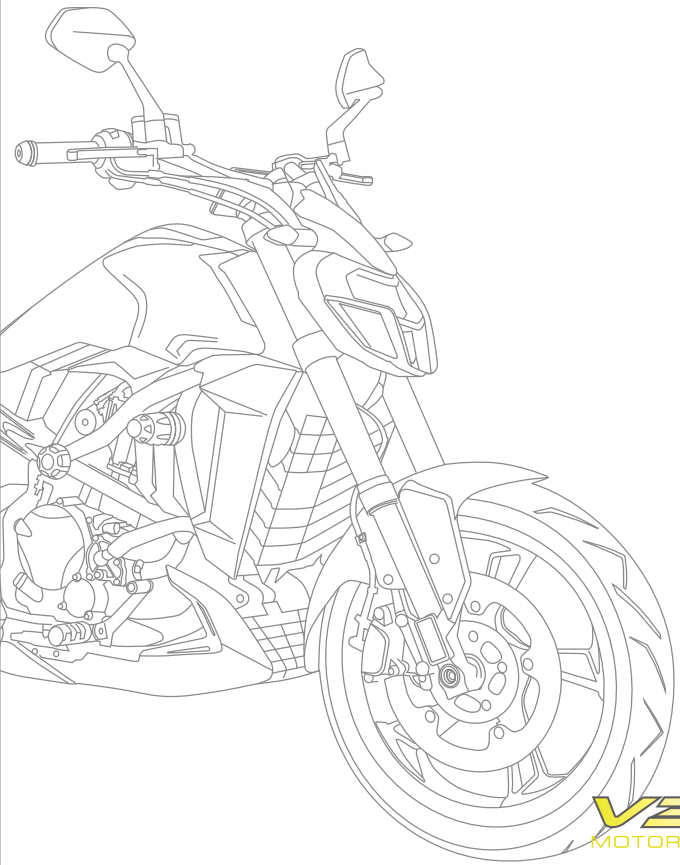
ZONTES
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V310 SERIES
MOTORCYCLE MANUAL

V310
MOTORCYCLE MANUAL

Preface

Thank you for using ZONTES brand motorcycles. We use most advanced technology to design, test and produce the type of motorcycle, to provide you with joy, fun and safe driving. When you are fully familiar with all the essentials in this manual, you will feel riding a motorcycle is one of the most exciting sports, at the same time, can feel the real pleasure of driving.

This manual summarizes the right repair and maintenance methods of motorcycle. As long as in accordance with the provisions to do, your motorcycle will be durable. ZONTES distribution unit has trained technical personnel, with the complete tools and equipment, to provide you with high quality and service at any time.

The single and double rocker arms share this manual. The maintenance of parts with the same structure should be operated in accordance with the unified method. The illustration only shows one of them.

The contents of this manual are updated quickly, and the official website shall prevail. The PDF version of the manual can be downloaded from the official website.

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V310

MOTORCYCLE MANUAL

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User instruction

There are all kinds of accessories on the market can be assembled on your motorcycle, and we cannot directly control the market quality and applicability of attachment. The inapplicable attachments will endanger the safety of the riding personnel. The selection of accessories and installation, therefore, must be especially careful. Though we can't examine the applicability of accessories for sell on the market, but your distribution unit can help you to choose high quality accessories on the market, and can be installed correctly.

⚠ DANGER

Attachment installed incorrectly or modified motorcycles will change handling of the motorcycle, this will cause an accident. Never use inappropriate attachments, to ensure that attachments are installed correctly. All accessories and parts should use pure part of the company.

You should be properly installed accessories and spare parts, if you have any questions, please relate this company designated shop of distribute of engage by special arrangement or special repair shop.s company shop of distribute of engage by special arrangement or special repair shop.

Wind deflector, chair back, saddle bags, luggage, etc., are all laid attachments, easy to cause the instability of driving. Especially in the side wind or with large vehicles encountered. If the attachment installed wrong or poorly designed attachments, would endanger the safety.

Additional electrical accessories can make the electrical system overload, serious overload may damage the wiring, make the engine stalling when driving, and even destroy vehicles.

When transporting goods, they should be fixed in the low position as far as possible close to the motorcycle. Fixed goods incorrectly can lift the center of gravity which is very dangerous. It can make the motorcycle hard to control. The size of the goods will affect the air drag and motorcycle maneuverability. Please balance the left sides of the motorcycle, and fixed the goods.

Modification

Motorcycle modification or removal device cannot guarantee the original motorcycle driving safety, and it is illegal. The user will lose the rights of quality guarantee if they modify the motorcycles..

Safe driving instruction

Driving a motorcycle is a very interesting and exciting sport activity. It also requires special precautions to ensure the safety of drivers and motorists. Preventive measures are as follows:

Examination before driving

Read carefully "before they check" section of the instruction, and check item by item according to the instructions, we must never forget that it can guarantee the safety of drivers and train personnel.

Familiar with your motorcycle

Your driving skill and mechanical knowledge, is the foundation of safe driving. First practice at where there are fewer cars, until you can fully familiar with the mechanical performance and operation method of motorcycle. Remember that! Practice makes perfect.

Realize your own driving skills

At any time drive within the scope of your own skilled. Know your skills limit and not to be reluctant so as to avoid accidents.

Rainy day traffic alert

Rainy day driving should be paid attention to, keep in mind the braking distance is twice as many as sunny days. Drive away from the road marking paint, manhole covers, and oil on the road to avoid slippage. When you drive on the railway crossing, bars and Bridges, you have to be careful. In the case of a negative judgment road, you should slow down.

Speed limit

Any time don't let the speed to be too high, and don't let the noise of engine speed is too high, from the outside.

Strategy during driving

Most of the motorcycle accident are turning cars bumped into people who driving a motorcycle in front. Wise driving strategy is to make the other driver seeing you; even in the broad road you also should pay attention to during the day. Wear smart clothing with safety reflective materials. Don't get in the other driver's blind spot.

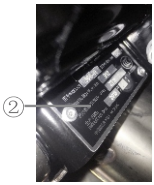
Special warning

⚠ WARNING

If the weight distribution of accessaries or goods attached on vehicle changes, the stability and operability of the vehicle may be adversely affected. In order to eliminate the possibility of an accident caused by it, the weight of the rear rack should be limited to be less than 10kg, and the weight of the side box should be limited to be less than 10kg. Please do not overload and modify the rear rack without permission.

Code positing







Vehicle identification code and engine number is for the registration of motorcycles, when ordering parts or entrust the special service, this number can make distribution unit provide a better service for you.

① Identity code will be carved on the turning vertical pipe, ② 3C nameplate card will be fixed in the bottom of the frame, ③ Engine code will be printed on the left side of the crankcase. Please write down the number in the space below for your reference.

Vehicle identification number:	
Engine number:	

Maintenance of muffler

This motorcycle muffler with catalyst can effectively reduce the operation process of motorcycle emissions of harmful substances into the atmosphere. To make the device work effectively, please refer to "maintain" the preventive maintenance in the section table.

In order to improve the service life of the muffler, and avoid faults caused by not-normal-use and maintenance of the mufflers rust, catalytic conversion efficiency decrease, please be sure to comply with the following items:

- Long time in high speed boom throttle is prohibited
- Long great load and low gear driving is prohibited
- Add muffler rust-proof oil or oil is prohibited
- Hot state muffler is washed with cold water directly is prohibited
- Slide when shut down is prohibited
- Use inferior oil is prohibited
- Use unleaded gasoline
- Keep clear the dirt of muffler to the rear and the surface
- Keep the engines running on good condition, regular maintenance and inspection. Avoid failure Leads to engine combustion exhaust gas in the exhaust pipe to cause secondary combustion catalyst sintering failure.
- Installing a muffler, be sure to properly installed muffler gasket.
- If you need to dismantle oxygen sensor, be sure to use the right tools, and be sure to stay muffler outfit after cooling to room temperature.

⚠ DANGER

Driving must pack up side racks, so as not to turn to when overturned vehicles, riding personnel casualties.

Rear brake system must be checked to see if it is working correctly before driving. If there is problem, please repair immediately

Driving is not allow to tie the helmet on the helmet pothook, to avoid helmets be involved in the wheel to make the vehicle turned over to cause casualties.

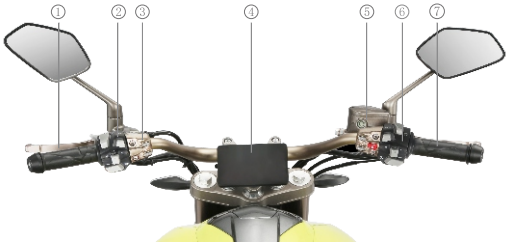
⚠ DANGER

Non-professional personnel do not pull the fuel pipe to discharge fuel, to avoid meeting flame and damaged vehicles; don't let the motorcycle muffler to touch other matter to avoid fire: motorcycle usage and storage environment cannot have fire hazard.

Vehicle maintenance need to replacement parts, have to use the pure part of the company, the use of pure components, electrical components in particular, it might damage the motorcycle, and even destroyed vehicles.

Please don't add attachments at your will, especially the electrical components, if improper wiring or electrical load is too large, it could destroy vehicles.

Single arm
Installtion of component parts



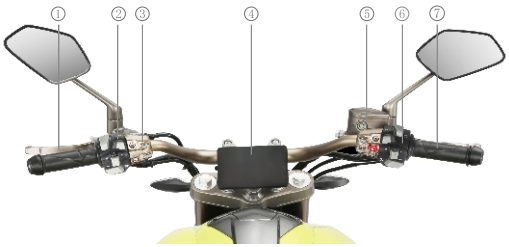
①Clutch handle
②Switch on left handle
③Secondary handle
④Meter
⑤Front brake liquid cylinder
⑥Switch on right handle
⑦Accelerator control handle





⑧Rear disk brake
⑨Muffler
⑩Rear brake pedal
⑪Front disk brake
⑫Ignition coil
⑬Side stand
⑭Gearshift pole

Double arm
Installtion of component parts



①Clutch handle
②Switch on left handle
③Secondary handle
④Meter
⑤Front brake liquid cylinder
⑥Switch on right handle
⑦Accelerator control handle





⑧Rear disk brake
⑨Muffler
⑩Rear brake pedal
⑪Front disk brake
⑫Ignition coil
⑬Side stand
⑭Gearshift pole

PKE user manual



1



2



3



4



5



6

PKE (Passive Keyless Entry) system user manual:

The PKE system is divided into two parts: the controller host (Fig. 1) and the key fob (Fig. 2). When the key fob is equipped with a button battery and is close to the effective sensing range of the motorcycle, the PKE system can be started normally.

PKE host (Figure 1) function description:

①battery charging DC connector,②charging insurance,③PKE insurance,④Test button (function is the same as the red button in Figure 3).

1. Using the key fob

The motorcycle is equipped with two key fob, one of it should be kept for backup.

The key fob has a serial number that matching to the PKE controller host. The PKE controller can automatically identify any matched key fob that close to the vehicle.

⚠ ATTENTION

There are two LED lights of green and red on the key fob, when the battery of the key fob is sufficient, the green light will flash every 3 seconds when the host is turned on. When it is battery low, it will flash red. The battery can be used normally for 0.5-1 years. If your key fob is not sensitive and it's indicator flashes red, please consider replacing the battery (the key fob has a sash to open on the back cover, you can replace the battery when you open it, and the battery is a 1225 button battery).

2.Turn on the PKE:

Short press the red power-on button on the right handlebar switch (Picture 3), turning signal will double flash twice, the steering lock will be automatically unlocked,then the buzzer "di" 1 sound to prompt, the electric circuit is connected.

⚠ ATTENTION

If the faucet lock is not unlocked successfully, it may be that the handle locks the connected lock shaft, gently turns the handle to allow the lock shaft to move freely, or the battery may be too low to unlock, please check if the battery is normal.

⚠ ATTENTION

If the battery power is normal, short press the red power button, the motorcycle cannot start up, but the main machine will give a "beep" prompt, please try to use the induction key to start up without electricity (see the following instructions for specific operation). If the battery is normal and the host does not give a "beep", please check whether the PKE insurance (the insurance position is as shown in FIG. 4) is normal. If the insurance is replaced, please be sure to replace the insurance of the same specification (15A).

When the battery is dead, please try to turn it on after charging.

After the PKE is turned on:

The motorcycle is in engine-on or riding state, the red power-on button, fuel tank lock open button(Picture5) and cushion button are invalid(Picture6). The tank lock and seat cushion lock can only be opened when the motorcycle is parked and not in engine-on state.

⚠ ATTENTION

During driving, if you find that the double flash signal is on along with some special noise, it means the key fob is lost, please stop the motorcycle but do not turn off the engine, you can continue to ride after returning to the original road to find the lost key fob. The trigger timing for key fob is: when starting for the first time after driving or stay waiting for more than 90 seconds.

PKE user manual

3.Turn off the PKE:

After stopping and parking the motorcycle, put handlebar to the left, turn off the engine, long press the red power-on button on right handlebar, the turning signal will double flash twice, the steering lock will be locked automatically, then the buzzer "di" 1 sound to prompt, the electric circuit is unconnected.

⚠ ATTENTION

After turning off the motorcycle, please check if the steering lock is locked. If the steering lock is unlocked, please put the handlebar to the left, the motorcycle will be locked automatically.

If the handlebar is not put to the left and turn off the motorcycle, it is forbidden to push the motorcycle or let the motorcycle slide, in case to put the handlebar to the left to lock the head lock, it is dangerous.

When pushing the motorcycle or let the motorcycle slide from the hill, make sure the PKE is turned on (the steering lock is unlocked successfully)

“TEST" button on the PKE controller host (Picture 1)

function is the same as the red button in Picture 3. Short press and long press to open and shut down, it is used to detect whether there is a problem with the PKE, and to eliminate the start-up abnormality caused by the handle switch.

key fob: batteryless power-on mode

When the key fob's battery is exhausted, long press the red power button or “test” button when the motorcycle is turned off. When the motorcycle sound a “Bi”, the controller can be turned on when put the key fob close to the sensing area(Picture1,2,4) near the host.

Emergency mode

In the case that the motorcycle cannot be started normally and the "key fob batteryless power-on mode" can not be started, the emergency mode can be used, the specific operation sequence:

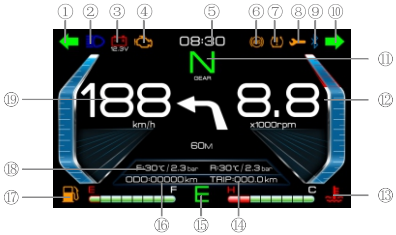
1. Open the key fob battery cover and take off the button battery.
2. Short press the red power-on button or the PKE host "TEST" button.
3. After short pressing the red power-on button, put the button battery back into the key fob within 10 seconds. At this time, the motorcycle is powered into emergency mode.

