

# NONIUM

**703 F**  
OWNER'S MANUAL

This User Manual is considered a permanent part of the Motorcycle and should be given to the new owner of the vehicle when the vehicle is resold.

The vehicle information in this User Manual is the latest production information before printing. Guangdong Tayo Motorcycle Technology Co., Ltd. reserves the right to modify the content and design of this manual at any time, and does not assume any responsibility for it.

The content of this User Manual is updated quickly, and the final website shall prevail, and the PDF file of this manual is available for download on the official website.

The vehicles illustrated in this User Manual are for reference only, and everything is based on your actual vehicle.

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# Precautions

Thank you for choosing Zontes brand motorcycles. We design, test and manufacture this model of motorcycle for you with advanced technology, providing you with interesting, fun and safe driving. Once you are fully familiar with the essentials in this manual, you will find driving a motorcycle an exhilarating sport and a real joy of driving

For your driving safety, please note the following:

- Please be sure to read this User Manual carefully;
- Please refer to the suggestions and operating procedures in this manual;
- Please carefully read this manual and the safety tips pasted on the motorcycle body.


- The illustrations in this manual are based on the highest configuration 703F. Please refer to the actual product.

## Vehicle model, engine model

Vehicle	Engine model
703F	ZT370MU

## Safety Precautions:

The safety of your and others life the is very important. Be sure to obey the traffic rules and drive safely. To help you drive safely, we provide detailed instructions and other relevant information on body stickers and in this manual to protect you or others from potential hazards.

This manual has safety warning symbols  and the following three warning words: danger, warning, and caution.

The following signal words and logos appear in this note

The meaning of the three warning words on the book and in your motorcyle is shown below:

### DANGER

- Failure to follow the hazard warning, it will result in serious casualties.

### WARNING

- Failure to follow warnings, it may result in serious casualties.

### ATTENTION

- Failure to follow the cautionary instructions will result in damage to the motorcycle and property.

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# Catalog

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## Driver safety

Drivers and passengers must wear appropriate protective gear at all times, including: certified helmets, gloves, long-sleeved shirts/jerseys, trousers/cycling pants, and boots that cover bare feet/cycling boots.

## ⚠ WARNING

- **Do not wear any loose clothing that may entangle the vehicle or hang on branches and bushes.**

## Helmet and eye protection

A certified helmet can mitigate head and brain injuries, and in the event of an accident, using a helmet can greatly reduce the risk of brain injury. The helmet you choose should meet the standards of your country or region and be the right size. A helmet with face protection is a better choice because it will protect against impacts from the front at the same time, including insects, flying stones, dust, scattered parts, etc., allowing you to make timely judgments about what is happening on the road and drive the motorcycle safely.

Semi-protective helmets do not provide the same protection for the face and jaw, so if you are wearing a semi-protective helmet, you should use a removable face shield and goggles.

## Gloves

Finger gloves are effective in protecting hands from wind, sun, heat, cold and splashes. Well-fitting gloves help you stay on top of your way and reduce hand fatigue. Conversely, if the gloves are too bulky, it will be difficult to operate the vehicle.

In the event of an accident or rollover, a pair of sturdy reinforced motorcycle gloves can better protect your hands.

## Long-sleeved shirts/jerseys

Wear a jacket/long-sleeved shirt and pants or a full cycling suit. High-quality protective gear is more comfortable and prevents adverse environmental factors from distracting you. In the event of an accident, high-quality protective gear made of strong materials can mitigate or even prevent injury.

## Boots

Always wear protective gear that protects your feet and bare feet; When the engine or exhaust gas is running, it will heat up and become very hot, which may cause burns.

## DANGER

- For your life safety, please avoid driving motorcycles at high speed in heavy rain, wind, ice and snow.
- 

## Carbon monoxide poisoning

When the engine is running, it produces carbon monoxide, a colorless, odorless, odorless gas that can cause headaches, dizziness, drowsiness, nausea, confusion, and eventually death when inhaled.

In confined or unventilated spaces, the lethal level of carbon monoxide can last for hours or days, leaving your body quickly unable to support yourself and unable to save yourself, if you feel carbon monoxide poisoning, leave the area immediately, get some fresh air and go to the hospital.

## WARNING

- Running a motorcycle's engine in a confined or semi-confined space may result in a rapid build-up of toxic carbon monoxide gas.
  - Limit the engine of the motorcycle to running in a well-ventilated outdoor area.
-

## Load

Accessories with extra weight, or accessories that easily block wind such as wind deflectors, backrests, saddles, cushions, suitcases, etc., should be installed as low as possible, close to the body and close to the center of gravity. Poor installation will shift the center of gravity and bring danger, the key point of installing accessories is: pay attention to left and right balance and firm stability. Poorly installed fittings or poorly designed accessories can cause maneuvering difficulties and endanger driving safety.

When loading, the cargo should be fixed in a low position as much as possible, as close to the motorcycle as possible. If the goods are not fixed correctly, the center of gravity will be raised, which will make the motorcycle difficult to control and seriously affect the driving safety. The size of the cargo affects the air resistance and affects the handling of the motorcycle. Please balance the items on the left and right sides of the motorcycle and secure the cargo.

The total weight of the driver, occupants, accessories and cargo must not exceed the limit of the maximum load.

### MAX load:

189 kg

## Genuine Zontes accessories

Choosing accessories for your vehicle is an important decision, and genuine parts are only available on our website and dealers, which are designed, tested, and approved for use on our vehicles.

Companies that are not affiliated with Zontes are also manufacturing parts and accessories for use in zontes vehicles or providing other modifications. Zontes is not responsible for testing these products that are not manufactured and manufactured by Zontes company, and Zontes does not endorse and do not recommend the use of accessories that are not sold by Zontes, even if they are sold and installed by Zontes's dealers.

## Safe driving tips

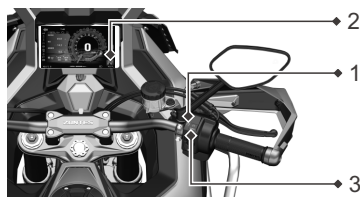
If you are driving this type of vehicle for the first time, we recommend that you practice on non-public roads until you are familiar with the control and handling methods of the motorcycle. Driving with one hand is dangerous, so keep your hands firmly on the handlebars and keep your feet on the resting pedals. Under no circumstances should you take your hands off the handlebar. Reduce your speed to a safe speed before you want to steer.




The road surface is wet and smooth, the tire friction will be reduced, and the braking ability and cornering ability will naturally decrease, so it is necessary to slow down in advance.

Crosswinds are usually most likely to occur at tunnel exits, in valleys or when large vehicles are overtaking from behind, so you must be careful to stay calm, slow down, obey traffic rules and limit speed.

## Start the engine

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



1. Make sure that the ignition switch of the engine is at (  Running) position.
2. The gear is switched to neutral (  the neutral indicator is on).
3. Pull down the clutch handle and press the switch. When it is in the "  START" position, the engine starts.

### ! WARNING

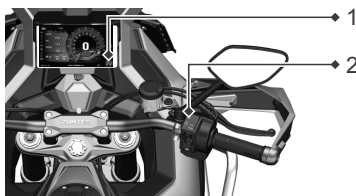
Never start or run the engine in a confined area.

- Waste is toxic and can cause loss of consciousness and death in a short time.
- Always drive your motorcycle in the open air or in a well-ventilated area



### ! ATTENTION

- Do not operate continuously for more than five minutes, because the motor will overheat and the battery will discharge.
- Wait 15 seconds between each operation of the starter to allow cooling and restore battery power.
- Do not leave the engine idling for a long time, as this may cause overheating and lead to engine damage.


## Stop the engine



Shut down the engine completely:

1. Select neutral " ".
2. Turn the ignition switch to the  (off) position.

### ! WARNING

- Generally, the ignition switch shall be turned to  (Off) position to stop the engine.
- The engine stop switch is for emergency use only.
- When the engine stops, do not turn on the ignition switch, which may cause electrical damage.

## Driving

After starting the motorcycle, if you need to let the vehicle move, you need to put on the first gear and slowly release the clutch handle so that the vehicle can drive smoothly; When the speed increases so that the vehicle can maintain balance, put your feet on the pedals.

### WARNING

- Do not wear any loose clothing that may entangle the vehicle or hang on branches and bushes.
- When going uphill, the engine speed should not be too high, otherwise, it is easy to damage the internal parts of the engine.
- Do not turn off the ignition and slide downhill, so as not to reduce the life of the catalyst in the muffler.


## • When the engine is in a cold state

- 1.The transmission is in neutral and hold the clutch lever tightly;
- 2.The transmission is not in neutral, the side stop bracket is fully retracted, and the clutch handle is held tightly. When the dump switch rolls over the motorcycle, it stops the fuel supply and ignition, causing the motorcycle to stall. After the fault is resolved, the ignition can be re-ignited.


### DANGER

- This motorcycle is equipped with an interlock switch for ignition circuit and starting circuit. The engine can only be started under the following conditions:
  - 1.Transmission in neutral and grip the clutch handlebar.
  2. The dump switch will stop the fuel injection and ignition when the motorcycle rolls over, so that the motorcycle will stall. When the dumping state is lifted, the flame-out switch can be turned back on and the engine can be started.


## • When the engine is in a cold state

1. The transmission is in neutral position.
2. The throttle control handlebar is in the idle position.
3. Pinch the clutch handlebar first, and then press the electric start button  to start.

## • When the engine is difficult to start in the cold state

1. The transmission is in neutral position.
2. Pinch the clutch handlebar first, turn the throttle 1/8 opening, and then press the electric start button  to Start.
3. After the engine starts, let the engine continue to run until it is fully warmed up.
4. When the engine is still difficult to start after many starts, the cylinder may have been flooded, please perform the cylinder cleaning procedure: the engine is in neutral, pinch the clutch handle, hold the throttle full open for 3 seconds, and then press the start button for 3 seconds, and the cylinder cleaning operation can be repeated.


### ATTENTION

- **Engine start:** When the vehicle is unlocked, the whole vehicle is energized, and at this time check whether the dead-off switch is in this sign position .
- As the weather gets colder, the engine requires a longer warm-up time. Allowing the engine to fully warm up before riding reduces engine wear.


## • When the engine is in a hot engine state

1. The transmission is in neutral position.

2. The throttle control handlebar is in the idle position.

3. Squeeze the clutch handle first, and then press the electric start button  to start.

## • When the engine is difficult to start in a hot engine state

1. The transmission is in neutral position.
2. Squeeze the clutch handle and turn the throttle to 1/8 open, then press the electric start button  to start.
3. If the engine remains difficult to start after several attempts, the cylinder may be flooded. Please perform the de-flooding procedure: with the engine in neutral, squeeze the clutch handle, hold the throttle fully open for 3 seconds, then press the start button for 3 seconds. Repeat the de-flooding procedure as needed.

### WARNING

- Develop the habit of retracting the side bracket before starting, returning the throttle to idle, and firmly gripping the clutch handle before starting to prevent unintended forward movement. Only with the side bracket retracted and the clutch handle firmly held can the vehicle be started.
- When there is a lack of fuel or oil, it is strictly forbidden to start the motorcycle!

## Braking and parking

1. Turn the throttle control handle forward to ensure the throttle returns completely.
2. Simultaneously use the front brake lever and rear brake pedal for braking.
3. When parking the motorcycle on a gentle slope using the side bracket, position the front of the motorcycle uphill to prevent tipping due to movement of the side bracket.
4. Switch the ignition on the right handlebar to the off position to stop the engine.
5. Turn the handlebars fully to the left, press the "P" button for 2-3 seconds to automatically lock the steering, and power off the motorcycle.
6. Rock the handlebars to verify they are locked in position.

## ATTENTION

- If the speed is too high, the braking distance will accordingly increase. Ensure that the vehicle or object in front of you is sufficiently distant to allow you to brake the motorcycle; otherwise, it may lead to a rear-end collision.
- Using only the front or rear brakes is dangerous, as this braking method can cause slipping and loss of control. Exercise caution and gentle use of the braking system on wet or slippery roads and while turning. Emergency braking on uneven or slick surfaces can result in loss of motorcycle control.
- Emergency braking while turning can lead to loss of vehicle control. Brake before turning to reduce vehicle speed.
- When the engine is running or has recently been stopped, the muffler reaches high temperatures. Avoid touching it to prevent burns.
- Relying solely on the rear brake will accelerate wear of the braking system and increase braking distances over time.
- After riding, the muffler and its decorative cover surfaces are hot. Avoid touching or leaning on them to prevent burns or potential fires.

## ABS

This model is equipped with an Anti-lock Braking System (ABS) on the front and rear wheels, which prevents the wheels from locking up for an extended period during emergency braking.

### ATTENTION

- ABS does not reduce braking distance. In some cases, ABS may result in longer braking distances.
- ABS does not function when the speed is below 10 km/h. During braking, the brake lever or pedal may feel springy. This is normal.
- Ensure to use recommended front and rear tires to ensure proper ABS operation.
- If you lift the rear wheel off the ground and rotate it, the ABS indicator may light up, indicating the ABS system is deactivated. Each time you lift and rotate the rear wheel, be sure to restart the vehicle's power to restore normal ABS function.

### ATTENTION

· If any of the following conditions occur with the indicator light, it indicates a serious issue with your ABS system. In this case, reduce speed and promptly visit an authorized Zontes dealer for inspection:

1. The indicator light remains on or flashes during riding.
2. The indicator light fails to turn off when the speed exceeds 5 km/h.
3. The ABS indicator light is on, the brakes operate normally, but the anti-lock function is not active.

## TCS

The TCS (Traction Control System) of this vehicle defaults to an open state, meaning that after each engine shutdown and restart, the TCS automatically returns to the open state.

The TCS function is displayed on the meter with a "T" icon. When the "T" light is on, it means that the TCS function is off; When the "T" light goes out, it means that the TCS function is on.

### Disable the operation of TCS

Press and hold the left handlebar switch labeled "TCS" to enable or disable TCS.



## **⚠ DANGER**

· When you need to drive intensely, please turn off the TCS function in advance, otherwise it will affect the driving experience.

1. After powering on, the TCS enters the initialization preparation. The TCS indicator remains solid when initialization is incomplete and turns off once initialization is complete. During TCS operation, the indicator flashes at a frequency of 2Hz. Initialization conditions include engine start, front wheel speed above 1km/h, and no current faults.

2. The TCS system will disable under the following conditions:

- (1) Throttle opening is at 0.
- (2) Neutral or clutch signals are engaged.
- (3) Fast shift system activation.
- (4) Severe vehicle deceleration.
- (5) ABS activation.
- (6) Abnormal ABS wheel speed signal.

3. Press and hold the TCS button to deactivate the TCS switch. The indicator will flash at 2Hz to indicate the state change. After deactivation, the TCS indicator remains solid for 1 second before turning off.

## New Vehicle Break-in Period

Properly breaking in your new motorcycle can prolong its lifespan and optimize its performance. Below are the correct break-in methods.

## Engine Break-in Period

The break-in period is the name given to the process that takes place during the first few hours of operation of a new vehicle.

In particular, the internal friction in the engine will be higher when the components are new. Afterwards, this internal friction will be greatly reduced when the continued operation of the engine ensures that the components have been "embedded".

A period of careful running-in will ensure lower exhaust emissions and will optimize the performance, fuel economy and service life of the engine and other motorcycle components.

## Within the first 1000 km:

- Do not use full throttle.
- Always avoid high engine speeds.
- Avoid riding at a constant engine speed (whether fast or slow) for long periods of time.
- Avoid sharp starts, stops, and rapid accelerations, except in emergencies.
- Do not ride faster than 3/4 of your maximum speed.

## From 1000 to 1500 km:

The engine speed can be gradually increased to the speed limit in a short time.

## Break in period and post break in have been completed:

- Do not overuse the engine when it is cold.
- Do not let the engine run hard. Always downshift before the engine starts to "struggle".
- Do not ride with an unnecessarily high engine speed. Gear changes help reduce fuel consumption, reduce noise and help protect the environment..

## Initial 0-1000 kilometers:

MAX6000rpm

## Subsequent 500-1000 kilometers:

MAX8000-9000rpm

## Subsequent 1000-2500 kilometers:

MAX11000rpm

## Engine speed

To protect the engine parts, the speed is limited to 6000rpm at gear N and 11000 rpm at other gears (7000 rpm at gear 1-6 during 0-1000km running-in period). When the engine speed reaches the speed limit, it will be automatically adjusted around the speed limit, and the speed will fluctuate, which is a normal phenomenon.

## Tire Break-in

Similar to the engine, new tires require proper break-in for optimal performance. During the first 150 kilometers of using new tires, gradually increase lean angles during turns to condition the tire contact patch for improved performance. Avoid hard acceleration, sharp turns, and emergency braking during the initial 150 kilometers with new tires.

### DANGER

· **Improper tire break-in can lead to tire slip and loss of control. After changing your tires, exercise extra caution. Follow this section to properly break in your tires and avoid hard acceleration, sharp turns, and emergency braking during the first 150 kilometers.**

## Avoid Prolonged Full Throttle Operation

Avoid extended periods of full throttle and refrain from overloading the engine during the initial 1000 kilometers since it is brand new. During the break-in period, engine components undergo self-grinding and polishing to achieve proper running clearance. It is crucial to avoid prolonged full throttle operation or any conditions that may cause the engine to overheat during this period.

Before starting a cold engine, check the engine oil level through the oil window. If the oil level is low, add the appropriate amount of engine oil. Whether the engine is hot or cold, ensure it idles sufficiently before starting to allow the oil to reach all lubricated parts.

## Tire Break-in

Similar to the engine, new tires require proper break-in for optimal performance. During the first 150 kilometers of using new tires, gradually increase lean angles during turns to condition the tire contact patch for improved performance. Avoid hard acceleration, sharp turns, and emergency braking during the initial 150 kilometers with new tires.

