as it can damage the protective layer (ozone layer) in the atmosphere.

Waste recovery

Separate the oil and other toxic waste in approved containers and send it to a recycling center. Call the local national public affairs or environmental services office to find the recycling center in your area and the disposal method of non-recyclable waste.Do not dump used engine oil in trash cans, sewers, or on the floor because used oil, gasoline, coolant, and cleaning solvents contain toxic substances. It harms cleaners and pollutes drinking water, lakes, rivers and the sea.

Frame number, engine number, nameplate

When registering a motorcycle, you need to provide the frame number and engine number, which are unique and used to identify your motorcycle. When ordering replacement parts, record these numbers and keep them in a safe place.

Frame number

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



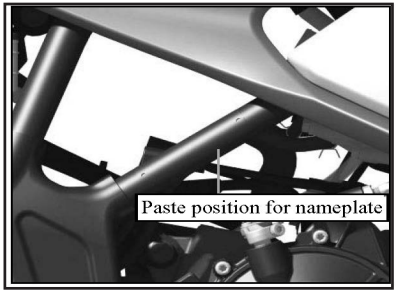
Engine number

The engine number is engraved in the middle position of the rear side of the engine transmission case



Nameplate

The nameplate is affixed to the middle of the frame body



Catalytic converter

The motorcycle is equipped with a three-way catalytic converter. Catalytic converters contain 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 mixture that meets regulations.

Since a faulty catalytic converter can pollute the air and reduce your engine performance, be sure to use the original KOVEMOTO parts when replacing. Protect your motorcycle's catalytic converter with the following guidelines:

●Only use unleaded gasoline, leaded gasoline will damage the catalytic converter.

●Keep the engine in good working order.

●If the engine does not catch fire, backfire, flameout or other bad operation, please immediately stop driving and turn off the engine, and hand over the motorcycle to the special repair shop of KOVEMOTO.

Technical parameters

Motorcycle related parameters 73

Torque parameters 75

Frame tightening torque 76

Motorcycle related parameters-1			
Model	ZF250GS-2	Engine number	Z262MM
Overall length (mm)	1975	Cylinder diameter (mm) stroke (mm)	62.0×41.4
Overall width (mm)	743	Compression ratio	12.5:1
Overall height (mm)	1100	Maximum net power (kW / r / min)	24.0/11500
Wheelbase (mm)	1370	Maximum torque (Nm/r/min)	22.5/9000
Track gauge (mm)	/	Idle speed (r / min)	1500±100
Curb weight (kg)	147	Piston swept volume (ML)	250
Payload (kg)	163	Spark plugs	TORCH BNORSI
Front tyre size	110/70R17	Spark plug gap (mm)	0.95-1.05
Rear tyre size	140/60R17	Valve clearance (mm)	Intake valve: 0.13 ± 0.03
Maximum speed (km / h)	160		Exhaust valve: 0.23 ± 0.03

Motorcycle related parameters-2			
Lubricating oil capacity (L)	2.4	Main fuse	30A
Gasoline capacity (L)	13	Neutral light	LED light
Primary transmission ratio	2.457	Headlight	LED light
First gear	3.077	Front position light	LED light
Second gear	2.200	Rear position light / brake light	LED light
Third gear	1.737	Front turn signal	LED light
Fourth gear	1.350	Rear turn signal	LED light
Fifth gear	1.182	Rear license plate light	LED light
Sixth gear	1.043	Turn indicator light	LED light
Final transmission ratio	3.357	Instrument indication light	LCD light
Battery	12V 3Ah (Lithium batteries)	Ignition mode	ECU controls the ignition

Torque parameters

Fasteners type	Torque	Fasteners type	Torque
5mm bolts and nuts	6	6mm bolts	8
6mm bolts and nuts	12	6mm flange bolt (8mm head: small flange)	10
8mm bolts and nuts	22	6mm flange bolt (8mm head: big flange)	12
10mm bolts and nuts	60	6mm flange bolt (10mm) and nuts	12
12mm bolts and nuts	80	8mm flange bolt and nuts	22
5mm bolts	5	/	/

Notes

· In addition to the specified torque, the motorcycle adopts the standard torque values in the table above.