PKE Host buzzer sound

The PKE host buzzer prompts the user to detect an abnormal condition by a combination of long and short “Bi” other prompt sounds. The specific meanings are as follows:

TEST button stuck	One long and one short	The button is detected to be stuck after each power-on, and the alarm is once within 10 seconds (only once)
START button stuck	One long and two short	The button is detected to be stuck after each power-on, and the alarm is once within 10 seconds (only once)
Learning key stuck	One long and three short	The button is detected to be stuck after each power-on, and the alarm is once within 10 seconds (only once)
Fuel tank lock button stuck	One long and four short	After the button is stuck and then turned on, and the alarm will be activated once in 10 seconds. After the turn on and then stuck, and the alarm will be triggered once within 10 seconds.
Cushion lock button stuck	Two long	After the button is stuck and then turned on, and the alarm will be activated once in 10 seconds. After the turn on and then stuck, and the alarm will be triggered once within 10 seconds.
High frequency reception abnormality	Two long and one short	When the TEST button is turned on, it detects that the PKE host has received a high frequency reception error, and the alarm is once (only once).
Loss of induction key pairing	Two long and three short	Induction key pairing lost alarm once every time it is turned on (only one alarm)
Induction key is low battery	Three long	Abnormal signal of sensor key battery is detected when starting with TEST key, and alarm is given once (only once)
Steering lock open abnormal	Five short	An unlocking in-position signal is detected every time the power is turned on, and the alarm is once (only once)
Steering lock is abnormal	Five short	The lock-in-place signal is detected abnormally every time the power is turned off, and the alarm is once (only once)
Low frequency transmitting antenna is abnormal	Three long and one short	The lock-in-place signal is detected abnormally every time the power is turned off, and the alarm is once (only once)
Induction key away from detection area	Eight short	The lock-in-place signal is detected abnormally every time the power is turned off, and the alarm is once (only once)

Instrument



The meter consists of four different interfaces which are leisure, racing, street and simplicity version,respectively.The interface can be switched and selected according to personal preference.A brief description of the meter is made with the leisure interface shown in the picture below.

Front view figure arrow: 1 left turn lights, 2 distance light lamp; 3 battery fuel gauge of voltage prompt lable; 4 emergency light;5 clock; 6 ABS anti-lock braking system light; 7 Tire pressure indicator light; 8 Maintenance indicator light; 9 bluetooth; 10 right turn signals light;11 gear display; 12 engine speed record; 13 water temperature; 14 short trip odometer; 15 E/S model;16 long tern odometer; 17 fuel oil level gage; 18 Driving information;19 speedometer;

⚠ WARNING

Do not use high pressure water washing instrument directly.

Do not use dishcloth with organic solvent such as gasoline, kerosene, alcohol, brake fluid to wipe the instrument, Otherwise, the instrument may cause local cracks or discoloration due to exposure to organic solvents.

Short press the " 🔒 " button of meter,then the meter will perform the process of self-test.

1. Left turn signal light

When the turn signal switch to the left, the left turn signal light will be flashing.

2. Distance light lamp

When using the high beam headlights, indicator light will be lighter.

3. Battery voltage prompt

When the engine is off, if the detection voltage is less than 12.1V, the display symbol will alarm in the way of flashing this flashing frequency is 1Hz. When the detection voltage is greater than 12.5V, the alarm will be canceled automatically.

When the engine is on, if the detection voltage is less than 12.5V, the display symbol will alarm in the way of flashing this flashing frequency is 1Hz. When the detection voltage is greater than 12.8V, the alarm will be canceled automatically.

When the low voltage indicator of the battery flashes, it means the voltage of the vehicle is lower than the set value. If the indicator is continuously on for a long time, it means that it is an abnormal phenomenon. Please contact our company for after-sales inspection. After the inspection, If the battery is dead, charging the battery will make it back to normal. If the battery is damaged, the battery needs to be replaced.

⚠ ATTENTION

If the voltage is higher than 16V, you must stop using the vehicle immediately and contact after-sales service point of the company for inspection.

4. Fuel injection error signal light

When the vehicle turns on the electric door lock switch and the flameout switch, it is normal for the electronic injection fault signal light to be on when it is not started, if the electronic injection signal light is not on, please do not start the vehicle. When the engine starts successfully, if the orange electrojet fault signal lights up and the electrojet fault is reported, it indicates that the system is abnormal.

⚠ WARNING

When the fuel injection system is showing error, it will break the fuel injection system when you still drive the mortorcycle. Please contact the after-sales dealership shop to check the fuel injection system.

5. Clock

The clock display in the 24 hours system.

⚠ ATTENTION

If the battery is removed or battery lost electricity, it will be shown from "00:00" clock.

Instrument

6. ABS anti-lock braking system singal light
ABS working situation

7. Tire pressure indicator light
When the tire pressure and temperature are abnormal, it will flash an alarm and need maintenance and inspection.

8.Maintenance indicator light
The first reminder is 1000km, and every 5000km thereafter, the orange wrench symbol maintenance and maintenance indicator flashes. Each time it will advance 200km, it will flash for 5 seconds to indicate maintenance after restarting.

⚠ WARNING

When the oil indicator light is on, it means that the motorcycle has already traveled to a certain mileage. Therefore, It is necessary to change the oil to maintain the engine. Otherwise, If you continue to drive the motorcycle without maintenance, the engine and the transmission system will be damaged.

When the oil indicator light is on, please turn off the engine firstly, and then check the oil level to confirm whether the oil capacity is correct or not, and whether the oil needs to be replaced or not.

9. Bluetooth
The indicator light will be on when the phone is connected to Bluetooth, and will be off when disconnected.

10. Right turn signal light
When press the right turn signal right to the right, it will be flashing.

11. Gear display
The motorcycle is using international gear, and there are six gear display which is 1,N,2,3,4,5,6 shown on the instrument.

12. Engine speed recorder
It shows the speed of the engine, indicating the number of revolutions per minute of engine crankshaft. 10000-12000rpm is red alert zone for engine speed (red printing section).

13. Water temperature
After the power is turned on, turn off the engine switch of the handle. After the EFI is powered on, the water temperature state is displayed. One grid indicates that the water temperature is lower than or equal to 60 ° C, 61-70 ° C shows two grids, and 71-80 ° C shows three grids, 81- 90° C shows four grids, 91-100° C shows five grids, 101-110° C shows six grids, 111-120° C shows seven grids, and 121° C above shows eight grids. When the water temperature is greater than 111 ° C, the water temperature indicator will start to alarm and the cooling system needs to be checked.

14 . TRIP short distance odometer & 16 ODO Long distance odometer
There are two functions in the display area of the screen, which are the TRIP MODE and the ODO MODE.
The TRIP MODE records accumulated mileage per drive, long press MOD key to clear zero, the maximum recorded value is 999.9.
The ODO MODE records the driving mileage in total from the beginning to the present. The recorded information cannot be cleared, and the maximum recorded value is up to 999999.

⚠ WARNING

When driving a motorcycle, instrument operation is very dangerous. Leave handlebar will reduce the performance control of the motorcycle. Always put the hand on the handlebars while driving.

15. E/S model
“E” is for fuel economy, “S” is for motion pattern.

17. Fuel oil level gage
Fuel oil level gauge shows the fuel capacity of the fuel tank. When it shows 8 sections indicating that the fuel tank is full. When the fuel capacity is reduced to 1 grid or flicker, please refuel as soon as possible.

⚠ WARNING

When the motorcycle is parked by using side stand, fuel gauge can’t accurately show. Put the motorcycle into normal driving status, after we turn on the red power-on button, we don’t need to start the engine, and we have to wait about half minute to let it accurately show; or shut down the red power-on button, turn it on again, the fuel level gage will demonstrate correct oil level information immediately.

18. Driving information
Records show information such as fuel consumption, average speed, cruising range, etc. The average fuel consumption is displayed when the motorcycle is stationary, and the instantaneous fuel consumption is displayed after the motorcycle is started.

Instrument

19. Speedometer & Voltmeter

Speedometer shows the speed is how many kilometers per hour (/miles).

Voltmeter: Press the MOD button to turn on the speedometer, it enters the diagnosis mode, and displays the 3-digit voltage at the speedometer. For example: “129" is 12.9V Restart, speedometer returns to normal mode.



1



2

As shown in figure 1: Main menu

Menu operation: Short Press the SET button on the main interface to enter the main menu. Long Press the SET button at any time to return to the main interface, or the screen can automatically return to the main interface without any operation for 8 seconds. Short press the MOD button, then the cursor will moves downwards, short press SET button to enter the secondary menu or set options.

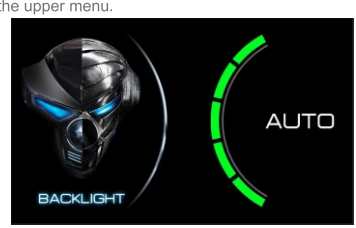
As shown in figure 2: ①Interface style

The four interface styles are leisure, racing, street, and simplicity, respectively .

Short press MOD button to move the cursor to select the option, short press SET button to confirm the option, then it will automatically return to the previous level.

②Clock Setting

The clocks and minutes are set individually in digital bits. When entering the clock setting, press digit setting from left to right, short press MOD key to increase digits, loop around, short press SET key to determine the current digit key, and then switch to the lower digit setting. After the last digit setting is completed, short press SET key to determine, and the interface will automatically return to the upper menu.



3



4

As shown in figure 3：③Meter backlight brightness adjustment

Short press the MOD button to switch circularly the backlight brightness position (auto, 1, 2, 3, 4, 5), short press the SET button to confirm the selection.。

Auto: When the headlight switch is turned on, the backlight is the darkest. When the headlight switch is off, the backlight is the brightest, and the two brightness can be automatically switched.

④Unit setting

Short press the SET button to alternately switch the unit display, and the speed unit can be switched between mph and km/h. Correspondingly, the mileage unit can be switched between mile and km.

⑤Language setting

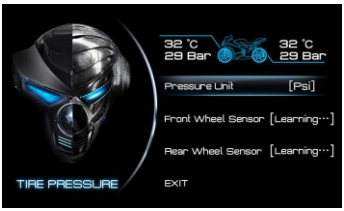
Short press the SET button to switch language between Simplified Chinese and English

⑥Bluetooth connection

Short press SET button to turn on and off Bluetooth

As shown in figure 4：⑦Malfunction information

Current fault code, historical fault code, software version number



5

Figure 5: Tire pressure monitoring function

The tire temperature and pressure data can be viewed on the main interface by short-pressing MOD to switch driving information or entering the "Main Menu-Tire Pressure Settings".

There are three pressure units: Psi, Kpa and Bar. Short press the SET button to switch, short press MOD to confirm and jump to the next item;

Tire pressure function description:

1. Tire pressure and temperature alarm

When the instrument receives that the tire pressure temperature information from the sensor exceeds the limit value, the instrument interface displays the corresponding tire pressure temperature alarm text, and the tire pressure indicator flashes (1 Hz).

2. Low voltage alarm

When the tire pressure sensor detects that the battery voltage value is lower than 2.6V, the interface shows that the sensor battery is low, the alarm will not disappear until the new sensor is re-matched, and the tire pressure indicator flashes (1Hz).

3. Air leakage alarm

When the sensor detects the change of tire pressure (decompression), it will prompt a leak alarm and the tire pressure indicator will flash (1 Hz)

4. Unlearned alarm

When the meter does not match the sensor and the tire pressure setting interface displays "Not Learned", the main interface displays "Not Learned Alarm" and the tire pressure indicator flashes (1 Hz).

5. Sensor loss alarm

When the signal from the sensor is not received, the meter shows that the sensor is missing and the tire pressure indicator flashes (1 Hz).

Remove alarm: The alarm disappears after receiving valid data.

6. Sensor failure alarm

When the meter receives the sensor chip fault information, the interface displays the sensor fault alarm and the tire pressure indicator flashes (1 Hz). At this time, the sensor needs to be replaced, otherwise the tire pressure information cannot be displayed normally.

7. System failure alarm

When the chip that receives the signal inside the instrument fails, the instrument interface displays a system failure alarm and the tire pressure indicator flashes. At this time, the instrument needs to be replaced, otherwise the tire pressure information cannot be displayed normally.

8. Learning matching function

Run the motorcycle to greater than 30km/h and then stop, and perform the following operations within 15 minutes:

① First adjust the motorcycle meter to the learning mode, that is: power on the meter → enter the menu → tire pressure setting interface → operate the instrument button to set the front (rear) wheel to "learning..." and wait for the tire pressure sensor to learn information.

② continue to inflate or deflate the corresponding front or rear wheels for approximately 3 seconds.

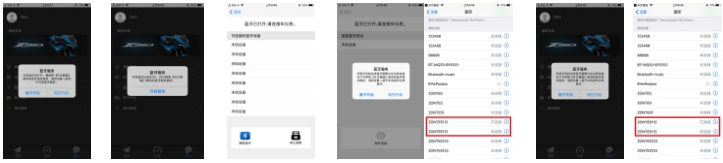
③ When the meter receives the matching signal from the tire pressure sensor, after the match is successful, the text "Learning..." on the tire pressure setting interface will be displayed as "success". At this time, the meter can receive the tire pressure temperature information of the sensor.

If the learning is unsuccessful, you need to repeat the above operation and increase the time of inflation and deflation.

The instructions of the usage of Zontes intelligent App

Landing:

Log in with your Zontes intelligent App account.



1 2 3 4 5

Apple system mobile operation:

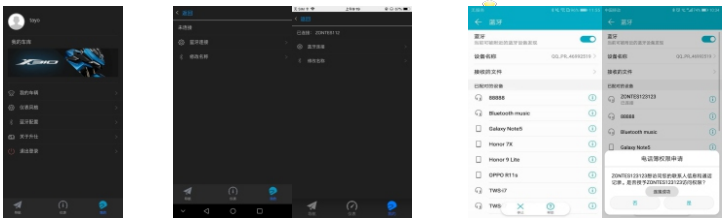
As show in picture 1, When log in successfully, go to My Page.When the Bluetooth is not open,it will remind you to open it in your phone.If it is not open, when use Bluetooth related functions such as navigation in the future, the user need to open the Bluetooth in the mobile phone system settings.

As show in picture 2, After opening the mobile phone system Bluetooth, it will remind you of opening APP Bluetooth service.

As show in picture 3,When open the Bluetooth,it will jump to the Bluetooth search page.The Bluetooth name will not show up, because it is the first time to search for Bluetooth. Then the Bluetooth name will appear as an unknown device,connect the Bluetooth by choosing the unknown device. If it is the motorcycle's speedometer bluetooth, it will the prompt the connection is successful, or it will disconnected automatically.(If the connection is not successful, please select another item to connect ,until the connection is successful).

As show in picture 4, When the connection is successfully, it will prompt to connect motorcycle speedometer's Bluetooth again.At this time, you need to go to the mobile setting system Bluetooth interface to connect to speedometer's bluetooth. After successfully connecting the motorcycle speedometer Bluetooth, you can use navigation and other functions.Attentions: When entering the system Bluetooth interface and selecting the motorcycle speedometer Bluetooth, two Bluetooth device names with the same name will appear, as show in picture below, one displays is connected, the other is unconnected.Then choose the the unconnected Bluetooth device and connect it.

As show in picture 5,When it is successfully to connect the motorcycle speedometer Bluetooth,enter APP again, the APP will connect the motorcycle meter Bluetooth which is connected last time automatically.After the connection is successful, the prompt of the Bluetooth connected to the mobile phone system interface will be popped up.When entering the system Bluetooth interface and selecting the motorcycle speedometer Bluetooth, two Bluetooth device names with the same name will appear, as show in picture follow, one displays is connected, the other is unconnected. Then choose the the unconnected Bluetooth device and connect it.



