ZONTES

150 X/V

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 125X.Please refer to the actual product.

Vehicle model, engine model

Vehicle	Engine model
150X	ZT1P58MJ-S
150V	ZT1P58MJ-S

Safety Precautions:
The safety of your and others life 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.

⚠ CAUTION

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

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Driver safety

Drivers and passengers must always wear appropriate protective equipment, including: certified helmets, gloves, long-sleeved shirts/jerseys, long pants/riding pants, and over-ankle boots/riding boots.

⚠ WARNING

• Do not wear any loose clothing that may entangle the vehicle or hang on branches and shrubs

Helmet and eye protection

A certified helmet can reduce injuries to the head and brain. In the event of an accident, wearing a helmet can greatly reduce the risk of brain injury.

The helmet you choose should meet the standards of your country or region and fit properly. A helmet with a face shield is a better choice because it also prevents impacts from the front, including insects, flying stones, dust, scattered parts, etc., allowing you to make timely judgments on road conditions and drive safely.

Half-face helmets cannot provide the same protection for the face and jaw. If you wear a half-face helmet, you should use a detachable face shield and goggles.

Gloves

Full-finger gloves can effectively protect hands from wind, sun, heat, cold, and flying debris. Well-fitting gloves help you grip the handlebars and reduce hand fatigue. On the contrary, 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 long pants or a full cycling outfit. High-quality protective equipment is more comfortable and can prevent adverse environmental factors from distracting you. In the event of an accident, high-quality protective equipment made of sturdy materials can reduce or even prevent injuries.

Boots

Always wear protective equipment that can protect your feet/ankles. The engine or exhaust will become very hot during operation, which may cause burns.

⚠ DANGER

• For your life safety, please avoid driving the motorcycle at high speed in heavy rain, strong winds, ice, or snow.

Carbon monoxide poisoning

The engine emits exhaust gas containing carbon monoxide during operation, which is a colorless and odorless gas. Inhalation of carbon monoxide can cause headaches, dizziness, drowsiness, nausea, confusion, and ultimately death.

In a confined or poorly ventilated space, lethal levels of carbon monoxide can accumulate over hours or days, making your body quickly unable to cope and unable to save yourself. If you feel symptoms of carbon monoxide poisoning, please immediately leave the area, breathe fresh air, and seek medical attention.

⚠ WARNING

• Running the motorcycle's engine in a confined or semi-confined space may cause the rapid accumulation of toxic carbon monoxide gas.
• Only run the motorcycle's engine in a well-ventilated outdoor area.

Load

Additional weight accessories or wind-resistant attachments such as windshields, backrests, saddles, seats, and travel cases should be installed as low as possible, close to the vehicle body, and near the center of gravity. Improper installation will shift the center of gravity and pose dangers. The key points for installing accessories are: ensuring left-right balance and firm stability. Poorly installed accessories or ill-designed attachments can cause operational difficulties and endanger driving safety.

When carrying goods, keep the goods as low as possible and close to the motorcycle. Incorrectly secured goods will raise the center of gravity, making the motorcycle difficult to control and seriously affecting driving safety. The size of the goods will affect air resistance and the motorcycle's maneuverability. Please balance the items on both sides of the motorcycle and secure the goods properly.

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

Maximum load:

180 kg

⚠CAUTION

• The plastic trunks sold by our company must not carry more than 5kg, and the aluminum trunks must not carry more than 10kg. If there is a loading weight requirement indicated on the trunk, then the above data shall prevail.

Genuine ZONTES accessories

Choosing accessories for your vehicle is an important decision. Genuine ZONTES accessories are only available for purchase on the ZONTES official website and through authorized dealers. They are designed, tested, and approved by ZONTES for use on the vehicle.

Companies unrelated to ZONTES also manufacture parts and accessories for ZONTES vehicles or provide other modifications. ZONTES is not responsible for testing products produced by these non-designated companies, and does not approve or recommend the use of accessories not sold by ZONTES, even if these accessories are sold and installed by ZONTES dealers.

Driving

After starting the vehicle, if you need to move it, release the brakes and slowly increase the throttle. When the speed increases enough to keep the vehicle balanced, put your feet on the footrests.

⚠ WARNING

- Do not wear loose clothing that may become entangled with the motorcycle or caught on branches or shrubs.
- Do not let the engine run at excessively high speeds when going uphill; otherwise, it may damage internal engine components.
- Do not turn off the engine and slide when going downhill, so as not to reduce the service life of the catalyst in the muffler.

Driving tips

If you are driving this model for the first time, we recommend practicing on non-public roads until you are familiar with the vehicle's controls and handling.

Driving with one hand is very dangerous. Always keep both hands firmly on the handlebars and feet on the footrests while driving. Under no circumstances should you drive with both hands off the handlebars.

Reduce speed to a safe level before turning.

Wet and slippery roads reduce tire friction, resulting in reduced braking and turning capabilities. Therefore, you must decelerate in advance.

Crosswinds are most likely to occur at tunnel exits, mountain valleys, or when large vehicles overtake from behind. You must remain calm and drive at a reduced speed.

Abide by traffic rules and speed limits

⚠ DANGER

- This motorcycle is equipped with interlock switches for the ignition circuit and starting circuit. The engine can only be started under the following conditions: the side stand is retracted, and the brake lever is squeezed.

Engine start: After the vehicle is unlocked and the entire vehicle is powered on, check if the stop switch is in the " " position.

When the engine is cold

1.Retract the side stand.
2.Keep the throttle control handlebar in the idle position.
3.First squeeze the brake handlebar, then press the electric start button to start.

When it is difficult to start the engine when cold:

1.Retract the side stand.
2.First squeeze the brake handlebar, turn the throttle to 1/8 opening, then press the electric start button to start.
3.After the engine starts, let it run until it is fully warmed up.
4.If the engine fails to start after multiple attempts, it may be flooded. Perform the cylinder clearing procedure: fully open the throttle and press the start button for 3 seconds.

⚠ WARNING

• The colder the weather, the longer the engine needs to warm up. Driving after the engine has fully warmed up reduces engine wear.

When the engine is in a hot-state operation:

1.Retract the side stand.
2.Keep the throttle control handlebar in the idle position.
3.First squeeze the brake handlebar, then press the electric start button " " to start.

When it is difficult to start the engine when hot

1.Retract the side stand.
2.First squeeze the brake handlebar, turn the throttle to 1/8 opening, then press the electric start button " " to start.
3.If the engine fails to start after multiple attempts, it may be flooded. Perform the cylinder clearing procedure: fully open the throttle and press the start button for 3 seconds.

⚠ CAUTION

• Engine start: After the vehicle is unlocked, the entire vehicle is powered on. At this point, check whether the ignition switch is in the correct position
• The colder the weather is, the longer it takes for the engine to warm up. Driving with the engine fully preheated can reduce its wear and tear.

⚠WARNING

• Form the habit of retracting the side parking frame when starting, fully depressing the accelerator, and gripping the left brake handle before starting. This is to avoid the vehicle rushing forward and causing an accident in case of an error. Only by retracting the side parking frame and gripping the rear brake handle can the vehicle be started.

• Do not start the motorcycle when there is a shortage of fuel or insufficient engine oil!

Braking and stopping

1.Turn the accelerator control handle forward to fully return the accelerator.
2.Use both the front brake lever and the rear brake lever to apply the brakes simultaneously.
3.If the motorcycle needs to park on a gentle slope using the side parking stand, position the front of the vehicle towards the uphill side to avoid overturning due to the rotation of the side parking stand.
4.Turn the ignition switch on the right handle to the off position to stop the engine.
5.Turn the steering lever to the far left, press the " ⏻ " button for 2-3 seconds, and the steering lever will be automatically locked and the vehicle will be powered off.
6.Swing the steering wheel to confirm that it is locked.

⚠DANGER

•Higher speeds result in longer braking distances. Always ensure there is enough distance between your vehicle and the vehicle or object in front to allow you to brake the motorcycle, otherwise a rear-end collision may occur.
•Using only the front or rear brake is very dangerous. This braking method can cause skidding and loss of control. Use the braking system carefully and gently on wet and slippery roads and when turning. Emergency braking on uneven or slippery roads can cause the motorcycle to lose control.
•Emergency braking while turning can cause the vehicle to lose control. Brake and reduce speed before turning.
•The muffler is very hot when the engine is running and shortly after it stops. Do not touch it to avoid burns.
•Using only the rear brake will accelerate the wear of the braking system and result in longer braking distances.
•The surface of the muffler and its cover is hot after riding. Do not touch or lean against it to avoid burns or even fires.

Anti-lock Braking System (ABS)

This model is equipped with an Anti-lock Braking System (ABS) on both the front and rear wheels, which can prevent the wheels from locking up for a long time during emergency braking.

⚠CAUTION

•ABS does not reduce braking distance. In some cases, ABS may result in a longer braking distance.
·ABS is not active when the speed is below 10km/h. You may feel a pulsation in the brake lever during braking; this is normal.
•Always use the recommended front/rear tires to ensure the proper operation of ABS.
•When you lift the rear wheel off the ground and rotate it, the ABS indicator light may illuminate, and the ABS system will turn off. After each time you lift the rear wheel off the ground and rotate it, be sure to restart the vehicle's power supply to restore ABS to normal operation.
•If the indicator light shows any of the following conditions, it indicates a serious problem with your ABS system. In this case, reduce speed and go to an authorized ZONTES dealer for inspection as soon as possible:
1.The indicator light remains on or flashes while riding.
2.The indicator light does not turn off when the speed exceeds 5km/h.
3.The ABS indicator light is on, the brakes work normally, but the anti-lock function is not available.

Traction Control System (TCS)

1.The TCS of this vehicle is enabled by default, meaning that after each shutdown and restart, TCS is restored to the on state.
2. The display icon of the TCS function on the instrument panel is"". When the""light is on,it indicates that the TCS function is off; when the""light is off, it indicates that the TCS function is on; when the""light flashes quickly, it indicates that TCS is working ;

Operation TCS(Turning off or on)

The TCS function is represented by the icon on the dashboard. When the light is" ",the TCS function is disabled (OFF). When the light is " " the TCS function is enabled (ON).
To turn off:
(1) Ensure the vehicle is powered on and the engine is running.
(2) Use the "SET"and "MOD" buttons on the left handlebar to enter the Stability System page in the dashboard's main menu, and select OFF.
(3)If the indicator light illuminates"" ,the TCS function is now closed.

To turn on：

(1) Ensure the vehicle is powered on and the engine is running.

(2) Use the "SET"and "MOD" buttons on the left handlebar to enter the Stability System page in the dashboard's main menu, and select ON.

(3)If the indicator light illuminates"" ,the TCS function is now closed.

⚠CAUTION

· Please turn off the TCS function in advance when you need to drive aggressively, otherwise, it will affect the driving experience.

1.When the main stand is raised and the throttle is applied, or the vehicle is stuck in mud or other soft roads, and TCS is continuously triggered for more than 5 seconds after the front wheel stops rotating and the rear wheel rotates, TCS will automatically exit. Release the throttle, and the TCS function will automatically recover.

2.When the ABS function is abnormal, TCS will automatically turn off, and the " "light will be on. After the ABS function returns to normal, shut down and restart the vehicle, and the TCS function will recover, and the" " light will turn off.

3. When the ABS function malfunctions, the TCS will automatically shut down. At this time, the "" light will illuminate. Once the ABS function returns to normal, if you turn off the power and then turn it on again, the TCS function will be restored, and the " " light will go out.

4. When the vehicle is powered on and the ignition switch is turned on, the TCS will perform a self-check. The " " light will illuminate for 1 second and then go out.

New car break-in period

Proper running-in of a new vehicle can extend the service life of the motorcycle and give full play to the performance of the new motorcycle The correct break-in methods are listed below.

Engine running-in period

The following table recommends the throttle opening during the break-in period:

First 1000 km:
Throttle opening below 1/3

Until 1600 km:
Throttle opening below 1/2

After 1600 km:
No restrictions

Engine RPM

To protect engine components, the engine speed is limited to 9600rpm. When the engine speed reaches the limit speed, the speed will automatically adjust near the limit speed, and there will be fluctuations, which is a normal phenomenon.

Tire running-in period

Like engine running-in, new tires require proper break-in to ensure better performance. During the initial 150km of using new tires, gradually increase the leaning angle when turning to break in the contact surface of the tires for better performance. Avoid sudden acceleration, sharp turns, and emergency braking during the initial 150km of using new tires.

⚠ DANGER

• Poor tire running-in can cause tire slipping and loss of control. Drive with extra caution after changing tires. running in the tires correctly according to the content of this section, and avoid sudden acceleration, sharp turns, and emergency braking during the initial 150km of using the tires.

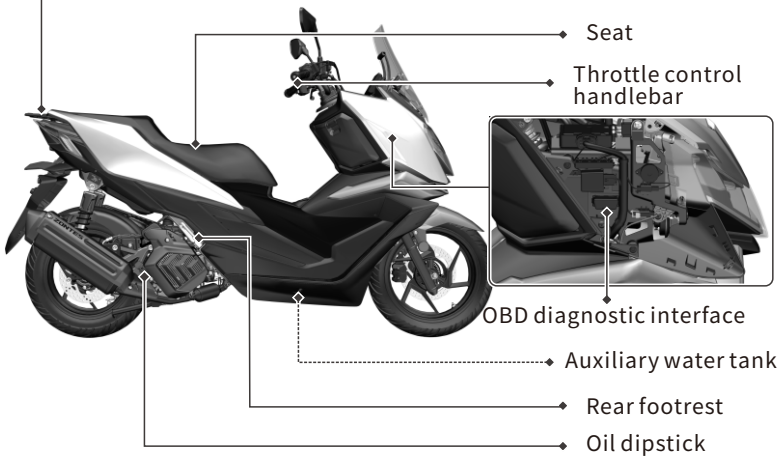
Avoid prolonged full throttle operation

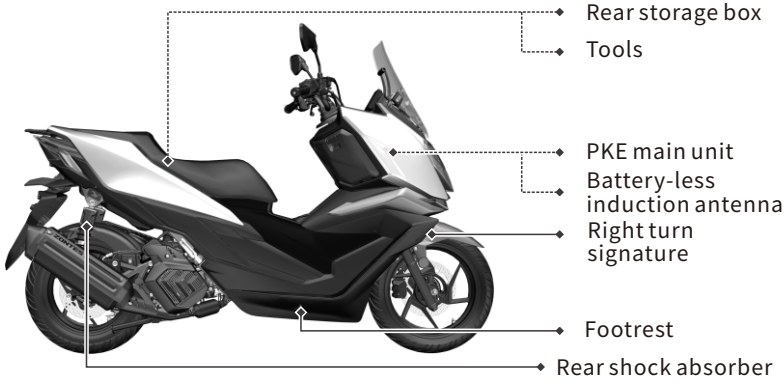
Avoid prolonged full throttle operation. Since the engine is in a new state, do not apply excessive load during the initial 1600km. During the break-in period, the various parts in the engine will wear and polish each other to achieve the correct operating clearance. During this period, you must avoid prolonged full throttle operation or any conditions that cause the engine to overheat.