### DANGER

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### **Avoid Prolonged Full Throttle Operation**

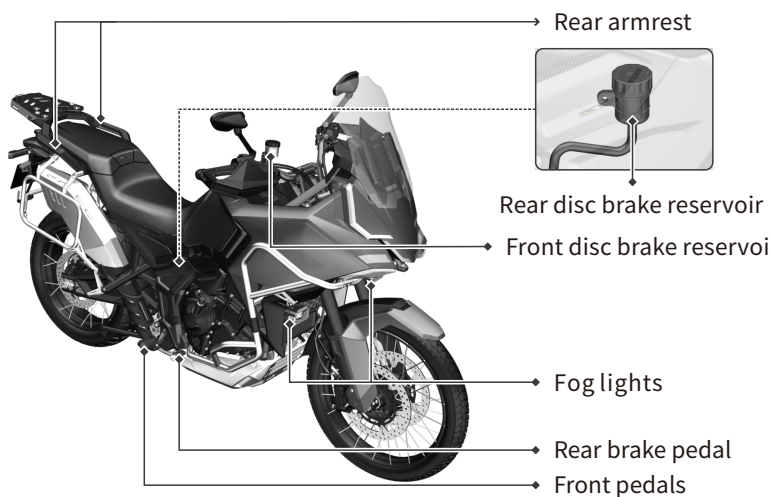
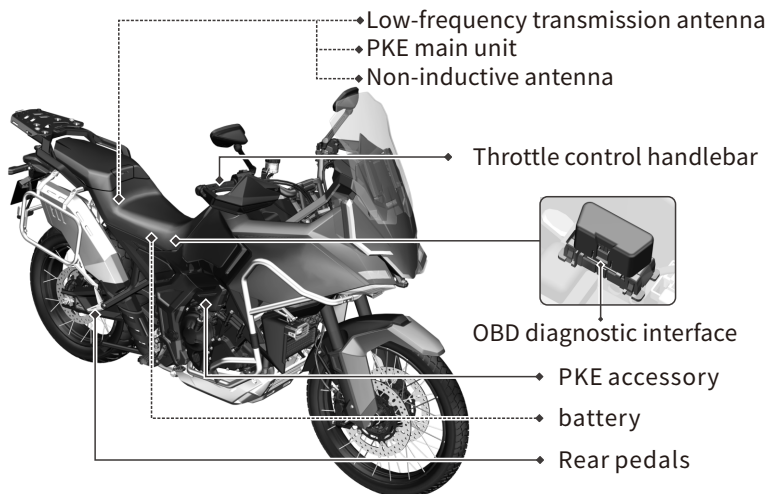
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### **Allow Engine Oil Circulation Before Drivin**

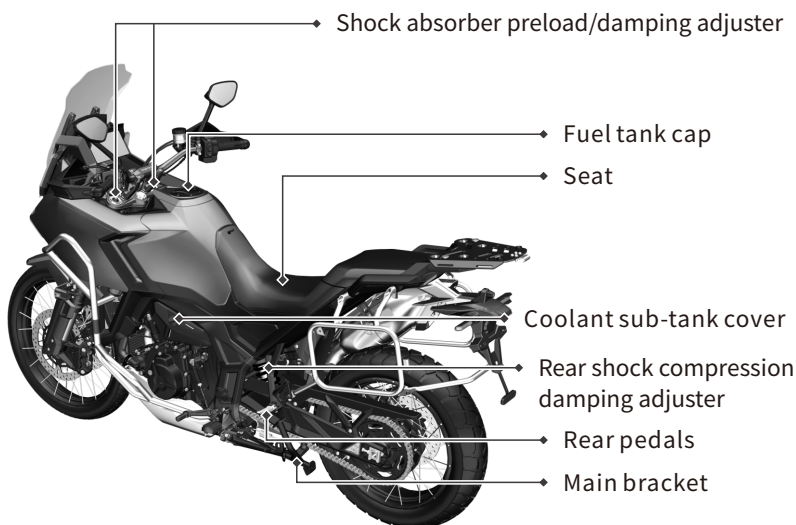
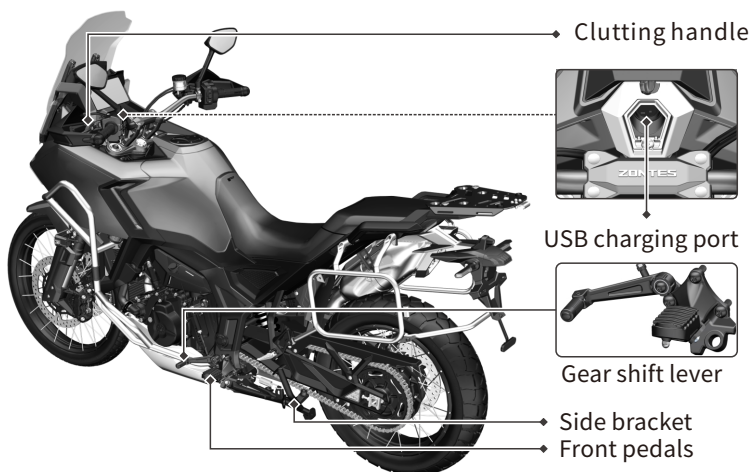
**Before starting a cold engine, check the engine oil level through the oil window. If the oil level is low, add the appropriate amount of engine oil.**

Whether the engine is hot or cold, ensure it idles sufficiently before starting to allow the oil to reach all lubricated parts.

# Component Installation Location



# Component Installation Location



# Left and Right Handlebar Control Systems

## Left handle switches

### TCS Switch

Used to enable and disable the TCS function. By default, the TCS function is on. Press and hold the TCS switch to turn off the TCS function, and press and hold the switch again to turn the TCS function back on.

### Horn Button

Press the button to sound the horn.

### SEAT Switch

Press briefly to unlock the seat.

### Fog Lamp Switch

Press to turn on the fog lamp. The specific fog lamp operation mode depends on the control logic of the LCM.

### Fog lamp control logic

When the fog light is off, short press the switch to turn on white light, and press and hold the switch to turn on yellow light.

After the fog light is turned on, short press the switch, the fog light will light white, and then short press or long press 3S to turn off; After the white light is turned on, double click the switch to enter other functions, and the details can be found in the operation video on Zontes website.

### Return/Exit Switch

Press once to return to the previous meter screen menu or exit the current function selection.

### Right Select Switch

Select up/right in gauge screen options.  
The windshield rises in windshield mode.

### Left Select Switch

Select down/left in instrument screen options.  
The windshield lowers in windshield mode.



### High and low beam overtaking light buttons

By default, turn on the low beam, turn on the high beam up, and press down to turn on the overtaking lights

High beams

Low beams

Overtaking lights

# Left and Right Handlebar Control Systems

## Left handle switches

### Windshield Button

Press the windshield button once to enter the windshield control mode. During this mode, use the "▲" button to raise the windshield and the "▼" button to lower the windshield.

You can manually exit the windshield control mode by pressing the "↶" button, or it will automatically exit after 3 seconds of inactivity.

If you notice that the windshield's range of motion is reduced, press and hold the windshield button for 3 seconds and then release it. The windshield will perform an automatic calibration.

### OK BUTTON

Press to confirm your selection.

### Hazard warning lights

Press to turn on the hazard warning light, and press again to turn off the hazard warning light.



### Turn signal operation

The switch is pushed to the left "◀" and the left turn signal flashes. When pushed to the right "▶", the right turn signal flashes, and the corresponding turn indicator on the dashboard surface lights up at the same time.

# Left and Right Handlebar Control Systems

## Right handle switches

### MODE

It is used to adjust the vehicle operation mode, E/S mode.

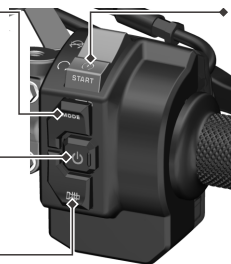
### Power on button

Press the button and the vehicle will turn on

### Electric hot handlebar button

Press to turn on the electric heating handlebar function.

✱ This function is only available for models with heated handle.

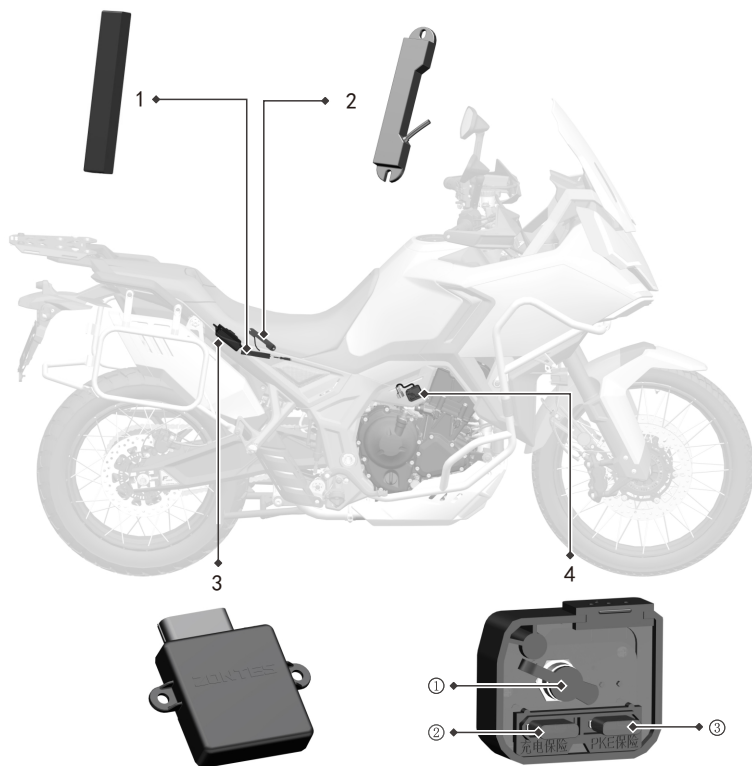


### Flame-out ignition switch

This switch is installed on the right-hand handle switch, which is a rocker type switch, and the rocker shaft is located in the center of the rocker. When the switch is in the "❌" position, the vehicle is turned off, when the switch is in the "🔌" position, the ECU is powered on, the oil pump is self-checked, at this time pinch the clutch, press the switch, when it is in the "🔥" position, the engine is ignited.

## Switch operation guide

Mode	OK		Return ↩	
	Press and hold	Short press	Press and hold	Short press
Main Interface	Into the menu	\	Short mileage, average fuel consumption, average speed to zero	Take a photo
Menu interface	\	Enter the current item and determine the current item	Go back to the main interface	Return to the previous menu
Mode	Up key ▲✱		Down key ▼✱	
	Press and hold	Short press	Press and hold	Short press
Main Interface	\	Toggle the previous driving information	\	Toggle to the next driving information
		Decline or hang up on a call		Call answering
Menu interface	\	Toggle the previous item	\	Toggle to the next item



3D antenna sensing area



5

## PKE (Passive Keyless Entry System) Instructions for Use:

- Low-frequency transmission antenna(Figure 1)
- Non-inductive antenna(Figure 2)
- 3rd generation PKE main unit(Figure 3)
- Charging port holder (Figure 4)
- Proximity key (Figure 5)

## Explanation of PKE Accessories (Figure 4)

- ①DC Interface for Battery Charging
- ②Charging Fuse
- ③PKE Fuse

# Passive Keyless Entry System

## Use of Inductive Keys

The motorcycle is equipped with two inductive keys, one of which should be kept in a safe place as a backup. Each inductive key has a barcode sticker that corresponds to the barcode sticker on the PKE main unit. The PKE main unit automatically recognizes the key that is close to the motorcycle without needing activation. At any given time, only one inductive key will be operational.

### ⚠ ATTENTION

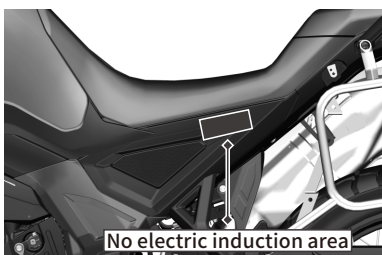
• There are two LEDs on the inductive key, green and red, which will flash when the vehicle detects the key. The green LED flashes when the inductive key battery is fully charged, and the red LED flashes when the battery is low (both the red and green LEDs will flash once simultaneously when the key battery is first installed). Due to the capacity limit of the key battery, the CR2032 button battery has a service life of about 18 months (depending on individual usage). If your inductive key is not responsive or the inductive key indicator flashes red, consider replacing the key battery.

## The Use of Fuel Tank Locks and Cushion Locks

(1) In the shutdown state, press the corresponding button when the key is detected.

(2) When the vehicle is turned on and the ignition is stationary, press the cushion lock button to open the cushion lock.

## Non-Electric Induction Start Mode



When the inductive key battery is low or there is no key battery, it can be powered on through the non-electric induction mode. The specific steps are as follows:

- When the vehicle is turned off and the handlebar lock is closed, press and hold the "⏻" button on the right handlebar, and listen for the first "beep"; or short press the "⏻" button on the right handlebar when the vehicle is turned off, and listen for the second "beep" sound.

Within 5 seconds, place the key sensing area (Figure 5) close to the non-electric sensing area.

### ⚠ ATTENTION

- It is also possible to place the key sensing area (Fig. 5) close to the non-electric sensing area first, and then proceed with the above steps.
- After the non-electric induction mode is turned on, the key will no longer be detected. Please ensure to shut down the vehicle when leaving.

## PKE Power-On

Short press the "⏻" button, the turn signal flashes twice, the Steering lock automatically unlocks, and then you will hear two beeps as the circuit is turned on.

## ⚠️ ATTENTION

• If the steering lock does not unlock successfully, it may be because the handlebar is pinning the lock shaft. Gently turn the handlebar to allow the lock shaft to move freely, or the battery power may be too low to unlock it. Please check if the battery level is normal. When the steering lock fails to unlock, you have 30 seconds to open the fuel tank lock and seat lock. During this time, short pressing the "⏻" button will not work. Long press the "⏻" button or wait more than 30 seconds to automatically exit this mode.

## ⚠️ DANGER

• When using non-induction or Bluetooth mode to force start, please be sure to turn the handlebar to the far left and confirm that the handlebar lock cylinder has been retracted before using the vehicle.

## ⚠️ ATTENTION

- If, after checking the battery level is normal, you short press the "⏻" button and the vehicle cannot be powered on but the main unit beeps once, please check the key battery level and try using the non-electric induction start mode (see the description of the non-electric induction start mode for specific operations). If the battery level is normal and the main unit does not beep, please check whether the main fuse, charging fuse, and PKE fuse (Figure 4) of the vehicle are normal. Be sure to replace any fuses with ones of the same specification.
- When the battery is empty, please complete the charging and unplug the charger before trying to power on.

## PKE Shutdown

After the vehicle is stopped and the engine is turned off, place the handlebar to the far left, press and hold the "⏻" button (hold for  $\geq 2$  seconds and then release). The turn signal will flash twice, the Steering lock will automatically engage, and the buzzer will beep once, indicating the vehicle is powered off.

# Passive Keyless Entry System

## ATTENTION

•After shutting down, please check the handlebar lock status. If the handlebar is not locked, place the handlebar to the far left and the vehicle will automatically lock. If the handlebar is not placed to the far left before shutting down, do not push or let the vehicle slide, as this could cause the steering lock lock and lead to danger. When pushing the vehicle or sliding downhill, ensure the PKE is turned on (handlebar lock is unlocked).

---

## PKE Fault Prompt

When an abnormal condition is detected in the vehicle, the vehicle will alert the owner with a buzzer sound of varying lengths and a fault code, as shown in the table below:

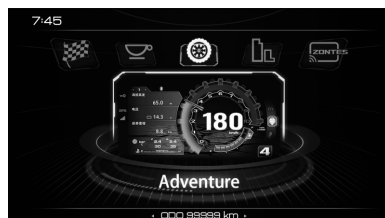
Item	Alert Sound	Fault Code	Alarm Description
START button stuck	One long, two short	8002	If a button is detected as stuck after each startup, an alarm will sound once after 10 seconds.
Seat cushion lock button stuck	Two long	8005	If a button is stuck during startup, an alarm will sound once and perform an action after 10 seconds: If it becomes stuck after startup, the alarm will sound once and perform an action within 10 seconds.
Abnormal high-frequency reception	Two long, one short	8006	If an abnormal high-frequency reception of the PKE main unit is detected during each normal startup, an alarm will sound once (only once, non-electric induction startup and APP startup do not check this item).
No paired remote	Two long, three short	8008	If no paired remote control is detected when pressing the red startup button each time, an alarm will sound once.
Low battery in remote	Three long	8009	If an abnormal signal from the transponder battery is detected during each normal startup, an alarm will sound once (only once, non-electric induction startup and APP startup do not check this item).
Handlebar lock open abnormal	Five short	8010	If an abnormal unlock signal is detected during each startup, an alarm will sound once (only once).
Steering lock close abnormal	Five short	8011	If an abnormal lock signal is detected during each startup, an alarm will sound once (only once).

# Passive Keyless Entry System

Item	Alert Sound	Fault Code	Alarm Description
START button stuck	One long, two short	8002	If an abnormal low-frequency transmitting antenna is detected during each normal startup, an alarm will sound once (only once, non-electric induction startup and APP startup do not check this item).
Remote control out of detection area	Eight short	8014	After a normal startup, if the PKE main unit cannot receive the transponder response signal while operating, it will alarm and shut down (non-electric induction startup and APP startup do not check this item).

## Instrument Panel Mode Selection

The instrument panel offers four modes: Urban, Wilderness, Competitive, and Leisure. You can switch between these modes based on environmental conditions and personal preference. The factory default is Wilderness mode. The figure below illustrates the Wilderness interface for a brief description of the instrument panel. (Urban)As the instrument panel functions are updated, the content may change. Please refer to your actual vehicle for the most accurate information.



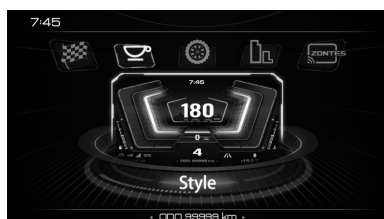
Adventure



City



Sport



Style



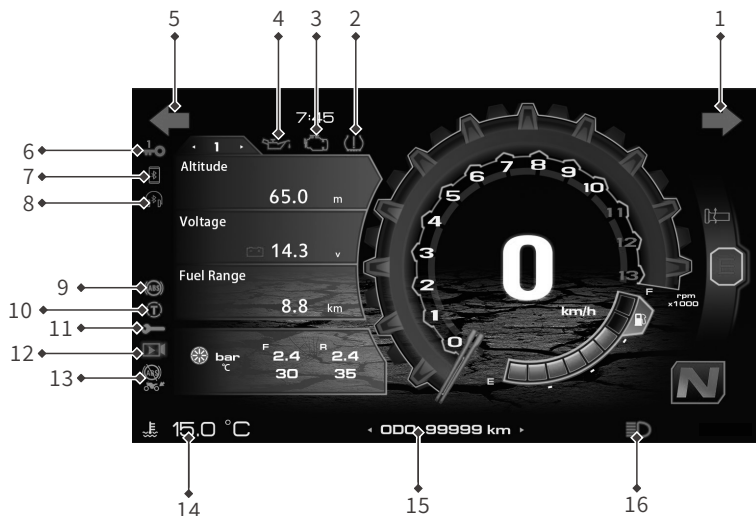
Connection

## ⚠ WARNING

- When the engine is turned off, avoid operating the instrument panel for extended periods. Doing so may cause the battery to deplete or run out of power
- Basic Operation: You can use the switch on the left handlebar to operate and set various functions of the instrument panel.