1 2 3

Android phone operation:

As show picture 1,When log in successfully, go to My Page. If cancel to open Bluetooth at first, it needs the open the Bluetooth with hands.

As show in picture 2,Click on Bluetooth configuration, go to My Page,and clink the Bluetooth connection again.If it is the first time connection, it will display unconnected on the top.If it connected before, then the speedometer will display.Modify the Bluetooth name: If the Bluetooth is connected, it will pop up a dialog with a name, then modify the Bluetooth name.

The instructions of the usage of Zontes intelligent App

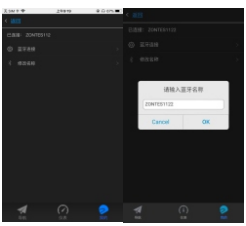
As show in picture 3,Clink and connect the Bluetooth,enter the Bluetooth search connection interface.Clink the Bluetooth you need to connect, there will be questions and tips. If you need to ask the questions, please clink the Ok, or allow Bluetooth to get phone alert.



4

Motorcycle speedometer connection Bluetooth success tag:

Mobile phone APP connects with motorcycle speedometer Bluetooth successfully, there is a blue icon appearing on the upper right corner on the speedometer(as show in picture 4).After connection is successfully, Bluetooth-related functions such as navigation can be used.



1



2



3



4

Modify the Bluetooth name:

Enter the Bluetooth settings interface(As show in picture 1),there are functions of the modify motorcycle speedometer Bluetooth name, it will be used until the APP connects with motorcycle speedometer Bluetooth successfully.

APP meter interface

①APP meter interface(As show in picture 2):

1.To exit the meter interface, it needs to clink for a long time.

2.If the slide switch style is turned on in the meter style setting interface, you can slide the left and right to switch the meter display style.

3.As long as the mobile APP bluetooth is conected to the car's instrument,the APP's instrument interface will display the data of the car's instrument.

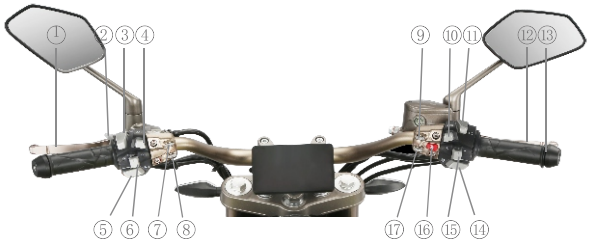
②APP speedometer interface style setting

Click to enter the speedometer style interface (Picture 3), as shown in the picture , you can select the speedometer display style.

My vehicle(As show in picture 4):

My vehicle page is mainly used to display customer's motorcycle information.

Left/Right handle control system



1.Clutch controller

When starting the engine or shifting gears, hold the handle to separate the clutch discs to cut off the power transmission.

2.Overtaking warning lights switch

When speeding up, press the button warning the cars vehicles in front or behind.

3.Dimmer switch

High beam&low beam operation: When the dimmer switch on position, the distance light is flashing. At the same time on the surface of the dashboard in light is lit will switch to dipped headlight will be turn on and distance light is turn off. At the same time the high beam indicator on the dashboard surface lights up. When the switch is changed to , the low beam lights up.

4.Danger warning button

Press the button, the four turning lights are flashing, and warned nearby vehicles to pay attention to the safety.

5.Horn button

Press the button, the horn will ring.

6.Turn signal operation

When turn the switch to the left⇦, the left turn light is flashing. When turn the switch to the right⇨, the right turn light is flashing. The indicator light on the instrument surface also flashes at the same time.

⚠ WARNING

Changing lanes or turning when driving, we must get into the habit of turning on the turn signals first. When finished, they must be turned off.

7.SET: Enter the main menu/confirm the option.

8.MOD: Select the next (Move the cursor to select the option).

9.Seat lock switch

When the engine is not starting with the seat cushion locking, press the switch to open the seat cushion lock.

⚠ ATTENTION

If the seat is not installed into position, the seat will glide which will lead to the driver to lose control of the motorcycle. Please make sure the correct positioning of the seat safety lock.

10.ECO button

Before starting the engine, please press ECO button. Instrument E indication light will be on, ECO button light will be on and the indication light S will be on. E stand for simple economic mode, and S stand for sport mode.

11.Engine flameout switch

This switch is installed on the right hand switch assembly, is a kind of wave plate card, shaft in wave plate center. Dial in position, the circuit connected, the motor can start.

If the switch in position, starting circuit completely cut off, the motor can't start. It's an emergency way to shut down the switch.

12.Front brake controller

When braking the front wheel, hold the brake handle on the right side. When braking the front wheel, we must grip on the right side of the front wheel brake. Because using the vehicle hydraulic brake disc, the brake holding force doesn't need to be large. When you hold front brake handle, brake lights will light up automatically.

13.Throttle control handle

Throttle control handle is used to control the engine rotating speed. When turn towards to the user's side is acceleration; On the other hand, turn towards to the opposite user's side is reduction.

Left/Right handle control system

14.Electrical starting button

Press this button to turn on the start-up circuit. When starting, you must set the gear position to the neutral position, confirm that the engine flame-off switch is in position, and hold the clutch handle to ensure safety.

⚠ WARNING

When continue starting the engine, consecutive start time not more than five seconds at a time. Because a large number of start can make some abnormal heating to circuit and start motor. If you still can't start it a few time, you should stop and check the oil supply system and start the circuit system. (please refer to "troubleshooting" section.)

15. Lamplight switch

☼ Position: When the engine is working, the left and right hand switches backlight, front light, front position light, rear position light, and nameplate light are all on together.

• Position: front position light, rear position light and nameplate light are all on together.

16. Red power-on button

When the host is in the sleeping version, press the "START" button to wake up the host. After detecting the response signal of the key and the signal of the hanlde bar lock, the whole vehicle will START up. Long press the "START" button, the host will enter into sleep version, and the whole vehicle will be shut down.

17. Fuel tank lock switch

When the engine does not start, press " Fuel " button, the fuel tank cover will be opened automatically.

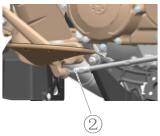
For details of the operation of MOD button and SET button,please refer to the main menu of the meter.

Installing of front footrest

⚠ ATTENTION

front footrests are installed at the backmost position before sending out the vehicle, adjusting lever of Gear shift lever and extension lever of rear brake main pump are put inside the accessory box.





Adjust the position of the front left pedal (take the pedal to the middle position as an example)

Tools: No. 13 torx wrench, No. 8 open end wrench, No. 10 open end wrench.

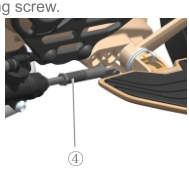
1. Unscrew the M8 nut ① behind the pedal bracket;

2. Install the front fender bush ②, adjust the pedal support to the middle position, and tighten the M8 nut ① behind the pedal support;

3. When the pedal is installed in the foremost position, add a front fender bush ② in front of the adjusting screw according to the above method to extend the adjusting screw.







Adjust the position of the front right foot pedal

Tools: No. 13 torx wrench, No. 10 open end wrench, No. 14 open end wrench

1. Unscrew the M8 nut ① behind the pedal bracket;

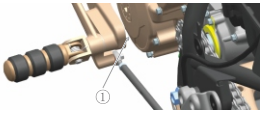
2. Install the front right pedal to the middle position: loosen the lock nut ②, rotate the screw ③, adjust the position of the brake pedal to a suitable height, tighten the lock nut ②, and tighten the M8 nut ① behind the pedal bracket.

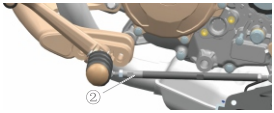
3. Install the front right pedal to the most front position: add ZT310-V rear brake main pump piston push rod extension rod ④ on the basis of step 2.

Installing of front footrest

ATTENTION

front footrests are installed at the backmost position before sending out the vehicle, adjusting lever of Gear shift lever and extension lever of rear brake main pump are put inside the accessory box.





Position adjustment of front left footrest (Take the footrest adjusted to the middle position as an example)

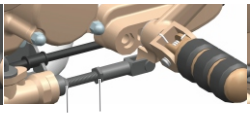
Tool:12# ring wrench, 8# open wrench, 10# open wrench

1.Remove the M8x45 bolt behind the footrest support ①.

2.Install the bushing of front fender ②, tighten the M8x45 bolts behind the footrest support ①.

3.When the footrest is installed at the front position, pls install an extra front fender bushing ② in front of the adjusting screw as the step 2 does, which extends the adjusting lever.







Position adjustment of front right footrest

Tool:12# ring wrench,10# open wrench,14# open wrench

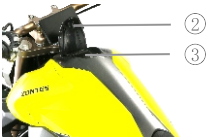
1.Remove the M8x45 bolt behind the footrest support ①.

2.Steps to install the front right footrest to the middle position: loosen the nut ②, rotate lever ③, and adjust the brake pedal to the appropriate height, then tighten nut ②.

3.Steps to install the front right footrest to the front position: install ZT310-V extension rod ④ on the basis of step 2.

Fuel tank





Fuel oil tank is located inside the fuel tank cover in the front part of seat. When open the fuel tank cover, please make sure the engine turn off switch is off, and press the fuel tank switch button 1, cover board 2 will automatically open, rotate the fuel tank cover 3 anticlockwise. When you install the cover, please follow the opposite order to do that.

⚠ DANGER

Not excessively fill in oil, so as to avoid overflow of fuel flow to the high temperature engine. Fuel oil level height shall not exceed the fuel tank as shown at the bottom of the mouth, or fuel will overflow after the heat expansion, and will damage the motorcycle parts.

To turn off the engine when refueling, make sure the turn off switch is shut down. Do not close to fireworks.

Oil gun against excessive stretch into the fuel tank, so as not to damage the fuel sensor.

When you fill in the fuel, you should have some prevention measures, otherwise it will cause fire or fuel vapor into the eye. When you fill in the gas, go to the open air. Make sure the engine has been closed to avoid oil spills. No smoking, make sure no heat or fire source around. Avoid fuel vapor into the eye. When Refueling, keep children and pets away.

⚠ ATTENTION

Do not use high pressure water to rinse when washing the car fuel tank cover to avoid water to get in the fuel tank.



Shift lever

The motorcycle is equipped with six gear transmission, its operation as shown. Pick on, or change the gear shift lever ①, the shift lever will recover to the original position, so as for subsequent shift. Before in low position, please reduce the speed or increase the engine speed; Before in high-grade place, please raise the speed or lower engine speed. After this will prevent transmission system components and unnecessary tire wear.

⚠ ATTENTION

When the gear is in the neutral position, the neutral position indicator light is lit, please slowly release the clutch handle, to confirm whether really is in the neutral position.

Rear brake pedal

When press on the rear brake pedal, rear wheel brake will work, brake lights up at the same time.

Rear shock absorber spring

The rear shock absorber's spring is adjustable according to willing of the driver, the loading condition and road condition. The adjusting method is non-polar adjustment. You only need to stop the motorcycle with the side stand. And then you turn the spring adjustment to the needed position. The rigidity will increase when we adjust it down; the rigidity will decrease when we adjust it up.

Side stand

When you are using the side stand, the side stand turn off switch will cut off the power if you don't hold the clutch handle and the shift level is on idle condition.

Notes for fuel, engine oil and coolant/antifreeze

Fuel oil

The pure 95# or more unleaded gasoline must be used. The pure 92# unleaded gasoline can only be used in a short time in case of emergency, otherwise the engine lifetime will be shortened.

If there are tapping based on experience, you can use level higher gasoline or use other sellers of gasoline. Because there are differences between different brands.

Engine oil

Use high quality SM or above level four-stroke engine oil can prolong engine life. Please choose ZONTES API SN level or higher level of "four stroke motorcycle engine oil", It is on sale in all ZONTES shops.

⚠ WARNING

The unleaded gasoline, poor quality fuel oil and engine oil can damage the system components, and it will shorten the service life of catalyst in spark plugs and muffler. Unclean fuel oil can block the oil-way, resulting in abnormal engine working, don't use that kind of oil.

⚠ WARNING

Please properly deal with waste engine oil, do not prevent the environment. We suggest that you will put waste oil into a sealed container to a local recycling center. Don't put them into the dustbin or directly into the ground.

Engine coolant/antifreeze

The coolant/antifreeze we use is suitable for the aluminum radiator. The coolant/antifreeze is a mixture of coolant/antifreeze concentrate and water. If the outdoor temperature is higher than the freeing point of the coolant/antifreeze, it can be used. When you add or cool the coolant/antifreeze, please use alcohol as the foundation.

⚠ DANGER

It is bad for health if you swallow or absorb the coolant/antifreeze. Therefore, when you use it, please don't eat and drink. After every work, please clean your hands, face or any skin parts demonstrated. If you swallow it mistakenly, please go to the hospital immediately. If you absorb it mistakenly, please breathe more fresh air in the environmental in where there is full of fresh air. If the coolant/antifreeze runs into your eyes mistakenly, please watch your eyes with large amount of water at once. Also, keep the liquid away from kids and pets.

⚠ WARNING

The coolant/antifreeze which splash out is possibly do harm to the surface of the motorcycle. Please be careful when you refill the coolant/antifreeze. If it splash out, please clean it immediately.

Distill water for coolant/antifreeze

If you need to add water, please use the distill water. If you use other kinds of water, it would probably do harm to the cooling system.

coolant/antifreeze

coolant/antifreeze can prevent routing and lubricate the coolant/antifreeze pump. Therefore, if the outdoor temperature is higher than the freeing point of the coolant/antifreeze, it can be used.

⚠ ATTENTION

Please refer to the instruction of coolant/antifreeze product when you use it.

When adding coolant/antifreeze, ensure that the engine is cold. Do not open the main tank cover of the hot engine, which may cause danger!

After the main tank is filled with coolant/antifreeze, do not close the tank cover and start the engine idling (Appropriate fueling) for a period of time. At this time, air is discharged from the water inlet. After the air is discharged, add more coolant/antifreeze. Once, until there is no air discharge from the water inlet, it can be considered that the main water tank has been filled up before the water tank cover can be closed.

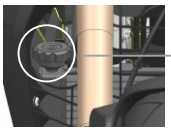
The sub tank coolant/antifreeze is added between "L" and "H".

The volume of coolant/antifreeze

coolant/antifreeze volume (total volume): 1670ml.

⚠ ATTENTION

Please choose the suitable coolant/antifreeze according to the driving air environment.



Main water tank cover

Running-in of new motorcycle

The correct new running-in can prolong the service life of the motorcycle, it can also give full play to the performance of the new motorcycle. Below is a list of running in right way.

recommended maximum engine speed

First 500 kilometers	below 5500 turns/minute
Up to 1500 kilometers	below 8250 turns/minute
Over 1500 kilometers	below10500 turns/minute

Gear and speed of engine

Gear and speed of the engine often change, not to run in a gear and speed. During the running-in, it can be appropriately step on the gas, make it completely running-in.

In order to protect the engine components, the engine speed limit is 10, 500 rpm. When the engine speed reaches the limit speed, the speed will be automatically adjusted near the speed limit, and the speed will fluctuate, which is normal.