Allow oil to circulate before driving

Whether the engine is hot or cold, the engine should have sufficient idle running time before starting.This allows the oil to flow to all of the lubricated areas.

Component Installation Positions





Component Installation Positions



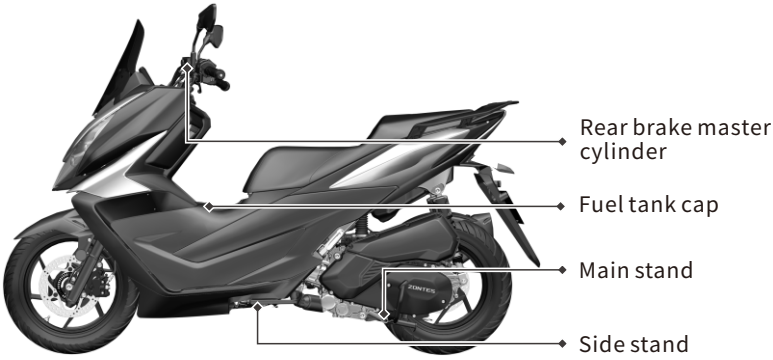


Component Installation Positions






Windshield
Hook
Rear footrest
Appearance


Rear brake master cylinder
Fuel tank cap
Main stand
Side stand

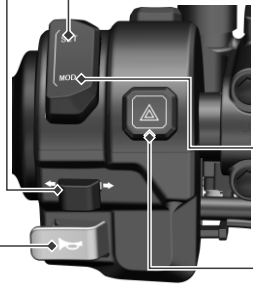
Left and Right Handlebar Control System

Left and Right Handlebar Switch

Instrument operation key:

Set key: Short press SET to enter main menu/confirm selection. Press the key for a long time on the main interface to quickly enter the screen projection interface.Screen projection interface Press this button for a long time to return to the main interface (only when you enter the screen projection interface quickly, you can exit quickly).Do not operate this key while driving the vehicle.

Turn signal operation:
Push left ⬅ to flash the left turn signal; push right ➡ to flash the right turn signal. The corresponding turn signal indicator on the instrument panel will light up simultaneously.



MOD key: Select the next item. It is prohibited to operate this key while driving the vehicle.

Horn button
Press the button to sound the horn.

Danger warning button:
Press the button to make all four turn signals flash to remind and warn surrounding vehicles.

High/Low Beam & Passing Light Switch:
Default is low beam. Push up to turn on high beam; push down to turn on passing light.

: High beam
: Low beam
: Passing light



SEAT switch
Short-press to unlock the seat cushion.

Left and Right Handlebar Switches



Power button
Short-press to turn on the vehicle; long-press to turn off the vehicle.

Stop ignition switch:
This is a rocker switch. When toggled to the "🔑"position, the circuit is connected, and the engine can be started. When toggled to the" 🔑"position, the starting circuit is completely cut off, and the engine cannot be started (this method can be used for emergency shutdown).

Electric start switch:
Press this button to connect the starting circuit. To start, the side stand must be retracted, the engine stop switch must be in the"🔑 "position, and the brake handlebar must be squeezed.

Idle stop switch button:
Press the key to turn on the automatic start-stop function, and press the key again to turn off the automatic start-stop function

⚠CAUTION

• Do not start the engine continuously for more than 5 seconds each time, as heavy discharge will cause abnormal heating of the circuit and starter motor. If the engine fails to start after several attempts, stop and check the fuel supply system and starting circuit system.

Idle Stop System

The idle stop system can be activated or deactivated using the start/stop switch:

1. Activation:When the start/stop switch is pressed, the start/stop indicator light " Ⓐ " illuminates for 2 seconds and then turns off. During riding, when the idle stop system is ready to stop the engine, the start/stop indicator light remains steadily on. When the idle stop system stops the engine, the start/stop indicator light flashes.
2. Deactivation:When the start/stop switch is pressed again, the idle stop OFF indicator light " Ⓐ OFF " illuminates.

Activating the idle stop system

When the following conditions are met and the start/stop switch is in the ON position, the idle stop system is ready to stop the engine, and the start/stop indicator light illuminates:

- The side stand is raised
- The engine is started using the electric starter button
- The engine is fully warmed up, with coolant temperature above 65°C
- The vehicle has been ridden at a speed exceeding 15 km/h (9 mph) for more than 3 seconds

Safety precautions of the idle stop system

When the start/stop indicator light is flashing, do not leave the vehicle. If you must leave the vehicle, turn the engine stop switch to the " " position.

- If the throttle is opened, the engine may start unexpectedly.

Restarting the engine

Check whether the start/stop indicator light is flashing, then open the throttle.

- If the indicator light is not flashing, the engine cannot be restarted via the idle stop system.
- When the idle stop system stops the engine, if the side stand is lowered, the flashing start-stop indicator light will turn off. At this time, opening the throttle will not restart the engine, and the electric start button will be disabled.

⚠ CAUTION

- Parking for a long time through the idle stop system will cause the battery to discharge.
- If the battery level is low, please turn on the start-stop switch, and the idle stop system cannot be used.
- If the start-stop indicator flashes (the start-stop switch has been pressed), open the throttle, and the engine fails to start, please check if the battery level is low or if there is a start-stop fault on the instrument fault page. If there is a fault, please go to the dealer for inspection.

Fault Indication

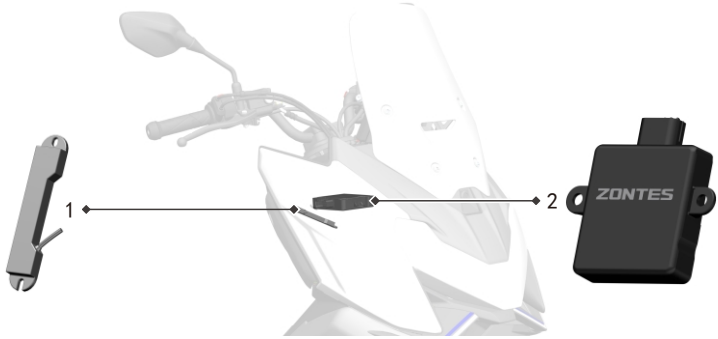
ISTOP controller start/stop indicator status table

Category	Description	Indicator status	
ISTOP	ISTOP function ON	On for 2 s, then off	On for 2 s, then off
	ISTOP engine stop activated	Always on	Always on
	ISTOP engine restart activated	Flashing	On 0.5 s,off0.5 s
	Temperature / throttle signal not received	Flashing two time	Flashing: On 1 s / Off 1 s Interval: Off 3 s
	Engine stop command sent but engine not stopped	Flashing three time	
	ISTOP low battery	Flashing four time	
Error	Hall sensor open circuit	Flashing one time	Flashing: On 1 s / Off 1 s Interval: Off 3 s
	Hall sensor short circuit	Flashing two time	
	Over current protect	Flashing three time	
	Motor stall	Flashing four time	
	Over voltage protect	Flashing five time	
	Relay open circuit	Flashing six time	
	Relay short circuit	Flashing seven time	
	Start timeout	Flashing eight time	
	Charging circuit fault	Flashing nine time	
	Communication fault	Flashing ten time	
	Battery low	Flashing eleven time	

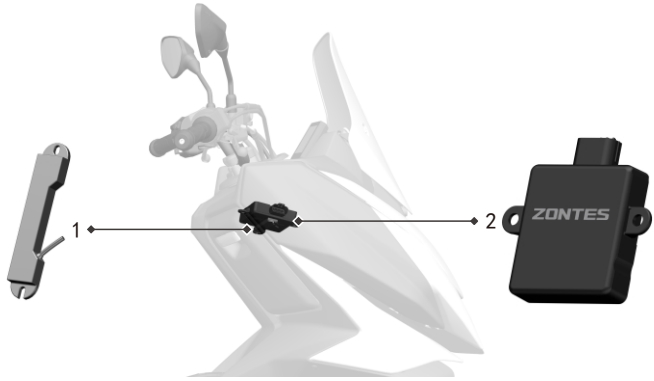
When the start/stop fault indicator on the instrument cluster flashes, switch to the vehicle information page on the instrument panel to check the specific fault

Fault Code	Fault Type
2001	Hall sensor open circuit
2002	Hall sensor short circuit
2003	Over current
2004	Motor stall
2005	Over voltage
2006	Relay open circuit
2007	Relay short circuit
2008	Start timeout
2009	Charging circuit fault
200A	Communication fault
200B	Battery low

PKE Keyless Control System



150X



150V

3D antenna sensing



3

PKE (Passive Keyless Entry) system instructions:

- Passive induction antenna (Figure 1)
- 3rd-generation PKE control unit (Figure 2)
- 3rd-generation smart key (Figure 3)

Use of the keyless entry system

The vehicle is equipped with two induction keys; one should be kept safely as a spare.

Both induction keys are affixed with barcode stickers that correspond to the barcode sticker number on the PKE host. The PKE host can automatically identify one key approaching the vehicle without activation. At any time, only one induction key is working.

⚠CAUTION

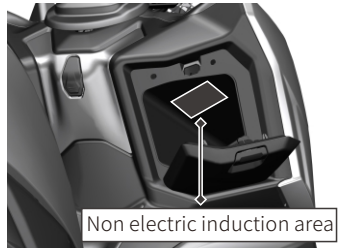
· The induction key has two LEDs: green and red. The LED will flash when the vehicle detects the key. When the battery of the induction key is fully charged, the LED flashes green; when the battery is low, the LED flashes red (both red and green key lights will flash once when the key battery is first installed). Due to the specification and capacity limit of the key battery, the CR2032 button battery has a service life of approximately 18 months (depending on individual usage). If your induction key is not sensitive or the induction key indicator light flashes red, please consider replacing the key battery.

Use of seat cushion lock

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

(2) When the vehicle is powered on and stationary with the engine off, press the seat cushion lock button to open the seat cushion lock.

Keyless induction start mode



When the induction key battery is low or there is no key battery, the vehicle can be turned on via the keyless induction mode. The specific steps are as follows:

Long-press the " ⏻ " button on the right handlebar when the vehicle is shut down and the steering lock is locked, and you will hear a "beep" sound for the first time; or short-press the "⏻ " button on the right handlebar when the vehicle is shut down, and you will hear a "beep" sound for the second time.

Within 5 seconds, attach the key induction area (Figure 1) to the vehicle's keyless induction area.

PKE Keyless Control System

⚠ CAUTION

· You can also first press the key sensing area (Figure 1) tightly against the non electric sensing area, and then proceed with the above steps.

·After turning on the non electric induction, the key will no longer be detected. Please pay attention to turning off the vehicle when leaving.

PKE power on

Short-press the "⏻" button, the turn signals will flash twice, the steering lock will automatically unlock, and then a "beep" sound will be heard twice as a prompt, and the circuit will be connected.

⚠ CAUTION

·If the steering lock fails to unlock successfully, it may be that the handlebar is blocking the steering lock plunger. Gently turn the handlebar to allow the plunger to move freely, or the battery power is too low to unlock. Please check if the battery power is normal. When the steering lock fails to unlock, you have 30 seconds to open the fuel tank lock and seat cushion lock. During this time, short-pressing the "⏻ "button will not work. The mode will automatically exit after long-pressing the"⏻"button or after 30 seconds.

⚠ DANGER

·When forcing the vehicle to power on using keyless induction or Bluetooth mode, be sure to turn the handlebar all the way to the left and confirm that the steering lock core has retracted before using the vehicle.

⚠ CAUTION

•If after checking that the battery power is normal, short-pressing the "⏻" button fails to turn on the vehicle but the host emits a "beep" sound as a prompt, please check the key battery power and try using the keyless induction start mode (refer to the keyless induction start mode description for specific operations). If the battery power is normal and the host does not emit a "beep" sound, please check if the vehicle's main fuse, charging fuse, and PKE fuse are normal. When replacing the fuse, be sure to use a fuse of the same specification.

·When the battery is dead, please charge it fully and unplug the charger before attempting to turn on the vehicle.

⚠ CAUTION

•When leaving the vehicle after use, please pay attention to manually shutting down and locking it.

PKE power off

After the vehicle comes to a complete stop, turn off the engine, move the handle to the far left, press and hold the "⏻" button for at least 2 seconds and then release it, the turn signals will flash twice, the handlebar lock will automatically engage, and then the buzzer will sound once to indicate that the vehicle is powered off.

⚠ CAUTION

•After shutting down, please check the lock status of the faucet. If the faucet is not locked, please place your hand to the far left and the vehicle will automatically lock. If the handle is not placed to the far left, turn off the device, prohibit pushing or sliding the vehicle, and prevent the faucet from locking when the handle is placed to the far left, which may cause danger. When pushing a cart or sliding downhill, ensure that the PKE is turned on (with the faucet lock unlocked).

⚠ CAUTION

•It is recommended to replace the key battery once a year.
•Try not to install electronic devices that affect the key signal in the vehicle, such as GPS, dash cams, wireless chargers, etc.
•Keep the key away from interference sources such as mobile phones, power banks, and Bluetooth earphone charging cases as much as possible. Try not to put it together with meal cards, access cards, NFC cards, car keys, metal pendants, etc. Do not use protective cases made of metal, conductive materials, or magnetic materials.
•If there is a strong interference source near the vehicle that affects the key signal, you can unlock the vehicle through the emergency start method, mobile phone remote control, and Bluetooth vehicle control functions.

