FORWARD

Respected user:

Sincerely thank you for choosing the B125-15 two-wheeled riding motorcycle designed and produced by our company! This model is developed and produced by our company based on advanced technology and avant-garde design concepts at home and abroad. We hope that it can bring you a safe driving process and a comfortable driving experience!

Before you drive the motorcycle, please fully read the regulations and requirements in this practical manual!

This manual outlines the repair and maintenance of this motorcycle, please operate according to the regulations of this manual!

The company has specialized technical maintenance personnel and maintenance department, which can provide you with good technical maintenance service support!

The company has always pursued the service tenet of "making consumers more satisfied", and continuously improved product quality and performance, which may cause changes in appearance, color and structure, which may cause inconsistencies with this manual. Please understand. The pictures in this manual are for reference only, and the actual product shall prevail.

Thanks again for your attention and trust

IMPORTANT NOTICE

When operating and driving the vehicle, please operate in accordance with the provisions of this instruction manual, and strictly abide by the national and local traffic laws and regulations, and always pay attention to your personal safety!

This maintenance manual is one of the necessary accessories of this car. When the car is sold to others, please attach it with the car.

Danger/Warning/Note

Please read the contents of this manual and keep in mind it.

Danger:

The items suggested here are related to the personal safety of the driver. It may result in injury if ignoring them .

Warning:

The items suggested here indicate the relevant operating precautions, so as not to damage the motorcycle.

Note:

The items suggested here are specialized explanations for the convenience of maintenance or to make important explanations clearer.

CONTENTS

I.User notice

1.1Safety instructions.

For your personal and vehicle safety, please abide by the following six regulations：

①、Wear all kinds of protective equipment correctly.

Riding protective equipment includes safety helmets, goggles, knee pads, elbow pads and gloves. Wearing protective equipment can greatly reduce the injury to your body during an accidental crash and protect your personal safety to the utmost extent.

②、 Familiar with vehicle structure.

The driver's driving skills and understanding of the vehicle are the basis for safe driving. Before officially riding on the road, you need to practice in an open field where there are no other vehicles and be fully familiar with the vehicle and the method of manipulating it.

③、Understand the limit of your own safe speed.

The driving speed depends on the ground conditions, your own skills and the weather. Drive at a safe speed and within your skill range at all times. Knowing this limit will prevent accidents.

④、Wear appropriate clothing.

Loose, bizarre clothing can make you uncomfortable and unsafe when driving. When you are on the saddle, wearing well-fitting clothing will make your hands, feet, and whole body move freely. So try to choose high-quality tight clothing.

⑤、Check before driving.

Please carefully read the instructions in the section "Inspection before driving" in this manual, driving in accordance with the rules can ensure the safety of you and the passengers.

⑥、Pay extra attention to safety when driving on cloudy and rainy days.

Pay special attention to rainy days. Keep in mind that the braking distance is twice that in sunny days. When driving, keep clear of the hole caps, marking paints, and oily roads to avoid slipping.

1.2、 Number position (Figure 1)

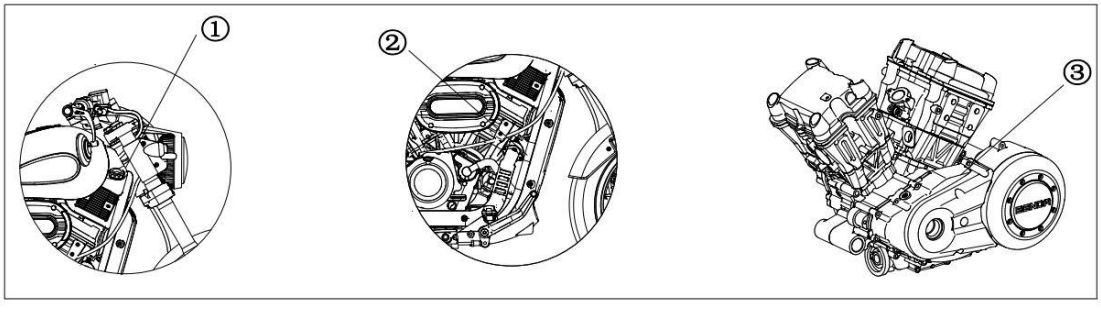
①、Frame number (VIN): the right side of the frame riser；

②、Nameplate: Elbow on the right side of the frame；

③、Engine number: Above the left crankcase.

Location map of nameplate, frame number, VIN code, and engine number

Please fill in the frame and engine code below for reference：



VIN	
ENGINE NO.	

II.Brief introduction of two-wheeled motorcycle

The two-wheeled motorcycles with compact structure and a unique novel appearance . very comfortable riding and pretty stable,All models are adopted with electronic fuel injection system ,which is more environmentally , lower fuel consumption and emissions , meeting emission requirements.

Two-wheeled motorcycle will bring you an unprecedented driving experience !

2.1.The range of application of two-wheeled motorcycles.

BD125-15It is a two-wheeled motorcycle, which adapts to both urban roads and rural roads.

2.2.Features of two-wheeled motorcycle.

1. Strong power and heavy load.
2. Large torque and strong climbing.
3. Adopt electronic fuel injection system.
4. The domestic advanced and professional water-cooled engine is adopted.
5. The "full DC power supply system" is adopted.

2.3.Carrying regulations.

Carrying capacity: 2 people (one for the driver and one for the occupant). Maximum allowable load: 150kg.

2.4.Fuel oil

Fuel grade: Unleaded gasoline above size.

As gasoline is extremely flammable, if the fuel tank, fuel filter, fuel pipe, throttle valve body and other parts of this vehicle leak oil due to damage or aging, they must be repaired in time before they can be used. Unleaded gasoline can extend the service life of spark plugs and mufflers.

2.5.Electrical parts.

You cannot install or change the line of this vehicle by yourself, nor can you increase or increase the electrical equipment by yourself. Otherwise, the electrical system will be overloaded, causing the line to overheat, causing the fuse to melt or the line to short-circuit, and even sparks, which may cause the car to burn and other dangers.

Danger:

The company will not be responsible for the consequences caused by the addition or modification of the line of the car, or the increase or increase of electrical equipment.

2.6.Inspection

You should maintain the listed parts strictly in accordance with the requirements in the "Maintenance Period Table".

III.Safe driving motorcycle.

The motorcycle is a two-wheeled motor vehicle, which can bring convenience and fast lifestyle to the rider. In order to ensure the best performance of your motorcycle, you must maintain it correctly. the motorcycle must be safe and well-performance; and you must be healthy when you driving or riding the motorcycle, so that you can control it in the best condition.

Danger:
You must comply with traffic laws when driving and inspect before driving.

3.1.Safe driving rules

1. Before starting the motorcycle, you must check the vehicle carefully to confirm that the vehicle is safe and normal. This can avoid accidents and damage to parts.

2. Motorcycle drivers must pass the examination of the traffic management department and obtain a "motorcycle driver's license"; it is not allowed to lend a motorcycle to a person without a "motorcycle driver's license".

3. In order to avoid causing harm, you should do：

●Wear eye-catching.

●Do not drive too close to other motor vehicles, and use signals such as turn signals, horns and brake lights correctly。

●Please do not drive in the blind spot of other drivers' sight。

4.Strictly abide by traffic laws.

●Over speeding is the main factor leading to accidents. In case of rain and snow, gravel roads, crossroads and other road conditions, you must drive carefully at low speed or slow down.

● When turning and changing lanes, signal devices such as turn signals must be turned on to attract the attention of other drivers.

5. The driver should hold the direction handle with both hands and step on the front pedals; the occupant should hold the handrails or hug the driver's waist with both hands and step on the rear pedals.

3.2. Safety protection products

1. Most of the injured in motorcycle traffic accidents are head injuries. Therefore, drivers and passengers must wear helmets that meet safety and quality standards, and wear protective equipment such as dust-proof glasses and gloves.

2. When driving, the temperature of the exhaust muffler is high. In order to avoid contact and scald, both the driver and the occupants should wear boots and other equipment.

3. Do not wear loose clothing to prevent hooking the steering handle, clutch handle, pedals or nearby vehicles, which may cause accidents.

3.3. Vehicle refitting

Danger:
If you modify cables and electrical appliances by yourself, the company will not be responsible for the dangerous consequences such as short-circuit of wires, blown fuses, electrical appliances exceeding rated power or sparks and burning of the car。

⚠**note:**

Improper loading or overweight motorcycle cargo will damage the performance of the vehicle and affect the driving stability of the vehicle.

Modification of motorcycles or removal of original parts may result in reduced vehicle safety or illegal operation. Please follow all regulations in your area.

Loading goods:

1. The center of the cargo weight (center of gravity) should be located low and close to the center of the vehicle.
2. Adjust the tire pressure according to the loaded weight and driving conditions.
3. All goods must be firmly fixed on the vehicle to ensure stable handling.
4. Do not attach large and heavy objects to the steering handle, front shock absorber or front fender, otherwise it will easily cause unstable driving or poor steering.
5. It is strictly forbidden to exceed the maximum load requirement of the vehicle (150kg).

3.4 Wanring on installation accessories

The original accessories of this car have been tested by the company. Therefore, if you install non-original accessories, the company will not be responsible.

After installing non-original accessories, you must carefully check: sight barriers, ground clearance, side tilt angle, steering flexibility of the steering mechanism, ease of operation, and performance of accessories. If there are any of the above problems, you should cancel the attachment before you can use the car.

IV. Instructions for use

4.1.Parts position

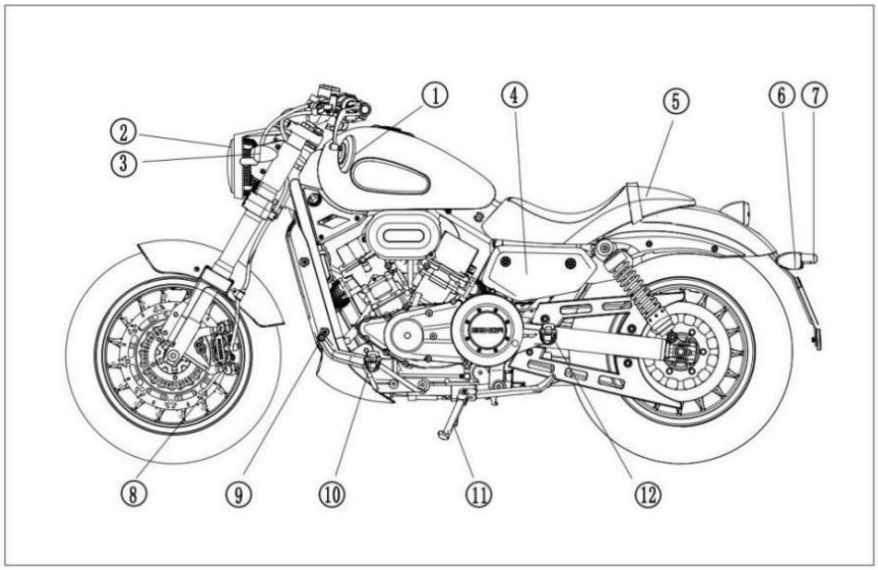


Fig.1

1.（Fig.1）

①L rear mirror
②headlight
③FL turn single light
④battery）
⑤cushion
⑥rear license
⑦RL turn single light
⑧front brake clipper
⑨gear lever
⑩FL pedal
⑪single support
⑫RL single support

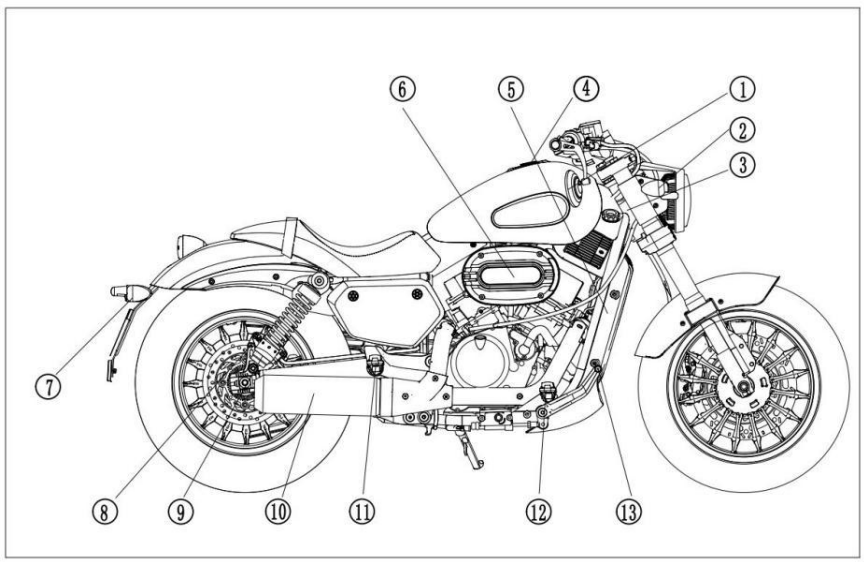


Fig.2

2.（Fig.2）

①R rear mirror
②FR turn single light
③VIN
④Tank cover
⑤Nameplate
⑥Air filter
⑦RR turn single light
⑧Rear brake clipper
⑨Rear suspension
⑩Exhaust muffler
⑪RR pedal
⑫FR pedal
⑬Brake pedal

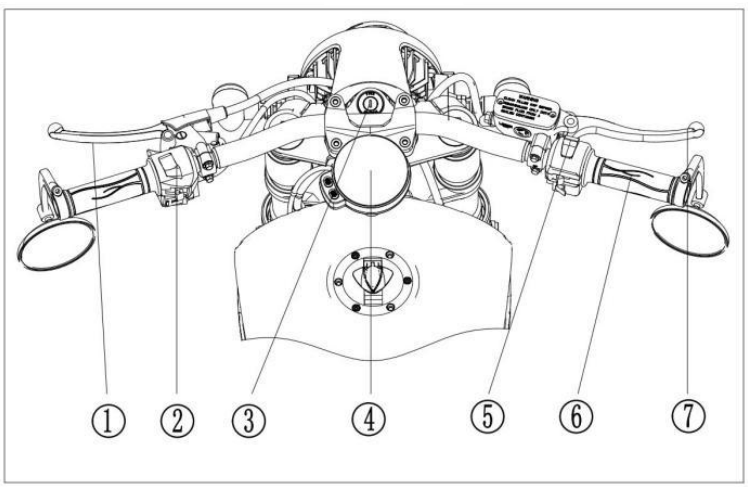


Fig.3

3.（Fig.3）

①Clutch Lever
②Left switch combination
③Ignition switch
④Instrument
⑤Right switch combination
⑥Throttle handle bar
⑦Front brake lever

4.2.Instrument and ignition switch.