Running-in of tires

Like engine running-in, the adaptation of the new tires need to be correct to ensure the best performance. In use within the first 150km new tires, we should gradually increase the turning Angle to connect the ground surface in order to achieve the best performance of the tire. In the use of new tires within the first 150km, we should avoid nasty acceleration, a sharp turn, and emergency braking.

⚠ DANGER

If a tire in is in bad adaptation, it will cause the skid, or out of control. After replacement of tires, do be careful with driving. In accordance with this section in tires, in the first 150km, we should use wheel tires to avoid nasty acceleration, a sharp turn, and emergency braking.

Avoid operation under fixed low speed

In fixed (light load) under operation at low speed, it will make the parts wear and bad matching. As long as no more than recommended throttle opening (no more than 3/4 of the opening of the throttle), it can make the engine speed under various rotational speed. However, during the period of the first 500km, it should not be more than three quarters of the throttle opening.

Let the engine oil cycling

No matter in hot or cold machine status, before starting, you should let the engine had good idle running time in order to make the oil flow to all lubrication part.

Routine first time examination

The initial 1000 kilometers of maintenance is one of the most important work. During this period, all engine parts should have good running-in. In the case, maintenance and repair should put all the parts to readjust, tighten all fasteners, replace parts abrasive dust pollution of the oil. Repair, about 1000 kilometers seriously for the first time, will guarantee your motorcycle to play the best performance and prolong its service life.

⚠ WARNING

According to the instruction for use in the inspection and maintenance of an execution section for 1000 kilometers Maintenance and repair. Please pay special attention to the danger and warning content of this section.

Inspection before driving

If it's not well check before driving the motorcycle, and there is no proper maintenance, it will increases the risk of accidents and the risk of motorcycle damage. Always check the motorcycle during daily usage, make sure it is safe to run. Refer to the instruction manual inspection and maintenance of the chapters.

If the motorcycle use inappropriate tires, or operating motorcycle not correctly, or tire pressure is not correct, you will lose control of the motorcycle. have to use in this instruction manual provisions size and specifications of the tires. Always in accordance with the requirements of the inspection and maintenance section to keep proper tire pressure.

Keep proper wheel pressure

Inspection content	Key points for inspection
Steering system	Active steering, no block for moving, no working loose
Accelerator	Correct accelerator inhaul space, smooth operation; smooth holding for accelerator
Clutch	Correct controller free stroke and smooth operation
Brake	Normal operation on braking controller and braking pedal; braking liquid above The LOWER line of the braking liquid cylinder; no feeling of inactive braking; no brake drag and brake liquid leak; braking plate wear within range
Shock absorber	Smooth and active controlling
Fuel oil	Enough planning distance oil level
Transmission chain	No wear; clean and lubricate from time to time; correct looseness
Tires	Correct air pressure; proper depth of tread; no wear
Engine oil	Correct oil level
Cooling system	No oil leaking
Lamplight	Normal working for all kinds of light in the motorcycle
Indicator light	Distance light, neutral position light, turn signal right working normally
Horn	Working normally
Brake switch	Working normally
Shut down switch	Working normally
Side stand/ignition interlock switch	Normal controlling

The importance of these tests can never be neglected. Complete all of the inspection before driving and necessary repairs.

⚠ DANGER

When you do the inspection, engine running status is more dangerous for you to inspect. If your hand or clothes are moving parts involved in the motorcycle, it will cause serious damage to you. In addition to check the engine flame out switch and power to run the engine, shut down the engine when you perform other checks.

Driving essentials

⚠ DANGER

As you drive the motorcycle for the first time, we suggest you had better look for practice on the un-public road, until you are familiar with this motorcycle control method.

Driving with only one hand is the most dangerous, we should driving in both hands firmly in the grip and both feet on the foot. No matter any situation, no hands are allow to be away from the line.

When turning, try to lower the speed to safe speed.

Road surface is moist and smooth, tire friction will be small, braking ability and the ability to turn the naturally decrease, so you must lift the speed.

Horizontal wind is usually the most likely to happen in the tunnel, valleys or large vehicles from behind when overtaking. You must be calm and lower your speed.

Obey the traffic rules and speed limits.

Starting of the engine

When you start the system without key, all the motorcycle will be connected automatically. Check whether the engine turn off switch is in the position of ⟳. At this moment your motorcycle is in the neutral position, the neutral light will light up on the dashboard.

⚠ WARNING

This motorcycle equipped with ignition circuit and the starter circuit interlock switch. Only under the condition of the following the engine will start:

1.Transmission is under neutral gear, and hold the clutch handle.

2.Transmission is not under neutral gear,side stand is packed up and you hold the clutch handle.

Dumping of sensor when the motorcycle is overturned, will cut off the power and stop the oil supply, and make the motorcycle stall, and fault indicator will light up. Motorcycle starting again, you need to turn off the ignition switch, after waiting for 1 minute, reopen the ignition switch, and starting the engine.

When the engine is in cold machine status:

1.Pack up the side stand.

2.Throttle control handle is on idling position.

3.First pinch the clutch and then press the electric start button ⓢ to start.

When the engine is in cool machine status and hard to start:

1.Pack up the side stand.

2.Turn the throttle 1 / 8th opening, and at the same time pinch the clutch before pressing the electric start button ⓢ to start.

3.After starting the engine, keep the engine turning to fully preheated.

4.When after several times that the engine is hard to start, it is most likely that the cylinder submerged. In the case, you have to do the clear cylinder process: open the acceleration entirely, press the starting button for 3 seconds.

⚠ WARNING

The colder is the weather, the longer time the engine needs to preheat. After fully preheat, you can reduce the engine wear and tear.

When the engine is in hot machine status

1.Pack up the side stand.

2.Throttle control handle is on idling position.

3.First pinch the clutch and then press the electric start button ⓢ to start.

When the engine is in hot machine status and hard to start

1.Pack up the side stand.

2.Turn the throttle 1 / 8th opening, and at the same time pinch the clutch before pressing the electric start button ⓢ to start.

3.When after several times that the engine is hard to start, it is most likely that the cylinder submerged. In that case, you have to do the clear cylinder process: open the acceleration entirely, press the starting button for 3 seconds.

⚠ DANGER

When starting the hang gear in neutral, throttle back to bottom, form a habit of holding the clutch handle before starting. Avoid-error, when it is starting, moving forward immediately.

whether the gear is in neutral or not, you need to squeeze the clutch handle first, otherwise it will not start, and do n't forget to put away the side stand.

Do not start motorcycle without fuel and engine oil.

Driving

Pack up the main stand, hold the clutch handle, just wait a moment, hit the hang first gear shift lever: step on the gas and slowly release the clutch handle gently, the motorcycle will start.

It you want to get to the next higher gear, speed up first, and then close the throttle, hold the clutch handle at the same time, the shift lever stepped down, hanging in the second gear. And then loose the clutch handle gently, gently step on the gas. In accordance with the main point to gradually shift can reach a top speed of gear.

⚠ WARNING

This motorcycle is configured with side racks and ignition interlock switch. When we set up side racks, it will range from neutral to other gears, the engine will stop running.

⚠ DANGER

When going downhill, we will not closed the ignition switch or engine flameout switch. Otherwise, it will reduce the life of the catalyst in the muffler.

Use the transmission system

The transmission system can make the engine running smoothly in the normal speed range. Variable speed ratio is carefully selected for the engine performance. Drivers shall select the most appropriate gear according to driving conditions, and never use low-grade in high speed driving. In any time, don't use the method of half clutch to control speed. Before changing in low level gear, lower the speed or increase the speed of the engine. before hanging into the high-end gear, improve the speed or reduce the engine speed.

Climbing driving

When climbing steep hills, motorcycles will have the phenomenon of underpowered slowdown. You should put the low gear, let the engine operates within the scope of normal power. Then shift should be quickly, to avoid the motorcycle to slow down too much.

When going downhill , we can use the engine to assist braking resistance, as long as the gear into a lower gear. If the brake to be continuous using, it will overheat, and reduce the braking ability.

⚠ WARNING

When going downhill, you will not close the ignition switch or engine flameout switch, so as not to reduce the service life of catalyst in the muffler.

Brake and park

(1)Turn the throttle control handle forward, and make the throttle fully return.

(2)Brake by using the front brake controller and rear brake pedal at the same time.

(3)When the speed is low enough, you can change it to low level gear so as to reduce the speed.

(4)Hold the clutch handle (to clutch off), put the gear into a gap position and then stopped completely. After having into the gap position, the gap indication light is lit.

(5)If a motorcycle with a side stand is going to park in gentle slope road, you should hang gear into the low level, as far as possible to get the car started up hill side, to avoid overturned because of side racks rotation. However, when restart, you must hang the files back to the neutral position.

(6)Turn the turn off switch on the right handle bar to the turn off gear position, the engine will stop.

(7)Turn the handle bar to the left for most extent, press the "🔓" button for 2-3 seconds, the handle bar will be locked and the electricity will cut off completely.

(8)Swing the handle bar to make sure the handle bar is locked.

⚠ DANGER

High speed will extend the braking distance accordingly. Make sure the front vehicle or object to have proper distance with you to make your motorcycle braking. Otherwise it may cause collision.

Use only front and rear brake is very dangerous, the braking method causes skid and out-of- control. In the wet pavement as well as turn place, be careful gently use the braking system. In the uneven road surface or smooth roads, to have emergency braking, you can make the motorcycle out of control.

Emergency braking when the motorcycle is turning can make the motorcycle out of control. In this case, brake before the turning to reduce speed.

When the engine is working or just stalling soon, the temperature of the muffler is high, please do not touch to prevent burns.

Only use rear brake to brake will make brake system accelerated wear and tear so that the braking distance is longer and longer.

⚠ WARNING

If you use other anti-theft lock, such as u-lock, brake disc, chain lock anti-theft lock; you have to remove the anti-theft lock before driving.

Inspection and maintenance

Maintenance schedule

The table below is the inspection for each regular maintenance should be done, the interval period should be used in months or mileage depending on which one reached first. Each check should be carried out in accordance with the project in the table below.

If your motorcycle has been used in harsh conditions, namely the continuous driving in large throttle or worked in wind sand, it should have special maintenance to keep the reliability of the motorcycle after driving. The repair units can provide you with further advice. Especially, shock absorber and wheel steering system are key parts, and they require specialized technology and careful maintenance. To be safe, we recommend the work best done by a qualified repair units.

⚠ DANGER

Initial 1000km maintenance is the must-follow project, it can make your motorcycle always reliable and have superior performance.

When the engine is working and just stalling, the temperature of the muffler is high, please do not touch to prevent burns.

Improper maintenance or problems after maintenance will cause an accident. To keep your motorcycle in good condition, it request the company qualified maintenance unit complete with mark project. Refer to this section, if you have any mechanical maintenance experience, you can maintain the unmarked items; if you are not sure how to deal with the work, let your repair units to complete the maintenance.

⚠ WARNING

Pay attention to the maintenance regularly to see whether full compliance with the prompt or not carefully. The initial 1000km maintenance, shall be carried out according to the method described in this section. "Dangerous "and "Warned" in this section should pay special attention to. Replacing the wrong parts can lead to motorcycle accelerated wear and tear, and shorten the service life of the motorcycle. When the motorcycle needs to replace parts, you can only use pure part of the company.

Waste in the maintenance process, such as cleaning agents and waste engine oil should be properly handled so as not to damage to the environment.

Regular maintenance table

Inspection cycle / Inspection item / kilometer / months	First 1000 First 3	Each5000 Each15	Each10000 Each30
Air filter (filter)	——	Check	Change
Muffler bolt, nut	Fastening	——	Fastening
Check valve clearance (cold) In 0.11-0.20mm / Out 0.18-0.30mm	——	——	Check
Ignition plug	——	——	Check
Engine oil	Change	Change	——
Engine oil filter	Change	——	Change
Clutch controller free stroke	Check	Check	——
Throttle body	Check		Check
Throttle digging line gap	Check	Check	——
Idling	Check	Check	——
Fuel evaporative pollutants control system	——	——	Check
Radiator rubber hose	——	Check	——
Fuel pipe	——	Check	——
Transmission chain	Check	Check	——
	Checked and washed per 1000km		
Anti-wear block of rear fork lift	——	Check	Check
Brake	Check	Check	——
Brake liquid pipe	——	Check	——
	Change once every four years		
Brake liquid pipe	——	Check	——
	Change once every two years		
Tires	——	Check	——
Knuckle mechanic	Check	——	Check
Front fork	——	——	Check
Rear shock absorption	——	——	Check
Body and the engine installation of bolts and nuts	Fastening	Fastening	——
coolant	——	Check	——
	Change once every 3 years or 30000km		

Initial maintenance for the first 1000 km or 3 months (whichever comes first), every 5,000 km or 15 months (whichever comes first) Regular maintenance.

Inspection and maintenance

ATTENTION

According to the project inspection table, if necessary, to further cleaning, lubrication, adjustment or replacement operations.

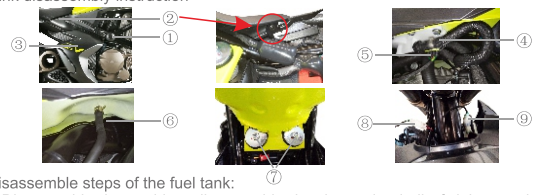
In poor road conditions and high power conditions for a long time, you should increase the inspection frequency.

Toolkit

Open the seat cushion and place the toolkit under the cushion, as shown in the figure.



Fuel tank disassembly instruction



The Disassemble steps of the fuel tank:

1. Disassemble the cushion, disassemble the decorative ball of right guard bar ①Remove the expansion screw ② at the joint between the right side cover and the tail skirt.

2. Disassemble the decorative ball of left guard bar and the left side cover by the same method.

3. Disassemble high-pressure fuel pipe ④, electric connector of the fuel pump ⑤, and the fuel vapor.

4. Disassemble the two fixed bolts ⑦ at the rear of the tank.

5. Holding the fuel tank with both hands and move it about 50mm in the backward direction, then stabilize the fuel tank.

6. Disassemble the USB connector on the left ⑧, disassemble the electric connector ⑨ of right fuel tank lock.

7. Holding the fuel tank with both hands and move it backwards to disassemble the entire fuel tank from the vehicle and place it in a safe area.

WARNING

Before installing the fuel tank, check the fuel tank leaking pipe and ventilation tube without bending.
Fuel tank location is correct.
The pipe connection is correct.
Adsorption pipe connection, to the end of the pipe clamp towards the outside.
When installing the fuel pipe, prevent foreign body to get into the fuel pipe.

Lubricating point

For safe driving, you have to keep good lubrication which can maintain the smooth operation, and prolong service life. After using in harsh conditions, after the vehicle is wet by the rain, or after washing the vehicle, it should be lubricated. Lubrication points are as follows:



WARNING

Lubrication might damage the switch. Don't use grease or oil to lubricate the switch.

D chain oil G grease

① clutch controller ② Side parking axle and spring hook ③ left shift lever shaft axis and put feet

④ Transmission chain ⑤ The brake handle shaft ⑥ right shift lever shaft axis and put feet

Storage battery



gel battery

The battery is located under the driver's seat cushion, please connect the positive and negative poles and install the battery straps for the first time.