PKE Fault Prompt

When an abnormal condition of the vehicle is detected, the vehicle will prompt the owner through beeps of different lengths and fault codes. The specific meanings are as follows:

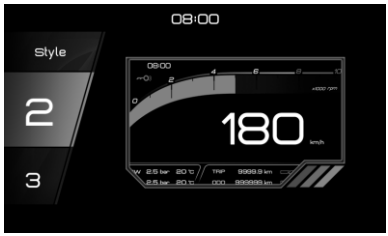
Item	Prompt Sound	Fault Code	Alarm Content
START Button Stuck	One long and two short beeps	8002	If a button is detected as stuck after each startup, an alarm will sound once after 10 seconds.
Seat Cushion Lock Button Stuck	Two long beeps	8005	Alarms once and acts once 10 seconds after power-on if the button is stuck; alarms once and acts once within 10 seconds of being stuck after power-on.
High-Frequency Reception Abnormality	Two long, and one short beeps	8006	Detects an abnormality in the high-frequency reception of the PKE host during each normal power-on, alarms once (only alarms once; not detected during keyless induction power-on or APP power-on).
No Paired Remote Control	Two long, three short beeps	8008	Detects no paired remote control in the PKE host when pressing the red power-on button each time, alarms once (only alarms once).
Low Remote Control Battery	Three long beeps	8009	Detects an abnormal battery signal of the transponder during each normal power-on, alarms once (only alarms once; not detected during keyless induction power-on or APP power-on).
Steering Lock Unlock Abnormality	Five short beeps	8010	Detects an abnormal unlock signal during each power-on, alarms once (only alarms once).
Steering Lock Lock Abnormalityl	Five short beeps	8011	Detects an abnormal lock signal during each power-on, alarms once (only alarms once).
Remote Control Out of Detection Area	Eight short beeps	8014	After normal power-on, the PKE host alarms and shuts down if it cannot receive the response signal from the transponder during operation (not detected during keyless induction power-on or APP power-on).

Instrument mode selection

This instrument has three style modes, which can be switched according to the usage scenario and personal preference. The following is a brief introduction of the instrument using only the Style 1 interface.
With the update of instrument functions, the content may change, please refer to your actual vehicle.



Theme 1



Theme 2



Theme 3
(Screen mirroring mode)

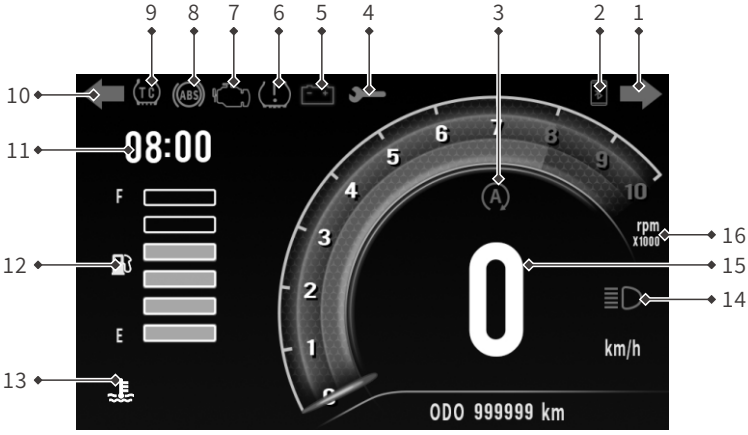
⚠ WARNING

•Do not operate the instrument panel functions for a long time when the engine is turned off. This will cause the battery power to be too low or exhausted.

•Basic operations: You can use the buttons on the left and right handlebars to operate and set various functions of the instrument panel.

•Do not use the handlebar controls to access the main menu of the instrument panel while the vehicle is in motion.

Indicators and Warning Lights



1. Right turn signal " ➡ "
2. Bluetooth indicator light " ᛒ "
3. Start/stop indicator light " Ⓐ "
4. Maintenance and service indicator light " 🔧 "
5. Battery low voltage warning light "[−+]"
6. Tire pressure indicator light " (!) "
7. Engine electronic fuel injection system fault warning light " "
8. ABS system warning light " (ABS) "
9. TCS system warning light " (TC) "
10. Left turn signal " ⬅ "
11. Clock "07:45"
12. Fuel gauge " ⛽ "
13. Water temperature warning light " "
14. High beam indicator light " ≡D "
15. Speedometer " km/h "
16. Tachometer " rpm x1000 "

Right turn signal " ➡ "

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

Bluetooth indicator light " ᛒ "

Lights up when connected to a mobile phone via Bluetooth.

Start/stop indicator light " Ⓐ "

Start/Stop indicator light: When the start/stop function is enabled," Ⓐ " indicator light A illuminates for 3 seconds and then turns off. When the start/stop function is disabled, " Ⓐ OFF " indicator light A illuminates.

Maintenance and service indicator light " 🔧 "

Refer to the regular maintenance schedule - engine oil.

Instrument reset maintenance mileage operation: You can check the remaining maintenance mileage in the secondary menu - Vehicle Information. On this page, long press 'SET' for 8 seconds to reset and enter the next maintenance cycle. (Note: This operation is irreversible!)

⚠ WARNING

· When the maintenance and service indicator light illuminates, it indicates that the motorcycle has traveled a certain mileage and needs to have its oil changed to maintain the engine. Continuing to drive the motorcycle without maintenance will damage the engine and transmission system.
· When the maintenance and service indicator light illuminates, turn off the engine, check the engine oil level, and determine if the oil level is correct and if the oil needs to be changed.

Battery low voltage warning light "🔋"

Flashes and alarms when the detected voltage is ⩽11.9V when the engine is not started (flashing frequency 1Hz, automatically cancels when >12.1V). Flashes and alarms when the detected voltage is <12.6V when the engine is started (flashing frequency 1Hz, automatically cancels when ⩾12.6V). If the voltage display exceeds 15V, stop using the vehicle immediately and take it to an authorized ZONTES flagship store or dealer for inspection.

Tire pressure indicator light " (!) "

When the tire pressure function is turned off, no further warnings will be issued.

When the tire pressure function is turned on, Illuminates and alarms when there is an abnormality in tire pressure or temperature; maintenance and inspection are required.

The tire pressure alarm range of this model is as follows:

Front wheel high-voltage alarm:⩾ 280kPa

Front wheel low-voltage alarm:⩽ 165 kPa

Rear wheel high-voltage alarm:⩾ 330kPa

Rear wheel low-voltage alarm:⩽ 200kPa

When the tire pressure alarm is alarmed, the tire pressure warning light is on, and the tire pressure value turns red.

The range of lifting the tire pressure alarm of this model is as follows:

Front wheel high-pressure alarm:＜ 270kPa

Front wheel low-voltage alarm:＞ 175kPa

Rear wheel high-voltage alarm:＜ 320kPa

Rear wheel low-voltage alarm:＞ 210kPa

⚠CAUTION

・When triggering the tire pressure low pressure alarm, the tire pressure must be 11kPa higher than the alarm point to release the alarm;
・When triggering the tire pressure high-pressure alarm, the tire pressure must be 11kPa lower than the alarm point to release the alarm.

Engine EFI fault warning light " "

After the engine starts successfully and operates normally, the EFI warning light should remain off. If the light illuminates during operation, it indicates a fault in the electronic fuel injection (EFI) system.

⚠WARNING

・Continuing to drive the motorcycle when the EFI system reports a fault may damage the motorcycle. Please take it to an authorized ZONTES flagship store or dealer to inspect the EFI system.

ABS system warning Light "(ABS)"

When the vehicle is powered on again, the ABS indicator light remains on and turns off when the speed reaches approximately 5km/h. If it remains on while driving (refer to page 1-7 for details).

⚠ WARNING

• If the ABS warning light does not go out after the speed reaches 5km/h, or illuminates while riding, please pay special attention to avoid wheel lock-up during emergency braking.

⚠ CAUTION

· If the warning light does not function as described above, or illuminates while riding, ABS may be malfunctioning. Please take it to an authorized ZONTES flagship store or dealer for repair as soon as possible.

TCS system indicator "(TC)"

(Refer to the TCS section for details).

⚠ WARNING

· If the TCS warning light does not go out after the speed reaches 5km/h, or illuminates while riding, please pay special attention to avoid rear wheel skidding.

⚠ CAUTION

• If the warning light does not function as described above, or illuminates while riding, TCS may be malfunctioning. Please take it to an authorized ZONTES flagship store or dealer for repair as soon as possible.

Left turn signal " ⬅ "

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

Clock " 07:45 "

Uses a 24-hour format.

Fuel gauge " ⛽ "

The remaining oil quantity when the last indicator starts to flash: approximately 1.1 liters. The low oil level indicator also lights up simultaneously.

High beam indicator light "≣D"

Illuminates when the high beam of the headlight is used.

Water temperature warning light "🌡"

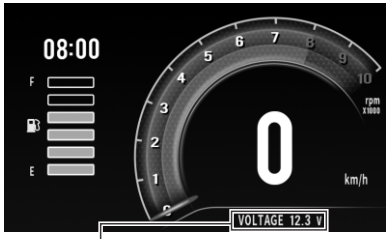
Water Temperature Warning Light: After starting, when the temperature reaches 115°C, the water temperature warning light will turn on, indicating that the cooling system needs to be checked.

Speedometer " km/h "

Speedometer: 0-199 km/h

Tachometer "rpm x1000"

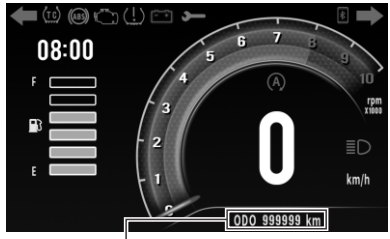
Tachometer：0-10000rpm



Voltage

Voltage

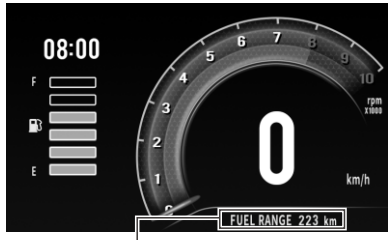
Display voltage value.



Trip mileage

Trip mileage

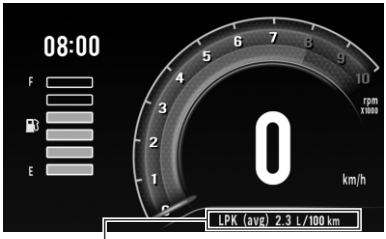
Total mileage traveled.



Driving range

Driving range

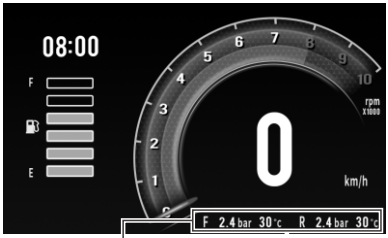
Indicates the remaining driving range with the current fuel. Calculated based on average fuel consumption and fuel level.



Average fuel consumption

Average fuel consumption

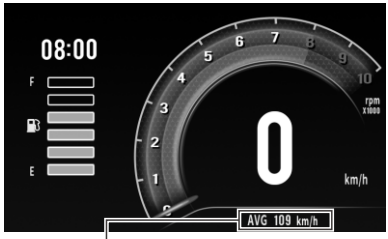
Average fuel consumption shows the average fuel usage, display range: 0.0-9.9L/100km; initial display: shows “--”. When the trip meter accumulates less than 0.5 km, it shows “--”. Press and hold the “MOD” button on the main screen to reset the average fuel consumption.



Tire pressure, Tire temperature

Tire pressure display:

Tire pressure and temperature display section



Average speed

Average speed:

Displays the average speed after it has been reset. Display range: 0-199 km/h; Initial display: shows "--". When the trip mileage is less than 0.1 km: shows "--". Press and hold the "MOD" key on the main screen to reset the average speed.

Menu Structure

Main Interface	First-level Menu	Second-level Menu	Third-level Menu	Fourth-level Menu
	Instrument Settings	Language Settings	Chinese	
			English	
		Backlight Settings	1……5gear	
			Automatic	
		Clock Settings	Automatic Calibration	
			Manual Calibration	
		Bluetooth Settings	ON	
			OFF	
		Units Settings	Metric	
			Imperial	
	Style Switch	Style1		
		Style2		
		Style3		
	Vehicle Information	Tire Pressure	Tire Pressure Monitoring: [On]	Tire Pressure Monitoring: [Off]
			Units:[kPa]	
			Units:[bar]	
			Units:[psi]	
		Vehicle Information		
		Version Information		
	Stabilization System	TCS	ON	
			OFF	
	Return			

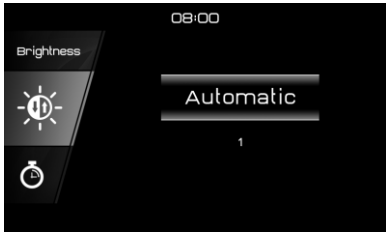
Language settings

Change the system language.



Backlight settings

You can choose one of the 5 backlight brightness levels or select auto adjustment (automatically adjusts brightness based on the photoelectric sensor).



Clock settings

Automatic Calibration: Automatically syncs time with GPS every time the device is powered on. You can also manually set the hour and minute according to local time. Operation: Enter manual settings and set in the order of hour and minute. When the cursor is on the hour, use 'SET' or 'MOD' until the desired value is displayed. Press the 'SET' button briefly to confirm and switch.



Bluetooth settings

Pairing: Before two Bluetooth devices can establish a connection with each other, they must recognize each other. This mutual recognition process is called pairing. Once a device is recognized, it will be stored, so pairing is only required the first time the devices come into contact.

Prerequisites for Pairing:

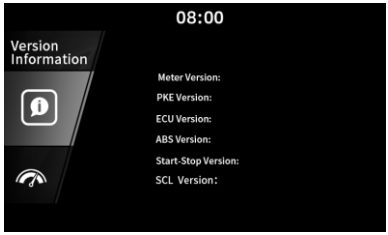
The device's Bluetooth function must be turned on, and the device must allow itself to be discovered by other devices.



Vehicle version information

Vehicle Information: Displays information such as PKE, ECU, ABS, start-stop faults, current tire pressure faults, and remaining maintenance mileage.

Version Information: Displays version information for the dashboard, PKE, ECU, ABS, start-stop system, and handlebar lock.

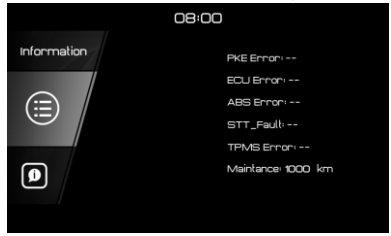


Key number "⊓O"

This indicates the number of the key currently in use, which corresponds one-to-one with the key codes in the Zontes Smart APP. For example: Key 1 corresponds to the [0] key code in the APP, Key 2 corresponds to the [1] key code in the APP, and so on. Each vehicle can have a maximum of 4 keys.

Maintenance information

You can check the remaining maintenance mileage in the vehicle information. Press and hold "SET" in the remaining maintenance mileage option for 8 seconds to select 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 every time the vehicle is turned on (the TPMS sensor only sends a signal to the vehicle after the minimum speed is exceeded).