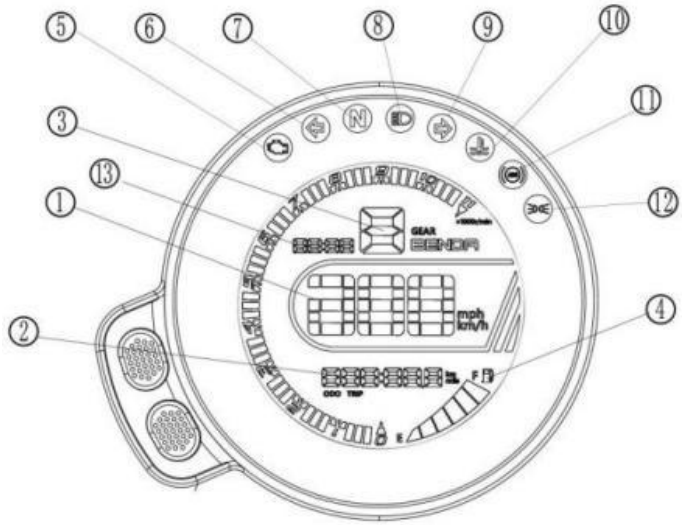


Fig.4

Instrument（Fig.4）

Please refer to the table for the names and functions of indicator symbols.

Code No.	Title	Function
1	Speed indicator	Instantaneous speed of the vehicle
2	Mileage indication	The total mileage of the vehicle
3	Gear indication	Display the gear position of the engine
4	Fuel quantity indicator	Display the amount of fuel left in the fuel tank
5	EFI failure indicator	After the engine is running, the light goes out, if there is a fault, it will show yellow light and flash
6	Left turn indicator	The front and rear left turn signals are flashing, light up to display green
7	Neutral indicator	Lights up green when in neutral
8	High beam indicator	The high beam light is on, and it lights up to show blue
9	Right turn indicator	The front and rear right turn signals are flashing and light up to display green
10	Water temperature alarm indication	Lights up and displays red: the coolant is overheated, and the cooling system is faulty
11	ABS instructions	Show ABS status
12	Marker light indication	Front position lamp, instrument panel lighting lamp, rear position lamp light up
13	Time indicator	Display current Beijing time
14	Up button	Switch between total and subtotal of mileage. Meter time setting.
15	Bottom button	The mileage subtotal is cleared and the meter time is adjusted.

Table.1

Note: When the upper button is pressed once, the total and subtotal of the mileage will be switched. When in the subtotal state, long-time presses the button to clear the subtotal mileage.

Long press the up button to enter the clock setting mode. At this time, press the up button once to switch the clock to adjust the position. Press the button once to adjust the time.

4.3.Ignition switch.

The ignition switch lock (Figure 5) is set in front of the steering handle, and the ignition switch must be turned on before starting the motorcycle. The key position and function are shown in Table 2.

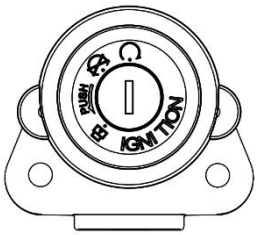
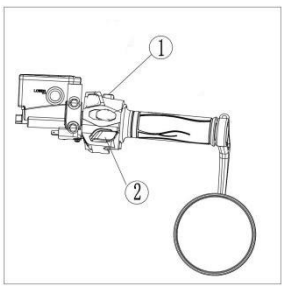


Fig.5

Key position	Function	Key state
OFF“⊗”	The circuit is disconnected and the engine cannot be started	Can be unplugged
ON“↻”	The circuit is closed and the engine can be started	Not unplugged
Steering lock“🔒”	The circuit is disconnected and the steering mechanism is locked	Can be unplugged
Note： **1、1. When the vehicle is not in use, turn the key to the off “⊗”or direction lock“🔒”and take out the key。** **2、Lock the steering mechanism: first turn the front of the car to the extreme left position, press the key down at the position of“⊗”let go to let the key bounce back, and counterclockwise turn it to the position of“🔒”.** **Before locking the steering mechanism, first slow down and stop firmly, and then park with a single support; after locking, never push the motorcycle, otherwise it will lose balance**		

Table.2

4.4.Right switch combination



①Flame out preset switch

②Electric start button

Fig.6 Right switch combination

1、Flameout preset switch

The flameout switch is located on the right side of the direction handle, and the flameout preset switch has two positions：“⊗”and“↻”。

OFF“⊗”	The flameout switch is off-the ignition circuit is disconnected at this position, the running engine is turned off, and the engine cannot be started.
ON“↻”	The flameout switch is ON needs to be switched to this position during operation, and the ignition circuit is closed.

2.Headlight, position light switch

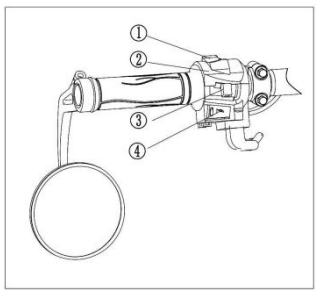
The headlight and position light switch have three states： “☼” “≡D0≡” “●”

headlight “ ☼ ”	When the switch is in this position, the headlights, position lights and taillights are on.
Position light “≡D≡”	When the switch is in this position, the position light and tail light are on.
OFF “ ● ”	When the switch is in this position, the headlights, position lights and taillights will be turned off.

3.Electric start button

The method of operation is: After completing the preparations for starting (see page 16), press the electric start button“ⓔ”， If necessary, turn the throttle grip cover at the same time to refuel properly to start the engine.

4.5.Left switch combination



①Headlamp dimmer switch

②Overtaking light switch

③Turn signal switch

④Horn button

Fig.7 Left switch combination

1.Headlight dimmer switch

The headlight switch has two operating states: turn on the ignition switch lock, and turn the "headlight, position light switch" to this sign“☼”

Low-beam“≡D”	“Headlamp dimmer switch”turn to this sign“≡D”is low-beam.
High-beam“≡D”	“Headlamp dimmer switch”turn to this sign“≡D”is high-beam.

⚠Warning:

Please change the state of the far and low beams appropriately according to the road conditions. If there is an oncoming car, please adjust the light to the low beam state to avoid glare of the lights affecting the driving state of the drivers of the oncoming car and cause traffic accidents.

2. Overtaking light switch

When the "passing light button" is pressed, the overtaking light is on;

When the "passing light button" is released, the overtaking light does not light up.

⚠Note：

Overtaking light is not on when current lamp light is in the high beam state“≡D”

3. Turn signal switch

When turning left, turn the "turn signal switch" to the "" position; the front and rear turn signals on the left side, the left turn indicator light in the instrument panel is on.

When turning to the right, turn the "turn signal switch" to the "" position; the front and rear turn signals on the right side and the right turn indicator in the instrument panel are on.

Turn the "turn signal switch" to the "middle" position; the left and right turn signals and indicator lights will not light up.

⚠Warning:

You must turn on the turn signal switch when you are about to turn or change lanes, and turn off the turn signal switch until you have completed the turn or changed lanes.

4.6.Headlamp pitch angle adjustment (Figure 8)

Due to the different heights and observation habits of users, there are different needs for night driving lighting. In order to give users a better night driving experience, the headlights of Jingira are specially designed to adjust the pitch angle. Users can make adjustments according to their own needs. The adjustment method is as follows:

The first step is to loosen the upper fixing screws and the lower fixing screws that fix the headlight with a 5# Allen key.

Step 2. After loosening the screws, gently hold the headlights up and down with both hands, and gently rotate the headlights up and down with the fixing screws as the axis to adjust them to a suitable position. And tighten the screws.

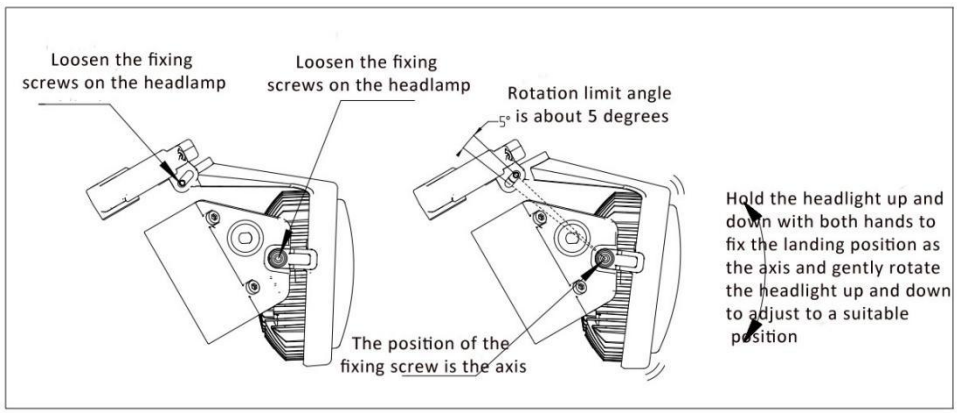
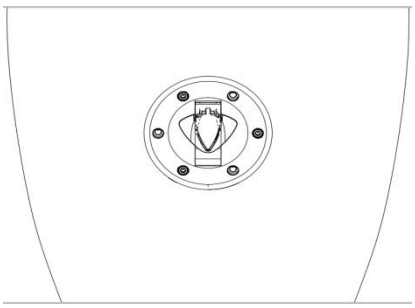


Fig.8

4.7.The way to open the fuel tank cap (Figure 9)



Open the small cover that covers the keyhole, insert the key into the fuel tank lock hole, and turn it clockwise to open the fuel tank lock; when closing, pull out the key, gently close the fuel tank cover, and press firmly until you hear a "click" sound. can. Finally, close the small cover that blocks the keyhole.

Fig.9 Tank cover

4.8.Tires

The correct tire pressure will ensure: stable driving, comfortable driving, and durable tires. The tire pressure should be checked during "cold tires".

Tire specifications and tire pressure refer to Table 2:

Tire pressure in cold state	Single ride			Double ride		
	kPa	kgf/cm2	psi	kPa	kgf/cm2	psi
Front wheel	225	2.25	33	225	2.25	33
rear wheel	225	2.25	33	225	2.25	33

Table 3

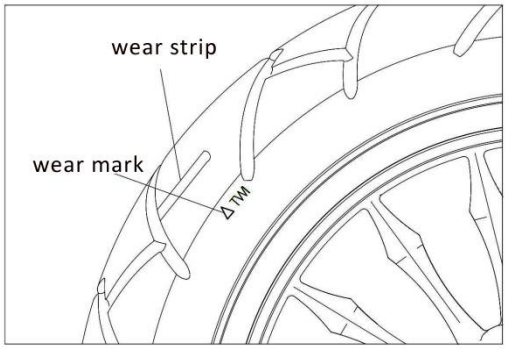


Fig.10 Tyre inspection

Make sure the tire status. Incorrect tire specifications will affect the handling performance of the motorcycle. Damaged and scratched tires can cause tire failure and cause the vehicle to lose control. Excessively worn tires can puncture the tires and cause the vehicle to lose control. Tire wear also affects tire shape and handling performance.

Check the condition and air pressure of the tires before use every day. If there are many obvious damages on the tires, such as breakages, scratches, or the tires are worn to the limit, the tires must be replaced.

⚠note:

1. When you feel the tire pressure drops, check whether there are nails, small holes on the tire, and whether the side of the rim (rim) is damaged. Tubeless tires will gradually deflate when they have small holes.

2. Incorrect tire pressure can cause abnormal tire tread wear and even cause safety accidents.

3. Insufficient tire pressure can cause tire damage or detachment from the rim.

⚠Warning:

1. The triangle mark indicates the location of the wear bar. If the wear bar touches the ground, the tire has worn to the limit. The tires must be replaced.