Disassemble the battery in the following steps:

a. Turn off the motorcycle power switch.

b. Remove the cushion.

c. Poke black protective cap, remove the negative extreme (-), push aside red protective cap, remove the positive extreme (+).

⚠ WARNING

When reinstalling the battery, starting or when the whole vehicle has power failure, battery dormancy restarting, abnormal idle speed, plug and unplug insurance and other similar situations, please pay attention to reset individual hardware of the electronic injection. Steps: Turn on the electric door lock switch and the engine flameout switch, start the engine with the clutch of neutral gear. Turn off the engine flameout switch after 10 seconds and turn on the engine flameout switch after 10 seconds. Repeat 2 more times.

Replace the battery, please note the following:

When you replace battery, you shall confirm the battery type and verify the models are consistent with the original battery. the specification of the battery in motorcycle design is considered as the relative match. if switch to a different type of battery, it could affect the performance and life of the motorcycle, and is likely to trigger circuit fault.

⚠ WARNING

If you don't drive your motorcycle for a long time, please remove the battery and charge it per month.

Battery should be checked regularly, if the voltage is lower than 12V, we suggest for battery charging.

Battery charging will shorten the life of the battery. Don't let the battery over charge.

Please charge the battery when you use the professional lithium battery. The charging voltage should not be over 15V.

Please properly deal with waste battery and waste electrolyte, don't damage to the environment.

We suggest that you will recycle waste battery and waste electrolyte to a local recycling center.

Don't discard it in the dustbin or discarded directly on the ground.

⚠ WARNING

Please purchase and use our special charger to ensure the extension of the service life of the battery. There are lead-acid battery chargers for sale in Zontes shop. Users who need them can go to Zontes shop to purchase the corresponding chargers according to the batteries equipped with the model.

It is not allow to use the unqualified charger to charge the original battery.

Charger Manual

When the battery feed cannot be started due to the long time of not cycling or other reasons, please recharge the battery as the following steps:

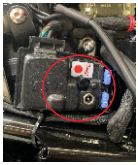
a. Open the right cover of Figure 1 and remove the PKE fuse.
b. Plug the DC output plug of the charger into the PKE charging port;
c. Charger input AC seat directly into the home 110-220V power supply, after charging is completed, unplug the charger and plug it back into PKE insurance.

LED indicator

Green light	Standby Mode
Red light	Charging Mode
Red light becomes Green light	Full Charging



Picture1



Picture2



Picture3

⚠ ATTENTION

Lithium battery needs to be charged with lithium battery charger, please buy our special charger, the chargers are available in Zontes shop, it is forbidden to use other unqualified chargers to charge the battery

Air filter

The air filter is located below the seat. If the air filter is dirt jam, it can make the air intake resistance increases, the output power down, and fuel consumption increases. If driving in dusty conditions, you should increase air cleaner filter cleaning or replacement frequency. Complete the following steps to check clean air filter.

⚠WARNING

Under normal circumstances, the air filter element needs to be replaced or maintained every 10,000km. The ZT310-V air filter has a quick maintenance function. After rapid maintenance, it can continue to drive for 4000km and then continue to maintain or replace the filter element.

If driving under dusty conditions, it should be increased the frequency of cleaning or replacing the filter.

It is very dangerous to run the engine without an air filter installed. Without the blockage of the internal filter element of the air filter, the flame of the engine will be sprayed back from the engine to the air filter inlet. Dirt will enter the engine and cause damage to the engine. Do not run the engine without an air filter element.

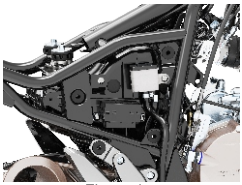


Figure 1



Figure 2



Figure 3

Quick maintenance filter element:

1. As shown in Figure 1, the air filter is seen when the seat cushion and the right side cover are disassembled, and there is a rubber cover on the right side of the air filter.
2. Move the vehicle to the place where there is no dust or less dust as shown in Figure 2. Unplug the rubber cover and use a high-pressure air gun to blow the filter through the anti-tempering iron mesh for 10-15 minutes, then cover the rubber cover.
3. Extend the high-pressure air gun into the intake pipe to blow out the dropped dirt or put the pipe into the intake pipe with a vacuum cleaner to suck the dirt out.
4. Re-install the side cover and seat cushion and complete the maintenance.

Replacement of filter element:

1. Disassemble the side cover and seat cushion and then disassemble the small parts around the rear mud plate and air filter. (For details, please see the official website video)
2. Disassemble the filter cartridge and take the filter element out as shown in Figure 3.
3. After replacement, install the new filter element in the opposite steps (make sure the filter element is installed well), then assemble the other parts that which have been disassembled.

⚠ATTENTION

If the air cleaner filter installation position is not correct, the dust will bypass the filter into the engine which can damage the engine. Make sure the filter installed in the correct position. In addition, when you flush the motorcycle, don't let the water into inside the air filter; if there is water into the air filter, you can pull the release the product oil pipeline, and make sure there was no swelling in the empty filter before using the motorcycle.

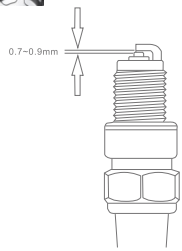
Product oil pipeline

Get rid of the clamp with long flat nose pliers. After that you can get rid of the used oil. When you finish the process, you can install it parts with opposite order.



Spark plug





Disassembly the spark plug
Follow the steps below:

1.Disassembly the spark plug cap ,be careful not to use strong force, or you may break the spark plug.

2.To remove the spark plug with the spark plug wrench.

3.Check the spark plug.

The spark plug replacement guide

Use a hard wire or steel adhesion of carbon on the spark plug for removal of dirt, and then to use with a feeler gauge to adjust the spark plug gap between 0.7~0.9mm.

When remove adherent carbon deposition, you need to observe the spark plug tip of the porcelain two kinds of color at the same time. The color will tell you whether standard spark plug is fitted. If the spark plug is wet black, turned to high-pressure hot plug may be more appropriate. Normal working condition spark plug should be light brown. If it appears as white and light, the spark plug under the condition of overheating, then you should change it into cold type spark plugs.

Torch	Annotation
LDK7RTIP	If the spark plug are wet, switch to the spark plugs LDK7RTIP .
LDK8RTIP	Standard spark plug
LDK9RTIP	Use the spark plug if the ambient temperature is too high and the spark plug is overheating.

Install spark plug
Torque: 20N.m

⚠ WARNING

The incorrect installation of the spark plug will damage the engine. If the torgue of the spark plug is too large, it will also do harm to the engine. If there is no torque wrench when installing or replacing a new spark plug, screw it until there is resistance and then tighten it for 3/8 turn(135°). If used the old spark plug, screw the spark plug until there is resistance and then tighten 1/12 turn(30°), However, the spark plug should be screwd to the required torque as faras possible.

The unclean material will go through the spark plug and go into the engine to do harm to it. Therefore, when we dismentle the spark plug, we have to use something to cover the installation hole of spark plug.

It is forbidden to use spark plugs below LDK7RTIP.

Engine Oil





Whether the engine can be durable, it is very important to select the high quality oil and regular replacement of new oil. Check the oil level and oil change on a regular basis is two important tasks of Maintenance project.

Check the oil level, according to the following steps to check oil level.

1.Park the motorcycle horizontally and make it upright.

2.Start the engine and put it into idling mode for 10 minutes (if the temperature is under 10℃, the idling mode should be 15 minutes).

3.Turn off the engine and wait for 3 minutes.

4.Rotate out the engine oil gauge in anti-clockwise direction Clean the gauge with dry and non scrap loosing cloth or tissueThen incert the gauge back in position without twisting tight. Take out the gauge and observe the oil level,which should be between the 2 level lines.

⚠ WARNING

When the engine oil is too much or too little, running the engine can damage the engine. Stop the motorcycle on the flat ground and check the engine oil level gauge. The oil level must be between the lowest and the highest lines. When checking the oil level, make sure that the motorcycle is standing upright and slightly incline to either side may cause the inspection error side may cause the inspection error.

Engine oil replacement

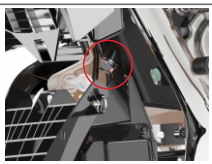
At each maintenance cycle, we should replace the engine oil. Oil change should be performed under the condition of the engine, so the old engine oil can discharge more thoroughly. Steps are as follows:

1. Park the motorcycle with the side stand.
2. Remove the fuel tank cover, unscrew the oil feet counterclockwise.
3. Tear down the low cover.
4. To put oil bolt in the frame and engine oil drain bolt placed under the drainage plate.
5. Disassembly oil bolt with tools and pull out the old oil.

⚠ WARNING

Please replace the oil in the franchised dealer or repair shop. Unauthorized replacement is not allowed. Please consult the professional staff to ensure correct disassembly when the lower fairing cover is removed. Please dispose the disused engine oil properly and don't pollute the environment. We recommend that you put the disused oil into a sealed container and send it to the local recycling center. Don't put it in the dustbin or pour it directly onto the ground.





6. Reinstall the drain bolt and washer. Use a wrench to screw down the drain bolt. (tighteening torque would be 24±4N.m)

7. From the oil filler added about 1600ml (If changed engine oil filter, add 1700ml) of new SAE 5W-40/10W-40/10W-50. The new API SN grade or higher "ZONTES" motorcycle four-stroke engine Oil, and then tighten the oil dipstick.

⚠ WARNING

If you doesn't use the prescriptive engine oil, it might damage the engine.

8. With different speeds launch machine for 2 minutes. When engine is running, check leakage situation with dismantling parts.

9. Engine turns off for 5 minutes. Turn off the engine for 3 minutes, check oil level through oil foot calibration. If the oil level is lower than the oil feet minimum scale line, you should add new oil to the highest scale line. Once again, check for leaks.

Engine oil filter

Please properly recycle and handle the used oil and oil filter.

1. Place the oil unloading tray under the right crankcase cover.

2. Remove the right crankcase trim cover and remove 3 cap nuts on the oil filter cover with the special tool. Loosen the oil filter cover by the rotating softly from left and right, and disassemble the oil filter cover. It is strictly forbidden to pick up the oil filter cover with a hard object, otherwise it will lead to oil seepage.

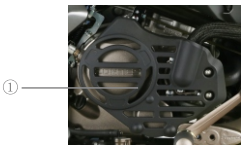
3. Disassemble the oil filter cover, and disassemble the old oil filter ,the seal ring of oil filter will be stuck to the old oil filter. If don't replace the seal ring, please remove it and use again, but must not forget this seal ring .

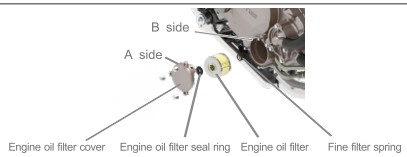
4. Wipe off residual oil and impurities with a clean paper towel, check and install the filter spring and replace a new oil filter.

ATTENTION

It is very important to install the oil filter properly. Don't install the oil filter on anti-loaded and don't miss the spring and filter seals.

Please be sure to confirm carefully. Improper installation may result in serious engine damage due to oil contamination or missing





5. Before re-installing the oil filter cover: If necessary please replace the oil filter seal ring and O-ring on the oil filter cover, align the filter cover with the screw hole and press it in parallel with the mounting hole, Hold the fine filter cover by hand and pre-tighten the 3 cap nuts, the end face (A side) of the filter cover is attached to the end face (B side) of the mounting hole. Pre-tightening 3 nuts to make sure that the filter cover can not bounce and then tighten the three cap nuts evenly. The standard torque is 12±1.5N.m.

ATTENTION

Before installing the oil filter cover, please check if the O-ring on it is damaged. When installing the filter cover, the O-ring should not be trimmed. If there is any damage or trimming, please replace it with the dealer, otherwise it will cause oil seepage. It is recommended to purchase the oil filter seal and the filter cover O-ring together when purchasing the filter.

Be sure to follow the correct procedure to install the filter cover, otherwise it will cause oil seepage.

The clutch controller free stroke

Measuring the clutch controller end free stroke, it should be between 10~15mm. If free stroke is not correct, accord with the following method to adjust.



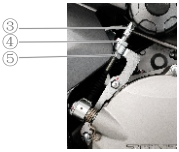
Micro adjustment

1.Loose clutch digging line nut ①.

2.Rotate clutch digging line adjustor ② to get proper free stroke.

3.Screw down the clutch digging line nut ①.





Large adjustment

1.Loose clutch digging line nut ④、⑤.

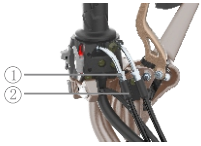
2.Rotate clutch digging line adjustor ③ to get proper free stroke.

3.Screw down the clutch digging line nut ④ ⑤.

WARNING

If the clutch controller free stroke is too large, it is easy to cause clutch and shift institutions wear and failure Maintain and adjust the clutch should be performed by the designated company service units.

Throttle cable clearance



Adjustment progress：

(1) Loose lock nut ①.

(2) Turn the adjusting screw ② to adjust the clearance lasso, within the range of 2.0~4.0mm.

(3) After completion of clearance adjustment, tighten the lock nut.

⚠ WARNING

After completing the clearance adjusting throttle cable, ensure the throttle hand turn automatically back to the closed position, do not make the engine idle speed by adjusting cable. It cannot appear the situation that the idling level is up when you turn the head of the motorcycle at the same time.

Idling

When you check the engine idle speed, it should be performed under the hot condition of the engine. engine idle speed range should be between 1500 to 1700RPM.

⚠ WARNING

If the idle speed of engine is beyond the scope of regulation, please let the designated company service units to check the motorcycle.

Fuel evaporative pollutants control system

The motorcycle has a control system which can prevent fuel evaporation to the atmosphere. It should be regularly (every 10000km or every 30 months) do the following.

(1)Check whether every connection is reliable.

(2)Check each line and the activated carbon tank① crack or damage, please replace the damage.

(3)Confirm every line and activated carbon tank① whether blocking, clear or replace if necessary.

⚠ DANGER

If the fuel evaporative pollutants control system need to check and maintain, we strongly advise you to give this work to a qualified repair units to do it.

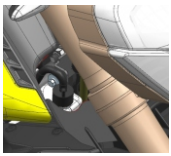
coolant/antifreeze

The coolant/antifreeze surface level in the main water tank should be kept between the H line and L line at any time. If the surface level drops to below the L line, please add the coolant/antifreeze according to the following steps:

1.Park the motorcycle with side stand.

2.Open the cover of the main water tank, add proper coolant/antifreeze(when the motorcycle is in normal condition, the coolant/antifreeze surface level can reach to H line).

3. Please note the cover of auxiliary radiator should be toward the fuel tank.



⚠ ATTENTION

In order to correctly check the surface level of the coolant/antifreeze, we should put the motorcycle into the cooling engine condition.

If the main water tank is empty, please check and repair the cooling system immediately. After you finish fixing the cooling system, add some coolant/antifreezeinside.

⚠ DANGER

It is bad for health if you swallow or absorb the coolant/antifreeze. Therefore, when you use it, please don't eat and drink. After every work, please clean your hands, face or any skin parts demonstrated. If you swallow it mistakenly, please go to the hospital immediately. If you absorb it mistakenly, please breathe more fresh air in the environmental in where there is full of fresh air. If the coolant/antifreeze runs into your eyes mistakenly, please watch your eyes with large amount of water at once. Also, keep the liquid away from kids and pets.