Tire pressure unit setting: Briefly press the "SET" button to switch between kPa/psi/bar units for your convenience.

Tire pressure learning:

(1) Rotate the valves of the front (rear) wheels of the motorcycle to the 12 o'clock position and leave them for more than 5 minutes. Then operate the instrument to enter the tire pressure learning mode, that is, power on the instrument → enter the menu → tire pressure setting interface → turn on tire pressure monitoring → set the front (rear) wheels to the "learning" state.

(2) Continuously deflate the corresponding front (rear) tires until the instrument displays the sensor ID, current tire pressure, and tire temperature values, and the instrument displays the "learned" status. Then inflate the tires to the rated tire pressure value. The instrument will update and display the inflated values, indicating that the learning was successful.

(3) After successfully learning the front (rear) wheel, wait at least 1 minute before operating the instrument to learn the other wheel to avoid overlapping learning. If the learning is unsuccessful, repeat the above operation.



Maintenance

First maintenance

The initial 1000km maintenance is a mandatory item to keep the vehicle in the safest and most efficient state. Ensuring safety is the obligation of the vehicle owner/driver.

⚠ WARNING

•Failure to perform normal maintenance before riding or failure to correctly troubleshoot faults may cause accidents resulting in serious injury or death.

•Always follow the inspection, maintenance recommendations, and maintenance cycle table provided in this User Manual.

•If you are not familiar with vehicle maintenance, please take it to an authorized ZONTES dealer for maintenance.

Maintenance safety

Please read the maintenance instructions before each maintenance to ensure you have the necessary tools, parts, and skills. We cannot remind you of every possible danger during maintenance. Only you can decide whether you should perform the maintenance and repair.

Follow the following guidelines during maintenance

•Turn off the engine and remove the key.

•Place the motorcycle on a stable and flat surface using the side stand or support it with the main stand.

•Wait for the engine, muffler, brakes, and other high-temperature components to cool down before starting operation to avoid burns.

•Start the engine only in specified cases and in a well-ventilated environment.

⚠ WARNING

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

First routine inspection

The first inspection at 1,000 km is critical. During this period, all engine components have undergone break-in. This service involves readjusting components, tightening all fasteners, and replacing engine oil contaminated by wear debris. Thoroughly performing this initial 1,000 km service ensures optimal performance and extends your motorcycle's service life.

⚠ CAUTION

· Pay attention to whether each regular maintenance is fully carried out in accordance with the prompts in this manual. The initial 1000km maintenance should be performed in accordance with the methods described in this section. Special attention should be paid to the "Danger" and "Warning" in this section. Replacing inappropriate parts will accelerate the wear of the motorcycle and shorten its service life. When replacing parts for your motorcycle, please choose original parts from our company.
· Waste generated during maintenance, such as cleaning agents and used oil, should be properly disposed of to avoid environmental pollution.
· The maintenance specified in the maintenance schedule is the minimum required. If your motorcycle is often used in harsh environments, maintenance should be performed more frequently than specified in the table. If you have any questions about the maintenance cycle, please consult a qualified maintenance unit of our company.

Regular maintenance table

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

Item		Inspect before driving	Service Interval*1 X1000km	1	6	12	18	24	Annual Inspection	Regular Replacement	Reference Page
			X1000miles	0.6	4	8	12	16			
Engine Oil	☆	●		Ⓡ	Ⓡ	Ⓡ	Ⓡ	Ⓡ	●	★Note 1	6-16
Oil Filter	☆			Ⓡ		Ⓡ		Ⓡ	●		6-18
Air Filter (Filter Element)	☆☆				●	Ⓡ	●	Ⓡ		★Note 2	6-25
Engine Air Inlet Filter	☆☆									Replace every 12000 km	6-25
Tire	☆	●			●	●	●	●	●	Check tire pressure and tread wear	6-32
Brake Fluid	☆	●			●	●	●	●	●	Replace every 2 years	6-34
The Internal Moving Mechanism of Steering Lock	☆	●				●		●		★Note 3	–
Front Shock Absorber	☆☆	●				●		Ⓡ	●	Check for leaks	–
Rear Shock Absorber	☆☆	●				●		●	●		6-30
V-Belt	☆☆					●				Replace every 20000 km	6-31
Bolts and Screws in Steering Mechanism	☆☆	●		Ⓣ	Ⓣ	Ⓣ	Ⓣ	Ⓣ	●		–
Secondary Water Tank Level		●		●	●	●	●	●		Replace every 3 years or 30000 km	6-22
Brake Pad Wear		●			●	●	●	●	●	Check for wear and tear	–
Fuel Level		●									–
Idle Speed		●								Start check	–

Regular maintenance table

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

Item		Inspect before driving	Service Interval*1						Annual Inspection	Regular Replacement	Reference Page
			X1000km	1	6	12	18	24			
			X1000miles	0.6	4	8	12	16			
Swing Arm Buffer Rubber				●	●	●	●	●		30000 km replacement	–
Muffler	☆				●	●	●	●	●	★Note 4	–
Accelerator Handle Angle	☆				●	●	●	●		Gap distance:2-4mm	6-28
Gearbox Oil	☆				Ⓡ		Ⓡ			★Note 5	–
Driving Wheel, Driven Wheel	☆					●		●		★Note 6-7	–
Fuel Lines					●	●	●	●		Check for leaks	–
Bearings In The Steering	☆☆				●	●	●	●	●	Add grease at 15000 km	–
Fasteners, bolts, and screws for the whole vehicle				Ⓣ	Ⓣ	Ⓣ	Ⓣ	Ⓣ			–
Wheel, rear swing-arm bushings and oil seals	☆☆				●	●	●	●	●		–
Spark Plug	☆☆					●		Ⓡ			6-14
Brake Hoses	☆☆					●		●	●	Check for leaks	–
Valve Gap	☆☆			Check and adjust every 6000km						★Note 8	–
Air Filter Oil Collection Pipe				●	●	●	●	●			–
Radiator Pipes				●	●	●	●				–
Brake System						●		●	●	Check oil cup level, caliper floating	–
Electric seat lock, electric fuel tank lock										Cleaning and lubrication every 6000 KM	–
Main Bracket					●	●	●	●		Cleaning and lubrication every 6000 KM	–

☆ : This service can be provided by the dealer or a qualified repair unit. If the owner has the appropriate tools, service information and a certain understanding of the machinery, they can carry it out by themselves.

☆☆ : Due to security concerns, such services should be provided by the dealers or qualified maintenance units.

★ Note 1: The first maintenance is required after the first 1000 kilometers or within 3 months (whichever comes first). The second maintenance is conducted when the actual mileage reaches 6000 kilometers. Subsequently, a regular maintenance is carried out every 6000 kilometers or 15 months (whichever comes first).

★ Note 2: When driving in particularly humid or dusty areas, frequent maintenance and repair work should be performed.

★ Note 3: Check, clean, and lubricate every 10,000 kilometers (6,000 miles). For detailed maintenance instructions, please refer to the official website's "Leader Lock Maintenance Video".

★ Note 4: If a motorcycle collides or scrapes the muffler and heat protection plate while reversing, the first step is to carefully inspect the appearance, the stability of the installation point, and whether the muffler buffer gel has deformed. Also, check if there is any air leakage when the engine is idling. Internal abnormal sounds or severe external damage usually require replacement. The involved hangers, brackets, buffer gel, and bolts must all be replaced before the motorcycle can be ridden again.

★ Note 5: Gearbox oil is replaced initially at 6000 km, the second at 18000 km, and thereafter every 12,000 km.

★ Note 6: ①It is recommended to use Shell Gatos S3 V220 C2 extreme pressure grease or a high-temperature resistant No. 2 grease of the same viscosity for the drive and driven wheel bushings every 10,000 kilometers to maintain and lubricate them to ensure riding comfort.②Transmission System: If a significant decrease in speed is observed, it is recommended to maintain and inspect the CVT Transmission system regularly, and replace it in advance if necessary.

★Note 7: CVT system malfunctions caused by parts quality issues are covered by a 1-year or 6,000-kilometer warranty. Beyond either of these distances, the warranty expires. Normal wear and tear on parts during vehicle use is not covered by the warranty. Sensory phenomena that do not affect mechanical performance, such as noise or vibration, are also not covered.

★Note 8: Valve clearance (engine cold state): Inlet: 0.08~0.12mm, Exhaust: 0.18~0.22mm.

Check the front disc brake caliper bolts, front shock absorber base bolts, upper and lower connecting plate bolts, upper connecting plate decorative nuts, disc brake disc and sprocket bolts (nuts), rear axle nuts and cotter pins, rear swingarm nuts, and side bracket kill switch bolts for any looseness. Check the rear axle cotter pins for any abnormalities.

Pre-driving check

Failure to properly check and maintain the motorcycle before driving will increase the risk of accidents and motorcycle damage. Always check the motorcycle before each use to ensure it can operate safely. Refer to the maintenance section of this User Manual.

Perform the following checks before riding the motorcycle:

Steering system

- Steering is flexible.
- No obstacles to movement.
- No shaking or looseness.

Accelerator

- The gap of the accelerator cable is correct.
- The operation is smooth, and releasing the accelerator is effortless.

Brakes

- The handbrake lever operates normally.
- The brake fluid level is above the lower limit mark of the brake fluid cylinder
- No "spongy" feeling of brake failure
- No dragging (braking brakes) phenomenon
- No brake fluid leaks phenomenon
- The wear of the brake discs/plates must not exceed the limit range

Shock absorbers

- No foreign objects attached to the surface, no oil leakage, and smooth operation.

Fuel

- Sufficient fuel for the planned journey.

Engine oil

- Check if the oil level is sufficient. Follow steps 1 to 5 on page 6-16. The oil level should be between the upper and lower limit marks on the oil dipstick.

Lights

- Headlight, taillight/brake light, instrument panel light, turn signals, front position light, and license plate light can be turned on normally.

Indicators

- High beam indicator and turn signal indicator can be turned on normally.

Horn

- Functions normally

Brake switch

- Functions normally.

Stop switch

- Functions normally.

Side stand/Ignition interlock switch

- Operates normally.

⚠CAUTION

·Failure to familiarize yourself with the control components may lead to loss of vehicle control, resulting in accidents or personal injury.

·Please carefully read the user manual to familiarize yourself with all control components. If you have any control components or functions that you do not understand, please consult an authorized ZONTES dealer.

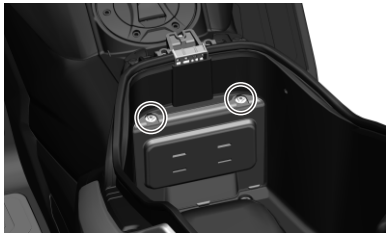
⚠WARNING

·Installing non-authentic ZONTES parts may make your motorcycle unsafe and may cause accidents resulting in injury or death.

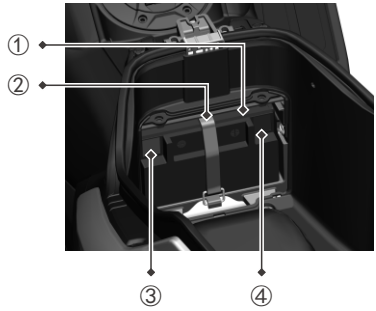
·Always use authentic ZONTES parts or replacements designed and certified for your motorcycle.

Battery

The battery is located at the front end of the seat bucket. To remove the battery, follow the sequence below



1.Use a T25 socket wrench to loosen two inner socket shoulder screws, then remove the battery cover plate (a fuse box is inserted on the back of the battery cover plate; please do not forcefully pull it to avoid breaking the clips or wiring harness).



①Battery
②Battery strap
③Battery negative terminal wire (black)
④Battery positive terminal wire (red)

2.Remove the black protective cap and disconnect the negative (-) terminal wire. Remove the red protective cap and disconnect the positive (+) terminal wire.

⚠CAUTION

•When reinstalling the battery after removal, ensure all surrounding wiring harnesses are properly routed. Pay particular attention to the battery's positive terminal position and other red wires to avoid contact with the vehicle frame, battery, or other metal components. The battery must be fully seated within the battery compartment.

The activation of the new battery

Battery installation:

1.Before installing the battery, inspect its appearance. The cover should be free of scratches or cracks. The battery upper cover should be properly sealed with no leakage. The terminals should be free of misalignment, deformation, or other defects.

2.First connect the positive (+) terminal wire (red wire), then connect the negative (-) terminal wire. Caution: Do not reverse the positive and negative terminals, as this may damage the voltage regulator, rectifier, and other electrical components.

3.After tightening the bolts, apply grease or petroleum jelly to the bolts, nuts, and terminals to prevent rust from causing poor contact.
4.Place the battery into the battery compartment and secure it with the strap. Verify that the battery does not move.

Clean the battery

1.Remove the battery.
2.If the terminals are just starting to corrode and covered with white substances, clean them with warm water and dry them.
3.If the terminals are severely corroded, clean and polish them with a wire brush or sandpaper. Please wear safety glasses.

Replace battery

When replacing the battery, confirm the battery model and verify that it matches the original battery model. The battery specifications are matched during motorcycle design. Using a different model battery may affect the motorcycle's performance and service life and may cause electrical faults.

Usage and maintenance

1. Each electric startup should not exceed 5 seconds. If the engine fails to start after several attempts, check the fuel supply system, starting system and ignition system.
2.The following conditions will cause battery over-discharge or insufficient charging, thereby shortening the battery service life:
・Frequent electric startup,
・Short riding time and distance,
・Long-term power-on without ignition,
・Installing additional electrical components, such as high-power spotlights, audio systems, GPS, and other electrical devices.
3.If the starter motor rotates weakly, the lights are dim, the horn sounds hoarse, or the instrument panel blacks out and restarts during ignition, etc., charge the battery immediately.
4.When the motorcycle is not in use for a long time, remove the battery and store it separately, or disconnect the battery wires. Charge the battery fully before the motorcycle is out of use, and recharge it every three months.
5.Charging cautions:
・Do not overcharge the battery. Overcharging may cause leakage, swelling, or even rupture, posing varying degrees of danger

⚠CAUTION

•Do not attempt to open or modify the battery in any way.
•Avoid using or storing the battery near high temperatures or open flames; otherwise, it may damage the battery and vehicle.
•Do not install the battery's positive and negative terminals incorrectly; otherwise, it may damage the battery and vehicle.
•Use the matching screws and nuts to securely connect and install the battery terminals; otherwise, it may damage the battery and vehicle.
•If the battery emits an odor, heats up, deforms, fades in color, or exhibits any other abnormalities during use or charging, stop using it immediately and remove the battery from the vehicle.
•This battery is standard equipment for the vehicle; do not use it for purposes other than starting this motorcycle.
•Installing external devices such as anti-theft devices, GPS, and fog lights has a certain impact on the battery and the vehicle's electrical circuit. When adding such devices, select qualified brand products and connect them to the reserved interfaces of our company. Do not modify the wires without permission; otherwise, it may cause abnormal operation of the vehicle's electrical circuit system and excessive battery discharge.
•Do not damage the battery. The electrolyte inside the battery is harmful to human skin and eyes; avoid splashing it on the skin, eyes, and clothing. If it comes into contact with the skin or eyes, rinse immediately with a large amount of water and seek medical treatment.