2. When replacing tires, make sure that the size and model of replacement tires should conform to the contents of Table

3. If you change the tires of a different size or model, it will affect the handling performance of the motorcycle and may cause the motorcycle to lose control.

3. After repairing or replacing tires, balance the wheels. It is very important to balance the wheel correctly to avoid uneven contact between the tire and the road, and to avoid uneven wear of the tire.

⚠Danger:

1. Tubeless tires are sealed at the contact part between the rim and the bead. In order to avoid air leakage, removing and installing tubeless tires requires special tools to protect the rim and bead part, and a special tire changer is used.

2. To repair the small holes of a tubeless tire, you need to remove the tire and apply a patch on the inside of the tire. Do not use external repair methods, because the centrifugal force of the tire will loosen the repaired area when turning. The vehicle speed cannot exceed 80 kilometers per hour within 24 hours after the tire is repaired, and the vehicle speed cannot exceed 130 kilometers per hour in the future. If you exceed the speed, the heat of the tire will increase sharply, which will make the repair failure and cause the tire to leak. If the side of the tire is damaged, or the damaged area is greater than 6 mm, the tire cannot be repaired and used.

V. Operation guidance

5.1. New motorcycle running-in

The running-in period refers to a treatment method that is carried out in order to ensure that the joint surface between the parts and the parts becomes the best joint state during the initial use of the new car. The correct running-in operation can maximize the life of the vehicle.

New car running-in mileage: 1500km.

1. During the running-in period, it must be done: the throttle should be avoided to operate fully, and the maximum engine speed should not exceed 6500 rpm (see the instrument). The vehicle speed is controlled in the following range:

0～300km running-in:

Avoid opening the throttle handle to exceed 1/2 of the maximum opening; the vehicle speed is within 50km/h.

300～600km running-in:

Avoid opening the throttle handle to exceed 2/3 of the maximum opening; the vehicle speed is within 60km/h.

600～1500km running-in:

The throttle handle should not exceed 3/4 of the maximum opening; the vehicle speed should be within 70km/h.

2. Avoid continuous low speed: When the engine is running at a certain low speed (light load), the parts will be polished smoothly and the running-in will not be good.

3. Reasonable use of each gear: Don't continue driving at a fixed engine speed. You can change the speed appropriately so that all parts of the engine can "carry" the pressure, so that the engine can run in better.

4. Before driving, let the engine oil circulate: after the hot and cold engine is started, and before the load is applied, the engine must be allowed to idle for sufficient time, so that the engine oil can be lubricated to all important parts of the engine, reducing wear and extending use Life, it can also warm up the engine well.

5. Running-in of new tires: The tires also need to be run-in. Before the new tires are run-in, you should gradually increase your turning angle within 160 kilometers, but avoid sudden braking, rapid acceleration and sharp turns.

Danger:

Poor tire running-in can cause tires to skid or lose control. When using new tires, you need to be especially careful. Run the tires in within the first 160 kilometers (100 miles).

6. Overhaul during the running-in period: Please perform the vehicle overhaul after the new car has been driven for 1,000 kilometers. During the running-in period, other parts have been engaged. At this time, all parts should be adjusted well. Then change the oil.

note:

When the vehicle is in a bad condition, it needs to be overhauled before 1000 kilometers.

5.2. Inspection before driving

In order to ensure driving safety, please check the motorcycle carefully before using the motorcycle; if there is any abnormality during the inspection, it must be repaired and solved before it can be used.

The inspection can follow the following procedures:

1. Check the lubricating oil in the engine (see page 33) and make sure that there is no leakage;

2. Check whether the fuel is sufficient;

3. Check whether the coolant in the cooling system is sufficient and ensure that there is no leakage;

4. Check the front and rear brakes: free travel (5-10mm front, 10-20mm rear), smooth operation;

5. Check the front and rear tires: the air pressure, the depth of wear of the tread pattern, and the cracks (see page 20);

6. Check the transmission belt: the elasticity is suitable, and there is no defect or damage;

7. Check the throttle handle: the free gap (2-6 mm), whether the oil refueling or oil return is easy to operate;

8. Check the lights and signal lights: make sure that the headlights, taillights, brake lights, turn signals, indicator lights, and horns are in good condition;

9. Check the battery electrolyte and add distilled water in time (see page 48);

10. Check the steering device: it should be stable, flexible to rotate, without looseness and axial movement;

11. Check the clutch handle: free clearance (5-10mm), smooth operation;

12. Fastening bolts and nuts: front and rear shock absorbers, flat fork axles, front and rear wheel axles, engine suspension, steering system, steering handles, front and rear brakes, clutches, rear suspension systems, electrical components, etc.

Waning:

Failure to conduct inspections and proper maintenance before riding will leave a safety hazard to riding, and checking and repairing the motorcycle before riding can eliminate safety hazards.

5.3 Start of motorcycle

（Fig.11）

1、Turn on the ignition switch lock, turn off the preset switch to this sign“”.

2、Change the gear to low gear or neutral.

3、Fully grasp the clutch handle with your left hand (disengage the clutch when it is not in neutral).

4、Press the electric start button“”， If necessary, turn the throttle handle at the same time to refuel properly to start the engine.

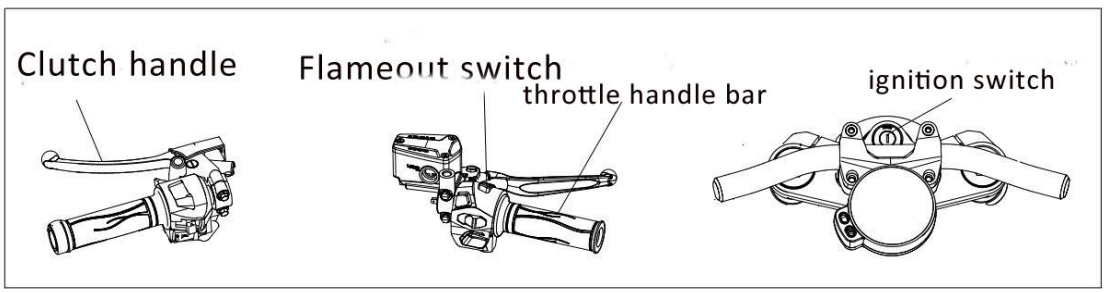


Fig 11 Start preparation

Danger:

1. In order to avoid making mistakes, rush forward and cause danger when starting, put in neutral gear and don't add gas.

2. When not driving, the engine speed should not be too high, and the idling time should not be too long, otherwise it will cause the engine to overheat and damage the internal parts, and cause the exhaust pipe muffler to change color.

Danger:

1. If you are driving this vehicle for the first time, we suggest that you should find a non-public road to practice until you are familiar with the control methods and maneuvering methods of this vehicle.

2. One-handed driving is the most dangerous. You should firmly hold the steering handle with both hands and drive with your feet on the pedals. In any case, do not drive with both hands away from the handle.

3. Reduce the speed to a safe speed before turning.

4. The road is wet and smooth, the tire friction is small, and the braking ability and turning ability are naturally reduced, so it must be slowed down in advance.

5. Crosswinds usually occur most easily at tunnel exits, valleys, or when large vehicles pass from behind. You must be careful and calm and drive at a slower speed.

6. Obey the traffic rules and speed limit.

⚠Note：

1、After starting, warm up for 2-3 minutes before driving on the road. Engines with insufficient preheating temperature will aggravate the wear of cylinders, piston rings, rocker arms and other parts during driving.

2.When using the electric start button "⏻", it should be released immediately within 3 to 5 seconds each time it runs; otherwise, it will easily cause the battery to discharge too quickly and affect the battery's service life.

3.After the engine is started, the electric start button "⏻"; should be released immediately; while the engine is running, it is not allowed to press the electric start button"⏻", otherwise the engine will be easily damaged.

4. Ensure that the single support is completely stowed to avoid obstruction of driving and control failure when turning left.

5. After starting or driving, please refuel stably (turn the throttle handle).

6. Do not start the motorcycle in a small space to avoid the risk of poisoning due to the exhaust gas that is not easily diffused.

7. If the clutch switch fails, it should be replaced in time.

8. It is strictly forbidden to start the engine without disengaging the clutch, otherwise it will cause damage to parts or safety accidents.

9. Do not start the motorcycle when there is lack of fuel or engine oil.

5.4.Motorcycle driving

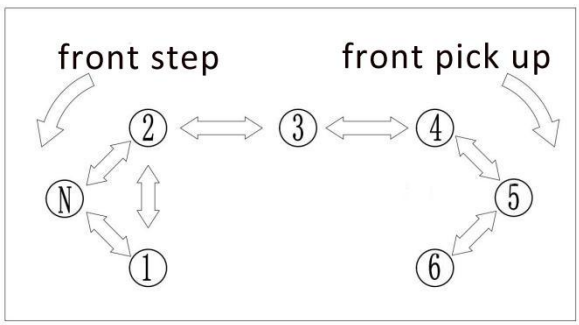


Fig. 12 Shift position diagram

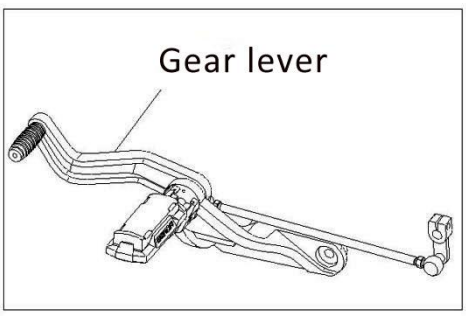


Fig.13 Gear Lever

5.4.1. Shift operation (Figure 12, Figure 13)

This car has six gears with constant meshing; gears ① and ② are low speeds, gears ③ and ④ are medium speeds, and gears ⑤ and ⑥ are high speeds. Refer to the following operations for gear shifting:

1) Neutral gear shift ①: Return the throttle with your right hand, quickly grasp the clutch handle with your left hand, step on the shift lever with your left foot once to make the transmission enter ① gear, gradually release the clutch handle with your left hand, and gradually increase the throttle with your right hand. The coordinated action makes the motorcycle run in the first gear steadily.

2) ①Gear shift ②Gear: return the throttle with your right hand, quickly grasp the clutch handle with your left hand, hook up the shift lever with your left foot once to make the transmission enter the ② gear, gradually release the clutch handle with your left hand, and gradually increase the throttle with your right hand. The coordinated action makes the motorcycle run smoothly in the second gear.

3) ②The method of shifting ③, ④, ⑤, ⑥ is the same as ① shifting ②.

4) The method of lowering the gear is the same as the method of shifting in neutral ①.

Waning:

1. It is strictly forbidden to shift gears when the throttle is not returned and the clutch handle is not held tightly, otherwise it will easily cause damage to the engine and transmission system and cause safety accidents.

2. When shifting gears, please make sure that the shift lever has been stepped on, and then release the clutch handle.

3. While the clutch handle is held tightly during gear shifting, the clutch is disengaged and the motorcycle runs by inertia. Therefore, the shifting time should be shortened as much as possible.

4. When the gear is suddenly lowered or the throttle is suddenly returned when driving at high speed, the engine speed is lower and the rear wheel speed is higher. When the clutch handle is released, the clutch plate frictionally engages and decelerates, causing the rear wheel to brake, losing control and causing an accident. Therefore, the brakes must be used to slow down when changing from high-speed driving to low-speed driving, and then lower the gear.

5. It is strictly forbidden to use the low gear to drive at high speed, and it is strictly forbidden to use the high gear to drive at low speed, otherwise the engine will be damaged.

6. The high gear must be increased before acceleration to make the engine run within the normal speed range. No gear can make the engine speed too high.

Note:

1. Before shifting down gears, reduce the vehicle speed or increase the engine speed. Before entering the high gear, increase the vehicle speed or reduce the engine speed. This prevents unnecessary wear of the transmission system components and rear tires.

2. When the gear is in neutral and the neutral indicator is on, it is best to slowly loosen the clutch handle to confirm whether it really enters the neutral position.

5.4.2 Climbing or turning driving (Figure 14)

1) When driving uphill, the gear will be too high and there will be insufficient power to decelerate. Therefore, the gear must be quickly lowered before driving uphill.

2) When driving down a long slope, the gear must be lowered and the front and rear brakes should be used intermittently. If the front and rear brakes are used continuously for a long time, the brakes will overheat and reduce the braking effect, resulting in danger.

3) When going downhill, it is not allowed to turn off the ignition switch or turn off the engine flameout switch to slide, otherwise it will reduce the life of the catalyst in the exhaust muffler.

4) Before turning, you must first use the brakes to reduce the vehicle speed and then lower the gear. Otherwise, when the vehicle is turning, the speed is too fast to rush out of the curve, or the brake is used when turning, which may cause a dangerous accident.