Change the coolant/antifreeze

It is suggest that you change the coolant/antifreeze completely every 3 years or 30000 kilometers.

Fuel pipe

Fuel pipe

Check the fuel pipe for damage or leakage. If there is a problem, it is necessary to replace the fuel pipe.

⚠ ATTENTION

Don't rise the fuel pipe by your means.

Transmission chain

Transmission chain

This transmission chain is made of special material. The drive chain has a special x-ring, x-ring, seal the grease. When you need to replace the drive chain, please leave this work to the designated company service units. Keep daily check, and adjust the drive chain of the motorcycle before driving. Accord with the following method to check maintenance.

⚠ DANGER

In order to ensure safety, check and adjustment of transmission chain should be before driving.

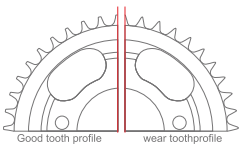
Inspection of transmission chain

When check the drive chain, please check the following questions:

①loose chain pin
②damage roller
③tears or rusty link
④bad rotation link
⑤undue wear
⑥improper adjustment of chain

⚠ WARNING

If it is found that there is something wrong with the drive chain or improper adjustment, please , relate this designated company repair shop for repair.



Drive chain wear often means that the chain has also wear. Please check whether the sprocket exist the following problems:

① If the sprocket is excessive wear
② Tooth is broken or damaged
③ Sprocket fixed nut is loose or not

If you find any questions about the sprocket, please let the designated company repair shop to repair.

⚠ WARNING

When replacing the drive chain , you should check the wear condition of master-slave two drive sprocket; the chain should be replaced at the same time if necessary.

Cleaning and lubrication of the transmission chain

Regular cleaning and lubricating transmission according to the following method

Chain:

1.Remove dirt and dust from the chain, be careful not to damage the sealing ring.
2.Clean the chain with seal chain cleaner or neutral detergent and water.

Transmission chain

⚠ WARNING

Not properly cleaning chain might damage the seals and break the chain
Do not use volatile solvent, such as coating thin sheen agent, gasoline
Do not use high pressure cleaner to clean the chain oil.
Do not use wire brush to clean the chain.

3.Use a soft brush cleaning chain. even if use a soft brush, be careful not to damage sealing ring.
4.Wipe off water and neutral detergent, and dry the chain.
5.Sealed with motorcycle chain special chain oil, lubricating the chain.
6.After comprehensive lubricating chains, wipe away excess oil.
7.We suggest that the user to clean the chain every 1000km drive to prevent dust to break the sealing ring.

⚠ WARNING

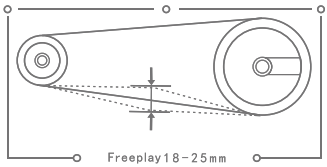
Some chain lubricant containing might damage the sealing ring of solvents and additives, so please use the special chain oil. If there is no chain oil for the seal chain, you can use high viscosity gear oil SAE90 instead.

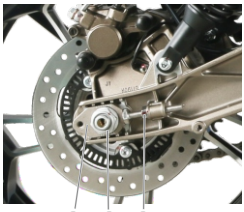
Adjustment of transmission chain

Adjust the drive chain sags to the appropriate range. The drive chain adjustment frequency should accord with the driving conditions.

⚠ WARNING

If drive chain relaxation degree is too big, drive chain sprocket will drop out, and it will be an accident or severe damage to the engine. Before using the motorcycle, please check and adjust the transmission chain sags.





(Double arm) Please kindly follow the below steps to adjust the drive chain:

1.Put the stand down to prop up the motorcycle.
2.Use a 30# wrench or adjustable wrench to loosen (do not have to completely unscrew) the rear axle nut①.
3.Use a 17# open end wrench to adjust the adjusting nut ② to a certain position to achieve proper slack of the drive chain. At the same time, in order to ensure that the front and rear wheels are in a straight line, refer to the scale on the chain adjuster and the position of the aluminum alloy rear fork, and adjust the left and right marks to the same position.
4.After completing the adjustment, retighten the rear axle nut. Rear axle nut torque: 110N.m.

⚠ WARNING

The drive chain is made of special raw materials. If you replace the drive chain need to choose the company integrity part . Use other drive chain may lead to early damage.
Do not use a wire brush to clean the chain.

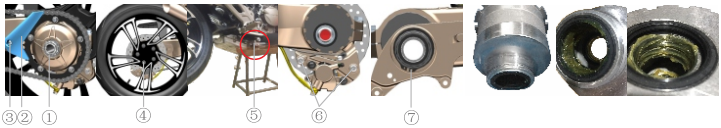
Transmission chain

(Single arm) Follow the steps below to adjust the drive chain:



Step 1: Use the 6# Allen wrench to remove the M8 hexagon socket bolt shown in the picture, then carefully remove the vice rear fender, taking care not to pull the wire.
Step 2: Loosen the M16×1.5 bolt shown in the picture with a torque wrench of 100N and the outer hex 21#. Note that it does not need to be completely unscrewed.
Step 3: Use the special chain adjustment tool to clamp the teeth of the eccentric chain adjuster as shown in the picture, and then turn the eccentric chain adjuster with force (note: Clockwise is loose, counterclockwise is tight. If you feel too tight to move, then loosen the M16 bolt until you can rotate the eccentric chain adjuster) and turn the chain adjuster to adjust it to fit the tightness.
Step 4: After adjusting the chain, use the 100N torque wrench and the outer hex 21# to tighten the loose bolts in step 2.
Step 5: Use the 6# Allen wrench to install the vice rear fender removed in step 2.

(Single arm) Eccentric chain regulator NK50-25 needle roller bearing maintenance steps:



Step 1: Remove the locking spring on the rear axle, and then loose the M35 nut with 200N torque wrench and special tools. When loosening, the foot brake should be pressed tightly to prevent the car from rotating. Please note that the M35 nut is not required to be completely removed.
Step 2: Use 4# Allen wrench to loosen the lock bolt of sprocket baffle and remove the sprocket baffle.
Step 3: As shown in steps 1, 2 and 3 of chain adjustment, remove the rear auxiliary fender and loosen the M16 bolt, and adjust the chain to the most loose state.
Step 4: Loosen the five M12×1.5 nuts shown in the drawing (Note to loosen the nuts diagonally) using a 100N torque wrench and hex 19#.
Step 5: Use stools to hold the car up. Pay attention to the position of the car. In addition, other auxiliary tools can be used.
Step 6: Remove the five M12×1.5 nuts that lock the wheels, then pull the wheels out directly.
Step 7:Remove the M35 nut and remove the sprocket housing, inner housing, etc.
Step 8: Use 14# sleeve to loosen the locking bolt of the rear caliper as shown in the picture and put the rear caliper in place.
Step 9: Remove rear axle, clean with gasoline or kerosene, and check bearing position and spline position for wear.
Step 10: Use the circlip pliers to remove the circlip as shown, and then remove the disc brake mounting plate.
Step 11: Remove the eccentric chain adjuster and clean the bearings inside the eccentric chain adjuster with gasoline or kerosene. Check whether the bearings are damaged, whether the rotating bearings are smooth, whether there are noises, etc. If there is no problem, wipe enough grease on the bearing position after cleaning.

Braking system

This motorcycle front and rear wheel assembly of the disc brake. The right brake operation is very important for safe driving. Remember to regularly check the braking system, and the inspection qualified maintenance unit to complete.

⚠ DANGER

Brake is highly significant components of personal safety; you should regularly check and adjust the brake, and regular cleaning the sediment on the brake caliper, etc. to prevent obstacles to the movement of the piston.

If the brake system needs maintenance, we strongly advise you to give this work to a qualified maintenance unit. They have complete tools and skilled technology, and it is also the safest and most economical way to do the job.

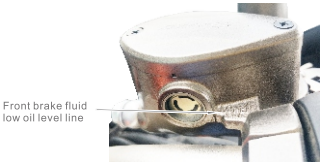
No regular inspection and maintenance of motorcycle brake system will increase the risk of accidents. Confirmed before each use of motorcycle according to the brake system content. In accordance with the requirements of the regular maintenance table to maintain the braking system.

According to the following to check the braking system:

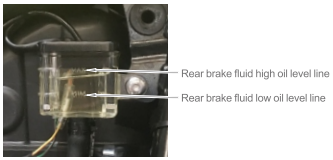
1. Check the brake cylinder liquid level position.
2. Check for leaks the front and rear brake system.
3. Check whether the brake fluid hose leakage or rupture.
4. Check the brake disc and brake wear condition.
5. Operate the front and rear brake system to check whether is flexible and effective or not.

⚠ WARNING

The disc brake system is using high pressure brake. To ensure safety, the brake fluid hose and brake fluid replacement, shall not exceed this manual "inspection and maintenance" the rules of the verse.



Front braking fluid



Rear braking fluid

Check the brake fluid level position in front and rear brake fluid cylinder. If the liquid level in the LOWER (low) below the mark, check the brake wear and brake fluid leakage.

⚠ DANGER

Don't wash brake cylinder directly with high pressure water.

If swallowed into the brake fluid, it will cause harm to people, and even deadly. The brake fluid is harmful to both skin and eye contact. Brake fluid is toxic for animals. Don't puke if swallowed into the brake fluid. Immediately contact the poison control center or hospital. If the brake fluid gets into eyes, wash your eyes, and look for a doctor for help. Wash your hands thoroughly. Keep children and pets away from the brake fluid.

⚠ WARNING

The use of the brake fluid is mixed with water, dust and impurities, and silicate liquid or oil, or else they could seriously damage the braking system. Do not use the brake fluid in the open container. You can't use the brake fluid from the last maintenance either. You can only use DOT4 brake fluid. When brake fluid splashed paint surface or plastic surface, it will corrode the surface of the material.

Brake pad

Check that the front and rear wheel brake pads are worn to the extreme position. The extreme position refers to the bottom of the friction material groove. If it is worn to the limit position, please go to the maintenance shops and replace the front or rear brake pads in pairs.



Rear wheel brake piece



front wheel brake piece

Braking system

⚠ DANGER

If fail to brake piece inspection and maintenance, don't change in time or in the recommended replacement, it will increase the risk of accidents. If brake piece need to be replaced, please let the designated company service units to complete the job. It must accord with the method recommended by brake piece inspection maintenance.

If driving after the maintenance of the brake system or replace the motorcycle brake, operate only a few with the brake lever or brake pedal, braking effect will be worse, and the accident will happen. Maintenance of the brake system or replace the brake after operating brake handle, or the brake pedal several times, until the brake disc can be normal pressure brake disc, brake lever and brake pedal back to normal hydraulic resistance.

⚠ WARNING

If you just change one pair of brake piece, it can cause the brake to not be smooth. You should replace a pair of brake at the same time.

If the location of the brake piece is wrong, please do not operate the brake handle or the brake pedal. If you operate on brake lever or the brake pedal, piston is hard to reset, and it can lead to the brake fluid leakage.

Brake disc

Front wheel

The main point to check the front brake disc is: to see if the thickness of the brake disc ① is less than 4.5mm. If the thickness is less than 4.5mm, you should change new brake disc.

Rear wheel

The main point to check the front brake disc is: to see if the thickness of the brake disc ① is less than 4.0mm. If the thickness is less than 4.0mm, you should change new brake disc.

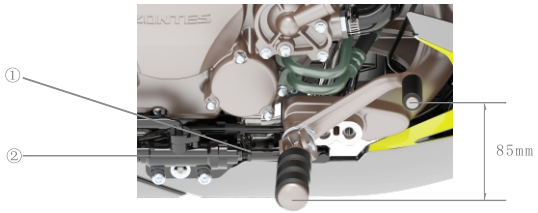
⚠ DANGER

When you have just replaced a new brake disc pad, do not drive immediately. Grab the brake handle several times or pedal the brake pedal several times to make the brake disc and the brake pad fit together to restore the normal grip and stabilize the brake fluid circulation.

After replacing the new brake disc or brake pad, the braking distance may be longer than the original braking distance. After 300km or so, the brake disc and the brake disc can be fully meshed to achieve better. Braking effect, before this, pay attention to leave enough braking distance when driving.

Adjustment of rear brake pedal

The rear brake pedal position shall be maintained properly. Or braking and brake disc will always friction which will damage the brake and the brake disc. Adjust the position of the brake pedal According to the following method.



1.Loosen the lock nut ①, the rotation of the screw ②, the brake pedal position at the top of the foot below 85 mm.

2.Lock nut ① to ensure that the screw ② in the right place.

⚠ WARNING

If the adjustment is not correct, brake piece and brake disc will be forced all the time which can damage the brake and the brake disc, when it is severe it will lead to high temperature for the rear brake, produce gas resistance, the rear wheels lose braking force. Please adjusted brake pedal according to the content of this section correctly.

Tires

⚠ DANGER

Do not pay attention to the following matters may be accident caused by the failure of the tire. Tires connect the motorcycle and ground, so it is very important. Observe the following rule:

Check the tires and tire pressure condition, adjust the tire pressure before each use.

Avoid the motorcycle overload.

Replace tires when tire wear to limit or tire surface has crack and wounds.

Always use specifications and regulations provided in the instruction manual for the size of the tires.

After installing tires, you should balance the wheels.

Read carefully the content of the instruction.

If tire running-in is not good, it will affect the occurrence of tire slip and lose of control. When motorcycle is using new tires, you must be driving carefully. According to the running-in-section in tires, avoid braking in the situation of nasty accelerated, a sharp turn, and emergency within 150 kilometers after the replacement of tires.

Tire pressure and load

The right tire pressure and the right tire load is an important factor. Overload can lead to tire faulty and motorcycle will be out of control.

Check the tire pressure, payload in accordance with the contents of the table below before using the motorcycle. You should check and adjust tire air pressure before driving, During driving, rear tires will fever, and tire pressure will rise.

If tire pressure is too low will cause the difficulty of turning, it will also accelerates the tire wear. If the tire pressure is too high, the tire and ground contact area is reduced, it is easy to slip out of control.

Recommended tire pressure under the normal temperature condition: 250kPa .

⚠ WARNING

Regularly check the tire pressure, tire pressure is not allowed to be less than 250kPa.

When feeling tire pressure drops, check whether there is a nail in the tire, small hole, round circle round (copper) profile is damaged. Tubeless tire is gradually deflated when small hole.

Storage of Tires

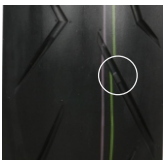
When the motorcycle is not in use for a period of time, it is necessary to adjust the tire pressure to the specified pressure.

The tire is rubber product of semi-hot melt formula, which is not suitable for outdoor weather in extremely cold, otherwise it will cause frost crack of the product. Please store it in a place with higher temperature or indoor.

Tire status and specifications

Incorrect tire status and incorrect tire size affect the performance of the motorcycle. If there is any breakage in the tire scratches, it can lead to faulty tires and make the vehicle out of control. Excessive wear of tires can make tires perforation and the vehicle out of control. Tire wear is also affect the appearance of the tire, and change the operating performance of the tire.

Check the state of tire and air pressure before each use. If there is much obvious damage on the tires, such as: damaged, scratched, or tire wear to limit position, you must replace tires.