Tool Kit

Press the "SEAT" button on the right handlebar briefly to open the seat cushion, revealing the location of the tool kit.



150X

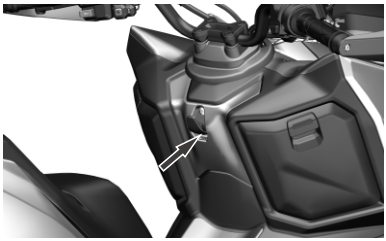


150V



Front Storage Box Hook

Press and rotate the hook downward 48 degrees to reveal.



⚠CAUTION

・Hook weight capacity recommended within 1 kg.

Muffler

Muffler maintenance and care

This motorcycle's muffler is equipped with a catalytic converter to effectively reduce the emission of harmful substances during operation. To ensure its optimal performance, refer to the scheduled maintenance chart in the "Maintenance" section.

To extend the muffler's service life and prevent issues such as corrosion or reduced catalytic efficiency due to improper use or maintenance.

Please be sure to abide by the following matters:

- Do not rev the engine at high speed for a long time while the vehicle is stationary.
- Do not drive at low speed with a heavy load for a long time.
- Do not add anti-rust oil or engine oil to the muffler.
- Do not rinse the muffler directly with cold water when the engine is hot.
- Do not coast with the engine off.
- Do not use low-quality engine oil.
- Use unleaded gasoline.
- Timely remove dirt from the surface and tail of the muffler.
- Keep the engine in good running condition and conduct regular maintenance and inspection.Avoid that secondary combustion of the tail gas in the exhaust pipe caused by the poor combustion of the engine, which lead to the sintering failure of the catalyst.
- When installing the muffler decorative cover, be sure to install heat insulation pads at each screw point to prevent the decorative cover from being damaged by the high temperature of the muffler or causing a fire hazard.

⚠ CAUTION

· Please pay attention to the matters mentioned below and similar ones. Any violation may cause damage to parts or vehicles, and even casualties to the riders.

· When driving, the side parking rack must be retracted to prevent the vehicle from overturning when turning, which could cause casualties to the riders.

· When driving, it is necessary to check whether the braking system is working properly. If there are any problems, please repair it immediately.

· Non-professionals are not allowed to remove the fuel pipe to discharge fuel to avoid damage to the vehicle due to open flames. Do not let the muffler of the motorcycle come into contact with foreign objects to prevent fire. The environment where the motorcycle is used and stored must not have fire hazards.

· When parts need to be replaced during vehicle maintenance, it is essential to use genuine components from our company. Using non-genuine parts, especially electrical components, may damage the motorcycle or even burn out the vehicle.

· Please do not add accessories at will, especially electrical components. If the wiring is improper or the electrical load is too large, it may burn out the vehicle.

Spark Plug

Spark plug inspection

The spark plug is a critical component. According to the maintenance schedule, the spark plug should be removed and inspected regularly. The condition of the spark plug can indicate the engine's operating status. 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 shows significantly different colors, it may indicate abnormal engine operation.

If the spark plug electrodes are corroded, excessively carbonized, or have other deposits, replace the spark plug as soon as possible.

1.Use a hard wire or steel needle to remove carbon deposits from the spark plug, then use a feeler gauge to adjust the spark plug gap to 0.7~0.8 mm.

2.When removing deposits, observe the two colors on the ceramic tip of the spark plug; these colors indicate whether the standard spark plug is suitable. The ignition area of a used normal spark plug is light brown. If the insulator is white and the electrodes are ablated, a colder spark plug is more suitable.

Authorized ZONTES Spark Plug:

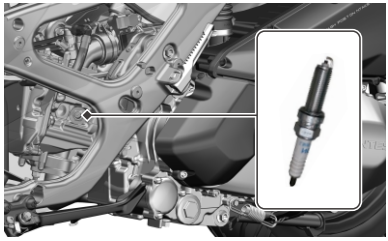
NGK/CR8E

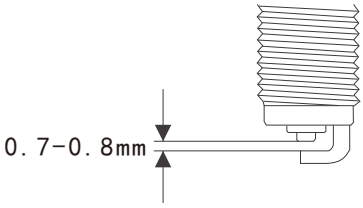
Spark plug replacement

1.Remove the spark plug cap.(For disassembly and assembly methods, please refer to the corresponding video on the official website.)

2.Use a spark plug wrench to remove the spark plug.

3.Inspect the spark plug.





Spark plug gap:

0.7-0.8mm

Spark plug installation

Clean the surface and contact surface of the spark plug gasket, and wipe off the dirt on the spark plug threads.

If there is a large amount of carbon deposit, use a hard iron wire or steel needle to remove the carbon deposit adhering to the spark plug

Locking torque:

Spark plug:

13N.m

⚠ WARNING

•Incorrect spark plug installation may damage the engine cylinder head. Excessive torque when installing the spark plug or cross-threading may also damage the engine cylinder head, so install the spark plug carefully. If no torque wrench is available when installing or replacing a new spark plug, tighten it by hand until resistance is felt, then tighten it an additional 3/8 turn (135°). If using an old spark plug, tighten it by hand until resistance is felt, then tighten it an additional 1/12 turn (30°). However, the spark plug should be tightened to the specified torque as much as possible.

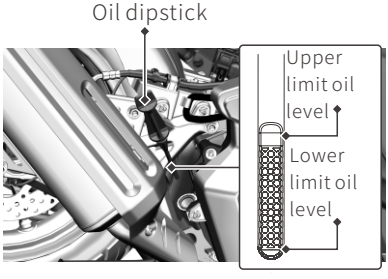
•Dirt may enter the engine through the spark plug installation hole, causing damage to the engine. After removing the spark plug, the spark plug hole must be covered with non-woven fabric or another clean, soft material that does not shed fibers or leave residue.

Engine Oil

Whether an engine can be durable depends greatly on using high-quality engine oil and regularly replacing it with new oil. Regularly checking the oil level and routinely changing the oil are two important tasks that must be carried out as part of maintenance.

Check the oil level of the engine oil

1.Park the motorcycle on a flat surface and use the main stand to keep it upright.
2.Start the engine and let it idle for 3-5 minutes (if the temperature is below 10°C, extend the idling time appropriately)
3.Turn off the engine and wait for 3-5 minutes.
4. Rotate the dipstick counterclockwise to remove it, wipe it clean with a lint-free dry cloth or napkin, then reinsert it into the original position (do not screw it in). Remove the dipstick again to check the oil; the oil level should be between the minimum and maximum marks.
5. If the oil level is below the mark, add the recommended engine oil until it reaches the correct level.



⚠ WARNING

When the engine oil is too much or too little, running the engine will damage the engine. Park the motorcycle on a flat surface and check the oil level by looking at the oil dipstick scale. The oil level must be between the lowest and highest oil level marks. When checking the oil level, make sure the motorcycle is upright. Any tilt of the motorcycle to one side may lead to incorrect checking.

Engine Oil Replacement

Replace the engine oil

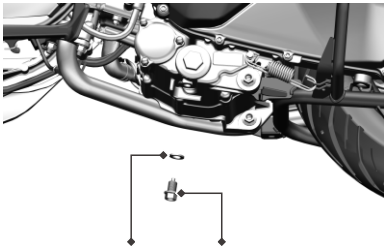
At the end of each maintenance cycle, replace the engine oil. The oil replacement should be carried out while the engine is hot, as this allows for a more thorough removal of the old oil. The steps are as follows:

1.Park the motorcycle on a flat ground with a side frame.

2.Unscrew the oil filler cap counterclockwise.

3.Place the oil drain pan under the engine oil drain bolt.

4.Use a 14# box wrench to remove the engine oil drain bolt and drain the old engine oil. It is strictly prohibited to start or run the engine during the process of draining the engine oil. Before starting the engine, it must be ensured that there is sufficient engine oil in the engine.



5.Install the engine oil drain bolt and gasket, and tighten the oil drain bolt to the specified torque. Tightening torque :25N.m.

6.Add 800ml (or 870ml if the oil filter has been replaced) of SN 5W-40 or a higher quality grade of four-stroke motorcycle engine oil than API SN from the oil port. Clean the thread of the oil dipstick and the O-ring groove on the box thoroughly to ensure there are no impurities and the O-ring is undamaged. Then screw in the oil dipstick and tighten it.

⚠ WARNING

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

7.Start the engine and let it idle for several minutes, checking for leaks at any disassembled parts. If there is oil leakage, immediately shut off the engine and investigate the cause.

8.Let the engine idle for 5 minutes, then turn it off and let it sit for 3 minutes. Check the engine oil level using the dipstick. Adjust as needed.

⚠ DANGER

· When the engine is running, do not open the dipstick to prevent hot engine oil from splashing out and injuring someone.

⚠ DANGER

· If the engine oil is too much or too little, running the engine can damage it. Park the motorcycle on a level surface and check the oil level using the dipstick markings. The oil level must be between the minimum and maximum marks. When checking the oil level, make sure the motorcycle is upright, as tilting it slightly to either side may lead to incorrect readings.

Locking torque:

Engine oil drain bolt:
25N.m

Oil filter replacement

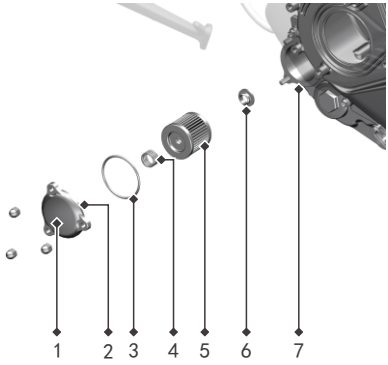
(Please properly recycle and dispose of used engine oil and oil filters)

1.Place the drain pan under the left crankcase cover.

2.Using a 10# socket, remove the three hexagonal nuts on the oil fine filter cover in a counterclockwise direction. Gently rotate the oil fine filter cover back and forth to loosen it, and then remove the cover. Do not use hard objects to pry open the oil fine filter cover; otherwise, it may cause oil leakage.

3.First, clean the oil inside the O-ring groove of the fine filter cover thoroughly, and then install the new sealing ring (3)

4.Use a clean non-woven cloth to wipe away the remaining oil and impurities. Check the installation of the fine filter spring, and replace the new fine filter (5) and the oil fine filter seal ring (6).



1.Fine filter cover
2.A side
3.Sealing ring
4.Fine filter spring
5.Engine oil fine filter
6.Engine oil fine filter sealing ring
7.B side

Nut torque:
10±1N.m

⚠CAUTION

•Proper installation of the oil filter is crucial. Please use a genuine factory oil filter. It is extremely important to install the oil fine filter correctly. Please use the original factory engine oil fine filter. Do not install the engine oil fine filter in the reverse direction. Do not leave the spring and the sealing ring of the fine filter uninstalled. Please make sure to carefully check. Using a non-original engine oil fine filter or incorrect installation may cause serious damage to the engine due to engine oil contamination or deficiency.

Reinstall the fine filter cover：If necessary, replace the sealing ring of the oil fine filter and the O-ring on the cover of the oil fine filter. Align the fine filter cover with the screw hole and press it gently and parallelly into the mounting hole. Hold the fine filter cover with your hand and pre-tighten the 3 cap nuts to ensure that the end face (A side) of the fine filter cover is tightly against the end face of the mounting hole.
(B side) No longer press up. Then evenly tighten the three cap-shaped nuts. The standard torque is 10±1N.m.

⚠CAUTION

•Before installing the fine oil filter cover, please carefully check whether the O-ring on the oil filter cover is damaged. When installing the filter cover, the O-ring must not have any trimmed edges. If there is any damage or trimming, please have it replaced by the dealer in time, otherwise it may cause oil leakage.

•Be sure to install the filter cover according to the correct procedure, otherwise it may lead to oil leakage.

Recommended oil

Shell Oil (SN5W-40)

Engine oil replacement capacity

Change the engine oil:
800mL
Replace the engine oil filter element:
870mL

Locking torque:

Gearbox drain bolt:
25N.m

Gearbox Oil

Change gearbox oil

Before each ride, always check the gearbox for oil leaks. If any leaks are found, take it to an authorized dealer or repair shop. Additionally, be sure to change the gearbox oil at the intervals specified in the maintenance schedule.





1.Start the engine, ride the vehicle for a few minutes to allow the gear oil temperature to rise, and then stop the vehicle and turn off the engine.
2.Support the main frame and park the vehicle.
3.Place an oil basin below the drain bolt of the gearbox to collect the used gearbox oil.
4.Remove the cap and O-ring at the oil filler opening of the gearbox
5.Remove the drain bolts and gaskets, and drain the oil from the gearbox
6.Install the drain plug bolts and gaskets, and tighten the bolts to the specified torque (tightening torque: 20 N.m).
7.Add the recommended gearbox oil to the specified capacity. (Specified capacity: 120 milliliters.
Recommended gearbox oil:Gear Oil SAE 80W-90 GL-5.)
Warning: Be careful not to allow any foreign objects to enter the gear box, and make sure there is no oil residue on the tire and the wheel.
8.Install the fuel filler cap and O-ring, and tighten the cap.
9.Check if the gearbox is leaking oil. If it is leaking, please check the cause.

Locking torque:

Gearbox oil drain bolt
20N.m

Coolant (Antifreeze)

Recommended coolant:

TOTAL Antifreeze

Coolant (antifreeze) total:

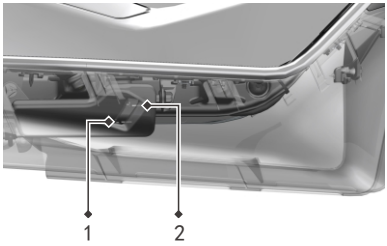
650ml (including auxiliary water tank 70ml)

Coolant

Check the coolant level in the storage tank while the engine is cold.

1.Place the motorcycle on a firm and flat surface and lift the main stand to keep the motorcycle upright.