Project	Thread diameter (mm)	Torque (Nm)	Note
Self-tapping nail for connection of OBD diagnostic interface to front section of rear mudguard	ST4.2	1	
Self-tapping nail for left and right connection of fuel tank front shield and fuel tank side shield	ST4.2	1	
Self-tapping nail connecting left and right of fuel tank lower guard plate with left and right of windshield	ST4.2	1	
Self-tapping nails connecting left and right of engine lower guard plate and left and right of wind shield, and left and right of fuel tank lower guard plate and left and right of fuel tank side guard plate	ST4.2	1	
Self-tapping nails connecting left and right of windshield and windshield grille, left and right of fuel tank lower guard and windshield grille	ST4.2	1	
The self-tapping nail connecting the left and right of the body vent with the left and right of the body	ST4.2	1	
Self-tapping nail connecting the left and right of the body vent with the left and right of the body	ST4.8	4	
Self-tapping nail for connecting the fuel tank middle protection plate with the left and right fuel tank side protection plates	ST4.8	1	
Self-tapping nail for connecting the protection plate in the fuel tank to the front cover of the fuel tank	ST4.8	1	
Self-tapping nail for connection of rear mud retaining rear section and rear mud retaining front section	ST4.8	1	
Cross pan head screw for connecting headlight bracket to instrument housing	M5	4	
Hexagon flange nut for connecting fuel pump mounting bracket and fuel pump	M5	6	
Hexagon socket flower pan head screw for connecting ABS gear ring and front aluminium wheel	M5	3	Gluing of threads, Huitian 7272
Hexagon socket flower pan head screw for connecting ABS ring gear and rear aluminium wheel	M5	3	Gluing of threads, Huitian 7272
Cross pan head screw for connecting roll sensor and battery box	M5	3	
Cross pan head screw for connecting ECU and rear mud retaining front section	M5	3	
Cross pan head screws for connecting tail lamp assembly and rear mudguard front section	M5	4	

Project	Thread diameter (mm)	Torque (Nm)	Note
Front Hexagon internal socket flower pan head screw for connecting front pedal trim left and right with front pedal support	M5	4	
Front Hexagon internal socket flower pan head screw for connecting the left and right of the windshield liner and the left and right of the windshield, and the left and right of the engine lower guard and the windshield	M5	4	
Hexagon internal socket flower pan head step screw for connecting left and right motorcycle body and battery box	M5	5	
Hexagon internal socket flower pan head step screw for connecting rear tailcap and body vents left and right and tail lights	M5	4	
Rubber nut for connecting front windshield and front panel lining	M5	4	
Hexagon internal socket flower pan head step screw for connecting left and right under the fuel tank cover and left and right of the vehicle body	M5	4	
Hexagon internal socket flower pan head step screw for connecting left and right under the fuel tank guard and left and right side of the fuel tank guard	M5	4	
Hexagon internal socket flower pan head step screw for connecting left and right of windshield and left and right of fuel tank side guard	M5	4	
Hexagon internal socket flower pan head step screw for connecting instrument case and front panel lining, oil tank front cover and instrument case	M5	4	
Hexagon internal socket flower pan head step screw for connecting left and right headlights and headlight decorations, left and right fuel tank side guards and left and right headlight decorations	M5	4	
Hexagon internal socket flower pan head step screw for connecting front panel lining and headlamp assembly	M5	4	
Hexagon internal socket flower pan head step screw for connecting windshield left and right with headlights	M5	4	
Cross pan head screw for connecting instruments and instrument housings	M5	4	
Cross pan head screw for connecting front windshield and front panel lining	M5	4	
Hexagon internal socket flower pan head step screw for connecting left and right of engine lower protection plate and engine lower protection plate	M5	4	
Hexagon internal socket flower pan head step screw for connecting left and right car body and fuel tank side guard	M5	4	
Hexagon internal socket flower pan head step screw for connecting rear mudguard lining plate and rear mudguard rear section	M5	4	
Cross semicircular head screw for connecting voltage regulator support and battery box	M6	8	Gluing of threads, Huitian 7272