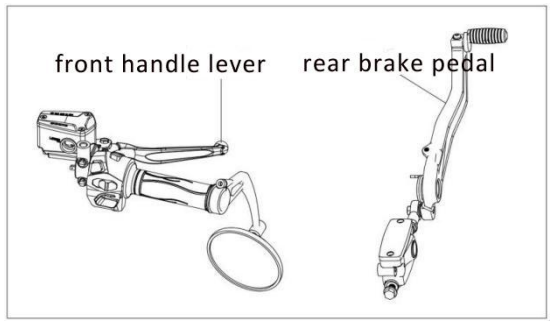


Fig.12 Brake position

5.4.3, use the brake

1) When you need to slow down, you must use the front and rear brakes at the same time. (Slowly hold the front brake handle with your right hand and slowly step on the rear brake pedal with your right foot to avoid using the front and rear brakes separately). Avoid decelerating too fast, which may cause the clutch to slip.

2) In emergency situations, turn off the flameout switch and use the front and rear brakes to stop at the same time.

3) Avoid sudden braking as much as possible. Because the sudden braking will cause the front and rear wheels to stop suddenly, making the vehicle difficult to control.

4) Avoid sudden acceleration, sudden braking and sharp turns on slippery or soft roads. Prevent the vehicle from sliding sideways, which is difficult to control.

5.4.4, parking

1) Return the throttle gradually to fully return the throttle.

2) At the same time, slowly hold the front brake handle with your right hand, and slowly step on the rear brake pedal with your right foot to avoid using the front and rear brakes separately.

3) When the vehicle speed decreases, lower the gear.

4) Hold the clutch handle tightly, put it in neutral and then stop completely. After the neutral gear is engaged, the neutral indicator on the meter will light up.

5) If you want to use a single brace to park on a gentle slope, you should put down a low gear, and the front of the car should be uphill to avoid overturning. (Be sure to engage the neutral position when restarting)

6) Turn off the ignition switch lock; in an emergency, you can directly turn off the flameout switch to turn off the engine.

7) Lock the steering mechanism and pull out the key to prevent theft.

Danger:

1. The higher the vehicle speed, the longer the braking distance. Therefore, a safe distance between vehicles must be maintained to prevent rear-end collisions. (Often only using the rear brake will accelerate the wear of the brake system, and the braking distance will become longer and longer)

2. Using only the front or rear brakes will cause slipping and loss of control; on wet and slippery roads and turns, the braking system must be used with caution; emergency braking on uneven or smooth roads will cause the motorcycle to lose control control.

VI. Maintenance

6.1. Maintenance period table

The motorcycle should be regularly maintained according to the time and mileage specified in Table 4. The vehicle must be cleaned before maintenance.

Maintenance times Maintenance item	Maintenance period	Odometer km (remark ②)				
		1000km	4000km	8000km	12000km	remark
★tank,tubing		Damage and aging should be repaired or replaced in time				Before use
★throttle		I	I	I	I	Before use
★Coolant		Replace every 2 years				Inspection before use

Air filter element	Remarks①	Every 40 hours driving or 1000km/I; every 80 hours driving or 2000km/C; every 8000km/R driving				
Spark plug		Every 2000km or 80 hours/I; every 8000km/R				
Engine lubricating oil	Replace once when a new car is 1000km, and then every 4000km or so.					
Lubricating oil filter	Replace once when a new car is 1000km, and then every 4000km or so.					
Chain\sprocket	Remarks ① I and L are carried out every 500km	Remarks ① I and L are carried out every 500km				
★Brake friction plate	I and R if necessary every 1000km	I and R if necessary every 1000km				
★★Brake oil		Replace every 2 years				
★★Front and rear brake system	Remark ③	I	I	I	I	before use
★Switch		I	I	I	I	before use
★Lights, speakers		I	I	I	I	before use
★Battery	per month	I	I	I	I	
fuse		I	I	I	I	
Connection line		I	I	I	I	
★★Valve clearance	Remark ③	Initially: 20 hours or 200km/I; every 4000km or 80 hours/I				
★Clutch		Every 4000km or 80 hours/I				before use
★Suspension system		I	I	I	I	
★ Fastening of nuts and bolts		I	I	I	I	before use
★wheel		I	I	I	I	before use
★ ★ Steering handle bearing (steering column thrust bearing)	Remark ③	I	I	I	I	
★★Engine maintenance	Remark ③	I	I	I	I	

The symbols in the above table are: "I" timely inspection, cleaning, adjustment, lubrication or replacement; "C" cleaning; "R" replacement; "L" lubrication.

None★The item is maintained by you, or you can go to the designated dealership store for maintenance.

One ★ item is maintained by the personnel of the designated dealership; if you have special tools, repair spare parts or repair capabilities, you can also repair and maintain it yourself.

For the two ★★ projects, for the sake of driving safety, maintenance can only be carried out by the personnel of the designated dealership.

Remark ① means: when driving in dusty areas, the cleaning cycle should be shortened.

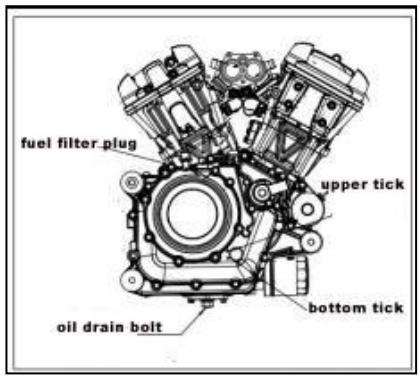
Remark ② means: when the odometer reading exceeds the highest number in the table, the maintenance and repair cycle will still be repeated according to the mileage specified in the table.

Remark ③ means: Only the personnel of designated dealership can carry out maintenance and adjustment.

6.2. Inspection, selection and replacement of engine lubricating oil

The effect of lubricating oil on the engine: reducing friction, increasing sealing, cooling parts, cleaning parts and preventing rust.

If the quality of lubricating oil is poor, the use time is too long, or the amount of lubricating oil is insufficient, etc., it will accelerate the wear of engine parts and reduce the service life of the engine; even cause the engine temperature to be too high, the clutch wear or burn out, power drop, abnormal noise, and lubrication Wait.



SN	SAE10W-30
	SAE15W-40
	SAE20W-50

Fig.15 Lubricating oil inspection

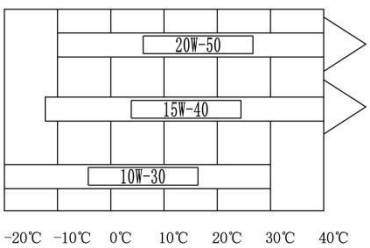
[Check] (Picture 15)

The oil level must be checked before each use. An oil window is provided on the right crankcase cover

Start the engine and run for 3 minutes, and wait 3 minutes for the engine to stop. Park the motorcycle on a flat ground, and the whole vehicle is perpendicular to the ground. At this time, the oil level should be between the upper and lower scale lines of the oil window.

If the lubricating oil is insufficient, directly open the oil filler plug and add an appropriate amount of lubricating oil. After installing the filler plug, check for leaks.

[Optional] (Fig.16)Fig.16 Lubricant selection Lubricant brand: SN 15W-50



Lubricant quality requirements: SN level or above

The use of high-quality four-stroke engine lubricating oil can extend the life of the engine. You need to choose according to the local temperature in Figure 15:

When the local temperature rises, high-viscosity lubricating oil should be replaced, such as SAE15W-40;When the local temperature drops, low-viscosity lubricants, such as SAE10W-30, should be replaced.

Waning:

1. The use of inferior lubricating oil will seriously affect the performance and life of the engine.

2. Long-term failure to change the lubricating oil will deteriorate, and the deteriorated lubricating oil will cause excessive wear of the engine and mechanical parts.

3. If the lubricating oil is insufficient, the engine will be seriously damaged.

［Replacement］

The lubricating oil should be completely replaced within 1000km during the running-in period of a new car; after the running-in period, the lubricant should be replaced every 4000km or so.

1. Turn off the engine after running for 3 minutes, and place an oil container under the engine oil drain bolt.

2. After 3 minutes, drain the lubricating oil from the engine (Caution: don't get burned by the engine or lubricating oil). Unscrew the oil bolt, loosen the nut, and take out the filter cover, spring, filter element, etc. of the machine.

3. After draining the oil, the drain bolt and filter cover must be cleaned; replace the filter element and check whether the sealing ring is intact. If it is damaged, replace it with a new one; then install the filter element, spring, sealing ring and filter cover.

4. Inject about 2L of new lubricating oil from the filler port. If you replace the new filter element, you need 2.2L of new

lubricating oil. Check and confirm that there is no oil leakage, and then install the filler plug.

1、5. Run the engine at different speeds for 3 minutes. During operation, check whether the disassembled parts are leaking. Wait for the engine to stop for 3 minutes. In the idling state, the oil level is still lower than the scale line under the oil window, and an appropriate amount of lubricating oil should be added. It must be checked again for leaks. Common reasons for lubricating oil deterioration:

2、1. Lubricating oil temperature is too high and spontaneously deteriorates.

3、2. Lubricants with different labels are mixed together and deteriorated.

4、3. There are more and more metal shavings caused by friction of machine parts.

5、4. There are many dust and impurities in the lubricating oil barrel.

6、5. The gap between the piston and the cylinder is too large to leak exhaust gas, and carbon slag is generated when the fuel is burned.

Danger:

1. The exhaust pipe of engine lubricating oil and muffler will burn people. Before draining the old lubricating oil, wait for the drain plug and exhaust pipe to cool down.

2. Children and pets may cause bodily harm if they drink lubricating oil by mistake. To reiterate: long-term exposure to lubricants can cause skin cancer. Short-term exposure to lubricating oil can irritate the skin. Keep children and pets away from lubricants. To reduce skin irritation when changing lubricants, please wear long-sleeved clothes and protective gloves (such as those used when washing clothes). If the skin comes into contact with lubricating oil, wash it off thoroughly with soap and water. Wash clothes and rags that have been stained with lubricant.

Waning:

If the specified engine oil is not used, the engine may be damaged.

Note:

Please properly dispose of the waste engine lubricating oil, do not pour it into the trash can or directly onto the ground, so as not to pollute the environment. We recommend that you put waste oil in a sealed container and send it to your local recycling center.

6.3 Selection and replacement of spark plugs

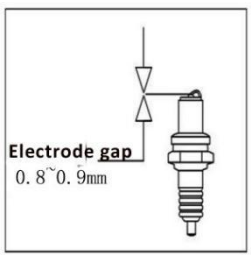


Fig.17 Spark plug

[Optional] (Figure 17)

Spark plug model: CR8E

Opposite side of spark plug sleeve: 16mm

[Check and Replace]

1. The replacement cycle of the spark plug is: once every 6000 km.

2. Remove the spark plug cap, remove the surrounding dirt, use the spark plug socket wrench in the tool bag to remove the spark plug, and use a wire brush to remove the carbon deposits and dirt on the spark plug.

3. Check whether the spark plug is damaged, whether the electrode gap is ablated, and whether the gasket is intact; if it is damaged, it should be replaced.

4. Check the electrode gap with a high-precision feeler gauge, the normal electrode gap is 0.8 ~ 0.9mm.

5. When installing the spark plug: first screw the spark plug into the thread by hand, and then tighten it with a spark plug socket wrench.

6.4. Cleaning and disassembly of the air filter

[Clean or replace]

1. The filter element of the air filter must be regularly maintained periodically: the filter element must be inspected, cleaned and adjusted in time every 40 hours or 1000km; the air filter must be cleaned every 80 hours or 2000km; a new one must be replaced every 20000km Filter element.

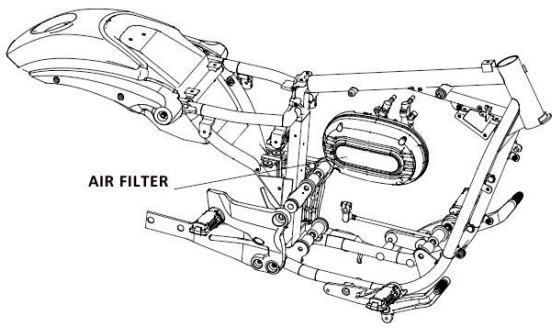
2. If the motorcycle is used in a muddy, humid or dusty environment, the cycle of cleaning or replacing the filter element should be shortened.

3. The filter element is too dirty, ingress of water or damaged, and a new filter element must be replaced, otherwise the air intake resistance will increase, the engine output power will decrease, and the fuel consumption will increase. Keeping the air filter clean can improve the working efficiency of the engine and prolong the service life of the engine.

4. This motorcycle is a paper filter element. When cleaning, you can gently knock on the ground to shake off most of the dust. If there is an air pump, you can blow from the inside out to blow off the dust. If the filter paper has penetrated the dust or The filter paper is wetted with oil, water, etc., and a new filter element must be replaced.

5. During regular maintenance, remove the oil accumulation pipe and drain the waste oil inside. The oil accumulation pipe is located under the air filter**.**

[Disassembly] (Figure 18)



1. Remove the 4 screws of the side cover of the air filter, and remove the fixing screws of the filter element. Remove the filter element.

2. Assembly: proceed in the reverse order of the above disassembly steps.

Figure 18 Air filter location

Warning:

1. It is dangerous to start the engine without the filter element installed. Without the barrier of the filter element, the flame of the engine will be injected back from the engine to the air filter intake cavity, and the dirt will also be sucked into the engine, causing serious wear and tear on the engine. Therefore, it is forbidden to start and run the engine without the filter element installed.

2. When washing the motorcycle, do not let water enter the air filter.

3. If the filter element is damaged, it must be replaced with a new one. When cleaning the air filter, check whether the filter element is damaged.