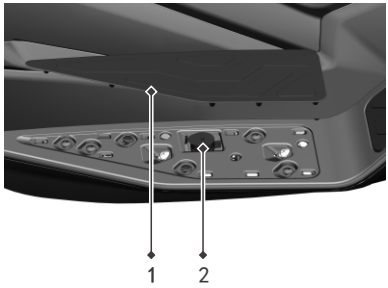
2.Check that the coolant level in the reservoir is between the upper and lower



1.Lower Level Mark (L)

2.Higher Level Mark (H)

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



1.Right pedal lower floor pad

2.Coolant auxiliary tank cover

⚠WARNING

· Only remove the coolant auxiliary water tank cover. Do not remove the water tank cover when the engine is very hot.

4.If the total amount of coolant is lower than lowest level mark (L), remove the right pedal lower floor pad, and the auxiliary coolant tank cover can be seen.

5.Open the cover of the auxiliary coolant tank, and add the antifreeze to the position between the liquid level lines

⚠WARNING

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

6.Reinstall the coolant reservoir cap and the right footrest lower footpad.
7.Observe and make sure that the auxiliary tank coolant is at the upper limit line "H".



1.Coolant main tank cover



2.Pump exhaust bolt

⚠CAUTION

·With the engine cold, deploy the side stand and inspect all hoses and clamps to ensure proper assembly. Loosen the air bleed bolt at the top of the water pump, remove the radiator cover, and unscrew the filler cap. Slowly add coolant until it continuously seeps from the air bleed bolt. Manually tighten the bolt to the specified torque (10 N·m) and continue filling coolant until the filler port is full. Secure the filler cap. Retract the side stand and deploy the main stand. Start the engine. After 30 seconds when the temperature gauge rises from 3 bars to 4 bars, shift the throttle to 4,000–5,000 RPM for about 10 seconds. Repeat this process several times, then touch the lower part of the radiator. If the lower section feels hot and the temperature stabilizes at 4 bars, the coolant filling is complete. Turn off the engine and wait for the coolant temperature to drop below 2 bars, then unscrew the filler cap. If the liquid level has decreased, refill the coolant until the filler port is full. Simultaneously, add coolant to the auxiliary tank up to the upper limit line "H."

Engine coolant (antifreeze)

A coolant (antifreeze) suitable for aluminum radiators, formed by mixing a coolant (antifreeze) concentrate with distilled water in a specific ratio. This coolant (antifreeze) can be used if the outdoor temperature does not fall below its freezing point. When adding or replacing the coolant (antifreeze), please use the coolant (antifreeze) based on ethylene glycol and suitable for aluminum radiators.

⚠ DANGER

· Swallowing or inhaling coolant (antifreeze) will cause harm to human body. When using, do not eat, drink or smoke. After each assignment, thoroughly clean any exposed skin on your hands, face, etc. If swallowed, contact a poison control center or hospital immediately. If inhaled, go to a ventilated environment with fresh air immediately. If it accidentally gets into your eyes, immediately rinse your eyes with plenty of flowing water and seek medical attention/consult a doctor as soon as possible. Keep coolant (antifreeze) away from children and pets.

Coolant change

The coolant should be replaced regularly in accordance with the maintenance schedule specified in the user manual. This task should be entrusted to the ZONTES dealer for the replacement of the coolant.

Air filter and engine inlet filter element

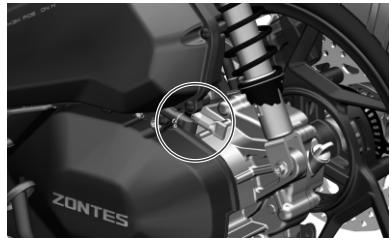
The air filter and engine air inlet filter element are located on the left side of the rear wheel. If the air filter is blocked by dust, It will increase the intake resistance and reduce the output power. If the engine inlet filter element is clogged with dust, the intake resistance will increase, which will reduce the heat dissipation of the belt and affect its service life.

⚠WARNING

·The air filter element should be replaced every 12000 km, and the engine inlet filter element should also be replaced every 12000 km. According to the regulations of the regular maintenance schedule, the filter cores of the air filter and the engine inlet filter element should be cleaned regularly. If you ride frequently in humid or dusty areas, you should inspect the air filter element more frequently. At the same time, it is essential to regularly check the waste oil pipe of the air filter.

· If driving in dusty conditions, the frequency of cleaning or replacing the filter element should be increased.

·It is dangerous to run the engine without installing the air filter. Without the blockage of the filter element inside the air filter, the flame of the engine will spray back from the engine to the air inlet chamber of the air filter. Dirt can enter the engine and cause damage to the it. Do not run the engine without air filter element



1.As shown in the picture above, check whether the waste oil pipe of the air filter is clogged with dirt or water. If you see any dirt or water, use caliper to remove the clamp shown in the picture, pull out the transparent tube, drain the waste oil and water, and then put the transparent tube back in place.

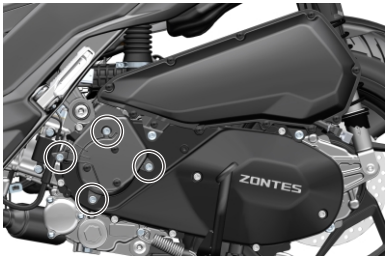
⚠WARNING

·If there is too much dirt in the check hose, be sure to check whether the air filter element is too dirty or damaged, and replace it if necessary.

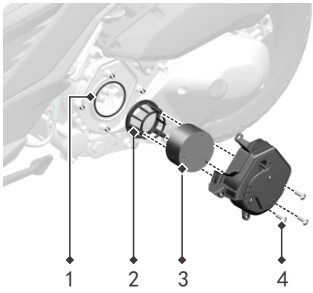




2.Remove 1 swell nail and remove 2 bolts.

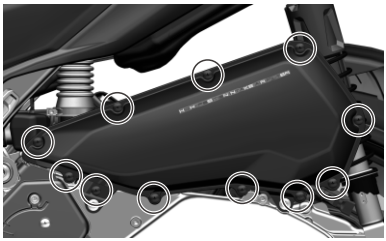


3.Remove the 4 bolts and take out the engine air inlet filter.

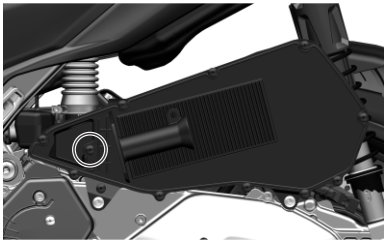


1.Sealing ring
2.Bracket
3.Sponge filter element
4.Bolt

4.Remove 3 bolts, take out the bracket and the sponge filter element, and replace with a new sponge filter element and seal ring.



5.Remove the 8 screws in the figure above and remove the air filter cover.



6.Remove one screw, take out the air filter element, and use a high-pressure air gun to blow away dust from the clean side.
7.Check whether the air filter element is damaged, and replace it with a new one if necessary
8.Replace the parts in reverse order.

⚠CAUTION

·Observe the removed filter element and use a high-pressure air gun to blow off contaminants from the clean side. If the contamination is severe or the element is damaged, it must be replaced.

·Reinstall the vehicle in the reverse order.

⚠CAUTION

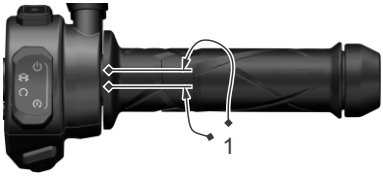
·If the filter element of the air filter is not installed in the correct position, dust will bypass the filter element and enter the engine, which may damage the engine. Make sure the filter element is installed in the right position. Moreover, when washing the motorcycle, do not let water enter the interior of the air filter. If water gets into the air filter, you can remove it by pulling out the oil drain pipe. Make sure there is no water inside the air filter before using the motorcycle.

Engine Idle Speed Check

Check the idle speed of the engine. If necessary, please have it inspected and adjusted at the ZONTES dealer.

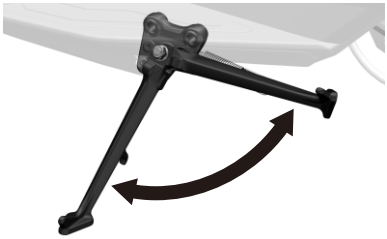
Engine idle speed:
1700±100 r/min

Check The Free Play Of The Throttle Grip



Throttle grip free play:
2.0-4.0mm

Side Parking Rack



Side parking rack

When the side stand is raised, the side stand stop switch sends a signal to the controller, the controller controls the engine to stop. Pressing the start switch will have no response at this time. To start the engine, the side stand must be retracted.

⚠ CAUTION

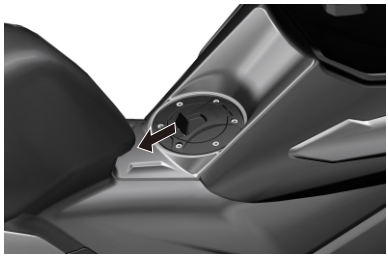
·Check if the side parking bracket operates smoothly. If the side parking bracket is stiff to operate or makes "creaking" sounds, clean the pivot area and lubricate the pivot bolts with clean lubricating oil.
·Check if the springs are damaged or lose their elasticity.

Fuel tank cap

The fuel tank is located in front of the seat. When opening the external fuel tank cap, make sure that the engine shutdown switch is in the off position. The fuel tank cover can only be opened after the vehicle is fully powered on and the instrument panel is turned on. Place the small cover plate up to open the fuel tank cap.

Please ensure that the fuel tank cap is closed every time you lock the vehicle and leave the vehicle.

Note: Before refueling, you must disable the automatic start-stop function either by turning off the ignition switch or lowering the side stand. Only after the automatic start-stop function is disabled can you normally unlock the fuel tank.





Fuel type:

Only unleaded gasoline

Fuel octane number:

Your motorcycle is specifically designed to use 95 or higher research octane number (RON).

Tank capacity:

11L (Economy fuel consumption: 2.1L/100km)

⚠ DANGER

- Do not overfill the fuel tank to prevent spilled fuel from flowing onto the hot engine. Just fill the tank until the fuel pump stops pumping. The fuel level should not exceed the bottom of the fuel tank opening. Otherwise, the heated fuel will overflow and damage the motorcycle components.
- When adding fuel, turn off the engine and make sure the ignition switch is off. Do not approach any open flames.
- Take some precautions when adding fuel. Otherwise, it may cause a fire or inhalation of fuel fumes. Do it in a well-ventilated area. Ensure the engine has been turned off to avoid fuel splashing. Prohibit open flames and ensure there are no heat sources or fire sources around. Avoid inhaling fuel fumes. Keep children and pets away when adding fuel.

⚠CAUTION

·When washing the car, do not use high-pressure water to rinse the fuel tank cap to prevent water from entering the fuel tank.

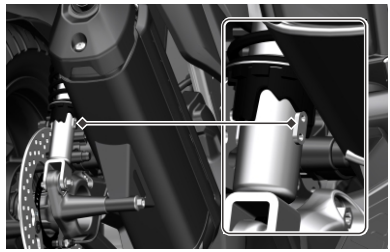
· If the fuel tank cap gets stuck and cannot be opened, press down on the cover forcefully. After the vehicle is turned off and restarted, try to open it again.

·When adding fuel, do not touch the fuel tank bottom shell with the fuel nozzle to avoid damaging the fuel tank and causing oil leakage.

Adjust The Suspension System

Rear shock spring

The preload of the rear shock spring can be adjusted according to the rider's preference, load conditions, driving style, and road conditions. There are five adjustable levels. Since the rear shock spring force is relatively small, you only need to stabilize the motorcycle on the main stand, hold the bottom of the spring with one hand and pull it upward, while turning the preload adjuster to the desired position with the other hand. Turning clockwise makes the suspension stiffer, and turning counterclockwise makes it softer.



V-belt

Have the V-belt inspected and replaced regularly by an authorized dealer or maintenance shop in accordance with the maintenance schedule.

⚠CAUTION

· Before installing the left crankcase cover, it is recommended to apply a thin layer of oil to the surface of the O-rings at the two bushings to facilitate the smooth installation of the left crankcase cover (if too much oil is applied, wipe off the excess with a dry cloth to prevent oil from splashing onto the belt and causing slipping!).

Tire(inspection/replacement)

Check tire pressure

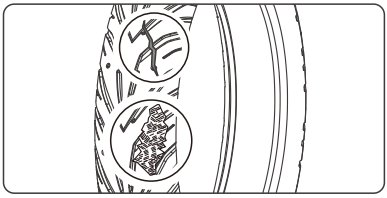
Check the tire pressure before each off-road ride and after returning to paved roads from off-road riding. If riding only on paved roads, check the pressure at least once a month or when low tire pressure is detected. Check the tire pressure when the tires are cold.

Recommended tire pressure:

Front wheel:
195kPa
Rear wheel:
230kPa

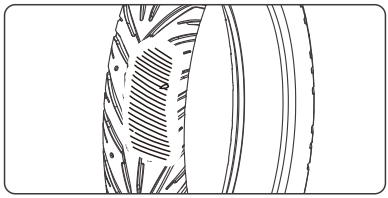
Damage inspection

Check the tires for cuts, cracks, exposed fabric or tire cords, or nails or other foreign objects embedded in the tire sidewalls or tread. Also, check the tire sidewalls for any abnormal bulges or swelling.



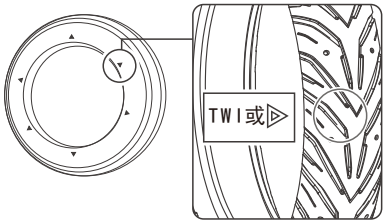
Abnormal wear inspection

Check the tire contact surface for signs of abnormal wear



Check the depth of the wheel tread

Check the tread wear indicator bars. If the wear indicator bars are visible, replace the tires immediately. For safe riding, replace the tires when the minimum wear depth is reached.



Tire replacement

Please have the tire replaced at ZONTES authorized service centers. For recommended tires, tire pressure, and minimum tread depth, please refer to "Technical Specifications".
Whenever you change tires, follow these guidelines:
Use recommended tires or equivalent products with the same size, construction, speed rating, and load capacity.

After the tires are installed, balance and align the wheels using genuine ZONTES balance weights or equivalent equipment.

Do not install an inner tube inside the tubeless tires on this motorcycle. Excessive heat can cause the inner tube to burst.

This motorcycle can only use tubeless tires. The rims are designed for tubeless tires; during rapid acceleration or braking, an inner tubed tire will slip on the rim, causing a rapid leak.

⚠ DANGER

· Installing unsuitable tires can affect handling and stability, leading to accidents that can cause injury or even death.