Project	Thread diameter (mm)	Torque (Nm)	Note
Hexagonal internal hexagonal flange face bolt for connecting hook of upper connected plate and upper connecting plat	M6	8	
Hexagon internal socket flower pan head step screw for connecting left and right of body vent and frame	M6	8	
Hexagon internal socket flower pan head step screw for connecting cushion trim panel and body vent	M6	8	
Hexagon internal socket flower pan head step screw for connecting left and right side of motorcycle body and frame	M6	8	
Hexagonal internal hexagonal flange face bolt for connecting front of fuel tank and frame	M6	10	
Hexagonal internal hexagonal flange face bolt for connecting ABS support and frame	M6	12	
Hexagonal internal hexagonal flange face bolt for connecting frame and air filter	M6	5	
Hexagonal internal hexagonal flange face bolt for connecting seat cushion lock seat and frame	M6	8	
Hexagon internal socket flower pan head step screw for connecting headlight bracket and frame	M6	8	
Hexagonal internal hexagonal flange face bolt for connecting ABS and ABS bracket	M6	12	
Hexagonal internal hexagonal flange face bolt for connecting left rear bracket of engine lower guard plate and engine	M6	12	
Hexagonal internal hexagonal flange face bolt for connecting water storage kettle assembly and frame	M6	5	
Hexagonal internal hexagonal flange face bolt for connecting water storage kettle and radiator	M6	8	
Hexagonal internal hexagonal flange face bolt for connecting fuel rail and throttle	M6	8	
Hexagonal internal hexagonal flange face bolt for connecting radiator and frame	M6	10	
Cross semicircular head screw for connecting chain protection clip and flat fork	M6	6	
Hexagonal internal hexagonal flange face bolt for connecting brake oil pipe 1 and lower connecting plate	M6	12	
Hexagon internal cylinder head screw for connecting brake return spring and front pedal bracket	M6	12	
Hexagonal internal hexagonal flange face bolt for connecting rear brake pump and right front pedal bracket	M6	8	
Hexagonal internal hexagonal flange face bolt for connecting rear brake pump and brake rocker arm	M6	10	
Hexagonal internal hexagonal flange face bolt for connecting rear brake oil cup and frame	M6	8	
Hexagonal internal hexagonal flange face bolt for connecting rear wheel speed sensor and rear brake caliper	M6	8	

Project	Thread diameter (mm)	Torque (Nm)	Note
Hexagonal internal hexagonal flange face bolt for connecting front wheel speed sensor with front shock absorber left	M6	8	
Hexagonal internal hexagonal flange face bolt for connecting horn and frame	M6	10	
Hexagonal internal hexagonal flange face bolt for connecting voltage regulating rectifier and voltage regulator support	M6	10	
Front Hexagonal internal hexagonal flange face bolt for connecting headlight and headlight bracket	M6	8	
Hexagon internal socket flower pan head step screw for connecting rear shock absorber cover and motorcycle body	M6	8	
Hexagon bolt with flat pad for connecting rear mudguard lining plate and front and rear mudguard sections	M6	8	
Hexagon internal socket flower pan head step screw for connecting left and right engine lower guard and left and right engine lower guard rear bracket	M6	10	
Hexagon internal socket flower pan head step screw for connecting oil tank cover and frame	M6	10	
Hexagon internal socket flower pan head step screw for connecting battery box and frame	M6	5	
Hexagon internal socket flower pan head step screw for connecting vehicle body lower mounting point and rear mudguard front section	M6	8	
Hexagon internal socket flower pan head step screw for connecting left and right fuel tank side guards and frame	M6	8	
Hexagon internal socket flower pan head step screw for connecting left and right fuel tank side guards and fuel tank middle guard	M6	8	
Hexagon internal socket flower pan head screw for connecting left and right of body vent and frame	M6	8	
Hexagon internal socket flower pan head step screw for connecting front mudguard and front shock absorber trim cover	M6	8	
Hexagonal internal hexagonal flange face bolt for connecting small sprocket cover and engine	M6	8	
Hexagon internal socket flower pan head screw for connecting muffler shield and muffler rear section	M6	8	
Hexagon internal socket flower pan head step screw for connecting flat fork and chain box	M6	8	
Hexagon internal cylinder head screw for connecting upper and lower connecting plates and front damping	M8	22	
Hexagon internal cylinder head screw for connecting ignition lock and frame	M8	22	
Hexagonal internal hexagonal flange face bolt for connecting rear tank and tank rear support	M8	22	
Hexagonal internal hexagonal flange face bolt for connecting tank rear support plate and tank left and right support plate	M8	22	
Hexagonal internal hexagonal flange face bolt for connecting rear of left and right fuel tank support plate and frame	M8	22	