⚠ ATTENTION

The triangle labels the wear strip position. If the wear strip touches the ground, it shows that the tires have been wear to pass the limit. You have to change the tires. When you change the tires, make sure that the size and type of the tires is accorded with the list content below. If you change it to different sizes or type, it will influence the performance of the motorcycle and may even lead to the loss of control for the motorcycle.

	front wheel	rear wheel
Specification	110/70R17	180/55R17

⚠ DANGER

It will cause problems if you use the tires which are out of the range of the standard. We really suggest you use the standard tires.

Disassembly of tires



Front axle tightening torque：65N.m
Front axle lock bolt tightening torque：23N.m
Brake pliers before installation bolt tightening torque：26N.m

1.Use special support to support the motorcycle
2.Loosen two bolts ① on the shock absorberwhich connected front brake caliper, remove the front brake pliers.

⚠ WARNING

When you remove the front brake pliers, do not operate the brake controller. Operating the brake controller leads to brake caliper piston ejector, difficult to return; if forced to return, it can make the brake fluid leakage.

3.Loosen lock bolt shaft ②.
4.The special equipment is placed under the engine, jacking the front of the motorcycle, until the front wheel had just left the ground.
5.The wheel axle ③ rotated counterclockwise and pull out.
6.Move the front wheel forward.
7.Install the front wheels in the operation contrary to the above.
8.After installing the front wheel, operate a few times for front brake controller in order to make its restore to normal grip force.

⚠ DANGER

After installing the front wheel brake, if the brake block position is not correct, it will affect the braking effect and may cause an accident. Before driving, operating brake controller for several times, until there is certain pressure to the brake disc when you grip it. Also, you can feel the handle grip force back to normal. Also check the wheel to see whether the rotation is flexible.

Disassembly of tires



Rear wheel nut tightening torque：110N.m

1.Use special support frame to support the motorcycle.
2.Remove the rear wheel nut ①.
3.Loosen the adjusting nut of left and right sides of the transmission chain ②.
4.Taking wheel.
5.Taking front moving rear wheel, remove drive chain sprocket from the rear sprocket.
6.Remove the rear wheel from behind.
7.Install back the rear wheels according to the reverse order.
8.Adjust the drive chain looseness.
9.After the installation, operate the brake pedal for several times, to check whether the rear wheel rotation is flexible.

⚠ WARNING

Remove the rear wheel, don't hit the brake pedal. Stamping on the rear brake pedal brake piece will make it difficult to return.

⚠ DANGER

If the drive chain adjustment is incorrect, or shaft didn't tighten correctly, it can cause accident. After installation of the rear wheel, adjust the drive chain according to the transmission chain adjustment section for drive chain. Make sure the torque tighten the wheel nuts in accordance with the relevant provisions. If you don't know how to operate, please let the designated company service units to complete the work.

After installation of the rear wheel, brake position is not correct will affect the braking effect and may cause an accident.

Before use, operating the brake pedal repeatedly, until the brake piece has certain pressure to the brake disc, you can feel the drag brake pedal returned to normal. Also check whether rear wheel rotation is flexible.

Illumination and signal

Please refer to the instruction of the front part "check before driving" for the illumination and signal inspection.



Front brake switch



Rear brake switch

Front brake switch

The front brake switch, housed in a former brake controller. When you slightly feel pressure before holding brake controller, the brake light is up.

Rear brake switch

The rear brake switch located in the bolt of brake hose. When you feel the pressure on the rear brake pedal slightly, the brake lights up.

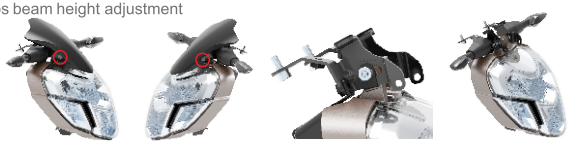
Lamp bulb change

We use imported LED light product for the front light. In that case, we don't need to change the lamp bulb during the usage life of the motorcycle since it is very durable.

Headlamps beam height adjustment

With type PH2 phillips screwdriver (6mm in diameter), inserted into the storage box on the right side of the hole that move light, tooth alignment adjustment bolt type, a clockwise cross screwdriver raised beam, the phillips screwdriver counterclockwise ti brim beam.

Headlamps beam height adjustment



Fuse wire

Main fuses, ECM fuses, constant power fuses, hydraulic unit motor fuses, hydraulic unit ECU fuses, light fuses, spare fuses are located in two main fuse blocks, starter fuses, ABS fuses, auxiliary fuses, and other fuses are located in the secondary fuse box.

1. The main fuse protects all circuits.
2. ECM fuse protects ECM, ECM relay, oil pump relay and other electrical components.
3. Constant power supply protection fan, instrument, anti-theft device connector.
4. Hydraulic unit motor fuse protection ABS hydraulic unit motor.
5. Hydraulic unit ECU fuse protection hydraulic unit ECU.
6. Light fuse protection headlights.
7. Start fuse protection start circuit.
8. ABS fuse protection ABS controller.
9. Auxiliary fuse protection auxiliary parts (position light, turn signal, tail light, brake light, license plate light, horn, overtaking light).
10. Other fuse protection deputy handle switch (except faucet lock switch), instrument, windshield, anti-theft device joint).

⚠ DANGER

Don't use not-in-specification fuse wire or other direct lap. Otherwise it will have serious absence made of circuit system, or even cause fire or burning vehicles, loss of engine power, it is very dangerous.

⚠ WARNING

Pay attention to the selection rules of the rated current of fuse. Do not use a substitute, such as aluminium or iron wire, etc. If the fuse wire frequently fuse in a short time, it shows the electrical system has fault. You should immediately make maintenance unit overhaul.

Accelerant

Catalyst can effectively cut your vehicle exhaust pollutant, the protection and preservation of our environment; Due to the life of the catalyst is under the precondition of normal use unleaded gasoline vehicle design, banned the use of leaded gasoline in the love of your car, because lead can make a reduction of the catalyst is also very important, if the engine is not effective when the ignition or without adequate cooling, will cause the exhaust gas gathered in catalytic combustion, catalytic overheating caused permanent damage to the catalytic conversion ability, banned in situ long maintain high engine speed.

Trouble shooting

The content of the troubleshooting can help you to find the cause of the general issues.

⚠ WARNING

Improper maintenance and adjustment can damage the motorcycle and cannot determine the cause of the problem. We can't guarantee such damage. If you are not sure how to correct operation, consult the designated company service units.

Before the troubleshooting, best to consult the company repair units. Repair units will try to solve for you.

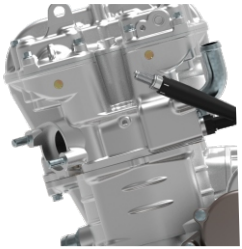
Fuel system inspection

If instrument engine fault indicator light is on, there is something wrong with the fuel injection system. You should send the motorcycle to the designated company service units. Refer to instrument a section of the content of the engine failure indicator, it shows the interpretation.

Ignition system inspection

1.Remove the spark plug, and connect to the spark plug cap.

2.paste spark plug on the engine, turn on the red power-on button, engine shut down switch is on " " position，put the gear in neutral, cut off the clutch (hold the clutch handle). According to the electric start button, if ignition system works properly, the spark plug electrodes have a blue spark. If there is no spark, contact with your designated company maintenance unit to maintain the motorcycle.



⚠ DANGER

Do not put the spark plug fixed near the spark plug hole to make the inspection. Because of the combustible mixture in the cylinder may be ignited by a spark and fire.

In order to reduce the possibility of electric shock, and spark plug shell metal parts, with best posted near to the parts without painting.

To avoid the possibility of electric shock lead to disaster, people who have heart disease or wear heart pacemaker should avoid doing this job.

Engine inoperation

1.Make sure the fuel tank has enough fuel

2.When you successfully start the engine, in the process of engine running, it shous abnormal situation when the orange fuel injection signal light is on. In that case, please contact after-sales dealership to check your fuel injection system.

3.Check whether the ignition system is normal

4.Check the idle. The correct idle speed of 1500-1700 revolutions per minute.

Trouble shooting

⚠ DANGER

Don't make the fuel flow everywhere, the container should be income. Don't let the fuel close to high temperature of the engine and the muffler. When doing the inspection, it should be far away from the fireworks, also don't close to fire and heat source.

Engine short of power

When engine power significantly decreased or a larger decline on original top speed, it may be the blocking of the engine fuel system make the work of engine is not normal, please immediately go to the company dealers maintenance unit for inspection.

⚠ WARNING

Fuel system block is probably because of the not clean gasoline.

Carbon deposit cleaning

In order to generate as little carbon as possible, the recommendations are as follows:

1. The motorcycle rides for a short time or for a long time or for a long time under 5000 rpm. It is recommended to clean the carbon deposit every 5000 kilometers or every 6 months. If the motorcycle often rides at more than 5,000 rpm, the motorcycle's heat engine is also sufficient, and the mileage for cleaning up carbon deposits can be extended to every 10,000 kilometers or every 12 months.

2. The motorcycle has difficulty in starting. Remove the spark plug for cleaning in time, and perform the cylinder cleaning procedure. Press the start button for 3 seconds when the clutch is fully opened.

There are several ways to clean up carbon deposits:

1. Scavenging to clean up carbon deposits. During riding, when conditions permit, appropriately increase the throttle at high gears to increase the engine speed to more than 7000, and the cumulative riding is not less than 2 minutes, which can effectively clean up the deposits by high-speed scavenging.

2. Use standard brand fuel oil to clean up carbon deposits and add according to the instructions, but it is not recommended for frequent use. Frequent use may cause damage to the fuel supply pipeline.

3. Use the throttle body cleaner to clean the carbon deposits, remove the idle step motor from the throttle body, spray a small amount of throttle body cleaner into the throttle body and clean the carbon deposits on the head of the step motor. If the throttle body is removed for cleaning, please be careful not to disassemble the throttle position sensor and do not immerse the electrical components for cleaning, which will cause the sensor to malfunction and fail to idle.

Fuel injection attention

Fuel injection attention:

1.Before the installation of battery for new motorcycle, we should inspect that whether the connection for the fuel injection spare parts is fixed and reliable including the installation of oxygen sensor. Moreover, make sure to fill in the gas.

2.When you install the battery, you should use tools to fix the positive and negative anodes according to the positive and negative anodes of battery. Do not tie it up by hand.

3.Please keep the gas level to not less than 3 liter in the fuel tank; otherwise it will influence the normal working of fuel injection system. In that case, please refill the gas when the gas level is lower than or equal to level 1.

4.When reinstalling the battery, starting or when the whole vehicle has power failure, battery dormancy restarting, abnormal idle speed, plug and unplug insurance and other similar situations, please pay attention to reset individual hardware of the electronic injection. Steps: Turn on the electric door lock switch and the engine flameout switch, start the engine with the clutch of neutral gear. Turn off the engine flameout switch after 10 seconds and turn on the engine flameout switch after 10 seconds. Repeat 2 more times.

5.When you don't use the motorcycle for a long time, it is hard to restart it for the first time. We can turn the throttle line to1/8 level to start.

6.If after several tries, you cannot still start, it might be the situation that the cylinder occupied by water. We should take the clear cylinder process. Turn the throttle line all the way down to full open, and then turn on te switch for 3 seconds.

7.If the battery voltage is flashing on the instrument, it indicates that the voltage level is too low, please recharge the battery at once: low voltage will lead to the abnormal working condition of the fuel injection spare parts so that the motorcycle won't start or the power is not enough.

⚠ WARNING

For new motorcycles or motorcycles which have no fuel inside the fuel tank, please don't turn off the switch. It got to refuel some level of fuel before you turn off the switch. Otherwise, the fuel pump will rotate without fuel so as to lower the service life for the fuel pump.

⚠ WARNING

Please do not unplug the cable port of all different spare parts and do not clean it with water.

1. When the engine is running, if the EFI failure indicator on the instrument is on, it indicates that there is a fault in the EFI component that needs to be eliminated.

a. Turn the throttle to the maximum before energizing the motorcycle and keep it in the fully open position, then turn on the electric lock and engine switch. If the system detects a fault, the fault light will start to flash.

b. The fault code has 4 digits. Read the fault code according to the number of flashes. For example: P0201 flashes in the following ways: continuous flashing 10 times→pause 1 second→continuous flashing 2 times→pause 1 second→continuous flashing 10 times→pause 1 second→continuous flashing 1 time.

c. If there is more than one fault, the next fault code will flash after the fault light is off for 4 seconds. Therefore, after the fault light is off during the flashing process, waiting for more than 5 seconds and still no longer lights up, it means that the fault code has been flashed.

d. If you need to observe the flashing code again, you need to turn off the engine switch first, then turn it on again, and keep the throttle fully open.

Code	Description	Code	Description
P0030	Upstream 1 cylinder oxygen sensor heating control is open circuit	P0116	Engine coolant temperature sensor signal is unreasonable
P0031	Upstream 1 cylinder oxygen sensor heating control circuit voltage is too low	P0117	Engine coolant temperature sensor circuit voltage is too low
P0032	Upstream 1 cylinder oxygen sensor heating control circuit voltage is too high	P0118	Engine coolant temperature sensor circuit voltage is too high
P0106	Intake pressure sensor/barometric pressure sensor is unreasonable	P0122	Throttle position sensor circuit voltage low limit
P0107	Intake pressure sensor is short circuit to ground	P0123	Throttle position sensor circuit voltage high limit
P0108	Intake pressure sensor is short circuit to power supply	P0130	Signal of the upstream 1 cylinder oxygen sensor is unreasonable

Fuel injection attention

Code	Description	Code	Description
P0112	Intake temperature sensor signal voltage is too low	P0131	Signal of the upstream 1 cylinder oxygen sensor is too low
P0113	Intake temperature sensor signal voltage is too high	P0132	Signal circuit voltage of the upstream 1 cylinder oxygen sensor is too high
P0134	Upstream 1 cylinder oxygen sensor circuit signal failure	P0627	Oil pump relay control circuit is open
P0201	1 cylinder injector controlis open circuit	P0629	Oil pump relay control circuit is short circuit to the power supply
P0261	1 cylinder injector control circuit is short circuit to ground	P0650	MIL lamp driver stage circuit failure
P0262	Intake pressure sensor is short circuit to power supply	P0444	Canister solenoid valve open
P0322	Speed-Sensorless pulse signal (open circuit or short circuit)	P0459	Canister solenoid valve is shorted to power supply
P0480	Fan control is open circuit	P0458	Canister solenoid valve is shorted to ground
P0691	Fan control circuit is shorted to ground	P2300	1 cylinder ignition coil is shorted to ground
P0692	The fan control circuit isshort circuit to the power supply	P0628	Oil pump relay control circuit voltage is too low
P0511	Idle speed actuator control is opencircuit	P1098	Dump sensor signal voltage is too low
P0563	System battery voltage is too high	P1099	Dump sensor signal voltage is too high

2. Extinguishing conditions of the instrument fault light:
Manually clear the historical fault operation: power on→turn on the engine switch→start, turn the throttle in neutral to 4000 rpm or more, hold for 10 seconds→release the throttle, turn off the engine switch, the motorcyle does not need to be powered off, wait for 10 seconds or more; the fault light will go off after repeating the above operation 4 times.

⚠ ATTENTION

When the engine is running, broken light is not on. When you turn off, the signal light is flashing. It means that is historical error and it has nothing to do with the whole motorcycle. After that it will disappear.