· Always use the tires of the size and type recommended in this User Manual.

Check wheel rims and valve systems

Before each ride, check if the rim is damaged and if the spokes are loose. Before each ride, check if the rim is damaged and if the spokes are loose. Additionally, check the position of the air valve. Additionally, you should also check the position of the air valve.

⚠ WARNING

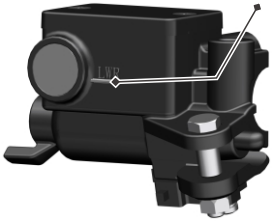
· Using tires that are overly worn or improperly inflated can lead to accidents and cause serious injuries.
· Please follow the relevant tire inflation data and maintenance guidelines in the User Manual.

Brake

Check brake fluid

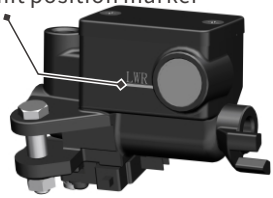
1.Place the motorcycle vertically on a stable and flat surface.
2.Check if the brake fluid reservoir of the front wheel is placed horizontally and the fluid level is between the lower and upper level marks. Check if the brake fluid reservoir of the rear wheel is placed horizontally and the fluid level is between the lower and upper level marks.
3.If the fluid level in any of the storage tanks is below the lower level mark, or if the free travel of the brake lever exceeds the limit, the wear of the brake pads must be checked. If the brake pads are almost not worn, there may be leakage. Please have it inspected and repaired at ZONTES authorized service center.

Lower limit position marker



Rear disc brake master cylinder

Lower limit position marker

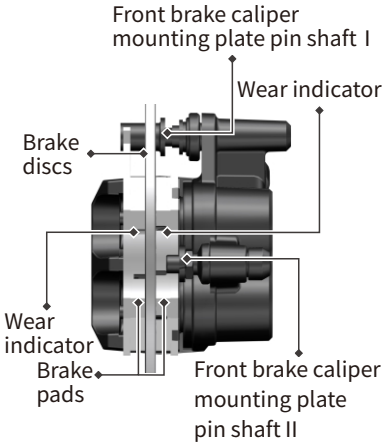


Front brake master cylinder

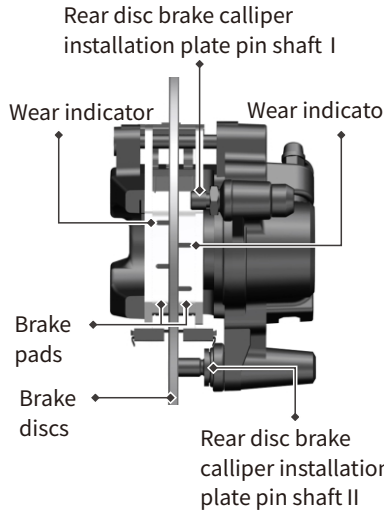
Check the brake pads

Check the condition of the wear indicators on the brake pads. If the brake pads on the front wheels have worn down to the bottom of the indicator marks, they need to be replaced. If the brake pads on the rear wheels have worn down to the indicator marks, they also need to be replaced.

Front Brake Caliper



Rear Brake Caliper



Check whether the front and rear calipers are floating normally. If there is any sticking, then the caliper mounting plate needs to be removed, and grease should be applied to the two floating pin shafts on the mounting plate and then reinstalled.

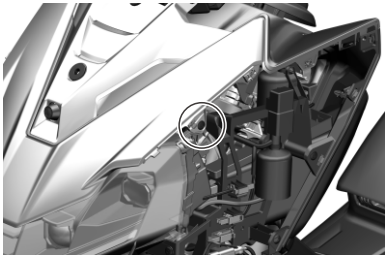
Check the brake pads from the front of the brake caliper for the front wheel. Check the brake pads from the right rear of the motorcycle for the rear wheel.
If necessary, please have the brake pads replaced at a ZONTES authorized service center. The brake pads must be replaced in pairs.

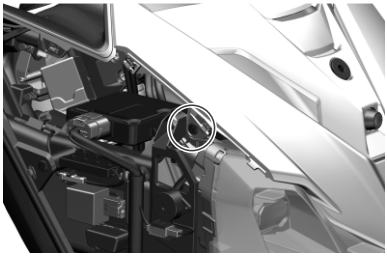
Light Adjustment（150X）

The headlight has four independently adjustable sections, corresponding to the high beam and low beam adjustment positions, which are visible after removing the front left and right panels and the front panel. (Adjust the height for both left and right headlights.)

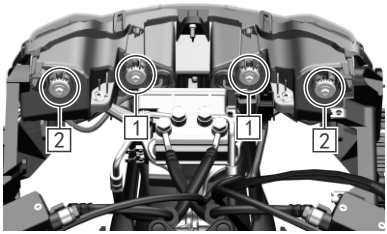


The front left panel is a quick-release component. First, open the clips at the bottom of the panel (from bottom to top), then push the panel toward the front of the vehicle to remove it. Use the same method to remove the front right panel.





Remove the left and right expansion rivets on the front panel, then take off the front panel.



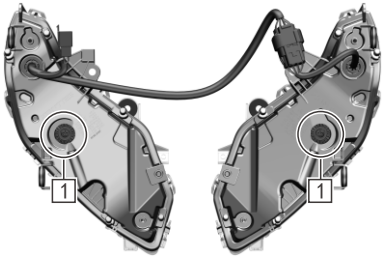
[1] Adjust low beam, [2] Adjust high beam.

Use a 6×150-200 cross screwdriver to insert into the adjustment hole. Turn counterclockwise to raise the beam and clockwise to lower it. Note that when adjusting, the cross screwdriver must effectively engage with the teeth of the adjustment bolt.

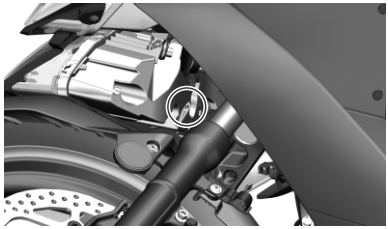
For more detailed steps, please watch the related video on the official website.

Light Adjustment（150X）

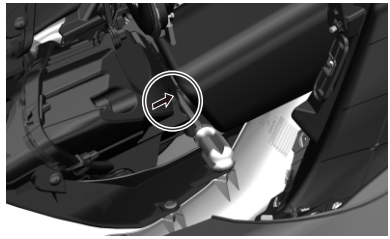
1.The headlights have two independently adjustable sections. The high and low beams are adjusted as a single unit, with separate adjustment positions for the left and right headlights.)



2.Crouch down at the front of the car and look at the back of the headlight; there's a screwdriver guide slot there.



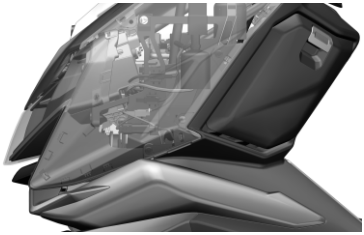
3.Insert an M6×150-200 Phillips screwdriver into the dimming hole along the guide groove and adjust it clockwise to increase the brightness. Adjust it counterclockwise to decrease the brightness. Note that when adjusting the brightness, the Phillips screwdriver and the serrated edge of the dimming screw must effectively engage.



For more detailed steps, please watch the relevant video on the official website .

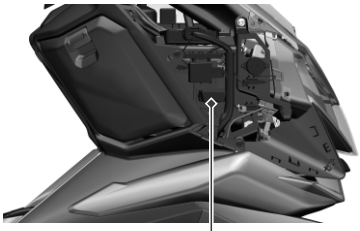
Installation of Electrical Devices (150X)

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



Remove the front right panel and unfold the black rubber sleeve to reveal the spotlight modification interface and the dash cam connector.



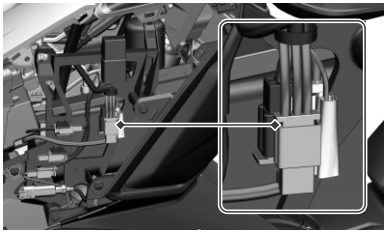


The OBD diagnostic

The OBD diagnostic interface is located under the right front storage compartment cover. Remove the expansion rivet on the outer cover of the right front storage compartment and take off the cover to reveal the OBD interface.

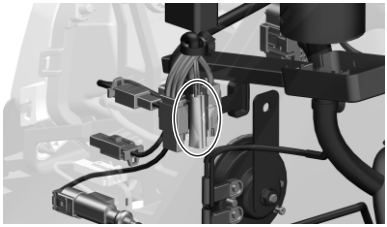
Dash cam modification interface

Red wire: positive pole, green wire: negative pole, black wire: ACC.



Spotlight modification interface

Blue-white wire: positive pole, green wire: negative pole. The total power of the modification must be less than 60W.



⚠ WARNING

· Do not connect electrical devices (e.g., GPS, fog lights) directly to the battery terminals.

· Avoid routing electrical wires in close proximity to the battery.

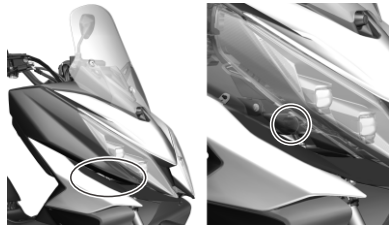
· Installed electrical devices must be kept at least 300 mm away from the EFI ECU, relay assembly, and PKE controller.

· Unauthorized wire modifications or improper installation locations may void warranties, and any resulting consequences are the consumer's responsibility.

· The total power of externally connected electrical devices must not exceed 60W. Do not use auxiliary lights while the engine is idling.

Installation of Electrical Devices (150X)

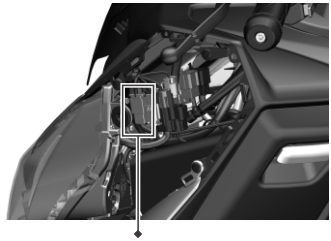
The vehicle is already equipped with interfaces for installing headlights, vehicle recorder，and an OBD diagnostic device.



Pull out the mushroom fasteners between the left panel and the lower deflector to remove the left panel, and use the same method to remove the right panel. Open the black rubber cover to see the spotlight modification interface and the dashcam connector.

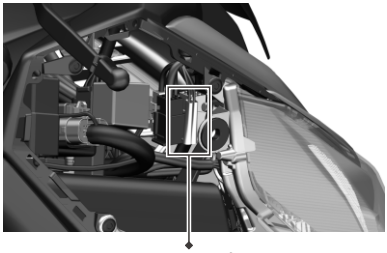
Spotlight modification interface

Blue and white wires are positive, green wire is negative, and the total power for modification should be less than 60W.



Recessed light fixture modification interface

Replay camera modification interface .
Red wire is the positive pole, green wire is the negative pole, and the black wire is ACC.



Dashcam modification interface

The OBD diagnostic interface is located in the front left storage box. The OBD interface is visible when the storage box is opened after the vehicle is powered on.



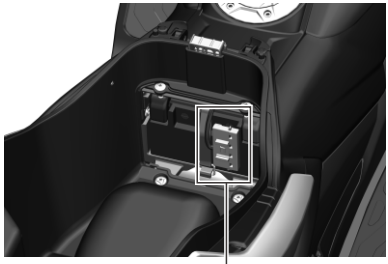
⚠WARNING

·Do not connect electrical devices (e.g., GPS, fog lights) directly to the battery terminals.
·Avoid routing electrical wires in close proximity to the battery.
·Installed electrical devices must be kept at least 300 mm away from the EFI ECU, relay assembly, and PKE controller.
·Unauthorized wire modifications or improper installation locations may void warranties, and any resulting consequences are the consumer's responsibility.
·The total power of externally connected electrical devices must not exceed 60W. Do not use auxiliary lights while the engine is idling.

Fuse Position（150X）

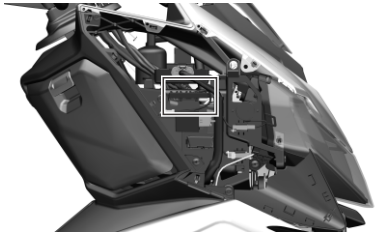
The main fuse box is located behind the battery cover inside the seat bucket, as shown in the figure below.





The main fuse box

Remove the front right panel and take off the headlight cover to access it.

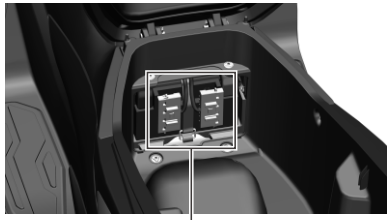


Auxiliary fuse box

Fuse Position（150V）

The fuse box is located inside the seat compartment, behind the battery cover, as shown in the diagram.





The main fuse box

Fuses

The main fuse, ABS ECU fuse, ECM fuse, ABS motor fuse, and two spare fuses are located in the main fuse box. The PKE fuse, lighting fuse, starter fuse, other fuses, and two spare fuses are located in the auxiliary fuse box.

- The main fuse protects all circuits.
- The ABS ECU fuse protects the ABS ECU.
- The ECM fuse protects the ECM, ECM main relay, fuel pump relay, ignition coil, high-voltage coil, fuel injector, and oxygen sensor.
- The ABS motor fuse protects the ABS motor.
- The PKE fuse protects the PKE and constant power supply circuits.
- The lighting fuse protects the headlight and auxiliary light modification circuits.
- The starter fuse protects the starter circuit and ABS controller.
- The other fuses protect the auxiliary handlebar switch, instrument panel, anti-theft device connector, and auxiliary components (position lights, flasher, taillight, brake light, license plate light, horn, and high-beam flash).

⚠ DANGER

• Do not use fuses with specifications other than those specified or bypass them with direct connections. This may severely damage the electrical system, cause fires, burn out the vehicle, or lead to loss of engine power, posing extreme hazards.

⚠ CAUTION

· Always use fuses with the specified current rating. Do not use substitutes such as aluminum or iron wires. If a fuse repeatedly blows in a short period, it indicates an electrical system fault. Immediately have the system inspected by a service center.

Fault Diagnosis

The troubleshooting section assists in identifying causes of common issues.

⚠ WARNING

• Incorrect repairs or adjustments may damage the motorcycle without resolving the fault. Such damage is not covered under warranty. If unsure about proper procedures, consult an authorized service center.

• Before troubleshooting, contact an authorized service center. They will assist in resolving the issue. If the engine fails to start, follow the checks below to determine the cause.

Fuel system inspection

If the engine malfunction indicator on the instrument panel illuminates, it indicates a issue with the fuel injection system. Take the motorcycle to an authorized service center.
Refer to the "Engine Malfunction Indicator" section in the instrument panel chapter for detailed explanations.