Project	Thread diameter (mm)	Torque (Nm)	Note
Hexagonal internal hexagonal flange face bolt for connecting fuel tank left and right support plate front and frame	M8	22	
Hexagon internal flat round head bolt for connecting left and right front pedal brackets and frame	M8	22	Gluing of threads, Huitian 7272
Hexagon internal socket pan head screw for connecting rear pedal support and frame	M8	22	
Hexagon flange nut for connecting muffler front section and engine	M8	16	
Hexagonal internal hexagonal flange face bolt for connecting muffler front section and frame	M8	22	
Hexagonal internal hexagonal flange face bolt for connecting rear section of muffler and right rear pedal bracket	M8	22	
Hexagon self-locking nuts with flanged face for connecting muffler front section and frame, muffler rear section and right rear pedal bracket	M8	22	
Special bolts for shift lever for connecting shift pedal linkage lever and left front pedal support	M8	22	Gluing of threads, Huitian 7262
Hexagon internal socket flower pan head step screw for connecting front disc brake disc and front aluminium wheel	M8	30	
Hexagon internal cylinder head screw for connecting locking of front shock absorber and front axle	M8	22	Gluing of threads, Huitian 7272
Hexagon internal cylinder head screw for connecting upper and lower connecting plates and front shock absorber	M8	22	Gluing of threads, Huitian 7262
Hexagon internal countersunk head screws for connecting large sprocket and buffer	M8	38	
Hexagon internal socket flower pan head step screw for connecting rear disc brake disc and rear wheel	M8	30	Gluing of threads, Huitian 7272
Hexagonal internal hexagonal flange face bolt for connecting front brake caliper with front damping	M8	22	Gluing of threads, Huitian 7262
Special bolts for shift lever for connecting brake rocker arm and right front pedal support	M8	22	Gluing of threads, Huitian 7262
Hexagon self-locking nuts with flanged face for connecting frame and rear shock absorber	M10	45	

Project	Thread diameter (mm)	Torque (Nm)	Note
Hexagonal internal hexagonal flange face bolt for connecting frame and rear shock absorber	M10	45	
Hexagonal internal hexagonal flange face bolt for connecting left front engine suspension and frame	M10	55	Gluing of threads, Huitian 7272
Hexagonal internal hexagonal flange face bolt for connecting engine front right suspension and frame	M10	55	Gluing of threads, Huitian 7272
Hexagonal internal hexagonal flange face bolt for connecting the upper suspension on frame and engine	M10	60	
Hexagonal internal hexagonal flange face bolt for connecting lower frame and engine (rear lower mounting point)	M10	60	
Hexagon self-locking nuts with flanged face for connecting engine lower suspension and side bracket mounting plate, engine upper suspension and frame	M10	60	
Hexagonal internal hexagonal flange face bolt for connecting side bracket mounting plate and frame	M10	60	
Side bracket of special bolt for connecting side bracket and side bracket mounting plate	M10	Bolt 2N.m, then tighten the bolt hexagonal fixed tightening nut torque 22N.m	
Hexagon self-locking nuts with flanged face for connecting side bracket and side bracket mounting plate	M10	Bolt 2N.m, then tighten the bolt hexagonal fixed tightening nut torque 22N.m	
Hexagonal internal hexagonal flange face bolt for connecting flat fork and rear damping	M10	45	

Project	Thread diameter (mm)	Torque (Nm)	Note
Hexagon self-locking nuts with flanged face for connecting the locking of flat fork and rear damping	M10	45	
Over-oil bolt for connecting brake oil line 2 with front brake pump, brake oil line 1 with left front brake caliper	M10	25	
Over-oil bolt for connecting brake oil line and ABS	M10	22	
Over-oil bolt for connecting brake oil line 4 and rear brake caliper	M10	22	
Hexagon internal flat round head bolt for connecting N upper connecting plate and steering handle	M14	22	
Front axle for connecting locking of front shock absorber and front wheel	M16	88	
Hexagon self-locking nuts with flanged face for connecting rear axle and fork	M16	128	
Flat fork shaft for connecting frame and fork	M16	88	
Hexagon self-locking nuts with flanged face for connecting flat fork shaft and flat fork	M16	88	
4-slot adjusting nut for connecting steering column and upper connecting plate	M25	The first stage is 40N.m, the second stage loosens two turns of the adjusting nut and tightens the nut to 10N.m, and the third stage does not loose 1 / 4 turn in the fixing direction	

KOVE 凯越机车

西藏新珠峰摩托车有限公司

TIBET NEW SUMMIT MOTORCYCLE CO, LTD

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