4. If the filter element is installed incorrectly, dust will enter the engine around the filter element and damage the engine. Confirm that the filter element is installed in the correct position and properly sealed.

6.4 Inspection and adjustment of the throttle handle

[Check] (Picture 19)

1. Check whether the front of the car turns from the far left to the far right is normal, and the limit is reliable.

2. Check whether the rotation of the throttle control handle is flexible from the fully open position to the fully closed position; whether it can automatically return to the position when the handle is released.

3. Check whether the throttle cable is flexible and good.

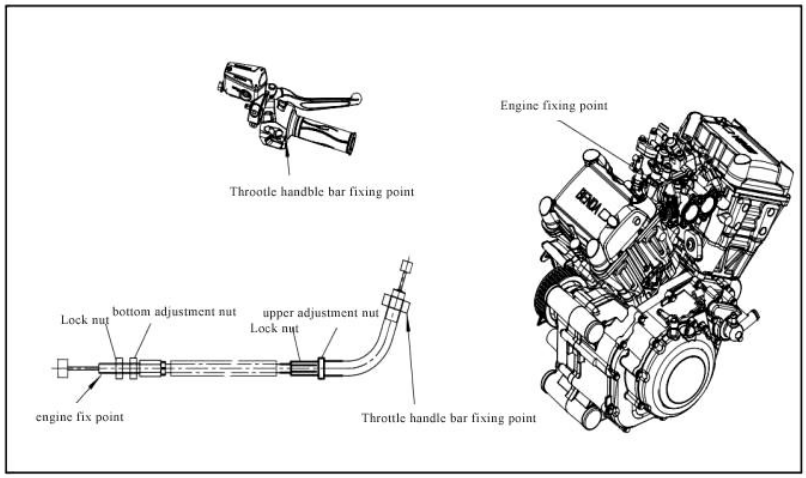


Fig.19

[Adjustment]

1. The free stroke of the throttle handle: 2～6mm.

2. The upper adjustment solenoid can be fine-tuned, and the lower adjustment solenoid (the connection between the throttle valve and the throttle cable) can be adjusted for a certain stroke.

3. When fine-tuning, first loosen the lock nut on the upper adjusting solenoid, and then turn the upper adjusting solenoid to adjust.

4. When making a larger range of adjustment, loosen the fastening nut and adjust the free stroke to 2～6mm.

5. The throttle cable should be filled with lubricating oil regularly to reduce the abrasion of the wire rope; the throttle cable cannot be bent.

Danger:

1. The throttle cable is improperly routed and should be reinstalled correctly.

2. If the throttle cable is twisted, stuck or unable to return, the throttle control cable should be replaced.

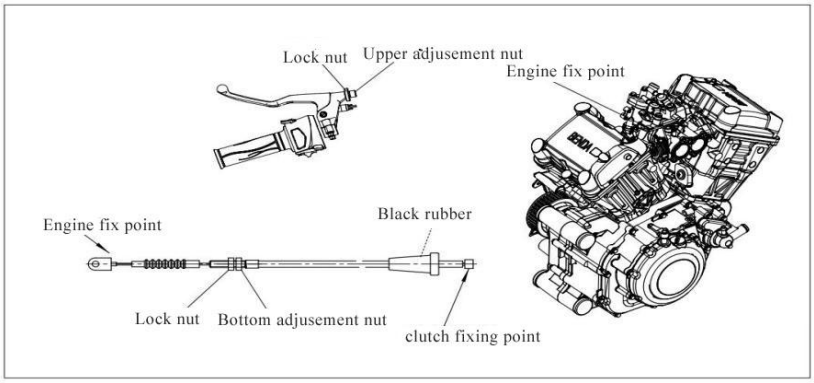
3. After the free stroke adjustment of the throttle cable is completed, it must be ensured that the throttle control handle can automatically return to the position and the idle speed will not increase. At the same time, after adjustment, the engine idling speed cannot increase when turning the front of the car.

[Throttle Body]

The throttle limit screw on the throttle body has been accurately set, and you cannot adjust it yourself. Check whether the idling speed of the vehicle is stable (after the engine is fully warmed up, the idling speed of the engine should be between 1350~1650RPM per minute). If the idling speed is unstable, please ask the professional service personnel of the maintenance unit designated by our company to check and deal with it.

6.5. Adjustment of clutch

(Figure 20)



The free stroke of the clutch handle is: 5-10mm.

The role of the clutch: (Figure 20)

1. The engine crankshaft and the variable speed transmission system can be combined smoothly and softly to ensure a smooth start of the motorcycle.

2. The engine crankshaft and the variable speed transmission system can be separated quickly and completely to ensure that the motorcycle does not produce shocks when shifting gears

3. It can prevent the parts of the transmission system from being damaged due to excessive load.

⚠**Notice:**

When you use the clutch handle, you should grasp or fully release; try to avoid only half or half (using half-clutch), otherwise it will easily cause the clutch to wear or burn.

VII. Inspection and adjustment

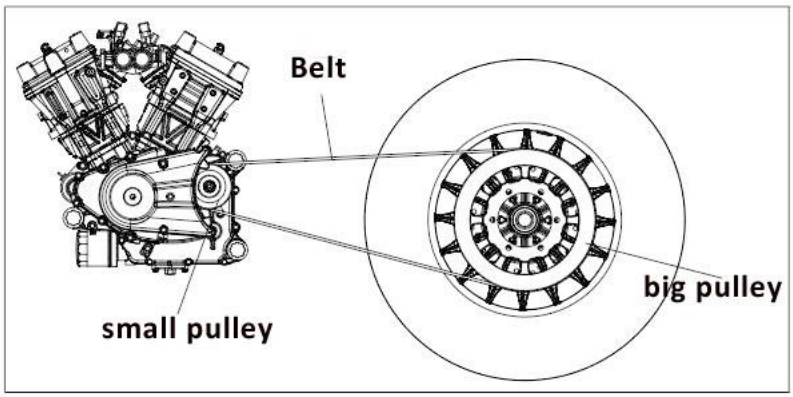


Figure 21 Belt drive

BELT VERSION

Belt model： HTD1760-pitch 8-width 20

[Check] (Picture 21)

Before every ride, check whether the belt drive system is working properly. If you notice any defect or damage, you must check and repair it immediately, and replace the parts of the transmission system if necessary, and the parts can only be obtained from a qualified dealer. Your dealer can recognize any signs of wear and can replace parts that are needed if necessary. Therefore, if necessary, bring the vehicle to the dealer for testing.

[Adjustment]

The belt installation tension needs to be detected with professional tools. If you need to detect or adjust the belt tension, please go to the vehicle dealer. Do not adjust it yourself.

[replace]

1. Remove the big sprocket and small sprocket with tools;
2. Install the large pulley, small pulley, and transmission belt in the reverse order of disassembly and adjust the swing of the chain;
3. Pay attention to the belt installation and debugging process: If the belt is operated incorrectly, the tension cord may be

broken.

This will cause the belt to lose tensile strength and tear, and there is a danger of failure!

●Avoid kinking, bending, twisting, knotting or turning over the belt, and never use it as a belt whip.

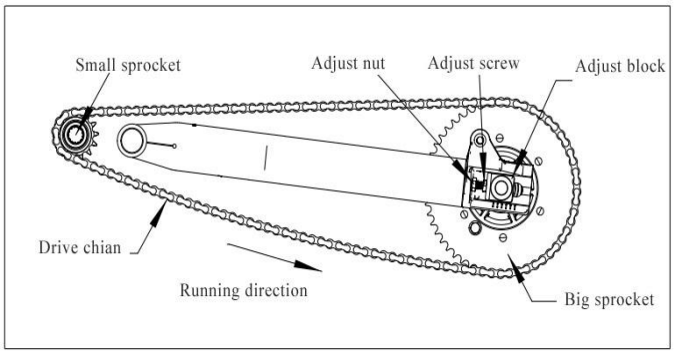
●Do not lift the belt with the sprocket during installation.

●Do not use (sharp-edged) tools to tamper with the belt.

●Do not oil or lubricate the belt.

●Do not try to open or repair the belt

CHAIN VERSION



Chain model: 428-132 [Check] (Picture 21)

1. Park the vehicle on a flat ground, switch to neutral, and turn off the engine.
2. Swing the chain up and down, measure the swing amplitude, the normal swing amplitude range:
   10~20mm.
3. Check whether the chain locking clamp is loose and whether the large and small sprocket are on the same level.
4. Check the wear condition of the chain. If there is a chain link defect, excessive wear, and the chain
   The chain must be replaced if it is too long.
5. Check the wear conditions of the large and small sprocket. If the teeth are severely worn, missing teeth, or broken teeth, they must be replaced.

[Adjustment]

It is advisable to adjust in time to keep the tightness of the motorcycle chain between 15mm and 20mm. Check the buffer body bearing frequently and add grease on time.

When adjusting the chain, in addition to adjusting the scale according to the frame chain adjustment, you should also observe whether the front and rear chainrings and the chain are in the same straight line.

Frequently check the matching clearance between the rear wheel fork buffer rubber sleeve and the wheel fork and the wheel fork shaft.

[lubricating]

1. Clean the chain and sprocket, add proper amount of engine oil or spray clean lubricating oil after cleaning.
2. The chain needs to be cleaned and lubricated every 500km.
3. After 3000km in general form, the chain should be removed and cleaned once, and soaked in the heated and melted graphite grease for 5-10 minutes.
4. After the vehicle is driving on the muddy road, the dust in the chain links should be cleaned up in time, and lubricating oil should be added.

[replace]

1. Use needle-nose pliers to carefully remove the chain locking clamp, disassemble the chain link, and remove the chain;
2. Remove the large and small sprocket with tools;
3. Install the large sprocket, small sprocket and chain in the reverse order of disassembly and adjust the swing of the chain;
4. When installing the chain, the locking clip must be on the outside of the vehicle, and the opening end is opposite to the running direction of the chain to prevent the locking clip from being thrown out by the centrifugal force generated by the high-speed running lock of the chain.
5. Clean the chain and gear plate regularly, and add grease in time. If there are rain, snow and muddy roads, the maintenance of the chain and gear plate should be strengthened.

⚠Notice:

Before each ride, check whether the transmission system is working properly. If you notice any defect or damage, you must check and repair it immediately, and replace the parts of the transmission system if necessary, and the parts can only be obtained from a qualified dealer. Your dealer can recognize any signs of wear and can replace parts that are needed if necessary. Therefore, if necessary, bring the vehicle to the dealer for testing.

.IX. Inspection and adjustment of the front brake

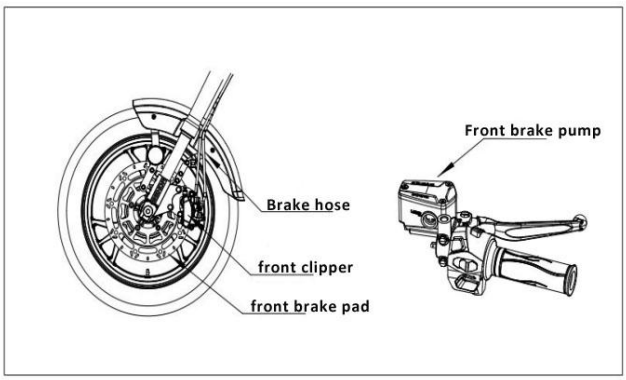


Fig.22 inspection front brake

[Check] (Picture 22)

●Measure the free stroke of the front brake handle: 5～10mm.

●Measure the thickness of the front brake disc and brake friction lining.

●Check the oil level in the oil cup; check whether the brake caliper is normal; check the brake oil pipe and

There is no oil leakage or cracks in the brake oil cup; check the wear of the brake disc.

●When operating the brake handle, if you feel that the handle pressure is insufficient, then there is air in the brake system; the air in the brake system should be completely discharged before normal use; otherwise it will reduce the braking performance or brake failure. This work should be completed at the designated dealership.

⚠warning:

1. It should be added: non-petroleum-based brake oil of DOT3 or DOT4; different brands cannot be mixed;

2. Brake oil is highly corrosive, do not splash on the surface of painted or plastic parts; if you drink it by mistake, you should force it to spit out; if it gets on your eyes or skin, you should rinse it with plenty of water immediately and consult a doctor;

3. Hydraulic disc brakes work under high pressure. In order to ensure safety and reliability, the replacement time of brake friction pads and brake oil should not exceed the maintenance period;

4. When the hydraulic disc brake system needs to be repaired, it can only be repaired by professional technicians.

⚠Note:

The brake is an extremely important component to ensure the personal safety of the rider, and the brake should be checked and adjusted frequently.

Replace with a new brake disc or brake friction pad, and do not drive immediately; you should first manipulate (hold and release) the front brake handle several times until the brake disc and the brake caliper mesh well.

9.1. Check the front brake disc

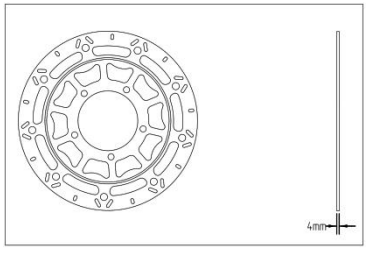


Figure 24 Front brake disc inspection

The brake disc will gradually wear out during long-term use, so it is necessary to check the thickness of the brake disc at multiple positions of the brake disc. And check its appearance to confirm whether the brake disc is damaged, cracked or deformed.