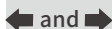
# Instrument Panel

## Indicator and alarm lights



1. Right Turn Signal Indicator "➡"
2. Tire Pressure Warning Light "(!)"
3. Engine EFI Fault Warning Light "🔧"
4. Oil Level Warning Light "🛢️"
5. Left Turn Signal Indicator "⬅️"
6. Key Number "🔑"
7. Mobile Bluetooth "📶"
8. Headset Bluetooth "🎧"
9. ABS System Warning Light "ABS"
10. Rear Wheel ABS Off Indicator "ABS"
11. TCS Warning Light "TCS"
12. Maintenance Reminder Light "🔧"
13. Dashcam Indicator Light "📹"
14. Water Temperature Warning Light "🌡️"
15. Odometer "ODO:999999 km"
16. High Beam Indicator "H"

### Direction Indicator Light



When the turn signal switch is activated, this indicator light starts flashing.

### Tire Pressure Warning Light "(!)"

When there is an abnormal tire pressure or temperature, the light will flash as a warning, indicating that maintenance is required.

### Engine EFI Fault Warning Light



After the engine is started successfully, the EFI fault indicator lamp is off during normal operation. If the EFI fault indicator lamp is on at this time, it indicates that the EFI system is faulty.

## ⚠ ATTENTION

Continuing to ride the motorcycle when the EFI system indicates a fault may cause damage to the motorcycle. Please have the EFI system inspected by a ZONTES flagship store or authorized dealer.

### Oil level warning light “”

During riding, the alarm light is on, indicating that the oil pressure is low and needs to be stopped for inspection.

When the alarm light flashes, it indicates that the oil pressure switch or line is faulty, please contact the Zontes flagship store or dealer for inspection and maintenance in time.

## ⚠ WARNING

- If the low oil pressure warning light comes on, stop the engine immediately. Do not restart the engine until the problem is solved.
- Running the engine while the low oil pressure warning light is on can cause serious engine damage.

## ⚠ WARNING

- The low oil pressure warning light should go out shortly after starting the engine.
- If the low oil pressure warning light remains on after starting the engine, stop the engine immediately and check the cause.
- Running the engine at low oil pressure will result in serious engine damage.

### Oil level warning light “”

Lights up when connected to your phone's Bluetooth.

### Oil level warning light “”

Lights up when Bluetooth is

### ABS Warning Light “”

When the vehicle is powered back on, the ABS indicator light is on and would turn off when the vehicle reaches a speed of about 5km/h. If the lights are always on while driving: (please see pages 1-9 for details).

### Turn off the rear wheel ABS indicator “”

When the driving control-ABS function is set to "turn on the front wheels and turn off the rear wheels ABS", the indicator light comes on; restarting the vehicle will turn on the front and rear wheel ABS by default.

# Instrument Panel

## WARNING

· If the ABS warning light does not go off after the speed reaches 5km/h, or if the warning light is on when driving, please pay special attention to avoid wheel locking during emergency braking.


---

## ATTENTION

· If the warning light does not work as described above, or the warning light is on when riding, the ABS may fail, please send it to the Zontes flagship store or dealer for repair.

---

## TCS system indicator “”

Lights up when the ignition turns to the “” position. It goes off at speeds of about 5 km/h (3 mph).

If it lights up while driving: (please see pages 1-5 for details).

## WARNING

· If the TCS warning light does not go off after reaching 5km/h, or if the warning light is on while driving, take special care to avoid side slip of the rear wheels.

---

## ATTENTION

· If the warning light does not work as described above, or if the warning light is on when driving, the TCS may fail. Please send it to the Zontes flagship store or dealer for repair.

---

## Oil level warning light “”

Lights up when connected to your phone's Bluetooth.

## ⚠ WARNING

· When the maintenance indicator light is on, it means that the motorcycle has traveled a certain mileage and needs to change the oil to maintain the engine, and continuing to drive the motorcycle without maintenance will damage the engine and transmission system.

· When the maintenance indicator light is on, please turn off the engine, check the oil level of the engine oil, make sure whether the oil level is correct and whether the oil needs to be changed.

## Dash Cam Indicator“”

Please check the subsequent DVR instructions.

## ⚠ ATTENTION

· After the motorcycle is turned on, it takes a certain amount of time to search for satellite signals for positioning, and the GPS is displayed in red at this time.

## Water Temperature Warning Light



After starting up, the water temperature is displayed in real time. When the temperature reaches 110°C, the water temperature indicator starts to alarm and the cooling system needs to be checked.

## Coolant temperature

Coolant temperature  
Approximate display range:  
60°C to 120°C;  
"---" is displayed below 60°C.

Between 110 °C and 120 °C: The coolant temperature indicator is on and the coolant temperature value is flashing.

The coolant high temperature indicator lights up and "120°C" flashes.

## Dash Cam Indicator

“ 999999 km ”

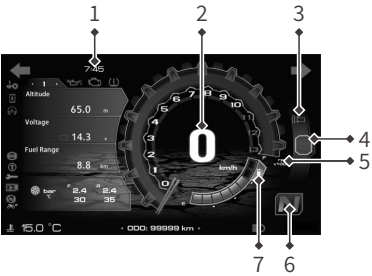
Total mileage.

## Dash Cam Indicator“ ”

Please check the subsequent DVR instructions.

# Instrument Panel

## Gauge Display



1. Clock
2. Speedometer
3. Heated handlebars "🔥" ★
4. mode "E/S"
5. Tachometer
6. Gear indicator light "N"
7. Fuel gauge "fuel"

Clock (24-hour system)

Speedometer

Tachometer

Heated handlebars "🔥" ★

The handlebar heating function has three different temperature heating levels, and the handlebar heating function can be used when the ambient temperature is low to improve driving comfort.

When the handlebar heating function is turned on by the handlebar button setting, the handlebar heating indicator displays the currently selected temperature range.

In order to avoid battery loss, do not use the handlebar to heat up for more than 10 minutes at idle speed, so as not to prevent the vehicle from starting.

### To operate the handle heater

1. Start the engine.
2. Short press the "🔥" function switch to turn on the heating handle function (cycle control).

Icon	Gears
🔥	First gear
🔥	Second gear
🔥	Third gear

### E/S Mode "E/S"

"E" indicates the economic mode, "S" indicates the sport mode.

### Gear indicator light "N"

This motorcycle has an international gear setting with 6 gears and one neutral gear.

### Gear indicator light "🛢"

The remaining oil level when the first bar starts flashing at the beginning: about 5L, and the low fuel level indicator lights up at the same time.

★ This function is only available for models with heated handle.

## Quick shift

The quick shift of this vehicle is one-way, and there is no need to pinch the clutch handle only when upshifting. The quick shift system senses the gear shifting action through the sensor, and when the sensor detects the gear shifting action, the system will be controlled by the ECU to make the gear immediately engaged so as to realize the gear shifting operation without the clutch.



1. Altitude
2. Voltage
3. Fuel Range
4. Tire pressure display

## Driver safety

(Wilderness mode display only): Displays the range from -999 meters to 9999 meters, beyond which the boundary values are displayed. After replacing the instrument or re-energizing the power supply of the whole vehicle, the altitude value needs to be slowly corrected during driving. Depending on the strength of the GPS signal, the correction time may be different. During the correction process, the altitude value will jump, which is a normal phenomenon.

## Aititude

When the engine is not started and detect voltage  $< 12.5V$ , it would display symbol flashing alarm (flashing frequency 1Hz,  $\geq 12.5V$  automatic release alarm). When the engine starts, the detection voltage  $< 13V$ , and the display symbol flashes the alarm (the flashing frequency is 1Hz, and the alarm is automatically released  $\geq 13V$ ).

If you find that the voltage is greater than 15V, you must stop using the vehicle immediately, and please hand it over to the Zontes flagship store or dealer to inspect the motorcycle.

## Cruising range

Indicates the mileage that can be driven on the remaining fuel. Calculations are made based on average fuel consumption and fuel volume.

## Tire pressure display

Tire pressure and temperature display bar.

# Instrument Panel



1. TRIP
2. AVG
3. MPG (avg)

## Subtotal mileage

### Average speed

Displays the average speed of the vehicle after the average speed reset. Display range: 0-299km/h; Initial display: "---" is displayed; When the total mileage is less than 0.2 km: "---" is displayed. Long press the "↶" back button on the main interface to reset the average speed.

### Instantaneous fuel consumption

shows the current fuel consumption, display range 0.0- 99.9L / 100km; At speeds greater than 5 km/h, the position of the average fuel consumption will show the instantaneous fuel consumption.

## Average fuel consumption

Displays the average fuel consumption after the subtotal mileage reset. Average fuel consumption will be calculated based on the values on the subtotal odometer. Display Range: 0.0-99.9L/100km, when the average fuel consumption is reset: display "---"; When you reset the subtotal odometer, the average fuel consumption is reset. On the main interface, press and hold the back button to reset the average fuel consumption.

Menu structure

Main interface	Level 1 menu	evel 2 menu	Level 3 menu	Level 4 menu
	Gauge settings	Clock setting	In-line calibration	
			Set manually	
		Bluetooth settings	Turn off Bluetooth	Turn on Bluetooth
			Mobile phone connection	
			Headset connection	
			Delete connection	
		Automatic headlights	Turn on	
			Turn off	
		Unit settings	The Metric System	
			Imperial Units	
		Language settings	Chinese	
			English	
		Backlight settings	1.....5gears	
			Automatic	
	Format switching	Athletics		
		Leisure		
		Wilderness		
		City		
		Screen casting		
	Vehicle Information	Vehicle information	Reset	Yes
		Maintenance information		
				No

# Instrument Panel

## Menu structure

Main interface	Level 1 menu	Level 2 menu	Level 3 menu	Level 4 menu
		Tire pressure setting	Tire pressure monitoring : [Turn on]	Tire pressure monitoring : [Turn off]
			Unit:[kPa]	Unit:[psi]
				Unit:[bar]
			Front-wheel learning	
			Rear wheel learning	
	DVR	Recording settings	Start recording	
			Only turn off the recording	
			Turn off recording (delete all recordings and photos)	
		DVR display	Foresight	
			Back-sight	
		DVR playback	Foresight playback	
			Back-sight playback	
			Take a photo	
	Ride control	QSS	Turn on	
			Turn off	
		ABS	Turn on the front and rear wheel ABS	
			Turn on the front wheels Turn off the rear wheel ABS	

Instrument Panel

## Clock Settings

Online calibration: automatically synchronize the time of GPS every time you turn on the computer, and manually set the year, month, day, hour and minute operation according to the local time: Enter the manual setting, set it in the order of "year", "month", "day", "hour" and "minute", when the value flashes, use " $\Delta$ " or " $\nabla$ " until the value you need is displayed, short press the OK button to confirm and switch.



## Bluetooth settings

Pairing: Before two Bluetooth devices can establish a connection to each other, they must recognize both. This process of mutual recognition is called pairing. Once the device is recognized, it will be stored and therefore must only be paired on first contact.

Pairing Prerequisites:

The device's Bluetooth function must be turned on; The device must be discoverable by other devices.



# Instrument Panel

## Unit settings

Switch between metric or imperial unit formats to facilitate your reading habits.



## Language settings

Change the system language.



## Backlight settings

You can choose one of the 5 backlight brightness levels or choose Auto Adjust (automatically adjusts brightness based on photosensor).



## Vehicle Information

Display ECU, PKE, LCM, ABS, DVR and tire pressure current faults and remaining service mileage, version number and other information.



## Key number “πO”

It means that the number of the key currently used corresponds to the key code in the Zontes smart APP, for example: the No. 1 key corresponds to the 【0】 key code in the APP; The No. 2 key corresponds to the 【1】 key code in the APP; And so on, each motorcycle can have up to 4 keys.

## Maintenance information

You can check the remaining maintenance mileage in the vehicle information, and short press OK in the remaining maintenance mileage option, you can choose to reset and enter the next maintenance cycle.



## Tire pressure information

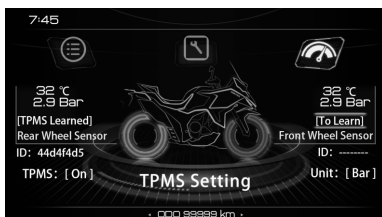
When the tire pressure monitoring setting is turned on, the tire pressure and temperature are displayed with "--" every time the vehicle is turned on, and the actual tire pressure value is not transmitted until the minimum speed of 30 km/h is exceeded for the first time

(The TPMS sensor only sends a signal to the vehicle after the minimum speed has been exceeded).

Tire pressure unit setting: short press the OK button to switch kPa/psi/bar units to facilitate your reading habits  
Tire Pressure Learning:

- (1) Short press " $\nabla$ " or " $\Delta$ " until the cursor falls on the middle bracket of the front wheel or rear wheel sensor, short press the OK button to display "[Learning]", and wait for the TPMS to send a signal to the vehicle;
- (2) Continue to inflate or deflate the front or rear wheels until the sensor ID and tire pressure and tire temperature are displayed, and success is displayed in parentheses, indicating that the learning is successful.

If the learning is unsuccessful or the data is abnormal, repeat the above operations.



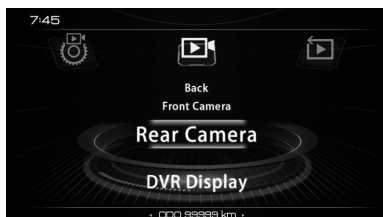
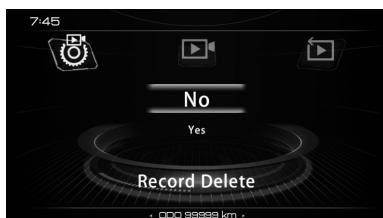
# Instrument Panel




## DVR

Short press the "↶" back button on the main interface, you can take a photo, take a photo before and after and store it, and you can view the captured photos in the DVR playback. You can choose to start recording, turn off recording only, and turn off recording (delete all videos and photos) from the recording settings, where turning off recording (deleting all videos and photos) will be formatted and stored, which will lose all videos and photos, which is irreversible.

The meter has built-in 128G EMMC storage, does not support memory card expansion, after starting recording, a video file is stored every 1 minute, when the storage is full, the new video file will automatically overwrite the old file.

You can view the current camera through the front and rear view in the DVR display, and calibrate the camera picture. Open the Zontes smart APP, scan the QR code of the projection interface and connect to the instrument successfully, you can download the video files and photos you need.



Operation	DVR status	Icon displays	Frequency of flashing	Icon
Start recording	Normal recording	Light is not on	-	
	Recording exceptions	red light flashes	1Hz	
Turn off recording (delete all recordings and photos)	Turn off recording	Light is on	-	
Capture	Take a photo of the front and back	Flash once	-	

## DVR fault code

Number	Fault codes	Description of the fault code
1	1001	The front camera is powered abnormally
2	1002	The rear camera is powered abnormally
3	1003	The front camera signal is abnormal
4	1004	The rear camera signal is abnormal
5	1005	Storage exceptions

# Maintenance

## First maintenance

The initial 1000 km maintenance is a must to keep the vehicle in the safest and most efficient condition. Ensuring safety is the owner/driver's obligation.

### WARNING

- Failure to perform proper maintenance before riding or failure to properly troubleshoot a problem could result in an accident resulting in serious injury or death.
- Always follow the inspection, maintenance recommendations and maintenance interval schedules provided in this Owner's Manual.
- If you are not familiar with vehicle maintenance, please have it serviced by a Zontes dealer.

## Maintenance safety

Please read the maintenance instructions before each maintenance and make sure you have the necessary tools, parts and skills. We cannot remind you of every hazard that may occur when performing maintenance. Only you can decide whether to perform maintenance repairs.

## Please follow these guidelines for maintenance:

- Turn off the engine and remove the key.
- Place the motorcycle on firm, level ground using the side stand or support it with the service stand.
- Wait for the engine, muffler, brakes, and other hot parts to cool before starting any operation, as this may result in burns.
- Start the engine only under specified circumstances and in a well-ventilated environment.

### DANGER

- Brake discs, brake calipers, and brake pads may become very hot during use. To avoid possible burns, allow the brake components to cool before touching them.

## Routine first inspection

The initial 1000 km inspection is a very important task. During this period, all engine parts have been run-in. Therefore, during this inspection, all parts should be readjusted, all fasteners should be tightened, and the engine oil contaminated by the wear debris of the parts should be replaced. Carefully carrying out the first 1000 km inspection will ensure that your motorcycle performs well and extend its service life.

## ATTENTION

- Pay attention to check each regular maintenance to see if it is done in full compliance with the instructions in this manual. The initial 1,000 km maintenance should be done in accordance with the methods described in this section. Pay special attention to the "Danger" and "Warning" in this section. Replacing inappropriate parts will cause the motorcycle to wear faster and shorten the service life of the motorcycle. When replacing parts for your motorcycle, please choose to use our company's original parts. Waste generated during maintenance, such as cleaning agents, waste oil, etc., should be properly disposed of to avoid polluting the environment.
- Waste generated during maintenance, such as cleaning agents, waste oil, etc., should be properly disposed of to avoid polluting the environment.