USB Port

Charge USB port data:
Input voltage: 12V-24V; output voltage: 5V; output voltage: 2A.
Characteristic:
1.Waterproof cover can prevent water and dust from getting inside to extend the usage life of the charger.
2.Intelligent IC design. It will automatically adjust the charging speed according to the battery volume and type.
3.With the protection of over voltage and current, we can make sure the safety of charging.

⚠ ATTENTION

USB must be covered with waterproof cover, when not in use, during raining time or washing of the bike. water is likely to cause damage to the internal components, If water enter the USB, dry before use by using a hair dryer to blow the USB port.

Please don't use when there is not enough battery volume.



Adding electrical parts

The original motorcycle has been equipped with a modified port: as is shown, the modified port is located on the lower left side of the oil tank and above the guard bar. The modified port is a waterproof plug, which supplies power only when the engine is started, and can be installed the spotlight without destroying the original circuits.

⚠ WARNING

It is forbidden to use GPS, spotlights and other electrical equipment to directly take power on the positive and negative poles of the battery.

Not allow electrical equipment to put wiring around the battery.

Installed electrical equipment must be kept away from the EFI ECU, relay combination, PKE controller 300mm or more

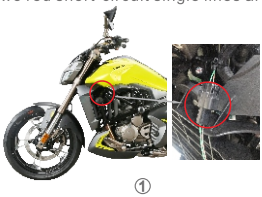
Unauthorized breakage modification and installation location do not meet the requirements, and the consequences are borne by owners

The total power of external electrical equipment shall not exceed 60W

Anti-theft device plug: As shown in Figure 2, an anti-theft device plug (6 pin) is reserved under the seat , which can be installed by an anti-theft device or a GPS device.
line color and definition are:

No	line color	Definition
1	blue and white	engine speed signal
2	red	power supply 12V
3	green	power supply 0V
4	light blue	right turn singal
5	orange	left turn singal
6	Black	ACC 12V

In addition, two red short-circuit single lines are reserved for emergency assistance.



①



②

Storage methods

Storage method

If you are not using motorcycle for a while, the motorcycle needs special maintenance, this requires some special materials, equipment and technology. For this reason, it is recommended that you choose the company service units to complete the maintenance work. If you want to complete the work, please click the following method:

Motorcycle

Thoroughly clean the motorcycle. Use the main parking stand to park the motorcycle on a flat ground. The handlebars to the left, long press the button of red power-on button, the motorcycle will be electrically cut off, the head lock will be also locked automatically.

Fuel

With the method of the siphon or other appropriate approach to pull out the fuel from the fuel tank into the appropriate containers.

Engine

1.Remove the spark plug, put a tablespoon of oil into each of the spark plug hole, reinstall the spark plug, and let the engine crankshaft rotate for several rounds.

2.Through dry the oil, and add new oil again.

3. With cloth containing new oil to cover the new oil filter of the air inlet and exhaust muffler to avoid

Storage battery.

1.Remove the battery refer to the content in battery section.

2.Use neutral soap water to clean surface of the battery, remove rust from the terminals and wiring connector.

3.Storage the battery indoor where the temperature is over 0℃.

Tires

Adjust the tire pressure to the regulated pressure.

The surface of motorcycle

Put rubber protective coating on the surface of resin and rubber parts.

The antirust paint spraying on the surface of the parts that have no surface treatment.

Use the car wax coating paint the surface.

Maintenance during storage period

Please use our dedicated charger to charge the battery once a month.gel battery charger charging: 4A × 3 ~ 5 hours (charging voltage 14.5V ~ 14.8V). The batteries can not be charged for more than 5 hours.

Restart method

1.Clean the motorcycle completely.

2.Remove dishcloth for air filter and the intake muffler exhaust.

3. Pull off all the engine oil . According to this instruction manual related content, replace the oil filter and add new engine oil.

4.Remove the spark plug. Let the engine turned several rounds. Reinstall the spark plug.

5.Reinstall the battery referring to battery content section.

6.Make sure motorcycle lubrication is normal.

7. Inspect the motorcycle in accordance with the content of instruction for use in the inspection section before driving.

8.Restart the motorcycle in accord with the instruction.

Corrosion prevention

Maintain the motorcycle carefully. Corrosion prevention is very important. In doing this, your motorcycle will look like new even after many years.

Key points to prevent corrosion

Factors that lead to corrosion:

Salt road salt, the accumulation of dirt, moisture and chemicals.

Small stones or gravel damage on the surface of the painting, or by knock against scratches.

Salt road, wind, industrial pollution and high humidity environment will lead to rust.

How to prevent corrosion

Clean the motorcycle at least once a month. Try to keep the motorcycle clean and dry at your best.

Remove dirt on the surface of the motorcycle. Salt road salt, chemicals, asphalt and materials such as SAP, bird droppings, and industrial emissions will damage your motorcycle. Remove the dirt as soon as possible. If it is hard to clean with water, use detergent to clean. When using the cleaning agent, you must comply with cleaner product requirements.

Clean up the damage as soon as possible. A careful examination of the motorcycle on the surface of the paint damage is a must. If you find any burr or scratches, immediately repair it, avoid damage more. If the burr and scratch is throughout the surface of parts, please let the designated company maintenance unit to maintain it.

Put the motorcycle in dry and ventilated place. If you often wash the motorcycle in the garage, and parked inside, the garage will become very wet. High humidity can increase the corrosion. If air does not flow, even in high temperature environment, damp motorcycle will rust.

Cover the motorcycle. Avoid the sun at noon to shine upon the motorcycle, it would lead to paint, plastic color changed or fade. Using high quality and breathable cover can avoid the sun ultraviolet radiation hit on the motorcycle, and reduce air pollution and dirt deposition on the motorcycle. Distribution unit of the company can help you choose your motorcycle cover.

Motorcycle cleaning

Clean the motorcycle

Clean the motorcycle accord with the following:

1.Use cold water to wash away dirt and mud on the surface of the motorcycle. You can use the soft sponge or soft brush to clean. You could scratch appearance parts with hard materials to clean.

2.Use neutral detergent or a car wash soap, thoroughly clean sponge or soft cloth motorcycle. Sponge or soft cloth should be frequent infiltrate cleaning agent.

If you use the motorcycle in salt road surface or the beach, after use, you should wash it in cold water immediately. You must use cold water. Hot water will accelerate corrosion.

Avoid spray cleaning, avoid water flow to the following location:

Ignition lock
Ignition plug
Fuel tank lock
Fuel injection system
Braking fluid tank

⚠ WARNING

Don't use high-pressure water to clean the motorcycle,throttle body and oil injector.

3.After cleaning the surface dirt , use water to rush residual cleaning agents

4.After rinse, wipe the motorcycle with wet soft leather or cloth, and dry in the shade.

5.Carefully check the paint surface. If it has any damage, follow these steps, use repair material to repair the damage surface:

a. Clean and dry the area of damage
b. Stir repair material and use small brush to smear lightly at the site of the injury
c. Thoroughly dry the patch

⚠ WARNING

After cleaning motorcycle or rain when you drive, there will be water mist in headlamps. Open the front light, water mist will gradually dissipate. Start the engine to power the headlamps; clear water to avoid the battery discharge.

⚠ WARNING

When you cleaning the motorcycle, don't use cleaner containing alkaline and acidic detergent, do not use gasoline, brake fluid, or other solvents which can damage the motorcycle. You can only use soft cloth with neutral detergent with warm water.

Motorcycle waxing

After cleaning, it is recommended that the waxing polishing, which not only it can protect the parts, but also it makes the parts more beautiful.

Use high quality wax and polish

When using wax and polish wax and polish matters, you need to pay attention on the use instruction of the products.

Inspection after cleaning

In order to prolong the service life of the motorcycle, lubricate the motorcycle according to the

⚠ DANGER

It is very dangerous to drive a motorcycle when the brake is wet. Wet brake is unable to provide braking force such as dry brake. This can cause an accident. After cleaning the motorcycle, you can test the brake system with low speed. If needed, operate brake for several times to make brake dry.

Inspect the problem after the use of the motorcycle accord with the instruction.

Transportation

Motorcycle fuel must be discharged before transport. Fuel is easy to combust and under certain conditions it can cause explosion. When drain the fuel, storage fuel or injected fuel, it is forbidden to open fire, be sure to stop the engine, to operate in a well-ventilated place. Drain fuel as follows.

(1) Stop engine rotation, and shut down the electrical door lock switch.

(2) With the method of the siphon or other appropriate approach to pull out fuel from the fuel tank and put into the appropriate containers.

⚠ WARNING

When shipping the motorcycles, the fuel in the fuel tank must be discharged clean to prevent fuel leakage and explosion .The vehicle should be shipped in a normal riding posture to prevent oil leakage from the outlet of the reducer box during shipping.

The use instruction of storage battery

1 The start of the new storage battery

Storage battery installation

a. Connect first positive (+) polar (red wire), followed by the negative (-), note: don't connect the reverse way, Otherwise it will damage voltage rectifier electric parts, etc.

b. After tightening bolts on the bolt, nut, terminal butter or vaseline, to avoid poor contact rust.

2 Use and maintenance

2.1 Each electric start-up time not more than 5 seconds, if you continue trying a few times and it can't start, you should check the oil supply system and starting, ignition system.

2.2 The following conditions will cause the gel battery to be over-discharged or under-charged to shorten the battery life:

a. Frequent invalid electric start.

b. Short riding time, short driving distance, long time low speed driving.

c. No ignition after long-time startup.

d. Install extra electrical devices without independent power supply or install high-power spotlights and other electrical equipment

2.3 When the starting motor rotates weakly, the brightness of each light is reduced, the horn sound is abnormally loud, and the ignition instrument restarts, such as abnormal phenomena, the battery should be recharged immediately to prevent the over-discharge from causing the ordinary charging method to fail to charge.

2.4 When the motorcycle is not used for a long time, it is best to remove the battery and store it separately, or disconnect the battery cable. And recharge the gel battery before the motorcycle is stopped, it is best to recharge it once a month.

2.5 Charging Precautions:

a. When charging, please use the charger that has passed the test to charge. You can use the motorcycle's own charging port or remove the battery to charge separately.

b. The charging voltage at both ends of the battery shall not be higher than 15V.

c. Use standard charging as much as possible when charging. It is best to avoid frequent fast charging to extend battery life.

d. Do not overcharge the battery. Overcharging will cause the battery to leak, swell or even burst, resulting in varying degrees of danger.

3. Attention

3.1 This battery is a maintenance free gel battery. It is strictly forbidden to open or modify the battery without permission. Do not add electrolyte or water without permission. It is strictly prohibited to put it in a place with high temperature and open flame.

3.2 It is forbidden to approach the open flame when using and charging the gel battery, and avoid short circuit of the positive and negative electrodes and reverse connection of the positive and negative terminals, otherwise it may cause damage to the battery and the motorcycle or even personal safety.

3.3 If there is special smell, serious heat, color change, form change or any strange situation happen for the battery, remove the battery immediately from the motorcycle and stop using it.

3.4 The gel battery is standard for motorcycles, please do not use it for other purposes than the start of the motorcycle..

3.5 The installation of security devices, spotlights and other external devices have a certain impact on the battery and the circuit. If it is indeed necessary to add, you need to select a regular product that has passed the test and connect it to our reserved interface. Otherwise, it may cause abnormal operation of the circuit system of our company, damage caused by excessive discharge of the gel battery, and interference with the signals of other electrical devices

3.6 Do not drop the battery. The electrolyte contains strong acid. Avoid splashing on skin, eyes and clothing. Once contacted, please wash with plenty of water immediately. In severe cases, you need to go to the nearest hospital for treatment in time

Fuel consumption

"Consumption" of powered by fuel motorcycle, refers to the vehicle with the fuel consumption at least one driving speed constant speed.

Each vehicle will be equipped with "vehicle parts list" and it is also avialable for you to get the electronic version from our official website.

Single sided swing arm specification table

Length	2104mm
Width	816mm
Height	1143mm
Wheel base	1464mm
Ground clearness	149mm
Seat height	750mm
Net weight	165kg
Full load weight	155kg

Engine

Type	Single cylinder ,upright, four-strokes, wind and oil cooling
Cylinder number	1
Cylinder bore	80mm
Stroke	62mm
Displacement	312ml
Compression ratio	12.5:1
Start-up mode	Electric starting
Lubricating system	Pressure splash-type
Power	26kW

Transmission system

Clutch	wet-type multiple-piece
Transmission	6 gears tooth transmission
Forward gear	3.1
Gear ratio 1 gear	2.909
2 gear	1.933
3 gear	1.4
4 gear	1.182
5 gear	1
6 gear	0.846
Transmission chain	Oil-seal chain

Main performance index

Fuel consumption	3.1L/100km
Maximum speed	150km/h
Braking system	7m

Travel system

Turning circle diameter	5m
Front wheel specification	110/70R17 Tubeless tires
Rear wheel specification	180/55R17 tubeless tires
Electric System ignition method	Inductance discharge type
Spark plug type	LDK8RTIP
Storage battery specification	12 V, 10Ah
Fuse wire specification	15A
Headlight specification	12V,7.5W/7.5W
Front position light specification	12V,0.6W
Turn signal light specification	12V,1.8 W
Tail lights/brake lamp specifications	12V,2.2W/2.4W
Rear license plate lamp specifications	12V,0.4W

Volume

Effective Fuel tank volume	15L
Engine oil volume	1900mL
Engine oil, replace the oil filter at the same time	1700mL
Engine oil, don't change the oil filter	1600mL

Double sided swing arm specification table

Length	2124mm
Width	860mm
Height	1145mm
Wheel base	1492mm
Ground clearness	186mm
Seat height	720mm
Net weight	175kg
Full load weight	157kg

Engine

Type	Single cylinder ,upright, four-strokes, wind and oil cooling
Cylinder number	1
Cylinder bore	80mm
Stroke	62mm
Displacement	312ml
Compression ratio	12.5:1
Start-up mode	Electric starting
Lubricating system	Pressure splash-type
Power	26kW

Transmission system

Clutch	wet-type multiple-piece
Transmission	6 gears tooth transmission
Forward gear	3.1
Gear ratio 1 gear	2.909
2 gear	1.933
3 gear	1.4
4 gear	1.182
5 gear	1
6 gear	0.846
Transmission chain	Oil-seal chain

Main performance index

Fuel consumption	3.1L/100km
Maximum speed	150km/h
Braking system	7m

Travel system

Turning circle diameter	5m
Front wheel specification	110/70R17 Tubeless tires
Rear wheel specification	180/55R17 tubeless tires
Electric System ignition method	Inductance discharge type
Spark plug type	LDK8RTIP
Storage battery specification	12 V, 10Ah
Fuse wire specification	15A
Headlight specification	12V,7.5W/7.5W
Front position light specification	12V,0.6W
Turn signal light specification	12V,1.8 W
Tail lights/brake lamp specifications	12V,2.2W/2.4W
Rear license plate lamp specifications	12V,0.4W

Volume

Effective Fuel tank volume	14L
Engine oil volume	1900mL
Engine oil, replace the oil filter at the same time	1700mL
Engine oil, don't change the oil filter	1600mL

Circuit diagram(TFT)