If the thickness of the brake disc is lower than the specified value: please

replace the brake disc.

If the brake disc is damaged, cracked or deformed: please replace the brake disc

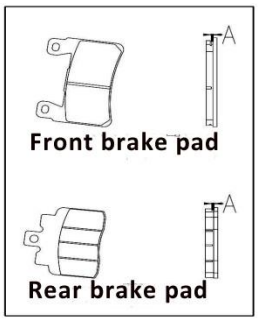
Brake disc wear limit	
Front	3mm
Rear	3mm

warning:

The wear of the brake disc will reduce the thickness of the brake disc within the contact surface of the brake friction lining, which will reduce the braking effect and threaten your driving safety. Once damage, cracks, or deformation occur, please replace the brake disc immediately .

When the brake disc is worn to the limit thickness of 3mm, it must be replaced; remove the front brake caliper and front wheel, and then replace the brake disc.

9.2. Check the brake pads of the front brake



Check the minimum thickness of the brake pads (A).

The minimum thickness of the brake friction pad: A=1.5mm.

If the thickness is lower than the minimum thickness: please replace the friction plate in time.

If the friction plate is found to be damaged or cracked: please replace the friction plate in time.

Note:

The friction lining will gradually wear out during the braking process of the vehicle. The braking effect will gradually decrease. To ensure the safety of you and the vehicle, please check it frequently and replace it in time. If you do not understand the specifications of the friction plate or cannot replace it by yourself, please go to the designated after-sales point for repair.

9.3. Check the brake fluid level of the front brake system

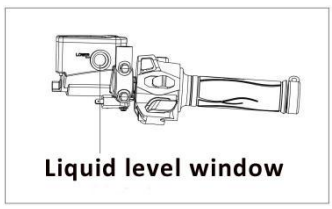


Figure 26 Front brake fluid level check

Adjust the placement posture of the vehicle so that the brake fluid in the brake fluid is in a horizontal position, and check the brake fluid level through the fluid level window. (Figure 26)

When the brake fluid level is below the scale line: please replenish the brake fluid in time.

Warning:

If the brake fluid level is lower than the scale line, it means that the brake system is not sealed, or the brake friction lining has been completely worn. Check the braking system and do not continue driving. Please go to designated after-sales point for repairs.

If the brake fluid is used for too long, the braking effect will be reduced. Please replace the brake fluid in time.

X.Inspection and adjustment of rear brake

[Check] (Picture 27)

●The free stroke of the brake pedal after measurement is: 10-20mm.

●Measure the thickness of the rear brake disc and brake pad thickness.

●Check the oil level in the oil cup; check whether the brake caliper is normal; check the brake oil pipe and brake oil cup for oil leakage or cracks; check the wear of the brake disc.

●When operating the brake pedal, if you feel that the pedal pressure is insufficient, then there is air in the brake system; the air in the brake system should be completely discharged before normal use; otherwise it will reduce the braking performance or brake failure. Please let the professional technicians of the maintenance organization serve you for this repair.

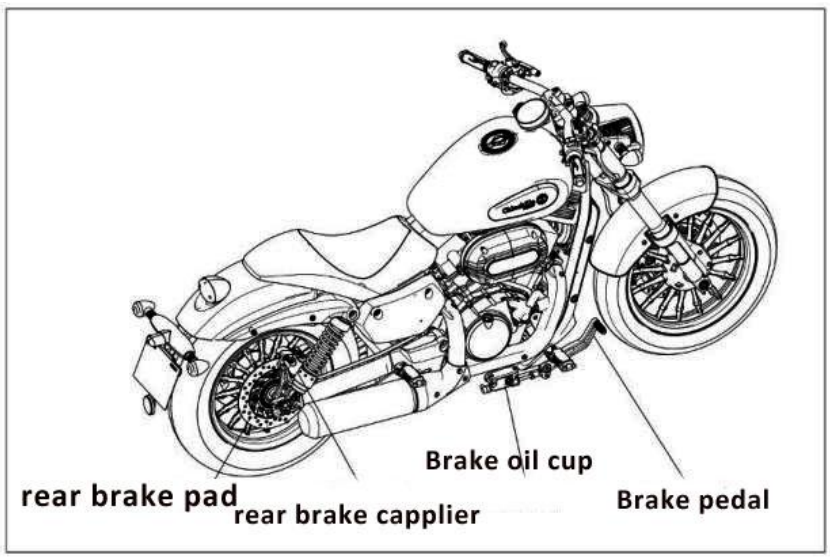


Figure 27 Rear brake inspection

10.1 Check the rear brake disc

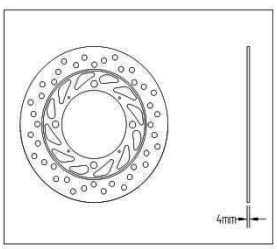


Figure 28 Inspection of rear brake disc

The brake disc will gradually wear out during long-term use, so it is necessary to check the thickness of the brake disc at multiple positions of the brake disc. And check its appearance to confirm whether the brake disc is damaged, cracked or deformed.

If the thickness of the brake disc is lower than the specified value: please replace the brake disc.

If the brake disc is damaged, cracked or deformed: please replace the brake disc.

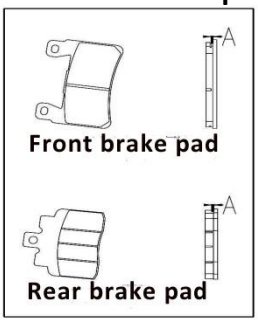
Brake disc wear limit	
front	3mm
rear	3mm

Warning:

The wear of the brake disc will reduce the thickness of the brake disc within the contact surface of the brake friction lining, which will reduce the braking effect and threaten your driving safety. Once damage, cracks, or deformation occur, please replace the brake disc immediately .

When the brake disc is worn to the limit thickness of 3mm, it must be replaced; remove the rear brake caliper and rear wheel, and then replace the brake disc.

10.2 Check the brake pads of the rear brake



Check the minimum thickness of the brake pads (A).

The minimum thickness of the brake friction pad: A=1.5mm.

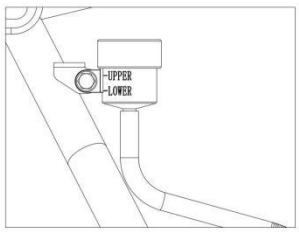
If the thickness is lower than the minimum thickness: please replace the friction plate in time.

If the friction plate is found to be damaged or cracked: please replace the friction plate in time

Figure 29 Inspection of rear brake friction lining

> ⚠**Note:**
> **The friction lining will gradually wear out during the braking process of the vehicle. The braking effect will gradually decrease. To ensure the safety of you and the vehicle, please check it frequently and replace it in time. If you do not understand the specifications of the friction plate or cannot replace it by yourself, please go to the designated after-sales point for repair.**

10.3. Check the brake fluid level of the rear brake system



Adjust the placement posture of the vehicle so that the brake fluid in the brake fluid is in a horizontal position, and check the brake fluid level through the fluid level window.

When the brake fluid level is below the scale line: please replenish the brake fluid in time.

Figure 30 Rear brake fluid level check

> ⚠**Warning:**
> **If the brake fluid level is lower than the scale line, it means that the brake system is not sealed, or the brake friction lining has been completely worn. Check the braking system and do not continue driving. Please go to designated after-sales point for repairs.**
> **If the brake fluid is used for too long, the braking effect will be reduced. Please replace the brake fluid in time.**

XI. Battery maintenance

[Battery model]

Model: MG14ZS-C

Capacity: 12V 11.2Ah

Standard charging: 1A～1.5A×6～8 hours

[Assembly and disassembly battery] (Figure 31)

Dismantling:

1. Open the seat cushion lock and remove the seat cushion;
2. Open the battery box cover;
3. Remove the ECU bracket;
4. First remove the negative lead (—);
5. Then remove the positive lead (+);

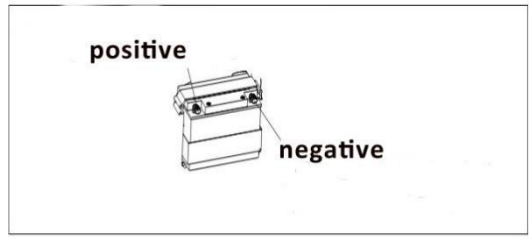


Fig.31 Battery

6. Remove the battery.

installation:

1. The installation sequence is opposite to the removal steps.

2. Install the positive lead (+) first, and then install the negative lead (—), and make sure the positive and negative

The pole terminal is not loose, and the positive and negative poles cannot be reversed. Reverse connection will damage electrical parts.

[Battery charging]

1. Remove the vehicle seat cushion.

2. Remove the battery tie, remove the positive and negative wires, and take out the battery.

3. Connect the charger wire and ensure that the charging current is 1/10A of the battery capacity. For example, if you charge a battery with a capacity of 10Ah, its charging current is 1 ampere.

4. For detailed instructions on the charger, please contact your dealer.

[Inspection and maintenance of battery]

1. When used frequently, the motorcycle charging system automatically fully charges the battery. If the motorcycle is used occasionally or for a short period of time, the battery power may be insufficient. The battery will self-discharge, and the self-discharge speed will vary with the battery type and ambient temperature.

2. When the motorcycle is not used for a long time, the battery must be removed and stored after charging, and the battery should be charged regularly;

3. The positive (+) and negative (—) terminals of the battery should be cleaned regularly.

4. When replacing batteries, use batteries of the same model and specifications.

> ⚠**Note:**
>
> **1. Overcharge or undercharge of the battery will shorten the life of the battery. Do not overcharge or undercharge the battery.**
>
> **2. If your vehicle is rarely driven, you must use a voltmeter to check the battery voltage every week. If the battery voltage is lower than 12.8V, a charger must be used to charge the battery.**
>
> **3. If you do not use the vehicle for more than two weeks, you must use a charger to charge the battery. Do not use the automatic quick charger to charge the battery, otherwise it may cause the battery to overload and damage the battery.**

[Replacement of fuse]

The circuit system has a total of six blade fuses, 20A fuse 2PCS, 5A-ECU fuse 1PCS and ABS fuse 15A, 10A, 1A each 1PCS, a total of 6PCS. In addition, there are extra 20A, 15A, 1A spare fuses in the fuse box, 1PCS each. If the fuse blows frequently, there is a short circuit or overload in the circuit system. Please ask the professional technicians of the maintenance unit to serve you.

When replacing the fuse, first unplug the old fuse and plug in the spare fuse.

> ⚠**Warning:**
>
> **Before checking or replacing the fuse, the ignition switch and electrical switch must be turned off to prevent short circuits. Never use a fuse that is different from the rated current. Otherwise, it will damage the vehicle's electrical system or cause a fire. It may also cause the lights to fail to turn on or the engine to fail at night or during driving.**

Instructions for use and maintenance of the engine water cooling system

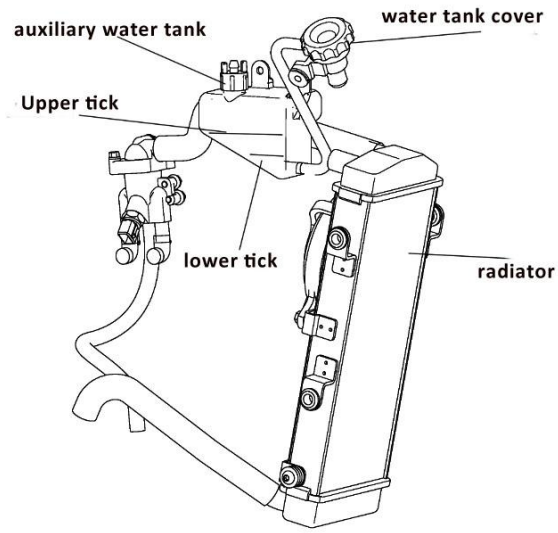


Fig.32 cooling system

[Cooling System] (Figure 23)

The cooling system can prevent the engine from overheating, and the correct use and maintenance of the cooling system can extend the service life of the engine.

The radiator is located in the front of the engine. According to the road conditions you are driving, the radiator should be regularly cleaned of dust and dirt.。

[Coolant Type]

Coolant has five characteristics of anti-corrosion, anti-cavitation, high boiling point, anti-scaling and anti-freezing. The coolant is generally mixed with concentrated antifreeze and soft water (pure water or distilled water) in an appropriate ratio. Please adjust it to a fixed concentration that is suitable for the local minimum temperature. Generally, when it is adjusted to a concentration of 40% to 50%, the antifreeze function is the best.

It is recommended that you use the direct coolant specially designed for aluminum alloy engines. This coolant has been prepared in the factory and contains antifreeze, rust inhibitor, foam inhibitor and trace silicate, etc., and the use is indicated on the container Ambient temperature.

⚠**Note:**

1. This coolant is a special coolant and cannot be replaced with tap water or other liquids, otherwise it may cause damage to the engine.