# Regular maintenance table

❶ Check (clean, lubricate, adjust or replace if necessary) Ⓡ:Replace Ⓣ:Fastening ★:Annotation

Item	Check before driving	Frequency*1						Annual Check	Regular replacement
		X1000km	X1000mi	1	5	10	15	20	
Muffler anti-scalding plate buffer					Ⓣ	Ⓣ	Ⓣ	Ⓣ	Ⓣ
Air filter (filter element)					Ⓣ	Ⓡ	Ⓣ	Ⓡ	
Clutch handle free travel					Ⓣ	Ⓣ	Ⓣ	Ⓣ	Ⓣ
spark plug						Ⓣ		Ⓡ	
Engine oil	Ⓣ			Ⓡ	Ⓡ	Ⓡ	Ⓡ	Ⓡ	Ⓣ
Oil filter				Ⓡ		Ⓡ		Ⓡ	Ⓣ
Throttle cable clearance					Ⓣ	Ⓣ	Ⓣ	Ⓣ	
Idle					Ⓣ	Ⓣ	Ⓣ	Ⓣ	Ⓣ
Radiator pipe					Ⓣ	Ⓣ	Ⓣ	Ⓣ	
Fuel pipe				Ⓣ					
Drive chain				Ⓣ	Ⓣ				Ⓣ
Brakes				Ⓣ	Ⓣ	Ⓣ	Ⓣ	Ⓣ	
Brake fluid hose					Ⓣ				Replace every 4 years
Brake fluid				Ⓣ	Ⓣ				Replace every 2 years
Brake pads wear	Ⓣ			Ⓣ	Ⓣ	Ⓣ	Ⓣ	Ⓣ	Ⓣ
Oil seals and bushings for wheels and sprocket seats	Ⓣ			Ⓣ	Ⓣ	Ⓣ	Ⓣ	Ⓣ	Ⓣ

★ Note 1

Replace every 4 years

Replace every 2 years

## Regular maintenance table

① Check (clean, lubricate, adjust or replace if necessary) ② Replace ③ Fastening ★ Annotation

Item	Check before driving	Frequency*1						Annual Check	Regular replacement
		X1000km	1	5	10	15	20		
		X1000mi	0.6	3	6	9	12		
Wheel spokes			①	①	①	①	①	①	
Front shock absorber					①		①	①	
Rear shock absorber					①		①	①	
Coolant	①		①	①	①	①	①		Replace every 3 years or 30,000 km
Rear fork anti-wear block				①	①	①	①	①	★Note 1
Muffler bolts and nuts			③		③	③	③	③	
Bolts and nuts in steering mechanisms			③	③	③	③	③	③	
Steering bearings				①	①	①	①	①	
Internal mechanism of faucet lock									Check, clean and lubricate every 10,000 km
Vehicle fasteners, bolts, nuts			③	③	③	③	③	③	
Air filter oil pipe			①	①	①	①	①	①	
Valve clearance (cold check) Enter: 0.1-0.22mm Exhaust: 0.2-0.33mm	①							Check and adjust every 40,000 km	①

★ Note 1: Clean and lubricate the chain every 500-1000 km, and check the upper and lower wear of the rear fork anti-wear block.

## Pre-drive inspection

If you do not inspect your motorcycle well before riding and do not properly maintain it, you will increase the chance of an accident and damage to your motorcycle. Always inspect your motorcycle before using it to make sure it is safe to operate. Refer to the Maintenance section of this Owner's Manual.

### Please check the following before riding a motorcycle:

#### Steering system

- Flexible steering
- No hindrance to movement
- No play or looseness

#### Accelerator

- Correct throttle cable clearance
- Smooth operation and smooth throttle return

#### Muffler

- It is forbidden to disassemble the muffler tail plug, otherwise it will change the power characteristics of the whole vehicle, affect the running quality and durability of the engine, and increase the driving noise, so it is forbidden to disassemble.

#### Shock absorbers

- No foreign matter attached to the surface, no oil leakage, smooth operation

## Brakes

- The brake handle operates normally
- The brake fluid is above the "LOWER" line of the brake cylinder
- There is no "spongy feeling" of poor braking
- No dragging (braking)
- No brake fluid leakage
- The wear of the brake disc/pad cannot exceed the specified range

## Fuel

- Sufficient fuel for the planned distance

## Engine lubricant

- **Check if the oil level is sufficient. Follow steps 6-15. The oil level should be between the upper and lower limits of the oil window.**

## light

- The indicator lights of the headlights, taillights/brake lights, instrument lights, turn signals, front position lights, and license plate lights can light up normally

## Indicator Lights

The high beam indicator and turn signal indicator can light up normally.

## Horn

- Functioning normally

## Brake switch

- Functioning normally

## Flame rollout switch

- Normal operation

## Side stand/ignition interlock switch

- Normal operation

### ATTENTION

- Failure to be familiar with the control components may cause loss of vehicle control, resulting in an accident or personal injury.
- Please read the user manual carefully to familiarize yourself with all the control components. If there are control components or functions that you do not understand, please consult a Zontes dealer.

### WARNING

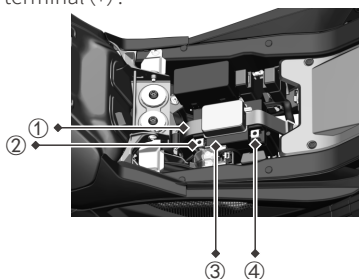
- Installing non-genuine Zontes parts may make your motorcycle unsafe, which may result in an accident in which you are injured or even killed.
- Always use Zontes original genuine parts or replacement parts designed and certified for your motorcycle.

# Maintenance

## Lithium-ion battery

The battery is located under the driver's seat. Please remove the battery in the following order:

1. Open the seat and turn off the motorcycle power switch.
2. Remove the seat and untie the battery strap
3. Remove the black protective cap and remove the negative terminal (-), remove the red protective cap and then remove the positive terminal (+) .



- ① Battery strap
- ② Battery positive cable (red)
- ③ Battery
- ④ Battery negative cable (black)

## New battery startup

Battery Installation:

1. Check the appearance of the battery before installing it. The outer shell should be free of scratches and cracks. The battery cover should be well sealed without leakage. The terminals should not be skewed or deformed.

2. Connect the positive (+) wire (red wire) first, then the negative (-) wire.  
Note: Do not connect the positive and negative poles in reverse, otherwise it will damage the voltage regulator rectifier and other electrical components.
3. After tightening the bolts, apply butter or Vaseline on the bolts, nuts and terminals to prevent rust and poor contact.
4. Put the battery into the battery box and secure it with a strap, and check that the battery does not shake.

## ⚠ ATTENTION

- When re-installing the battery after disassembling it, you need to straighten the surrounding wiring harnesses, especially the positive position of the battery and other red wires to avoid touching the frame and metal such as the battery, and the battery needs to be completely installed in the battery box.
- When re-installing the battery, starting or riding the whole vehicle with power failure, battery dormancy restart, abnormal idling, re-plugging the fuse and other similar situations, pay attention to resetting the individual hardware of the electronic injection. The steps are: turn on the electric door lock switch and the engine shutdown switch, start the engine in neutral by pressing the clutch, turn off the engine shutdown switch after 10 seconds, turn on the engine shutdown switch after 10 seconds, and repeat it twice.

## Cleaning the battery

1. Remove the battery.
2. If the terminals have just started to corrode and are covered with a white substance, clean them with warm water and wipe them clean.
3. If the terminals are severely corroded, use a wire brush or sandpaper to clean and polish. Wear safety glasses.

## Replace the battery

When replacing a battery, you should confirm the battery model and verify whether it is consistent with the original battery model. The battery specifications are relatively matched when the motorcycle is designed. If a different type of battery is used, the performance and life of the motorcycle may be affected, and it may cause circuit failure.

## Use and Maintenance

1. Each electric start time should not exceed 5 seconds. If it fails to start for several consecutive times, check the fuel supply system and the starting and ignition systems.
2. The following situations will cause the battery to be over-discharged or under-charged, thereby shortening the battery life:
  - Frequent electric starting;
  - Short riding time and short driving distance;
  - Long time without ignition;
  - Adding additional electrical components, such as high-power spotlights, audio, GPS and other electrical equipment.

3. When the starter motor is weak, the light is dim, the horn sound is hoarse, and the instrument screen is black and restarts after ignition, the battery should be recharged immediately.
4. When the motorcycle is not used for a long time, the battery should be removed and stored separately, or the battery connection cable should be disconnected. Please recharge the battery before the motorcycle stops using it, and recharge it once every three months.

## ATTENTION

1. Do not attempt to open or modify the battery in any way.
2. Avoid using or storing the battery near high temperatures or open flames, otherwise it may damage the battery and the vehicle.
3. Do not install the positive and negative poles of the battery incorrectly, otherwise it may damage the battery and the vehicle.
4. Please use the matching screws and nuts
5. Firmly connect and install the battery terminals, otherwise it may damage the battery and the vehicle.
6. During use or charging, if the battery has odor, heat, deformation, fading of the shell, and any other abnormal conditions, please stop using it and immediately remove the battery from the vehicle.

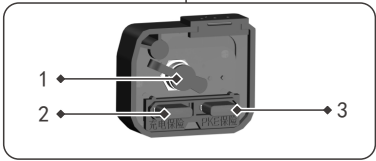
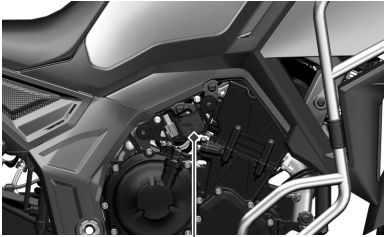
7.The installation of external devices such as anti-theft devices, GPS, fog lights, etc. will have a certain impact on the battery and the vehicle circuit.

You need to select qualified brand products and connect them to the reserved interface of our company. Do not change the wires privately, otherwise it may cause the abnormal operation of our vehicle circuit system and cause the battery to over-discharge and other defects.

8.Do not damage the battery. The electrolyte in the battery is harmful to human skin and eyes. Avoid splashing on the skin, eyes and clothes. Once it comes into contact with the skin and eyes, please wash it immediately with plenty of clean water and go to the hospital for treatment.

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## Chargingport



1. Battery charging DC interface
2. Charging fuse
3. PKE fuse

### Charger Instructions

When the vehicle is not ridden for a long time or the battery cannot be started due to other reasons, please follow the steps below to recharge the battery:

1. Remove the charging port cover on the right side of the vehicle.
2. Plug the DC output plug of the charger into the DC charging port of the battery.
3. Plug the charger input AC socket directly into the household 110-220V power supply. When the charger lights up green, charging is complete and the charger is unplugged.



Motorcycle starter battery charger

### LED Indicator Lights

Red light	Charging Mode
Green light	Fully charged

### ⚠ ATTENTION

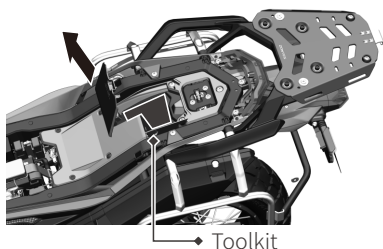
• Please purchase a professional charger from Zontes, which is available in Zontes Mall or dealers; it is forbidden to use other chargers that have not been inspected and qualified to charge the battery.

## Toolkit

Short press the "SEAT" button on the left handlebar to open the seat, then open the battery box storage cover to see the tool kit location.



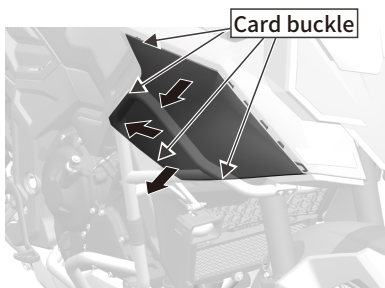
Short press



Toolkit

## Left and right surround panels (quick release)

The left and right surround panels are quick-release parts. Open the upper and lower clips of the panel (first lower and then upper), and finally push the panel toward the rear of the vehicle to complete dis-assembly.

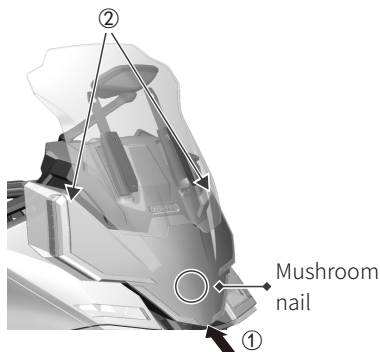


Card buckle

There are buckles on the four sides indicated by the arrows. First buckle the buckle on the bottom, then buckle the buckles on the remaining three sides in sequence, and then pull out the panel diagonally in the direction of the arrow to complete the dis-assembly.

## Hood panel(quickrelease)

The hood panel is a quick-release part; ① first use a flat-blade screwdriver to pry open the mushroom nails along the dis-assembly direction; ② then use a plastic pry bar to pry off the buckles, and then pull open the remaining buckles along the dis-assembly direction to complete the dis-assembly.

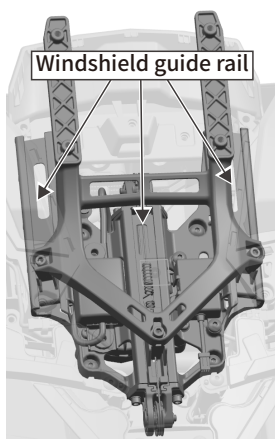


Mushroom nail

## Windshield component repair

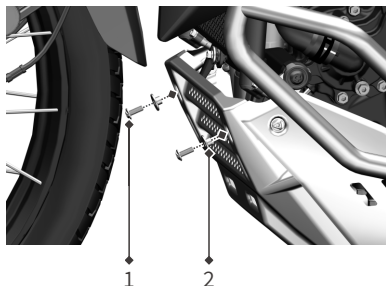
Check the windshield lifting function every 5000km:

- Check if the windshield is stuck/dry grinding or making abnormal noises;
- Check if there is too much dust and debris on the guide rails, and clean and add grease in time;
- Grease model: PI-SAM 371C.



## Engine guard removal

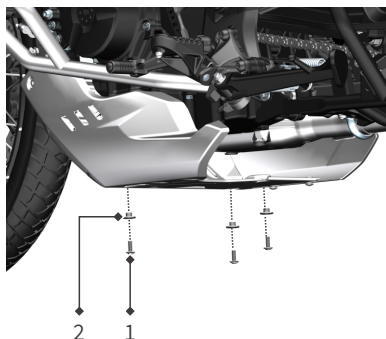
1. Lay down the main support and stabilize the vehicle. If the vehicle has been started in a short time, please leave the vehicle for a while before performing the following operations.



1.M6×16 bolt

2.Flanged bushing

2.Use a T25 plum wrench to remove the two M6×16 bolts (1) on the front of the engine guard, and remove the flanged bushing (2).



3. Use a T25 plum wrench to remove the three bolts (1) and the flanged bushing (2) of the engine guard, and remove the engine guard.

## Muffler

### Muffler maintenance and care

The muffler of this vehicle is equipped with a catalyst, which can effectively reduce the emission of harmful substances into the atmosphere during the operation of the motorcycle.

To make this device work effectively, please refer to the regular inspection table in the "Maintenance" section. To increase the service life of the muffler and avoid malfunctions such as muffler rust and reduced catalyst conversion efficiency caused by abnormal use and maintenance.

**Please be sure to comply with the following:**

- It is forbidden to throttle at high speed for a long time.
- It is forbidden to drive at low speed with heavy load for a long time.
- It is forbidden to add anti-rust oil or engine oil to the muffler.
- It is forbidden to directly rinse the muffler with cold water when the motorcycle is hot.
- It is forbidden to coast with the engine turned off.
- It is forbidden to use inferior engine oil.
- Use unleaded gasoline.
- Clean the dirt on the surface and tail of the muffler in time.
- Keep the engine in good running condition, and perform regular maintenance and inspection. Avoid poor engine combustion, which may cause secondary combustion of exhaust gas in the exhaust pipe and cause catalyst sintering failure.
- When installing the muffler, be sure to install the muffler gasket correctly.
- When installing the muffler decorative cover, be sure to install heat insulation pads at each screw point to avoid the muffler high temperature from burning the decorative cover or causing fire hazard.

## Spark plug

### Check the spark plugs

Spark plugs are important parts and should be removed and inspected regularly according to the maintenance schedule. The condition of the spark plugs can indicate the condition of the engine. The ceramic insulator around the center electrode of the spark plug should be light brown (the ideal color for normal vehicle operation). If the spark plug has a significantly different color, it may be caused by poor engine operation.

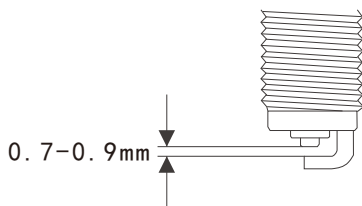
If the spark plug electrode is corroded, has excessive carbon deposits or other deposits, it should be replaced as soon as possible.

### Zontes specified spark plug:

TORCH/BN8RTIP-8

### Spark plug replacement

1. Use a hard iron wire or steel needle to remove the carbon deposits on the spark plug, and then use a feeler gauge to adjust the spark plug gap to between 0.7 and 0.9 mm.
2. When removing the attached carbon deposits, you need to observe the two colors at the porcelain tip of the spark plug at the same time. This color tells you whether the standard spark plug is suitable. The ignition area of a normal spark plug that has been used is light brown. If the insulator is burnt white and the electrode is burned, it is more appropriate to use a cold type spark plug.



### Spark plug gap:

0.7-0.9mm

### Installing the spark plug

Clean the spark plug washer contact surface and wipe off any dirt on the spark plug threads.

### Locking torque:

Spark plug:  
13N.m

### ⚠ WARNING

- Incorrect installation of the spark plug can damage the engine cylinder head. Installing the spark plug with excessive torque or causing the threads to be twisted can also damage the engine cylinder head, so install the spark plug carefully. If you do not have a torque wrench when installing or replacing a new spark plug, tighten it 3/8 turns (135°) after tightening it until there is resistance. If you use an old spark plug, tighten it 1/12 turn (30°) after tightening it until there is resistance, but the spark plug should be tightened to the specified torque as much as possible.

## ⚠ WARNING

- Dirty substances can enter the engine through the spark plug mounting hole and damage the engine. After removing the spark plug, the spark plug mounting hole must be covered with non-woven fabric or other clean soft fabric that will not shed or leave residue.
- Spark plugs with a calorific value lower than BN8RTIP-8 are prohibited.

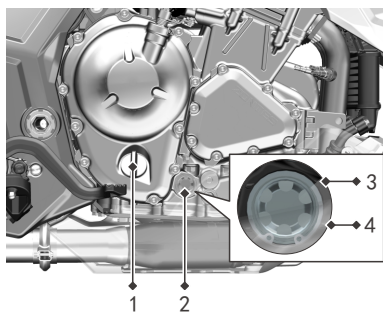
## Engine oil

Whether the engine can be durable, it is important to choose high-quality engine oil and replace it with new oil regularly. Regularly checking the oil level and changing the oil regularly are two important tasks that must be performed in the maintenance project.

### Check the engine oil level

Follow the steps below to check the engine oil level.

1. Park the motorcycle on a level surface and raise the main stand or keep the vehicle in an upright position.
2. Start the engine and run it at idle speed for 3-5 minutes.
3. Turn off the engine and wait for 3-5 minutes.
4. Keep the vehicle upright and observe the oil, check the window. The oil level should be between the minimum and maximum oil level marks.

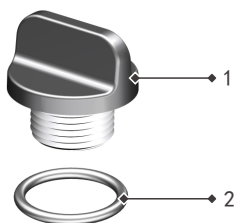


1. Engine oil filler cap
2. Engine oil observation window
3. Maximum oil level line
4. Minimum oil level line

## ⚠ ATTENTION

· The engine oil level should be between the upper and lower limits.

5. If the engine oil is found to be below the minimum oil level, remove the engine oil filler cap and add oil.
6. Check whether the engine oil filler cap O-ring is damaged. If damaged, replace it in time.



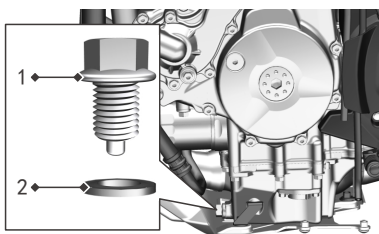
1. Engine oil filler cap
2. O-ring

## Change engine oil and oil filter

When the maintenance cycle is reached, change the engine oil. Replace the oil should be carried out in the case of the heat engine (idling for 3-5 minutes), so that the old oil can be discharged more thoroughly. The steps are as follows:

1. Park the motorcycle on flat ground with the main frame. Start the engine and idle for 3-5 minutes, turn off the engine and wait 3-5 minutes.
2. Place an oil pan under the engine drain bolt to collect the used oil.
3. Remove the engine fuel cover and O-ring, use a wrench to remove the engine oil drain bolt and gasket, and release the old oil.

It is forbidden to start or run the engine during the oil discharge process, and it must be ensured that there is enough oil in the engine before starting the engine.



1. Engine drain bolts
2. Gaskets

# Maintenance

4.Reinstall the oil drain bolt and new washer (clean the thread before installation), and tighten the oil drain bolt according to the  $40\pm 3\text{N.m}$  torque standard using a torque wrench.

## ⚠ ATTENTION

· It is recommended to use a funnel when refueling

## ⚠ WARNING

· If the prescribed oil is not used, it may damage the engine.

## ⚠ DANGER

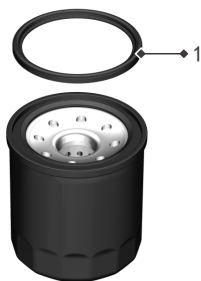
· When the engine is running, it is forbidden to open the fuel filler nut to prevent the high-temperature oil from splashing out and injuring people.

5.Place an oil basin underneath the oil filter.

6.Remove the oil filter with the filter wrench.

7.Use a clean non-woven fabric to wipe off the residual oil and impurities.

8.Install the new oil filter: Before installation, drop a small amount of oil into the new machine filter, and apply a thin layer of engine oil on the sealing ring to tighten the oil filter.



1.Oil filter seal ring

①Add oil from the engine fuel hole

## Tightening torque:

Engine oil drain bolt:  
 $40\pm 3\text{N.m}$

Oil filter  
 $20\pm 2\text{N.m}$

②After checking the O-ring of the engine fuel filler cap, install the oil filter cap.

③Run the engine at different speeds for 3 minutes. When running, check whether the disassembled parts are leaking.

## Engine oil recommendation

Engine oil (SN10W—50/1L)

## Engine oil change capacity

Replace the oil:  
3.0 L

Replace the oil filter:  
3.4 L

**⚠ ATTENTION**

• Before starting the engine, be sure to wipe off the leaking oil.

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9. Let the engine idle for 5 minutes, then turn off the engine and stop for 3 minutes, and check the oil level of the engine oil through the oil level marking line in the oil window (ensure that the oil is within the engraved line of the window). Check again for leaks.

**⚠ ATTENTION**

• Before installing the oil filter, please carefully check whether the seal ring is correctly installed in the groove, and confirm whether the seal ring is damaged. If there is damage or cutting edge, it should be replaced in time, otherwise it will lead to oil seepage.

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# Maintenance

## Coolant (antifreeze)

### Recommended coolant:

Mobilube Antifreeze

### Total amount of coolant (antifreeze):

1900ml (250ml with auxiliary water tank)

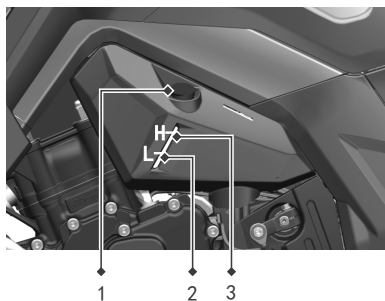
## Cooling liquid

While the engine is cooling, check the coolant level in the storage tank.

Place the motorcycle on a stable, flat ground.

Lift the main bracket to keep the motorcycle upright.

Check whether the coolant level in the storage tank is between the upper and lower level marks.



1. Coolant sub tank cover

2. Bottom Level Mark (L)

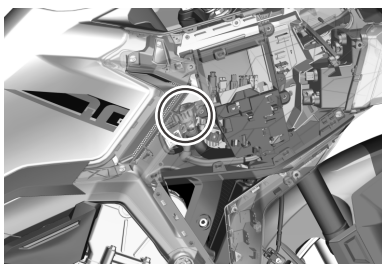
3. Maximum liquid Level Mark (H)

4. If the total amount of coolant is below the bottom level mark (L), remove the coolant sub-tank cover.

## ⚠ ATTENTION

• Only remove the coolant sub-tank cover. Do not remove the tank cover when the engine is very hot.

5. Add antifreeze between the liquid level line.



## Coolant main tank cover

## ⚠ ATTENTION

• If water needs to be added, only distilled water can be used as a temporary substitute. Other water may cause adverse effects such as corrosion of the engine cooling system.

6. Replace the coolant sub-tank cover.

## ⚠ ATTENTION

· Re-add antifreeze liquid to the main water tank: check to ensure that all pipes and pipe hoses are properly assembled, disassemble the right enveloping surface cover and fog lamp controller, remove the water inlet assembly and open the water inlet cover, and slowly add antifreeze liquid to the liquid level and the water inlet; Start the vehicle, idle, instrument temperature two boxes can be appropriate fuel door about 3000r/min, continue to add antifreeze in the middle, when there is obvious temperature in the middle of the main water tank, the water port cover is tight, continue to idle for about 1min and then turn off, after the cold motorcycle to open the cover to fill the antifreeze, complete the main water tank antifreeze filling.

## Engine coolant (antifreeze)

A coolant (antifreeze) suitable for aluminum radiators consisting of a coolant (antifreeze) concentrate mixed with distilled water in a certain proportion. If the outdoor temperature does not reach below the freezing point of the coolant (antifreeze), the coolant (antifreeze) can be used. Add or replace coolant (antifreeze Liquid), please use a glycol based coolant (antifreeze) suitable for aluminum radiators Liquid).

## ⚠ DANGER

Swallowing or inhaling coolant (antifreeze) can be harmful to the human body. Do not eat, drink or smoke while using. After each operation, wash hands, face and any exposed skin thoroughly. If swallowed by mistake, contact a poison control center or hospital immediately. If inhaled, immediately go to a ventilated environment with fresh air; In case of eye splash, immediately rinse eyes with plenty of running water and seek medical attention. Keep children and pets away from coolant (antifreeze).

## Coolant change

The coolant should be replaced regularly according to the regular maintenance table in the user manual. Please give this work to ZONTES dealer to replace the coolant.

# Maintenance

## Air cleaner

The air filter should be replaced regularly according to the regular maintenance table in the user manual. Please give ZONTES flagship store or dealer to replace the air filter.

### Driver safety

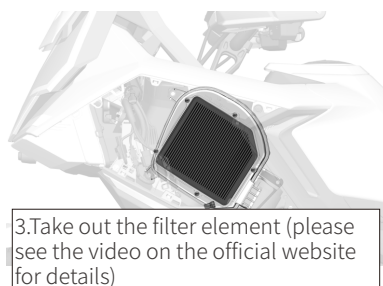
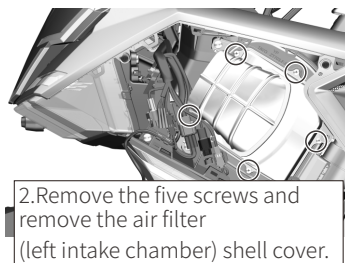
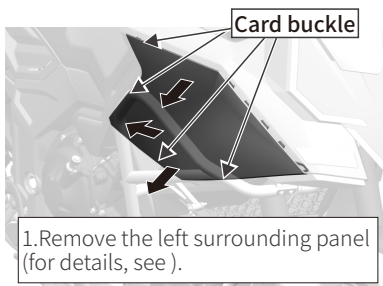
The air filter is located on the inside side of the left enclosure panel. If the air filter is blocked by dust, it will increase the intake resistance, decrease the output power, and increase the fuel consumption. Follow the steps to check the clean air filter.

### ⚠ WARNING

- Under normal circumstances, every 10000km need to replace or maintain the air filter element, the air filter is equipped with rapid maintenance function, rapid maintenance can continue to travel 4000km and then continue to maintain or replace the filter element.

- If you drive in dusty conditions, you should increase the frequency of cleaning or replacing the filter element.

- It is dangerous to run an engine without an air filter. Without the obstruction of the internal filter element of the air filter, the engine flame will be reversely sprayed from the engine to the air filter intake chamber. Dirt can get inside the engine and cause damage to the engine. Do not run the engine without an air filter element.



### ⚠ ATTENTION

- Observe the removed filter element and blow the pollutants from the clean side with a high-pressure air gun. If there is serious pollution, damage must replace the filter element.

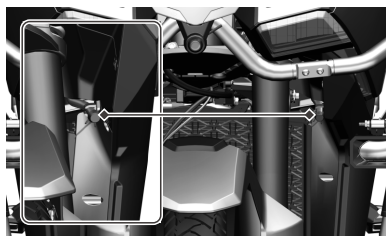
**⚠ ATTENTION**

•If the filter element of the air filter is installed incorrectly, dust will bypass the filter element and enter the engine, which will damage the engine. Make sure the filter element is installed in the correct position. In addition, when washing the motorcycle, do not let water into the air filter, if there is water into the air filter, you can remove the oil pipe, be sure to ensure that there is no water in the air filter before using the motorcycle.

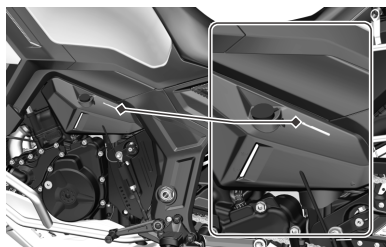
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## Oil drift pipe

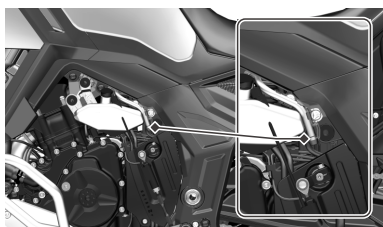
Air filter oil pipe inspection should be in accordance with the regular maintenance table in the user manual, regular inspection and discharge of waste oil. This work, please hand over to ZONTES flagship store or dealer to check the air filter oil pipe.



1.As shown in the figure, the oil pipe is placed in the left air inlet cavity. Remove the circlip with needle-nose pliers, pull out the plastic plug, release the waste oil, and then install it back to the original state in the reverse order after completion.



2.The position shown in the figure is the observation hole for the oil level of the air filter (when there is oil in the pipe, it should be placed on the side Oil).



3.Remove the left cover of the auxiliary water tank (refer to the steps for removing the auxiliary water tank), remove the circlip with needle-nose pliers, pull out the plastic plug, release the waste oil, and then install it back to the original state in the reverse order.

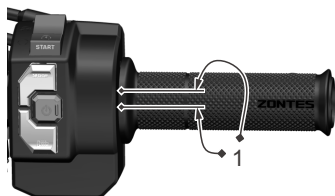
## Engine idle check

Check engine idle speed, if necessary, please go to ZONTES dealer to check and debug.

### Engine idle speed:

1500±100 r/min

## Check throttle grip free clearance



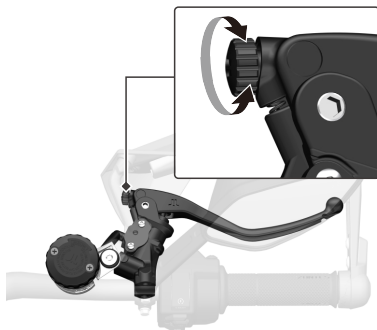
1. Throttle grip free clearance

### Throttle grip free clearance:

2.0-4.0mm

## Adjust brake handle Angle

Brake handle Angle adjustment bolt



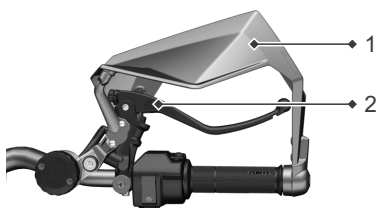
The distance between the brake handle and the throttle grip can be adjusted by turning the brake handle adjustment bolt.

Adjustment method:

1. Turn clockwise to increase the distance, counterclockwise to vice versa.
2. After adjustment, check whether the brake handle can operate normally before riding.

### ⚠ ATTENTION

- Adjust the brake handle to the appropriate position to avoid interference between the brake handle and the hand guard.



1. Hand guard
2. Brake handle

1. No brake handle free clearance  
Brake handle has no free clearance, if there is free clearance, please hand to ZONTES flagship store or dealer to check the brake system.

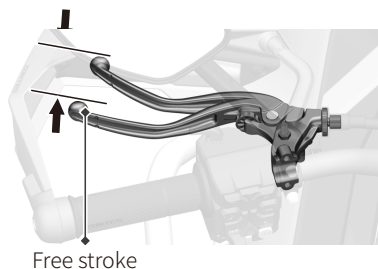
# Maintenance

## ⚠ DANGER

When operating the brake handle, if there is a soft or spongy feeling, it means that there is air inside the liquid brake system. Please hand it to ZONTES dealer or flagship store to repair the air discharged from the brake system before riding. If there is air inside the braking system, it will reduce the braking effect and cause the motorcycle to lose control of the accident.

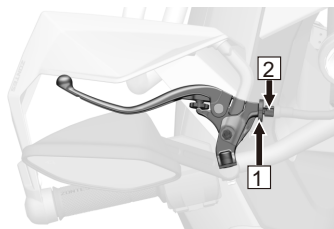
## Check the free clearance of the clutch handle

Measure the free clearance of the clutch handle as shown in the figure.



### Clutch handle free travel:

10-15mm



Regularly check the attention of the clutch handle when the gap is needed, adjust according to the following procedures:

1. Loosen the lock nut ①.
2. Rotate the adjusting nut ② to.
3. Tighten the lock nut ①.

(Note: Check whether the clutch cable is bent or damaged. If necessary, please send to ZONTES special repair shop for replacement; Lubricate the clutch cable with commercially available cable oil to prevent premature wear and corrosion.)

## ⚠ ATTENTION

- If the above specified free clearance cannot be reached, or the clutch cannot be operated, please check the clutch at the ZONTES flagship store or dealer.
- Incorrect free travel adjustment can cause early clutch wear

## Side stop bracket



### Side stop bracket

When the side stop frame is supported, if the clutch handle is not tightly held and the transmission is not in neutral, the side stop frame flout switch will cut off the power supply and the engine will stall.

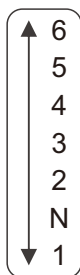
### **⚠ ATTENTION**

- Check that the side supports operate freely. If the side bracket operation is stiff or "squeaky", clean the pivot area and lubricate the pivot bolt with clean lubricating oil.
- Check the spring for damage or loss of elasticity.

# Maintenance

## Shift level

The motorcycle is equipped with a six-speed gear transmission, press down or up the shift lever to change gear, please reduce the speed or increase the engine speed before changing to the lower gear; Increase the speed or reduce the engine speed before switching to higher gear. This prevents unnecessary wear on drivetrain components and rear tires.



## ⚠ WARNING

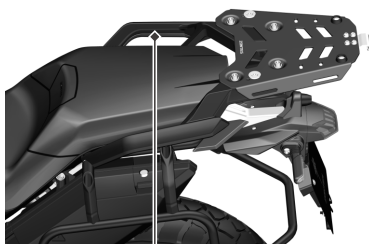
•When the position is in neutral and the neutral indicator is on, slowly release the clutch handle to confirm whether the position is really in neutral.

## Rear armrest (rear shelf)

Do not exceed the maximum load limit.

### maximum load:

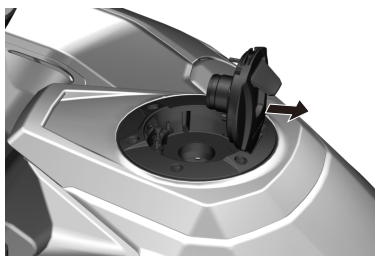
10 kg



Rear armrest  
(rear shelf)

## Fuel tank cap

The fuel tank is located in front of the cushion. When opening the outer fuel tank cover, confirm whether the engine flout switch is off. The vehicle must be powered on to open the fuel tank cover. Button the small cover to open the fuel tank cap.



### Fuel type:

Unleaded gasoline only

### Fuel octane rating:

Your motorcycle is designed to use 9 or more Designed for a high research octane number (RON).

### Fuel tank capacity

22L (Oil consumption: 5.0 L/100km)

## ⚠ DANGER

- Do not overfuel, so as not to spill the fuel to the high-temperature engine. The height of the oil level should not exceed the bottom of the fuel tank oil port, otherwise the fuel will overflow after thermal expansion, and will damage the motorcycle parts.
- Turn off the engine when adding fuel, make sure the flameout switch is off, and do not approach the open flame.
- Take some precautions when adding fuel, otherwise it will cause fire or inhale fuel steam. When refueling, do it in a ventilated area. Make sure the engine is turned off, avoid fuel spills, prohibit open flames, and ensure that there are no heat sources or fire sources around. Avoid inhaling fuel vapor. Keep children and pets away when filling up with fuel.