2. Please go to the designated dealership to purchase direct type coolant exclusively for aluminum alloy engines.

3. If the coolant needs to be replaced or coolant leakage occurs, please go to the designated dealership for replacement and maintenance.

[Check coolant capacity]

The total amount of coolant in the cooling system is about 4000ml

1. Park the motorcycle on a flat ground with a single support.

2. Check the coolant level when the engine is cooling. The coolant level should be between the upper and lower scale lines.

[Add a small amount of coolant]

If the coolant in the auxiliary water tank is at or below the lower mark, please add special coolant to the upper mark in time.

[How to add]

1. Park the motorcycle with a single support on a flat ground and wait for the engine to cool; otherwise the heat may cause burns to the skin;

Figure 33 Adding coolant

2. Unscrew the water tank cover;

3. Pour the cooling liquid from the mouth of the water tank, and add the cooling liquid to the position of the upper scale line;

4. Close the water tank cover.

[Storage of Coolant]

1. When the coolant is not in use, it should be stored in a special sealed container.
2. It should be placed in a cool and dry place. The coolant is a toxic liquid and must be kept away from children.
3. Note that the coolant should be strictly prevented from being contaminated by petroleum products, and it is not allowed to mix or store two different brands of coolant.

Danger:

1. Ethylene glycol antifreeze is an organic solvent, which is toxic and corrosive. Do not spill on the surface of rubber products and painted parts during use, let alone contact with human skin. If accidentally splashed on the surface of rubber products, painted parts or human body, immediately rinse with water.

2. When servicing the engine, if you need to loosen the cylinder nut, please drain the coolant first to prevent the coolant from entering the crankcase.

3. Since the boiling point of antifreeze is higher than pure water, the radiator cover must not be opened when the engine is running normally or the temperature does not drop (60℃) after stopping to avoid burns.

XIII:Adjustment of the rear shock absorber

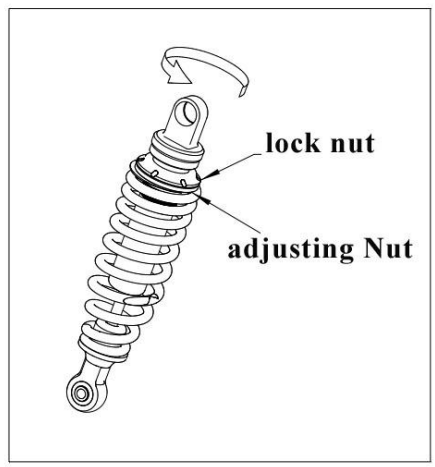
1. Appropriate shock absorption hardness is one of the important conditions to ensure the comfort of riders during riding. Different riders have different requirements for shock absorption hardness. Please follow the steps below to adjust.

[Shock absorption adjust to soft]（Fig 34）

Step 1: Loosen the locknut on the upper end of the shock.

Step 2: Turn the adjusting nut counterclockwise. Adjust the shock absorber hardness to an appropriate level.

Step 3: Tighten the locknut.



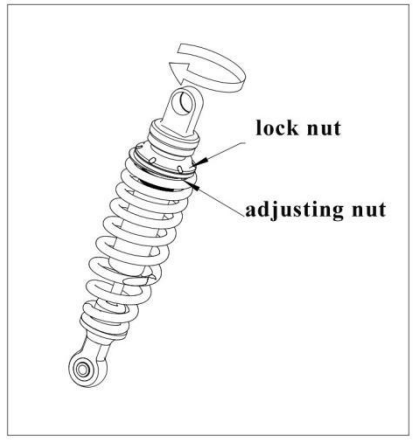
（Fig 34）

[shock absorptionadjust to hard]（Fig 35）

Step 1: Loosen the locknut on the upper end of the shock.

Step 2: Turn the adjusting nut clockwise. Adjust the shock absorber hardness to an appropriate level.

Step 3: Tighten the locknut.



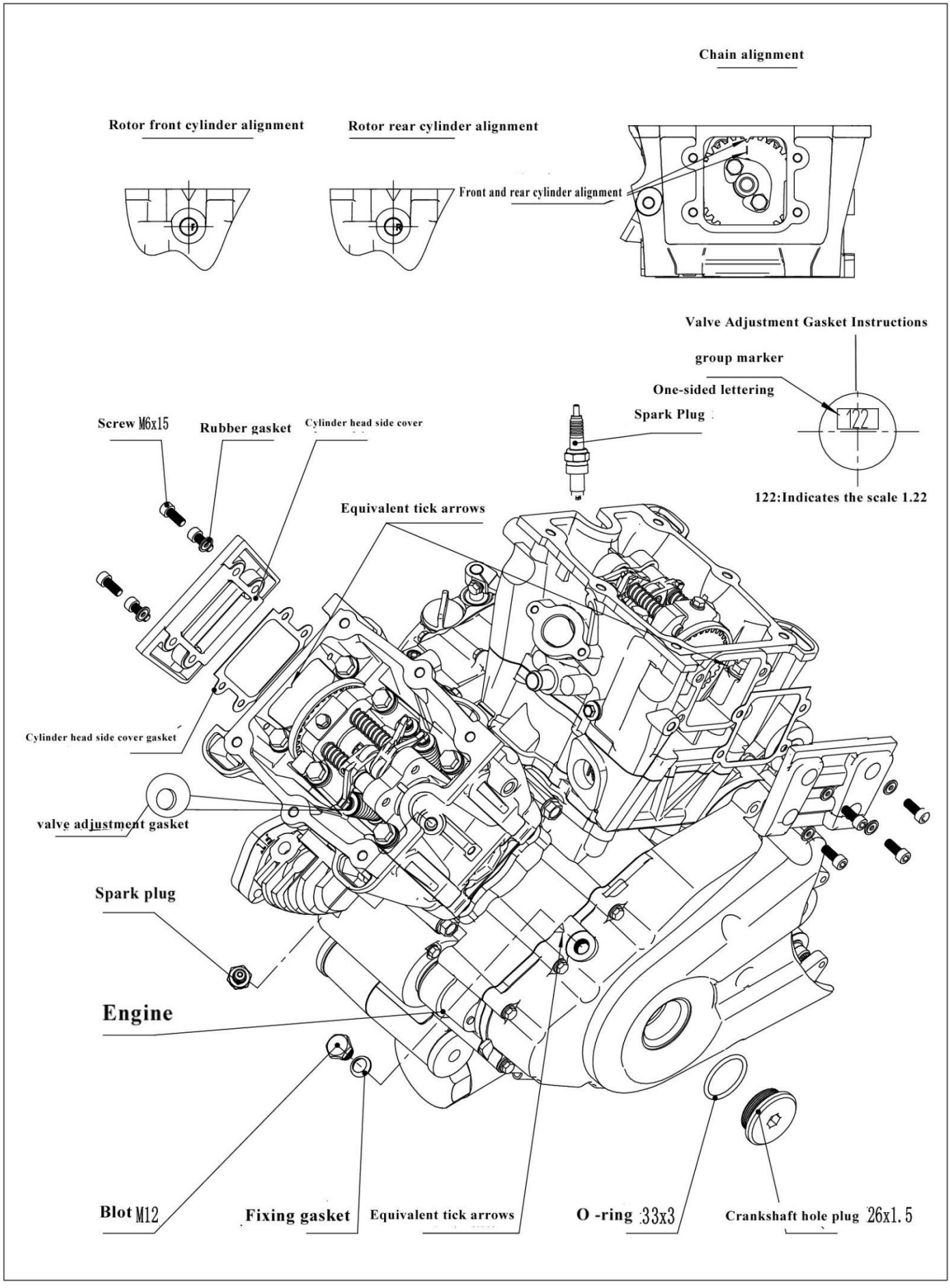
（Fig 35）

⚠NOTICE:

Please go to the designated dealer to adjust the shock absorption. The dealer has professionals and professional tools to adjust the shock absorption! !

The stroke of the left and right shock absorbers must be the same, otherwise it will adversely affect the riding safety! !

XIV.valve clearance adjustment



Step 1: Remove the fuel tank.
Step 2: Remove the cylinder head cover and use the corresponding tool to remove the engine cylinder head cover.
Step 3: Adjust the valve clearance of the rear cylinder: Rotate the magneto rotor to align the scale line of the rear cylinder alignment with the arrow, and confirm that the scale line of the sprocket and the arrow are also aligned at the same time, as shown in the figure.
Step 4: Loosen the valve adjustment nut of the intake rocker arm combination, insert a 0.05 feeler gauge between the valve adjustment bolt and the intake valve, rotate the valve adjustment bolt until there is no gap in the feeler gauge, and then go back to 5 in the direction of increasing the gap ° About °, tighten the valve adjusting nut.
Intake valve clearance: 0.04-0.06mm.
Step 5: Loosen the valve adjustment nut of the exhaust rocker arm combination, put a 0.12 feeler gauge between the valve adjustment bolt and the exhaust valve, rotate the valve adjustment bolt until the feeler gauge has no gap, and then adjust the gap to increase the direction 5 ° About °, tighten the valve adjusting nut.
Exhaust valve clearance: 0.10-0.13mm.
Step 6: Adjust the valve clearance of the front cylinder: rotate the magneto rotor along the direction of engine rotation until the scale line of the front cylinder is aligned with the arrow (360° +60°), and confirm that the scale line of the sprocket and the arrow are also aligned at the same time, as the picture shows.
Step 7: Repeat the previous steps 3 and 4 to adjust the front cylinder intake and exhaust valve clearance
Step 8: Install the spark plugs into the spark plug holes of the front and rear cylinders, and then tighten them with the spark plug sleeves. Tightening torque: 12-16N.m
Step 9: Insert the screw plug M12 through the top dead center plug gasket and then install it into the upper viewing hole to tighten. Tightening torque: 18-23N.m
Step 10: Insert the crankshaft hole plug M26x1.5 through the O-ring 33x3 and then install it into the left cover hole to tighten. Tightening torque: 7-14N.m
Step 11: Insert the screws M6x15 (8 pcs) through the rubber gaskets (8 pcs) and then fasten the cylinder head side cover (2 pcs) and the cylinder head side cover gaskets (2 pcs) to the front and rear cylinder heads respectively superior. Tightening torque: 8-12N.m

XV. Vehicle cleaning and storage

1. The motorcycle should be cleaned regularly in order to discover the damage, wear or oil leakage of the vehicle in time.

2. When cleaning, you must wait for the engine to cool down and rinse with clean water. After cleaning, dry the motorcycle and start the engine and let it run for a few minutes; lubricate the chain with lubricating oil; check the brakes before driving on the road, and the front and rear brakes should be normal.

3. Parts that cannot be sprayed with high-pressure water: headlights, turn signals, ignition switch locks, electrical switches, meters, electrical parts and wiring, batteries, air filters, hubs, exhaust pipe outlets, under the fuel tank and engine Cylinder head, etc. These parts are best wiped with a rag.

4. After cleaning, the braking performance may be reduced, so you must try to ride it and check it before it can be used after adjustment and recovery.

[Vehicle storage]

After the motorcycle is used on the day, it should be stored in a dry, safe place with small temperature differences and good ventilation. If it is stored for a long time (more than 30 days), necessary repairs should be performed before storing the motorcycle; otherwise, the problem that needs repairs may be forgotten when the motorcycle is used after storage. Long-term storage (more than 30 days) should be maintained in accordance with the following requirements in addition to the above maintenance:

1. Clean and dry the motorcycle, and wax the painted surface of the whole car.

2. Drain the fuel out of the fuel tank and spray anti-rust agent into the fuel tank.

3. Thoroughly drain the oil and refill the crankcase with new oil.

4. Remove the spark plug and inject a small amount (15-20 ml) of lubricating oil into the cylinder; then reinstall the spark plug, turn on the ignition switch lock, and press the start button for 2 to 3 seconds to distribute the oil evenly on the cylinder wall.

5. Remove the battery, remove the rust on the terminals and wiring connectors, and store it in a well-ventilated, dry, cool place and avoid direct sunlight.

6. Inflate the tire to the specified air pressure and place the motorcycle above the cushion block to keep the front and rear wheels off the ground. If the tire pressure is too low, the tire will age prematurely and cause cracks.

7. Cover the air inlet of the air cleaner and the exhaust outlet of the exhaust muffler with a rag containing new engine oil to prevent moisture from entering.

8. Cover the motorcycle with a material with strong air permeability and store it in a dry, safe place with small temperature difference and good ventilation.

[Use after the vehicle is stored]

1. Remove the motorcycle cover and clean the motorcycle.

2. Check the battery voltage. If the voltage is below 12.8V, you must charge the battery at low speed before installing the battery.

3. Remove the anti-rust agent in the fuel tank and add new fuel.

4. Try riding the motorcycle in a safe place to check whether the performance of the motorcycle is normal.

XVI. The service life of the vehicle and the disposal of the vehicle

[Vehicle life time]

Please follow the regulations of the traffic management department or the local vehicle management office for the use period of the vehicle.

[Vehicle handling]

1. Disposal of waste lubricating oil: The waste lubricating oil from the replacement of motorcycles should be put into plastic drums and handed over to the recycling company for disposal. You cannot discharge waste lubricating oil at will, otherwise it will cause damage to the environment such as the site, soil, water source, etc.

2. Disposal of waste batteries, light bulbs, exterior parts, filter elements, tires, iron parts, aluminum parts and other parts: these scrap parts should be recycled and processed separately. You can't throw it away at will, let alone dump the dilute sulfuric acid in the battery to cause harm to people or cause pollution to the environment.

3. After the vehicle is scrapped, please dispose of it in accordance with the vehicle scrapping regulations of the traffic management department or local vehicle management office.

XVII. Motorcycle related adjustment data

Front (hand) brake free stroke 5～10mm Free clearance of throttle handle: 2～6mm

Rear (foot) brake free stroke 10～20mm Clutch free stroke: 5～10mm

Spark plug gap: 0.8～0.9mm Inlet and exhaust valve gap: 0.08～0.12 mm

Torque value of rear shock absorber fastening bolt: 30～40 N·m

Handle tightening bolt torque value: 4～6N·m Flat fork shaft tightening nut torque value: 70～90 N·m

Torque value of tightening nut of front wheel axle: 70～90N·m Torque value of tightening nut of steering system: 50～70

N·m

Torque value of tightening nut of rear wheel axle: 70～90 N·m

Torque value of fastening bolts of front shock absorber and upper connecting plate: 10～14N·m

Torque value of fastening bolts of front shock absorber and direction column: 20～25 N·m

Torque value of engine suspension fastening nut: M8: 18～25 N·m, M10: 30～40 N·m

XVIII. Main technical parameter table

Model		BD125-15
Vehicle specification	Vehicle model (commercial name)	BD125-15
	Vehicle Type	Ordinary two-wheeled motorcycle
	Vehicle Identification Number	LBDPCJLKxxxxxxx
	Approved manned	2 people (one for driving and one for riding)
	Steering Type	Direction
	Gear form	Sixth gear constant meshing
	Braking form	Front wheel: Disc type Rear wheel: Disc type
	Brake operation mode	Front wheel: hand brake Rear wheel: foot brake
	Clutch form	Oil bath multi-piece
	Start method	Electric start
	Length*width*height	2120*836*1050
	Wheelbase	1420
	Minimum ground clearance	160
	Whole vehicle curb quality	175
	Maximum load mass	150
Model		**BD125-15**
Vehicle specification	Fuel tank capacity	14L
	Number of tires	2
	Front wheel	120/80-16
	Rear wheel	150/80-15
Electricity Device	Ignition method	ECU
	Spark plug model	CR8E
	Headlamp specifications	12V 35W/35W
	Turn signal specifications	12V LED
	Tail light/brake light specifications	12V LED
	Fuse specifications	20A(2 units)、15A(1unit)、10A(1unit)、5A-ECU(1unit)、1A(1unit)
	Battery specifications	12V 11.2Ah
	Engine form	V-twin double cylinder
	engine model	BD2V42MI
	Compression ratio	11.3：1
	Actual displacement	125ml

engine	Maximum net power	10.3kw/8500rpm
	Maximum torque	14.5N.M/6500rpm
	Bore*Stroke	42*45
	Idle speed	1600±100
	Engine lubricating oil	SAE
	Grade	15W-40
	Lubricating oil capacity	2.2L
	Fuel grade	95# and Above
	Spark plug gap	0.8~0.9 mm
change speed ratio	Primary speed ratio	3.238
	First gear ratio	2.42
	Second gear ratio	1.53
	Third gear ratio	1.18
	Fourth gear ratio	1.04
	Five gear ratio	0.91
	Sixth gear ratio	0.81
	Final speed ratio	3.714
performance	Maximum speed	100
	Gradeability	
	Fuel consumption	≤2.40

XIX. Common faults and causes of motorcycles

Phenomenon	Part location	Cause of failure	Disposal method
Cannot start	Fuel System	No fuel in the tank	refuel
		The oil pump is blocked or damaged, and the fuel quality is poor	Clean or replace
	Ignition system	Spark plug failure: too much carbon deposits and long use time	Check or replace
		Spark plug cap failure: poor contact or burnt Ignition coil failure: poor contact or burnt	Check or replace
		CDI failure: poor contact or burnt	Check or replace
		Trigger coil failure: poor contact or burnt	Check or replace
		Stator failure: poor contact or burned out	Check or replace
		Failure of each connection line: poor contact	Check or replace
	Cylinder pressure system	Starting mechanism failure: worn or damaged	Check or adjust
		Intake and exhaust valve, valve seat failure: the fuel contains too much gum or has been used for too long	Check or replace
		Cylinder, piston, piston ring failure: the fuel contains gum or wear	Check or replace
		Air intake pipe leak: use time is too long	Check or replace

		Valve timing failure	Check or replace
Lack of power	Valve piston	Excessive carbon deposits on intake and exhaust valves and pistons: poor fuel quality and poor oil quality	Repair or replace
	clutch	Clutch slip: poor oil quality, long use time, overload	Adjust or replace
	Cylinder block, ring	Cylinder block and piston ring wear: poor oil quality, long use time	Change the oil
	Brake	Brake separation is not complete: the brakes are too tight	Adjustment
	Chain	Chain too tight: improper adjustment	Adjustment
	engine	Engine overheating: The mixture is too rich or too thin, and the quality of oil and fuel is poor.	Adjust or replace
	Spark plug	There are obstructions etc.	Adjust or replace
	Intake pipe	Improper spark plug gap, normal 0.8-0.9 mm	Adjust or replace
	Cylinder head	Air intake pipe leak: use time is too long, adjust or replace	Check or replace
	Electrical system	Cylinder head or valve leak	Check or repair
	Air filter	The electrical system is faulty	Clean or adjust
Headlights and taillights do not light up	cable	Bad line connection	Adjustment
	Left and right switch	Poor contact or damage to the switch	Adjust or replace
	Headlamp	Bulb and lamp holder inspection	Adjust or replace
Headlights and taillights do not light up	Regulator	Voltage regulator inspection: poor contact or burnt	Check or replace
	Magneto	Magneto coil inspection: poor contact or burnt	Check or replace
La	Battery	No battery	Adjust or replace
	Left switch	Horn button check	Adjust or replace
	cable	Poor line contact	Adjust or replace
	horn	Horn damage	Adjust or replace

The above-listed are common faults of motorcycles. If your motorcycle breaks down, please go to the designated maintenance unit for inspection and repair in time.

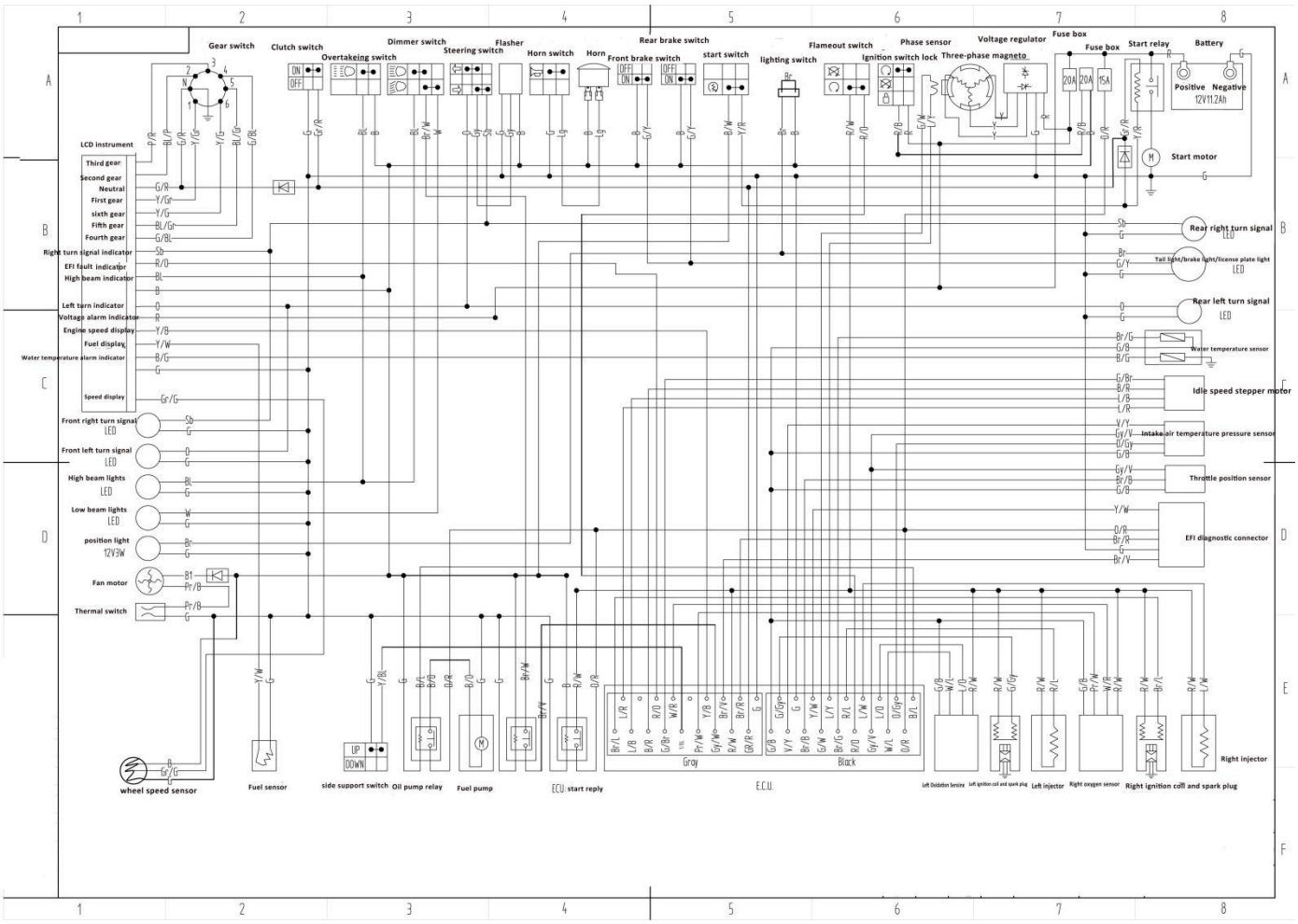
MT05 fault code table	
fault code	description
P0107	The intake pressure sensor is open or shorted to ground
P0108	The intake air pressure sensor is shorted to the power supply
P0112	The intake air temperature sensor is shorted to ground
P0113	The intake air pressure sensor is open or shorted to the

	power supply
P0117	The cooling/cylinder temperature sensor is shorted to ground
P0118	The cooling/cylinder temperature sensor is open or shorted to the power supply
P0122	Throttle position sensor is open or shorted to ground
P0123	Throttle position sensor shorted to power supply
P0131	Oxygen sensor (one cylinder) is shorted to ground
P0132	The oxygen sensor (one cylinder) is shorted to the power supply
P0031	The oxygen sensor heater is shorted to ground
P0032	The oxygen sensor heater is shorted to the power supply
P0201	A cylinder nozzle failure
P0202	Second cylinder nozzle failure
P0230	The oil pump (relay) is open or shorted to the ground
P0232	The oil pump (relay) is shorted to the power supply
P0336	Crankshaft position sensor has interference
P0337	No signal from crankshaft position sensor
P0351	Ignition coil failure of a cylinder
P0352	The second cylinder ignition coil failure
P0505	Idle speed control failure
P0562	System voltage is too low
P0563	System voltage is too high
P0650	Fault light failure
P1693	Tachometer shorted to ground
P1694	Tachometer shorted to power supply

The codes listed above are common fault codes for motorcycles. If your motorcycle breaks down, please go to the designated maintenance unit for inspection and repair in time.

Remember: You can't handle the motorcycle breakdown by yourself, otherwise it will easily cause safety hazards or safety accidents. If you handle the motorcycle breakdown by yourself, you will be responsible for the safety accident.

XX. BD125-15 electrical schematic diagram


Gear switch
Clutch switch
Overtakeing switch
Dimmer switch
Steering switch
Flasher
Horn switch
Horn
Rear brake switch
Front brake switch
start switch
lighting switch
Flameout switch
Ignition switch lock
Phase sensor
Three-phase magneto
Voltage regulator
Fuse box
Fuse box
Start relay
Battery
Positive Negative
12V11.2Ah
Start motor
LCD instrument
Third gear
Second gear
Neutral
First gear
sixth gear
Fifth gear
Fourth gear
Right turn signal indicator
EFI fault indicator
High beam indicator
Left turn indicator
Voltage alarm indicator
Engine speed display
Fuel display
Water temperature alarm indicator
Speed display
Front right turn signal LED
Front left turn signal LED
High beam lights LED
Low beam lights LED
position light 12V3W
Fan motor
Thermal switch
Rear right turn signal LED
Tail light/brake light/license plate light LED
Rear left turn signal LED
Water temperature sensor
Idle speed stepper motor
Intake air temperature pressure sensor
Throttle position sensor
EFI diagnostic connector
Right injector
wheel speed sensor
Fuel sensor
side support switch
Oil pump relay
Fuel pump
ECU start reply
E.C.U.
Gray
Black
Left Oxidation Sensinr
Left ignition coil and spark plug
Left injector
Right oxygen sensor
Right ignition coil and spark plug