## ⚠ ATTENTION

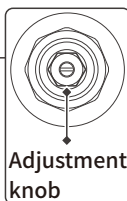
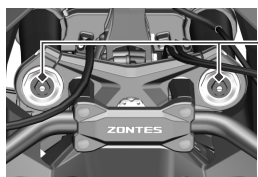
- Do not wash the fuel tank cover with high pressure water when washing the motorcycle to avoid water entering the fuel tank.
- If the fuel tank cap is stuck and cannot be opened, press it down hard, and try to open it after the vehicle is shut down and restarted.
- Do not touch the muzzle of the oil gun to the bottom shell of the fuel tank when adding fuel to avoid damage to the fuel tank and oil leakage.

## Adjust the front suspension system

### Spring preload force

The spring preload adjustment knob can be turned using a 14 socket wrench. The standard position is to turn the knob counterclockwise to the end and then clockwise 4 turns.

The adjustment range of the spring preload is 10 turns, and the clockwise rotation can increase the spring preload (change Hard), counterclockwise rotation can reduce the spring preload force (soft).



### ⚠ ATTENTION

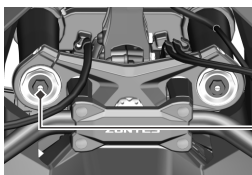
· Do not turn the adjustment knob beyond its limit, and the preload of the left and right shock absorbers should be adjusted to the same position.

### Compression damping adjustment

The front shock absorber recovers the damping adjustment knob, which can be turned with a flat-head screwdriver.

The adjustment range is 4 turns. The standard position is to turn the knob clockwise to the end and then turn it counter-clockwise 2.75 turns.

Clockwise rotation increases the recovery damping (hardening), and counterclockwise rotation decreases the recovery damping (Becomes soft)

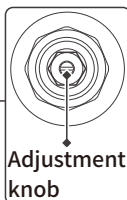
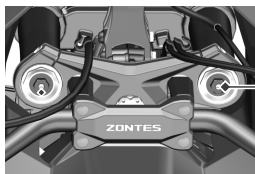


### ⚠ ATTENTION

· Do not turn the adjustment knob beyond its limit.

### Restored damping adjustment

The front shock absorber has restored the damping adjustment knob, which can be rotated with a flathead screwdriver, and the adjustment range is 4 turns, and the standard position is to turn the knob clockwise all the way to the bottom, and then rotate it counterclockwise 1.75 times. Rotate clockwise to increase recovery damping (stiffening), and counterclockwise to decrease recovery damping (Soften).



### ⚠ ATTENTION

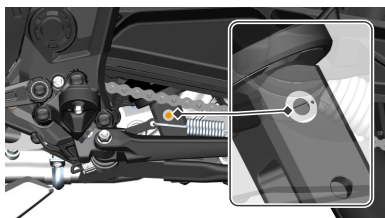
- Do not turn the adjustment knob beyond its limit.

## Adjust the rear suspension system

### Rear shock absorber recovery damping adjustment knob

The rear shock absorber restores the damping adjustment knob, which can be rotated using a flat-head screwdriver. The adjustment range is 70 stops. Since the damping force at the factory needs to be set in a fixed range to ensure the performance of the shock absorber, each shock absorber is tested and adjusted, so the damping adjustment knob is not fixed in the factory position. It is recommended that you draw a mark near the knob with a marker and restore the knob to its factory position (align the mark line) before adjusting it.

Rotate clockwise to increase recovery damping (stiffen), counterclockwise to decrease recovery damping (soften)



### Compress

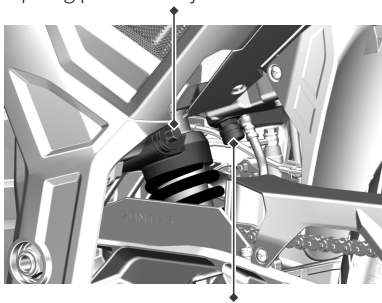
Rear shock absorber compression damping adjustment knob, manual rotation, adjustment range of 15 stops. The standard position is to turn the knob counterclockwise to the end, then turn it clockwise for 7 stops. Clockwise rotation increases the compression damping (hardening) and counterclockwise rotation decreases the compression damping (Becomes soft).

### Spring preload force

The spring preload adjustment knob can be rotated using a 14-gauge opening or a box wrench, and the adjustment range is 15 turns. The standard position is to turn the knob to the end counterclockwise and then clockwise 1.5 turns.

Turn clockwise to increase the spring preload(hardening), counterclockwise rotation can reduce the spring preload force (softening).

### Spring preload adjustment knob



Shock absorber compression damping adjustment knob

## Suspension Adjustment Recommendations

	Function settings	Riding alone	Suspension Adjustment Recommendations		
			Carry three boxes	Carry passengers	Carry passengers and three boxes
Front suspension	Preload	4 turns (10 turns in total)	4 turns	4 turns	4 turns
	Restoration damping (R)	1. 75 turns (4 turns in total)	1. 75 turns	1. 75 turns	1. 75 turns
	Compression damping (C)	2. 75 turns (4 turns in total)	2. 75 turns	2. 75 turns	2. 75 turns
	Preload	1. 5 turns (15 turns in total)	4 turns	6 turns	10 turns
Rear suspension	Restoration damping	19 gears (of 70 gears)	17th gear	15th gear	12th gear
	Compression damping	8 gears (of 15)	6th gear	6th gear	5th gear
Remark	<ul style="list-style-type: none"> <li>• The spring preload of the front and rear suspensions is the number of turns clockwise from the fully counterclockwise position, clockwise to increase the preload and counterclockwise to decrease the preload.</li> <li>• The damping force of the front and rear suspensions is the number of counterclockwise turns from the fully clockwise position, clockwise to increase the damping force and counterclockwise to decrease the damping force.</li> </ul>				
	The factory damping gear of the rear shock absorber is not consistent, and the factory gear number of the vehicle should be recorded before adjustment.				
	Set the compression amount when the front and rear suspension systems are balanced: the front shock absorber is compressed by 50mm, and the rear shock absorber is compressed by 26mm.				
	Adjustment sequence: first adjust the pre-tightening force of the spring to balance the front and rear suspension systems when sitting, and then adjust the damping force appropriately.				
	The first 1000 km of the vehicle mileage is the running-in period of the suspension system, during which it is recommended not to adjust.				
	The above is for reference only, please adjust according to the specific situation.				

## ATTENTION

- Do not turn the regulator beyond its limit.
- High pressure nitrogen gas is contained in the rear shock absorber damping unit. Do not attempt to disassemble, repair, or improperly dispose of dampers. Please refer to ZONTES flagship store or dealer repair.

## Transmission chains

This model is equipped with a circulating transmission chain made of special materials. When it is time to replace the transmission chain, please let flagship store or dealer of Zontes to deal with. Check and adjust the transmission chain of the motorcycle every day before driving. Follow the method below to check the maintenance.

## DANGER

- In order to ensure safety, the inspection and adjustment of the transmission chain should be done in advance before driving.

### Check the transmission chain

When checking the transmission chain, check for the following problems:

- Loose pin shaft.
- Whether the gear teeth are broken or damaged.
- Links that do not rotate flexibly.
- Excessive wear.
- The chain is adjusted improperly, and the left and right scale marks of the rear flat fork are inconsistent.
- Dry, heavily rusted or heavily soiled.

Whether the chain has reached the end of its service life.

## ⚠ WARNING

•If you find any of the above problems, please contact the flagship store or dealer of Zontes for repair.



Good shape



Shape wear

## ⚠ ATTENTION

•When inspecting or replacing the transmission chain, the wear of the main and slave drive sprockets and the rear flat fork wear block should be checked, and they should be replaced at the same time if necessary.

## Cleaning and lubrication of transmission chains

Clean and lubricate the transmission chains regularly as follows:

1. Remove dirt and dust from the chain.
2. Wash the chain with sealing chain cleaner or water and mild detergent, and use a fine soft brush to clean the dirt and dust on the surface of the oil seal.
3. Wipe off water and mild detergent and dry the chains.
4. Use special chain oil for motorcycle sealing chains to lubricate oil seals, rollers and inner and outer chain plates.

5. After fully lubricating the chain, wipe off the excess chain oil and let it stand for more than half an hour to allow the chain oil to fully penetrate and lubricate.

6.Keep the chain lubricated.

## Adjustment of the transmission chain

Adjust the slack of the transmission chain to the appropriate range. Increase the frequency of adjustment of the transmission chain according to the driving conditions.

## ⚠ WARNING

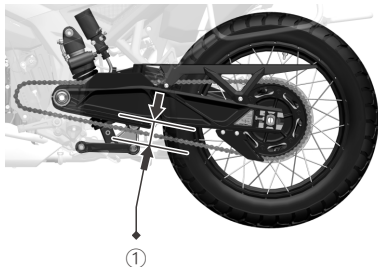
•The looseness of the transmission chain is too large. If the chain falls off, the engine may be damaged, or the rear fork is cut by the chain with too large looseness and high-speed movement, resulting in deformation or breakage. Please check and adjust the looseness of the chain when using the motorcycle. Adjust the transmission chain of the double rocker arm according to the following steps:

# Maintenance

## Check the tightness of the transmission chains

Adjust the slack of the transmission chains to the appropriate range. Check the chain tightness before each driving and adjust it if necessary.

1. Support the whole vehicle with the main support.
2. Shift the gearbox to neutral.
3. Measure the tightness of the transmission chains as shown in the figure.



① Transmission chain tightness

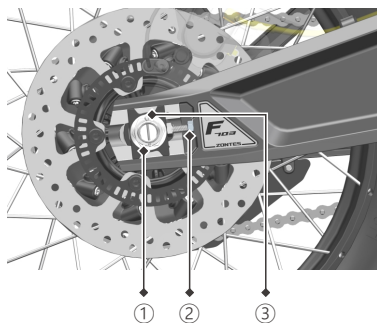
### Drive chain tightness:

35-45mm

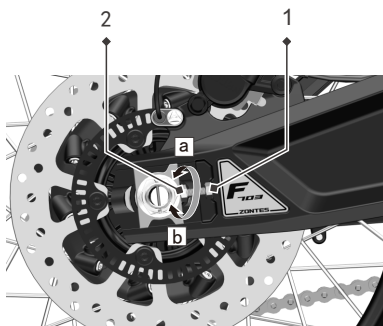
4. The tightness of the transmission chain is incorrect, and it is adjusted according to the following procedure.

## Adjust the tightness of the transmission chain

1. Remove the latch with a vise and loosen the rear axle bolt with a No. 30 wrench or sleeve.
2. Use a 13# open-end wrench to loosen the fixing nut.



- ① Rear axle nut
- ② Fixing nut
- ③ Latch



## Drive chain tightness adjustment bolts

To tighten the drive chain, rotate the drive chain tightness adjustment bolt on the rocker arm in the direction (a). To loosen the tight drive chain, rotate the drive chain tightness adjustment bolt on the rocker arm in the direction (b) and push the rear wheel forward.

## WARNING

• Make the drive chain achieve the appropriate relaxation (35-45mm). At the same time, in order to ensure that the front and rear wheels are in a straight line, the scale plates on the left and right sides are adjusted to the same position as the scale mark on the rear flat fork.

3. After completing the adjustment, fix the nut and the rear axle nut, install the latch into the corresponding hole, and bend the latch at least 120 degrees with a vise.

## Rear axle nut locking torque

100-110N.m

## WARNING

• The transmission chains of this motorcycle is made of special raw materials. It is highly recommended to use our oil seal chains for the replacement of transmission chains. If the strength is too low or the quality of other transmission chains is poor, the broken chain may damage the vehicle or cause personal injury. After the oil seal chain is worn and stretched to its service life, one or two sections can not be removed for riveting. The fatigue life of the chain is seriously exceeded, and the broken chain may damage the vehicle or cause personal injury.

## Check the chain life

The normal maintenance service life of the oil seal chain is 10,000 to 15,000 kilometers, and after the wear is extended to the service life, please replace the chain in time:

1. It is recommended to replace the original genuine 525 oil seal chains;
2. When using the open oil seal chain with union joint, you need to use special tools to rivet, before riveting, you need to evenly apply special lubricating oil to the pin shaft oil seal. The oil seal and chain link need to be clean and free of debris. When riveting the expansion hole, it is recommended to rivet the expansion hole many times. The pin shaft hole can not be broken or cracked. The size of the hole must ensure that the chain link at the riveting place can rotate flexibly and the outer chain plate will not deviate or fall off in normal riding.

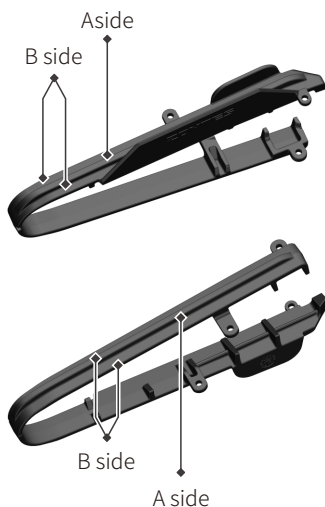
## WARNING

• If the anti-wear block of the rear fork fails, the chain moving at high speed will not only cut and damage the rear fork, but also damage the chain at the same time. The rear fork or chain breakage may damage the vehicle or cause personal injury.

## Check the anti-wear block of the rear fork

1. When cleaning the oil seal chain every 500-1000km, be sure to check the surface A and surface B of the boss on the anti-wear block of the rear fork. When there is a relatively deep groove of at most 1mm at the place where the B side is contacted by the inner and outer chain plates of the chain, the rear fork anti-wear block must be replaced with a new one to avoid the rear fork anti-wear block from being worn through by the chain.

2. When replacing the new oil seal chain, the wear of the rear fork anti-wear block must be checked. If the rear fork anti-wear block is worn to a very thin point by the chain, and there is a 1mm groove in the contact between the inner and outer chain plates of the chain, a new rear fork anti-wear block must be replaced to avoid the rear flat fork wear block being worn through by the chain and damaging the rear flat fork.



## Tires (Inspection/ Replacement)

### Check your tire pressure

Check your tire pressure before each unpaved ride and when you return to the road from your unpaved ride. If you're only riding on the road, check the pressure at least once a month or when you notice a lack of tire pressure. Check the tire pressure after the tire has cooled down.

### Recommended tire pressure:

Front wheel:

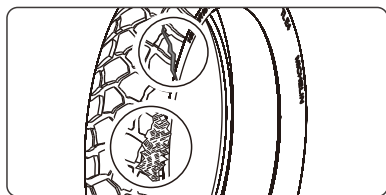
250kPa

Rear wheel:

250kPa

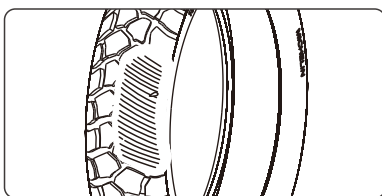
### Injury examination

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



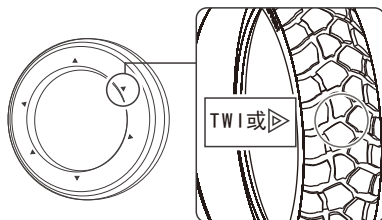
### Abnormal wear and tear examination

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



### Check the wheel grain depth

Check the tread wear indicator markings. If the wear indication markings are visible, replace the tires immediately. In order to ride safely, the tires need to be replaced when the minimum wear depth is reached.



### Replace the tires

Please have your tires replaced at an authorized repair shop.

For recommended tires, tire pressures and minimum tread depth, please refer to "Technical Specifications". Whenever you change your tire, follow these guidelines:

- Use recommended tires or equivalent products of the same size, construction, speed class and load capacity.
- After the tires are installed, use the original ZONTES original balance weight or equivalent equipment to balance and position the wheels.

# Maintenance

- Do not install an inner tube inside the tubeless tire of this motorcycle. Excessive heat can cause the inner tube to burst.
- This motorcycle can only use tubeless tires. Rims are designed to use tubeless tires, and when accelerating or braking hard, the tires with inner tubes can slide on the rims, causing rapid air bleats.

## DANGER

- **Installing unsuitable tires can affect handling and stability, which can lead to accidents that can injure you or even kill you.**
- **Be sure to use the size and type of tire recommended in this "User Manual".**

## Check the rims and valves

Before each ride, check whether the rim is damaged and whether the spokes are loose. In addition, the valve position should also be checked.

## WARNING

- **The use of over-worn or improperly inflated tires can lead to accidents, resulting in serious injuries or deaths.**
- **Please follow the relevant tire inflation data and maintenance guidelines in the User Manual.**

## Wheels

### Rims and spokes

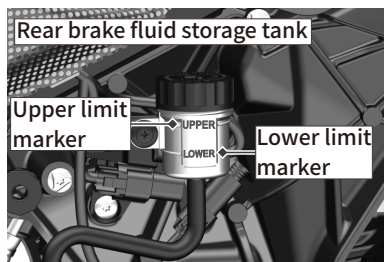
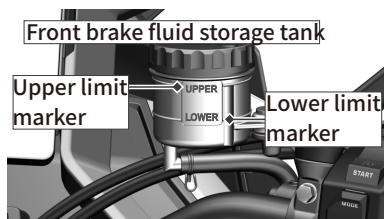
In order to ensure the safe operation of the motorcycle, it is necessary to ensure that the wheels are absolutely rounded and that the spoke tension is appropriate. Loose spokes and wheel loss of roundness can cause instability at high speeds and may cause loss of control of the vehicle (wheels do not need to be removed when performing the maintenance work recommended in the service schedule), as follows:

1. Check the rim and spokes for damage.
2. Tighten the loose spokes according to the standard torque; It is recommended to be handled by a special repair shop of ZONTES.
3. Rotate the wheel slowly to see if it "wobbles". If it is found to be wobbly, it means that the rim is not round or "absolutely" round. If the shaking is obvious, please hand it over to the ZONTES special maintenance shop for maintenance.

## Brake

### Check the brake fluid

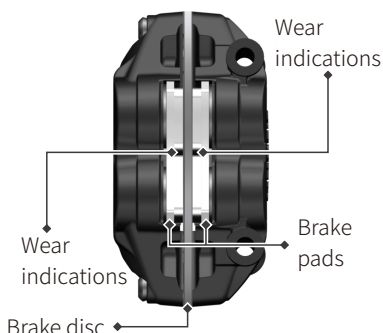
1. Place the motorcycle vertically on a stable, flat surface.
2. Front wheel Check that the brake fluid storage tank is level and that the fluid level is between the lower and upper limit marks. Rear wheels Check that the brake fluid storage tank is level and that the fluid level is between the lower and upper limit marks.
3. If the brake fluid level in any storage tank is below the lower limit level mark, or the free travel of the brake lever and pedal exceeds the limit, brake pad wear must be checked. If the brake pad is almost not worn, there may be leakage. Please send it to ZONTES Special Repair Shop for repair.



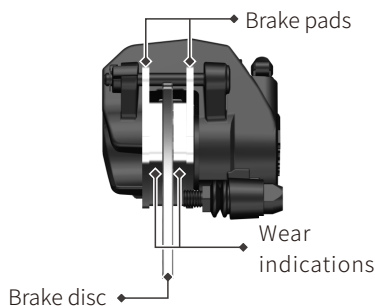
### Check the brake pads

Check the condition of the brake pad wear indicators. If the brake pad of the front wheel is worn to the bottom of the indicator mark, it needs to be replaced. If the brake pad of the rear wheel is worn to the indicator mark, it needs to be replaced.

### Front disc brake caliper



### Rear disc brake calipers



# Maintenance

The front wheels check the brake pads from the front of the brake caliper(Be sure to check the left and right brake calipers).

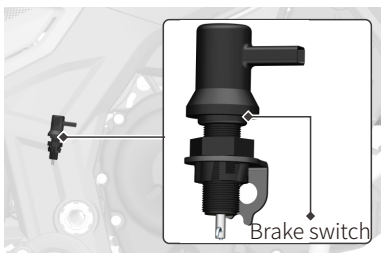
The rear wheel checks the brake pads from the right rear of the motorcycle. If necessary, please refer it to the special repair shop of ZONTES.

To replace the brake pads, the brake pads must be replaced in pairs at the same time.

Maintenance

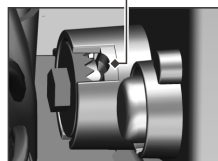
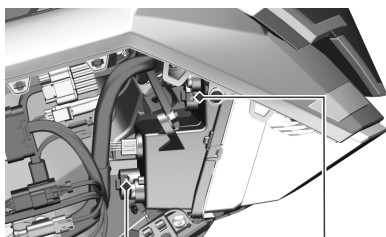
## Adjust the brake light switch

Check that the brake light switch is working properly. If the switch reacts too slowly, hold the brake light switch and rotate the adjustment nut in a counterclockwise direction, and if the switch responds too quickly, rotate the adjustment nut in a clockwise direction.

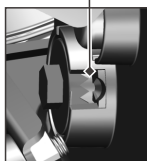


## Lighting adjustment

1. The headlamp has two independent adjustable parts, which are the adjusting positions of the high beam and the low beam, and can be seen by removing the left and right surrounding panels. (Height adjustment for both left and right headlights)



**Low beam  
adjustment**



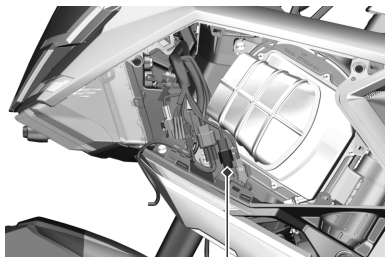
**High beam  
adjustment**

2. Use a 6 × 150 - 200 Phillips screwdriver, insert the dimming hole, turn it down counterclockwise, turn it up clockwise, pay attention to the dimming, the Phillips screwdriver and the dimming bolt serration need to be effectively meshed.

When dimming, the Phillips screwdriver needs to be effectively engaged with the dimming bolt serration, please watch the relevant video on the official website for more detailed steps.

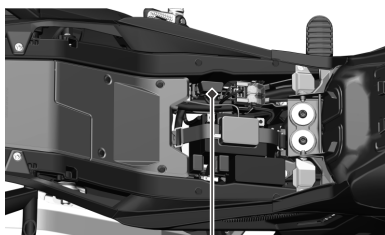
## Installation of electrical devices

The original motorcycle has been equipped with a spotlight modification interface, an immobilizer plug and an OBD diagnostic interface.



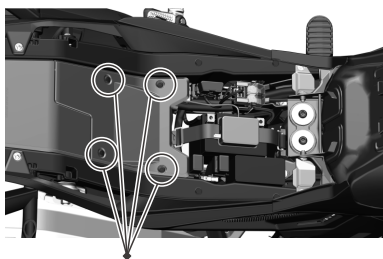
Spotlight retrofit interface

Remove the left surround panel (pages 6-11) and disassemble the visible spotlight modification interface.



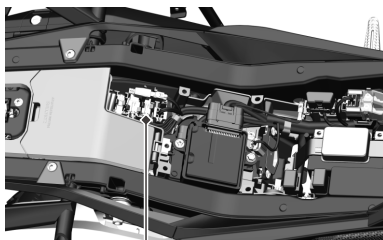
OBD diagnostic interface

The OBD diagnostic interface is located under the seat cushion, short press once, and the left handle switch "SEAT" button opens the seat cushion.



Expansion nails

Remove the 4 expansion nails on the cover plate of the battery compartment electrical device and remove the cover.



Immobilizer plug

The immobilizer plug is located under the cover plate of the electrical device in the battery compartment and can be seen when it is disassembled.

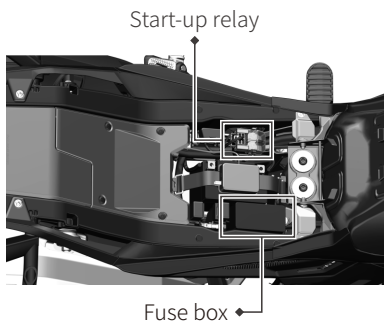
**⚠ WARNING**

- It is forbidden for GPS, fog lamps and other electrical equipment to draw power directly on the positive and negative poles of the battery.
  - It is forbidden to wire electrical equipment close to the surrounding area of the battery.
  - The installation of electrical equipment must be more than 300mm away from EFI ECU, relay combination, and PKE controller.
  - Unauthorized line breaking, modification, and installation positions do not meet the requirements, and the consequences caused by them shall be borne by consumers.
  - The total power of external electrical equipment shall not exceed 60W; Do not use spotlights when idling.
-

# Troubleshooting

## Safe position

The safety device is located under the cushion. Press the button "SEAT" in the left hand to open the cushion to see the safety device.



## Fuse

The fuse and one spare fuse are located on the starting relay, LCM fuse, ECM fuse, normal power supply fuse, ABS motor fuse, ABS ECU fuse, oil pump

fuse, starting fuse, ABS fuse, auxiliary fuse, other fuses and four spare fuses are located in the fuse box.

- The main fuse protects all circuits.
- LCM fuses protect LCM circuits.
- ECM fuses protect electrical devices such as ECM, ECM relays, and oil pump relays.
- Constant power supply insurance protection fan, instrument, immobilizer connector.
- ABS motor fuse protects ABS motor.
- ABS ECU fuse protects ABS ECU.

- Oil pump fuse protects oil pump circuit.
- Start the fuse to protect the starting circuit.
- ABS fuse protects ABS controller.
- Auxiliary fuse protection auxiliary components (position lights, turn signals, tail lights, brake lights, license plate lights, horns, overtaking lamp).
- Other fuses protect the off-hand handle switch (except faucet lock switches), meters, windshields, immobilizer joints).

## ⚠ DANGER

- Do not use other fuses other than the specified specifications or direct lapping, otherwise it will have a serious impact on the circuit system, and even cause fire or burn the vehicle, loss of engine power, which is very dangerous.

## ⚠ ATTENTION

- Pay attention to the selection of fuses with specified rated currents. Do not use substitutes such as aluminium or iron wire. If the fuse blows frequently for a short period of time, the electrical system is faulty. It should be sent to the maintenance unit immediately for maintenance.

## Catalyst

Catalyst can effectively reduce the pollutants emitted by your vehicle and protect the environment we live in; Since the life of the catalyst is designed under the premise that the vehicle normally uses unleaded gasoline, it is forbidden to use leaded gasoline in your motorcycle, because lead will disable the reduction component of the catalyst conversion system. If the engine is not effectively ignited or does not have sufficient heat dissipation for a long time, it will cause exhaust oil and gas to accumulate and burn at the catalyst, causing the catalyst to overheat, which will permanently damage the conversion ability of the catalyst, and it is forbidden to maintain the high speed of the engine for a long time.

## Troubleshooting

What troubleshooting is to help you find the cause of a general problem.

### WARNING

• **Incorrect repairs and adjustments can damage the motorcycle without determining the cause of the failure. Such damage cannot be guaranteed in three packs. If you are not sure how to operate it correctly, please consult our repair unit.**

• **Before troubleshooting, consult the company's maintenance unit. The repair unit will try to solve it for you. If the engine won't start, follow the checks below to determine the cause.**

### Fuel system check

If the gauge engine fault indicator is illuminated, there is a problem with the fuel injection system. Send the motorcycle to the maintenance unit of the company.

Refer to the Engine Malfunction Lamp in the Instrumentation section to explain the meaning of the display.

### The engine does not work

- Confirm that there is enough fuel in the fuel tank.
- The engine is started successfully. During operation, if the orange EFI fault signal light is on, it indicates that the EFI system is abnormal. Please contact our after-sales service shop to check the EFI system.
- Check whether the ignition system is normal.
- Check the idle speed. The correct idle speed is  $1500 \pm 100$  rpm per minute.

### DANGER

**Do not let the fuel flow all over the floor, and put it into the container. Do not allow fuel to approach the engine and muffler at high temperatures. When doing this check, keep away from smoke and fire, and do not approach any fire or heat source.**

### The engine is underpowered

When the engine power drops significantly or the maximum speed drops significantly, it may be that the fuel system is blocked and the engine does not work properly. Please immediately go to the dealer maintenance unit of our company for inspection.

## WARNING

- The blockage of the fuel system may be caused by the unclean gasoline.
- For a new vehicle or a vehicle running out of fuel, please do not turn on the flameout switch. Be sure to turn on the flameout switch after replenishing the fuel. Otherwise, the fuel pump will run idle without fuel, which will seriously affect the service life of the fuel pump.

## Carbon deposit cleanup

In order to minimize carbon deposits, the following are recommended:

1. The vehicle rides for a long time or for a long time. For riding below 5,000 rpm, it is recommended to clean up the carbon deposits every 5,000 kilometers or every 6 months. If the vehicle is regularly ridden above 5,000 rpm and the vehicle heats up sufficiently, the carbon removal mileage can be extended to every 10,000 km or every 12 months.
2. The vehicle has the problem of difficulty in starting, and the spark plug should be removed in time to clean up, and the cylinder cleaning procedure should be carried out: the engine is in neutral, pinch the clutch handle, keep the throttle fully open for 3 seconds, and then press the start button for 3 seconds.

There are several ways to clean up carbon deposits:

1. Sweep the air to clean up the carbon deposit, during the riding process, when the conditions permit, appropriately increase the throttle 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 carbon deposit through high-speed sweeping.
2. Use regular big brand fuel treasure to clean up carbon deposits, add according to the instructions, but it is not recommended to use it frequently, frequent use may lead to damage to the fuel supply pipeline.
3. Use throttle body cleaner to clean up carbon deposits, remove the stepper motor from the throttle body, and the rest of the sensors shall not be disassembled by themselves, otherwise it will cause abnormal vehicle idling. Spray a small amount of throttle body cleaning agent inside the throttle body and around the valve plate, and clean the carbon deposits on the head of the stepper motor with a clean rag.

## EFI precautions

1. Before installing the battery in the new motorcycle, it is necessary to check that the wiring harness plug-in of the EFI parts is firmly and reliable, including the installation of the oxygen sensor, and the gasoline has been added.

2. When installing the battery, you need to use tools to firmly install the positive and negative poles of the cable on the positive and negative poles of the battery, and do not twist them by hand.

3. Please keep the fuel in the tank not less than 3 liters, otherwise it will affect the normal operation of the EFI system, please replenish the fuel as soon as possible when the fuel volume is 1 bar or less than 1 bar.

4. When the battery is reinstalled, the whole vehicle is powered off during starting or riding, the battery is dormant and restarted, the idle speed is abnormal, and the insurance is replugged and unplugged, please pay attention to the individual hardware reset of the EFI, the steps are: open the electric door lock and the engine shutdown switch, support the main bracket and pinch the brake, start the engine and refuel to more than 3000rpm, release the throttle and then close the flame-out switch and the electric door lock, and power on after 5s.

5. The vehicle is left standing for a long time (the parking time is more than 3 hours), please make sure that the oil pump completes the pressure storage (that is, the whole vehicle is powered on, turn on the flame-off switch, and wait until the whining in the fuel tank stops) before starting.

6. If the engine still fails to sound after multiple starts, the cylinder may have been flooded, and the cylinder cleaning procedure is executed: open the throttle fully and press the start button for 3 seconds.

7. If the meter battery voltage flashes, it means that the battery voltage is too low, please charge the battery in time; Too low voltage may cause EFI parts to not work properly, unable to start or difficult to start, insufficient power, etc.

### DANGER

· New motorcycles or fuel-depleted vehicles, please do not turn on the kill switch, be sure to turn on the stop switch after replenishing fuel, otherwise the fuel pump without oil idling will seriously affect the life of the fuel pump.

### WARNING

Do not plug and unplug the cable plugs of individual parts at will, and do not clean the cable plugs of EFI parts with water.

## ⚠ ATTENTION

• During engine operation, the fault light is not on, and the fault light flashes after the ignition is turned off, which is a historical fault and has no impact on the whole vehicle, and will disappear by itself in the future.

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**1. During the operation of the engine, if the EFI fault indicator of the instrument is on, it indicates that there is a fault in the EFI parts that needs to be eliminated.**

You can directly read the fault code the fault information page in the instrument menu, or read the fault code in the ZONTES intelligent APP.



ZONTES intelligent APP QR code

2. Instrument fault lamp extinguishing conditions:

Manual clearing of historical faults and ECU reset operation: power on the whole vehicle - turn the ignition switch on and off more than five times in a row (on-off as one). If the flame-out switch is turned on and the fault light is not lit, it means that the ECU has been reset successfully.

Use the diagnostic instrument to clear the fault code: After the vehicle is powered on, open the seat cushion, connect the diagnostic interface in the electrical box with the diagnostic instrument, and clear the fault code according to the operation steps of the diagnostic instrument.

## ⚠ WARNING

• During the operation of the engine, the fault light is not lit, and the fault light flashes after the ignition is turned off, which is a historical fault and has no impact on the whole vehicle, and will disappear by itself in the future.

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# Troubleshooting

## Fault codes

Serial number	Fault codes	Description of the fault code
1	P0118	Cylinder temperature sensor line high voltage/open circuit fault
2	P0117	Cylinder temperature sensor line low voltage fault
3	P0336	Crankshaft position sensor line signal interference failure
4	P0335	There is no signal failure in the crankshaft position sensor line
5	P2300	One Cylinder ignition coil short circuit to low voltage/open circuit fault
6	P2303	Two Cylinder ignition coil short circuit to low voltage/open circuit fault
7	P2306	Three Cylinder ignition coil "C" way to low voltage/open circuit fault
8	P0123	The throttle position sensor is short-circuited to a high voltage fault
9	P0122	The throttle position sensor is short-circuited to a low-voltage/open-circuit fault
10	P0459	The carbon canister solenoid valve wire is short-circuited to a high voltage fault
11	P0458	Canister solenoid valve wire short circuit to low voltage/open circuit fault
12	P0232	The oil pump relay is short-circuited to a high voltage fault
13	P0231	Oil pump relay short circuit to low voltage/open circuit fault
14	P1780	The fast displacement sensor fails
15	P0262	One cylinder injector short circuit to high voltage fault
16	P0261	One cylinder injector short circuit to low voltage/open circuit fault
17	P0265	Two cylinder injector short circuit to high voltage fault

## Fault codes

Serial number	Fault codes	Description of the fault code
18	P0264	Two cylinder injector short circuit to low voltage/open circuit fault
19	P0268	Three injector short circuit to high voltage fault
20	P0267	Three cylinder injector short circuit to low voltage/open circuit fault
21	P0108	Air intake sensor line high voltage/open circuit fault
22	P0107	Air intake sensor line low voltage fault
23	P0113	The inlet temperature sensor line is faulty for low voltage
24	P0112	The inlet temperature sensor line is faulty for low voltage
25	P0132	One pre-cylinder oxygen sensor signal is short-circuited to high-voltage/open-circuit fault
26	P0131	One signal of the oxygen sensor in front of the cylinder is short-circuited to the ground fault
27	P0138	Two pre-cylinder oxygen sensor signal is short-circuited to high-voltage/open-circuit fault
28	P0137	Two signal of the oxygen sensor in front of the cylinder is short-circuited to the ground fault
29	P0152	Three pre-cylinder oxygen sensor signal is short-circuited to high-voltage/open-circuit fault
30	P0153	Three signal of the oxygen sensor in front of the cylinder is short-circuited to the ground fault

# Troubleshooting

## LCM key fault code

Serial number	Fault codes	Description of the fault code
1	9002	Spotlights is overloaded
2	9022	Fog lights is overloaded with white light
3	9032	The horn is overloaded
4	9042	The cushion lock is open
5	9052	The brake light is overloaded
6	9062	Low beam is overloaded circuit
7	9072	Fog lights is overloaded the way with yellow light
8	9082	Heated handlebar is overloaded circuit
9	9092	High beams is overloaded the way
10	90A2	The left light is overloadedn
11	90B2	The right light is overloaded
12	90C2	The left turn signal is overloaded
13	90D2	The right turn signal is overloaded
14	9003	Spotlights are wires short circuit
15	9023	Fog lamp white light wires short circuit
16	9033	The horn is wires short circuit
17	9043	Seat lock wires short circuit
18	9053	Brake light wires short circuit
19	9063	Short circuit in the low beam
20	9073	Fog lamp yellow light wires short circuit
21	9083	Heating handlebar wires short circuit
22	9093	Short circuit in high beams
23	90A3	The left light is wires short circuit
24	90B3	The right light is wires short circuit
25	90C3	Left turn signal swires hort circuit
26	90D3	The right turn signal is wires short circuit

## LCM key fault code

Serial number	Fault codes	Description of the fault code
1	A001	KEY1 Channel - 【Channel】Short circuit
2	A002	KEY1 Channel - 【Channel】Open Circuit
3	A021	KEY1 Channel-【- Overtaking button】Short circuit
4	A022	KEY1 Channel-【- Overtaking button】Open Circuit
5	A031	KEY1 Channel-【- High beam button】Short Circuit
6	A032	KEY1 Channel-【- High beam button】Open Circuit
7	A101	KEY2 Channel--【Windscreen channel】Short Circuit
8	A102	KEY2 Channel--【Windscreen channel】Open Circuit
9	A111	KEY2 Channel--【Down /-Key】Short Circuit
10	A112	KEY2 Channel--【Down /-Key】Open Circuit
11	A121	KEY2 Channel--【OKKey】Short Circuit
12	A122	KEY2 Channel--【OKKey】Open Circuit
13	A131	KEY2 Channel--【Up /+Key】Short Circuit
14	A132	KEY2 Channel--【Up /+Key】Open Circuit
15	A141	KEY2 Channel--【Return to Key】Short Circuit
16	A142	KEY2 Channel--【Return to Key】Open Circuit
17	A151	KEY2 Channel--【Danger Warning Light Key】Short circuit
18	A152	KEY2 Channel--【Danger Warning Light Key】Open Circuit
19	A161	KEY2 Channel--【TCSKey】Short Circuit
20	A162	KEY2 Channel--【TCSKey】Open Circuit
21	A171	KEY2 Channel--【Cushion lock Key】Short Circuit
22	A172	KEY2 Channel--【Cushion lock Key】Open Circuit
23	A201	KEY3 Channel--【 Channel 】Short Circuit
24	A202	KEY3 Channel--【 Channel 】Open Circuit
25	A211	KEY3 Channel--【Right Turn Key】Short Circuit
26	A212	KEY3 Channel--【Right Turn Key】Open Circuit
27	A221	KEY3 Channel--【Steering Reset Key】Short Circuit
28	A222	KEY3 Channel--【Steering Reset Key】Open Circuit
29	A231	KEY3 Channel--【Left Turn Key】Short Circuit
30	A232	KEY3 Channel--【Left Turn Key】Open Circuit

# Troubleshooting

## LCM key fault code

Serial number	Fault codes	Description of the fault code
31	A241	KEY3 Channel--【Horn Key】Short circuit
32	A242	KEY3 Channel--【Horn Key】Open Circuit
33	A251	KEY3 Channel--【Light Key】Short circuit
34	A252	KEY3 Channel--【Light Key】Open Circuit
35	A301	KEY4 Channel--【 Channel 】Short circuit
36	A302	KEY4 Channel--【 Channel 】Open Circuit
37	A311	KEY4 Channel--【MODEKey】Short circuit
38	A312	KEY4 Channel--【MODEKey】Open Circuit
39	A321	KEY4 Channel--【Handlebar Heating Key】Short circuit
40	A322	KEY4 Channel--【Handlebar Heating Key】Open Circuit
41	A401	KEY5 Channel--【 Channel 】Short circuit
42	A402	KEY5 Channel--【 Channel 】Open Circuit
43	A411	KEY5 Channel--【RES/+Key】Short circuit
44	A412	KEY5 Channel--【RES/+Key】Open Circuit
45	A421	KEY5 Channel--【Cruising Key】Short circuit
46	A422	KEY5 Channel--【Cruising Key】Open Circuit
47	A431	KEY5 Channel--【SET/-Key】Short circuit
48	A432	KEY5 Channel--【SET/-Key】Open Circuit
49	A501	KEY6 Channel--【 Channel 】Short circuit
50	A502	KEY6 Channel--【 Channel 】Open Circuit

Key's open circuit faulty will not show individual, If a KEY channel or the internal sense resistor (33KΩ) of the KEY channel is not connected, it will directly alarm all open circuits in the channel .

## Storage

### Storage

If your motorcycle is not in use for a period of time and requires special maintenance, this requires some special materials, equipment, and technology. For the above reasons, it is recommended that you choose our company's maintenance unit to complete these maintenance work.

### Motorcycle

Wash your motorcycle thoroughly. Park your motorcycle with a side parking rack and park it on flat ground. Turn the handlebar to the left, press and hold the red power-on button on the handlebar, the whole vehicle will be powered off, and the front lock will be automatically locked.

### Fuel oil

The fuel from the fuel tank is discharged into the container by siphon or other suitable method.

### Engine

- 1.Remove the spark plugs, pour a tablespoon of new oil into each spark plug hole, reinstall the spark plugs, and allow the engine crankshaft to spin a few times.
- 2.Drain the oil thoroughly and add the new oil.
- 3.Cover the air intake of the air filter and the exhaust of the muffler with a rag containing new oil to prevent moisture from entering.

### Battery

- 1.Refer to the section on batteries to remove the battery.
- 2.Clean the surface of the battery with neutral soapy water and remove rust from the terminals and wiring joints.
- 3.Store the battery indoors above zero degrees Celsius.

### Maintenance

Please use our company exclusive charger to charge the battery every three months.

### Tyre

Adjust the tire pressure to the specified air pressure.

### Motorcycle

- 1.Spray the rubber protectant on the surface of the resin and rubber parts.
- 2.Spray anti-rust paint on the surface of the part without surface treatment.
- 3.Apply the painted surface with automotive wax.

## Re-enable the method

### Re-enable the method

- Clean the motorcycle thoroughly.
- Wipe to remove the air filter inlet and muffler exhaust port.
- Drain the engine oil. According to the relevant content of this user manual, replace the oil filter and add new engine oil.
- Remove the spark plug. Let the engine turn a few times. Reinstall the spark plugs.
- Reinstall the battery by referring to the section on batteries.
- Confirm the motorcycle is lubricated normally.
- Perform the inspection in accordance with the section on pre-driving inspection in this user manual.
- Start the motorcycle according to the relevant contents of this user manual.

### Prevent corrosion

It is important to take good care of the motorcycle and avoid rust so that it will look like a new motorcycle after many years.

### Key points for preventing corrosion

Factors that lead to rust damage: accumulation of salt, dirt, moisture, chemicals on salty roads. The surface of the painted part is damaged by small stones or gravel, or scratched by bumps. Salty roads, sea breezes, industrial pollution, and high humidity can all contribute to corrosion.

### How to prevent rust

- 1.Clean your motorcycle at least once a month. Try to keep your vehicle clean and dry.
- 2.Remove dirt from the surface of the motorcycle. Substances such as salt, chemicals, asphalt, tree sap, bird droppings, and industrial emissions from salty roads can damage your motorcycle. Remove these contaminants as soon as possible. If it is difficult to clean with water, clean it with a detergent. The detergent must be used in accordance with the detergent product requirements.
- 3.Clean up the damage to the motorcycle as soon as possible. Carefully inspect the surface of the motorcycle's painted parts for damage. If you find any burrs or scratches, repair them immediately to avoid further damage. If burrs and scratches run through the entire surface of the part, please have it repaired by a repair unit designated by the company.
- 4.Keep the motorcycle in a dry, ventilated place. If you often wash your motorbike in the garage and you park inside, the garage can get wet. High humidity increases rust. If the air is not circulated, wet motorcycles can rust even in hot environments.

5. Cover the motorcycle. Avoid the noon sun on the motorcycle, if it is exposed to the paint, plastic parts will be discolored, and the instrument will fade. The use of a high-quality, breathable cover protects the motorcycle from ultraviolet rays in the sun and reduces the deposition of dirt and air pollution on the motorcycle. Our dealers can help you choose the right cover for your motorcycle.

### Clean the motorcycle

**Please follow the instructions below to clean your motorcycle:**

1. Wash away dirt and mud from the surface of the motorcycle with cold water. You can clean it with a soft sponge or a soft brush, using other materials will scratch the exterior parts.
2. Wash your motorcycle thoroughly with a mild detergent or motorcycle soap, gauze or soft cloth. Gauze or soft cloth should be soaked frequently with the cleaning agent. If you have used your motorcycle on a salty road or near the sea, wash it with cold water immediately after use. Be sure to use cold water, which will accelerate corrosion.

### WARNING

- Avoid spray cleaning and avoid water flowing to the following locations: ignition switches, spark plugs, fuel tank caps, fuel injection systems, brake fluid cylinders.
- Do not use high-pressure water to clean the motorcycle, throttle body and injectors, and water tank.

4. After cleaning the dirt on the surface of the motorcycle, rinse off the residual cleaning agent with running water.

5. After rinsing, wipe the motorcycle clean with a damp soft skin or cloth and place it in a cool place to dry.

## Maintenance and storage

5. Carefully inspect the painted surface for damage. If there is any damage, repair the damaged surface with repair material as follows:

- Wash the damaged area and let it dry.
- Wash the damaged area and let it dry.
- Dry the repaired place thoroughly.

6. Regularly inspect the surface of the small tank for cleanliness, if it indicates a significant build-up, you need to clean the surface with cold water and a soft brush. Be careful not to damage the surface heat sink.

### ATTENTION

• After washing the motorcycle or driving after rain, water mist will appear in the headlights. Turn on the headlights and the water mist will gradually dissipate. Start the engine to supply power to the headlights, remove the water mist, and avoid over-discharging the battery.

### WARNING

• Do not use alkaline or acidic cleaning agents to clean motorcycles, and do not use gasoline, brake fluid or other solvents that will damage motorcycles. Wash only with a soft cloth and warm water with a mild detergent.

### WARNING

- Motorcycle cover paint surface avoid cleaning with the following cleaning agents.
- Engine surface cleaning agent (head water), range hood washing liquid, bathroom cleaning agent, carburetor cleaning agent, chain cleaning agent, cleaning products containing bleaching ingredients, try to avoid contact with disc brake oil, strong acid, strong alkali, to avoid corrosion.

### Wax the motorcycle

- After cleaning, waxing and polishing is recommended, which can not only protect the parts, but also make the parts more beautiful.
- Use high-quality motorcycle wax and polish.
- When using car wax and polish, pay attention to the precautions for the use of motorcycle wax and polish products.

### Inspection after cleaning

In order to prolong the service life of the motorcycle, lubricate the motorcycle according to the section on lubrication.

### DANGER

It is very dangerous to drive a motorcycle when the brakes are wet. Wet brakes don't provide the stopping power that dry brakes do. This can be unexpected. After washing the motorcycle, test the braking system at low speed. If needed, operate the brakes a few times to allow the brake pads to dry.

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### Transportation

The fuel must be drained before transporting the motorcycle. Fuel is extremely flammable and can cause explosions under certain conditions. When draining, storing or refilling fuel, open flames are strictly prohibited and the operation must be performed in a well-ventilated place after the engine is stopped. The order of draining fuel is as follows.

1. Stop the engine and turn off the electric door lock switch.
2. Use siphoning or other appropriate methods to drain the fuel in the fuel tank into a suitable container.

### WARNING

- When transporting a motorcycle, be sure to drain all the fuel from the fuel tank. Transport the motorcycle in normal driving condition to prevent fuel leakage.

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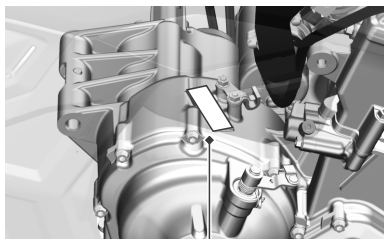
# Specification sheet

## Number

The frame and engine numbers are unique and are used to identify your motorcycle. They are required when registering your motorcycle. When ordering accessories or entrusting special services, the numbers enable the dealership to provide you with better service. Please record these numbers and keep them in a safe place.



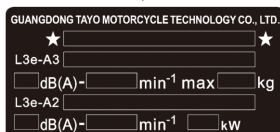
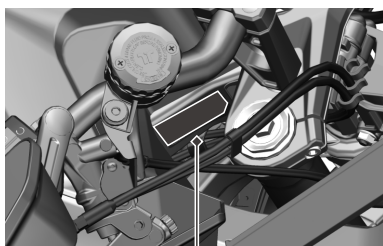
Frame code



Engine code

## Nameplate

- The nameplate is made of special materials and has tamper-proof properties. It is a one-time product. Please do not destroy or tear it.
- The nameplate has authoritative certification. Please do not make or print it privately.
- Do not wash the nameplate with corrosive liquids.
- Do not wash the nameplate with a high-pressure water gun.



## Dimensions and curb weight

### 703F 21 inch bumper version

Length	2355mm
Width	960mm
Height	1525/1618mm
Wheelbase	1565mm
Ground clearance	205mm
Seat cushion height	845mm
Whole motorcycle dry mass	220.5kg
Curb weight of the whole motorcycle	241kg

### 703F 21 inch basic version

Length	2305mm
Width	960mm
Height	1525/1618mm
Wheelbase	1565mm
Ground clearance	205mm
Seat cushion height	845mm
Whole motorcycle dry mass	215.5kg
Curb weight of the whole motorcycle	236kg

### 703F 19 inch bumper version

Length	2315mm
Width	960mm
Height	1510/1603mm
Wheelbase	1550mm
Ground clearance	190mm
Seat cushion height	825mm
Whole motorcycle dry mass	220.5kg
Curb weight of the whole motorcycle	241kg

### 703F 19 inch basic version

Length	2265mm
Width	960mm
Height	1510/1603mm
Wheelbase	1550mm
Ground clearance	190mm
Seat cushion height	825mm
Whole motorcycle dry mass	215.5kg
Curb weight of the whole motorcycle	236kg

# Specification sheet

## Engine-Version 1

Three-cylinder, vertical,  
four-stroke, water-cooled, 699cc

Number of cylinders	3
Cylinder diameter	70.0mm
Stroke	60.6mm
Displacement	699mL
Compression ratio	13.0:1
Start mode	Electric start
Lubrication method	Pressure splash type
Power	70.0kW
Clutch	Wet multi-piece
Transmission	Six-speed wheel shifting
The primary wheel ratio	1.775

Gear ratio	First gear	3.000
	Second gear	2.250
	Third gear	1.762
	Fourth gear	1.526
	Fifth gear	1.364
	Sixth gear	1.231

Drive form	Chain
Economical fuel consumption	5.0L/100km
Top speed	195km/h

## Engine-Version 2

Three-cylinder, vertical,  
four-stroke, water-cooled, 699cc

Number of cylinders	3
Cylinder diameter	70.0mm
Stroke	60.6mm
Displacement	699mL
Compression ratio	13.0:1
Start mode	Electric start
Lubrication method	Pressure splash type
Power	35.0kW
Clutch	Wet multi-piece
Transmission	Six-speed wheel shifting
The primary wheel ratio	1.775

Gear ratio	First gear	3.000
	Second gear	2.250
	Third gear	1.762
	Fourth gear	1.526
	Fifth gear	1.364
	Sixth gear	1.231

Drive form	Chain
Economical fuel consumption	5.0L/100km
Top speed	158km/h

## Crane system

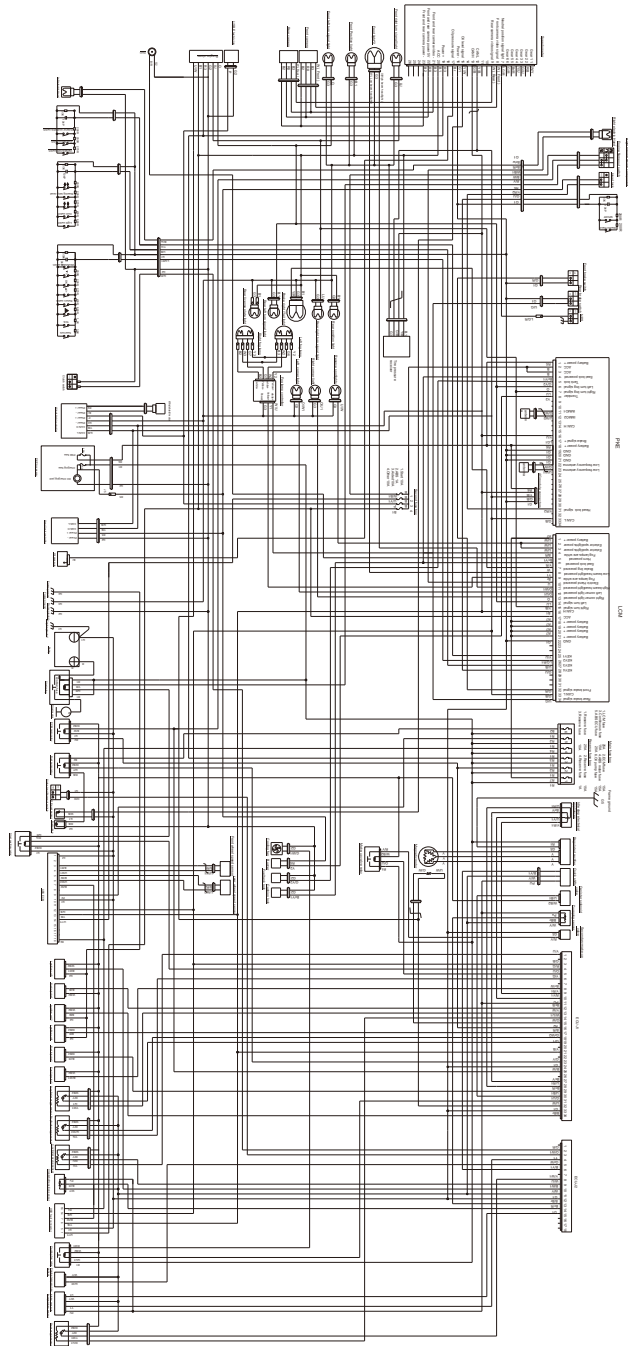
Steering degree	42°
Tire Specification	
21-inch high seat version/high seat guard bar version	
Front tire	90/90-21
19-inch high seat version/high seat guard bar version	
	120/70-R19
21-inch high seat version/high seat guard bar version	
Rear tire	150/70-18
19-inch high seat version/high seat guard bar version	
	170/60-R17
Ignition method of electrical system	Inductive discharge type
Spark plug model	BN8RTIP-8
Battery specifications	12V, 6Ah
Fuse specifications	10A/15A/25A

## Volume

Fuel tank effective volume	22L
Engine oil capacity	4000mL
When the engine changes the oil regularly and the oil filter is changed at the same time	
	3400mL
When the engine is regularly, changed with oil and the oil filter is not changed	
	3000mL

## Lamp power

Low beam	22W/12V
High beams	22W/12V
Front position lights	9.3W/12V
Corner lights (left, right)	8.7W/12V
Front turn signal	3.5W/12V
Rear position lights	5.5W/12V
Brake lights	2.9W/12V
Rear license plate lights	0.7W/12V
Rear turn signal	2.2W/12V





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