Lack of engine power

• Ensure sufficient fuel in the tank
• If the orange EFI fault light illuminates during operation after successful starting, it indicates an abnormal fuel injection system. Contact an authorized service center for inspection.
• Check the ignition system for proper function.
• Check idle speed. The correct idle speed is 1700±100 rpm.

⚠ DANGER

· Do not allow fuel to spill onto the ground; collect it in a container. Keep fuel away from the hot engine and muffler. Perform checks away from open flames, ignition sources, and heat sources.

Insufficient engine power

If engine power significantly decreases or the maximum speed drops substantially, it may indicate a clogged fuel system causing abnormal engine operation. Immediately visit an authorized service center for inspection.

⚠ WARNING

· Fuel system clogs may result from contaminated gasoline.
· For new motorcycles or vehicles that have run out of fuel, do not turn on the ignition switch until refueling is complete. Running the fuel pump dry severely shortens its lifespan.

Catalyst

Catalysts can effectively reduce the pollutants emitted by your vehicle and protect the environment we depend on for survival; 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 make the reduction components of the catalyst conversion system ineffective. The normal operation of the engine is also very important to the catalyst. If the engine is not effectively ignited or there is no sufficient heat dissipation for a longtime, the exhaust gas will gather and burn at the catalyst, causing the catalyst to overheat, which will permanently damage the catalyst's conversion ability. It is forbidden to maintain the engine at a high speed for a long time.

Carbon Deposit Cleaning

To minimize carbon deposits, the following recommendations are made.
1.If the vehicle is ridden for a longtime at short distances or for a longtime at less than 5,000 rpm, it is recommended to clean the carbon deposits every 6,000 kilometers or every 6 months. If the vehicle is often ridden at more than 5,000 rpm and the vehicle is fully warmed up, the cleaning mileage can be extended to every 10,000 kilometers or every 12 months.

2.If the vehicle has difficulty starting, remove the spark plug and clean it in time, and perform the cylinder cleaning procedure: squeeze the rear brake handle, fully open the accelerator and hold it for 3 seconds, then press the start button for 3 seconds.

There are several ways to clean carbon deposits:

1. Scavenging to clean carbon deposits. During riding, when conditions permit, increase the throttle appropriately to increase the engine speed to above 7000, and ride for a cumulative total of no less than 2 minutes. This can effectively clean the carbon deposits through high-speed scavenging

2. Use a regular big brand fuel saver to clean carbon deposits and add it according to the instructions. However frequent use is not recommended, as frequent use may cause damage to the fuel supply pipeline.

3. Use throttle body cleaning agent to clean carbon deposits. Remove the stepper motor from the throttle body. Do not remove other sensors by yourself, otherwise it will cause abnormal vehicle idling. If you need to disassemble and troubleshoot, please contact after-sales guidance. Spray a small amount of throttle body cleaning agent inside the throttle body and around the valve plate, and use a clean rag to clean the carbon deposits on the head of the stepper motor.

Electronic Inject System Precautions

1.Before installing the battery in a new vehicle, you need to check that the wiring harness connectors of the fuel injection components are securely and reliably connected, including making sure the oxygen sensor is installed and that gasoline has been added.
2.When installing the battery, you need to use tools to securely attach the positive and negative cables to the corresponding terminals on the battery. Do not tighten them by hand.
3.Please keep at least 3 liters of fuel in the tank, otherwise it may affect the normal operation of the fuel injection system. Refill as soon as possible when the fuel gauge reaches one bar.
4.In cases such as reinstalling the battery, experiencing power interruptions while starting or riding, battery hibernation and restart, abnormal idling, or reinserting fuses, please pay attention to resetting certain hardware of the fuel injection system. The steps are: turn on the ignition and turn off the engine switch, raise the main stand and squeeze the brake, start the engine and rev above 3000 rpm, release the throttle, then turn off the engine switch and ignition, and after 5 seconds, power can be restored.
5.If the vehicle has been stationary for a long time (parked for more than 3 hours), before starting it for the first time, make sure the fuel pump has finished pressurizing (i.e., power on the vehicle, turn on the ignition switch, and wait until the humming sound in the fuel tank stops) before starting the engine
6.If the engine still won't start after multiple attempts, it may be flooded. Perform the clearing cylinder procedure: fully open the throttle and press the start button for 3 seconds.
7.If the instrument panel battery voltage indicator flashes, it means the battery voltage is too low. Please charge the battery in time. Low voltage may cause fuel injection components to malfunction, prevent the engine from starting or make starting difficult, and result in insufficient power.

⚠ DANGER

• For new motorcycles or vehicles that have run out of fuel, do not turn on the ignition switch. Make sure to refuel before turning on the ignition switch; otherwise, the fuel pump running dry can seriously affect its lifespan.

⚠ WARNING

• Do not plug or unplug the cables of each component at will, and do not clean the cables of the electronic fuel injection components with water.

⚠ CAUTION

• During engine operation, the warning light did not turn on. After the engine was turned off, the warning light flashed, indicating a historical fault. It has no impact on the vehicle and will disappear on its own over time.

1st When the engine is running, if the instrument EFI (electronic fuel injection) warning light is on, it indicates that there is a fault in the EFI components that needs to be addressed.

1. You can directly read the fault codes on the instrument menu → fault information page, or read the fault codes in the Zontes Smart APP.

ZONTES Smart APP QR code

2nd Conditions for the instrument warning lights to turn off:

1.Clearing fault codes using the diagnostic tool: After powering on the vehicle, connect the diagnostic tool to the diagnostic port in the glove compartment and follow the steps on the diagnostic tool to clear the fault codes.

⚠WARNING

· During engine operation, the warning light did not come on. After shutting off, the warning light flashed, indicating a historical fault. It has no impact on the vehicle and will disappear on its own eventually.

Fuel Injection Error Code

No.	Error code	Error code description
1	P0030	Upstream bank 1 oxygen sensor heater control circuit open
2	P0031	Voltage too low in the upstream 1 cylinder oxygen sensor heater control circuit
3	P0032	Heater control circuit voltage of upstream oxygen sensor 1 is too high
4	P0106	Intake air pressure sensor/atmospheric pressure sensor is abnormal
5	P0107	Intake pressure sensor shorted to ground
6	P0108	Intake air pressure sensor short-circuited to power
7	P0112	Intake air temperature sensor signal voltage is too low
8	P0113	Intake air temperature sensor signal voltage too high
9	P0134	Upstream bank 1 oxygen sensor signal circuit open circuit fault
10	P0201	Cylinder 1 injector control circuit open
11	P0261	Cylinder 1 fuel injector control circuit shorted to ground
12	P0262	Cylinder 1 injector control circuit shorted to power
13	P0322	No speed sensor pulse signal (open circuit or short circuit)
14	P0480	Fan control circuit open
15	P0691	Fan control circuit shorted to ground
16	P0692	Fan control circuit power short circuit
17	P0511	Idle air control circuit open
18	P0563	System battery voltage is too high
19	P0116	Engine coolant temperature sensor signal is unreasonable
20	P0117	Engine coolant temperature sensor circuit voltage too low
21	P0118	Engine coolant temperature sensor circuit voltage too high
22	P0122	Throttle position sensor circuit voltage below lower limit
23	P0123	Throttle position sensor circuit voltage exceeds the high limit
24	P0130	Upstream bank 1 oxygen sensor signal is unreasonable
25	P0131	Upstream bank 1 oxygen sensor signal voltage too low fault
26	P0132	Upstream bank 1 oxygen sensor signal circuit voltage too high
27	P0627	Oil pump relay control circuit open
28	P0629	Fuel pump relay control circuit shorted to power
29	P0650	MIL lamp driver circuit fault
30	P2300	Cylinder 1 ignition coil short to ground
31	P0628	The voltage of the oil pump relay control circuit is too low

Storage Methods

Storage methods

If your motorcycle will not be used for a period of time, it requires special maintenance, which requires certain special materials, equipment, and techniques. For the above reasons, it is recommended that you have these maintenance tasks completed by our company's maintenance unit.

Motorcycle

Thoroughly clean the motorcycle.
Park the motorcycle on a flat surface using the side stand.
Turn the handlebar to the left, long press the red power button on the handlebar to power off the entire vehicle, and the front lock will automatically lock.

Fuel

Drain the fuel from the fuel tank into a container using a siphon or other appropriate method.

Engine

1.Remove the spark plug, pour one tablespoon of new engine oil into each spark plug hole, reinstall the spark plug, and rotate the engine crankshaft several times.
2.Drain the engine oil completely and add new engine oil.
3.Cover the air filter intake port and muffler exhaust port with a cloth soaked in new engine oil to prevent moisture from entering.

Battery

1.Remove the battery with reference to the battery section.
2.Clean the surface of the battery with neutral soapy water and remove rust from the terminals and wiring connectors.
3.Store the battery in a room above zero degrees Celsius.

Maintenance

Use our company's dedicated charger to charge the battery every three months.

Tires

Adjust the tire pressure to the specified pressure.

Motorcycle surface

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

Re-Enable the Method

Re-commissioning method

・Thoroughly clean the motorcycle.
・Remove the cloth covering the air filter intake port and muffler exhaust port.
・Drain the engine oil. Replace the oil filter and add new engine oil in accordance with the relevant content of this user manual.
・Remove the spark plug. Rotate the engine several times. Reinstall the spark plug.
・Reinstall the battery with reference to the battery section.
・Confirm that the motorcycle is properly lubricated.
・Perform the checks specified in the pre-driving check section of this user manual.
・Start the motorcycle in accordance with the relevant content of this user manual.

Rust prevention

It is important to maintain the motorcycle carefully to avoid rust, so that the motorcycle will look like a new car after many years.

Key points for rust prevention

Factors that cause rust damage: accumulation of salt from salted roads, dirt, moisture, chemicals. Damage to the painted surface by small stones or gravel, or scratches from collisions. Salted roads, sea breeze, industrial pollution, and high humidity environments can all cause rust.

How to prevent rust

1.Clean the motorcycle at least once a month. Keep the vehicle clean and dry as much as possible.
2.Remove dirt from the motorcycle surface. Substances such as salt from salted roads, chemicals, asphalt, tree sap, bird droppings, and industrial emissions can damage your motorcycle. Remove these substances as soon as possible. If they are difficult to clean with water, use a cleaning agent. Follow the cleaning agent product instructions when using it.
3.Repair body damage promptly. Carefully inspect the painted surface of the motorcycle for damage. If any burrs or scratches are found, repair them immediately to avoid further damage. If the burrs and scratches penetrate the entire part surface, have it repaired by our company's designated maintenance unit.
4.Store the motorcycle in a dry and well-ventilated place. If you often wash the motorcycle in the garage and park it there, the garage will become very humid. High humidity will increase rust. If the air is not circulating, even in a high-temperature environment, a damp motorcycle will rust.

5.Cover the motorcycle. Avoid exposing the motorcycle to direct sunlight at noon, as this can cause discoloration of painted parts and plastic parts, and fading of the instrument panel. Using a high-quality, breathable cover can prevent ultraviolet radiation from the sun and reduce the deposition of dirt and air pollution on the motorcycle. Our company's dealers can help you select a suitable cover for your motorcycle.

Cleaning the Motorcycle

Clean the motorcycle in accordance with the following guidelines:

Regular and thorough cleaning of the vehicle not only keeps it looking bright but also improves its regular performance and extends the service life of many components. Cleaning, washing, and polishing also give you more opportunities to check the condition of your vehicle frequently. Be sure to clean the vehicle after riding by the sea or in the rain, as salt and moisture can corrode metal parts.

⚠CAUTION

•In cold weather, when roads may be de-iced with salt, it is important to thoroughly clean the vehicle to remove road salt and avoid corrosion. Wheel spokes, bolts/nuts, and other unpainted metal parts are particularly susceptible to corrosion from road salt. After cleaning and drying the vehicle, apply anti-corrosion products to all vulnerable parts.

Cleaning steps

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

1.Rinse the motorcycle thoroughly with a low-pressure hose to remove loose dirt.

2.If necessary, use a sponge or soft towel dipped in mild detergent to remove dirt.

•Be particularly careful when cleaning the windshield, headlight lens, panels, and other plastic components to avoid scratches.Do not allow water to directly enter the air filter, muffler, and other electrical components.

3.Rinse the motorcycle thoroughly with plenty of clean water and dry it with a clean soft cloth.

4.After drying the motorcycle, lubricate all moving parts.

•Ensure no lubricating oil splashes onto the brakes or tires. Contaminated brake discs, brake pads, brake drums, and brake shoes will have significantly reduced braking performance, which may cause accidents.

5.Immediately lubricate the drive chain after cleaning and drying the motorcycle.

6.Waxing can prevent corrosion.

•Avoid using products containing strong detergents or chemical solvents. These substances can damage the motorcycle's metal parts, paint, and plastic components.

•Do not wax tires and brakes.

•If your motorcycle has parts with a matte paint finish, do not wax or polish the matte paint.

⚠CAUTION

· Do not use alkaline or acidic cleaning agents to clean the motorcycle, and do not use gasoline, brake fluid, or other solvents that may damage the motorcycle. Clean only with a soft cloth and warm water with a neutral cleaning agent.

· Avoid cleaning the motorcycle's cover paint with the following cleaning agents:

· Engine exterior cleaner (engine degreaser), range hood cleaner, bathroom cleaner, carburetor cleaner, chain cleaner, and cleaning products containing bleach. Try to avoid contact with brake fluid, strong acids, and alkalis to prevent corrosion.

⚠DANGER

· Driving a motorcycle with wet brakes is very dangerous. Wet brakes cannot provide the same braking force as dry brakes. This can cause accidents. After cleaning the motorcycle, test the braking system at low speed. If necessary, operate the brakes several times to dry the brake pads.

Cleaning Precautions

Follow these guidelines when cleaning:

1.Do not use a high-pressure water gun:

·High-pressure water can damage moving parts and electrical components, making them irreparable.

·Moisture at the air intake may be sucked into the throttle body or air filter.

2.Do not rinse the muffler directly with water:

·Water entering the muffler may cause failure to start and rusting of the muffler.

3.Dry the brakes:

·Water will reduce braking performance.After cleaning, operate the brakes intermittently at low speed to help dry them.

4.Do not directly under the seat cushion with water:

·Water entering the storage box under the seat cushion can damage your documents and other items.

5.Do not rinse the air filter directly with water:

·If the air filter gets wet, the engine may not start.

6.Do not rinse directly near the headlight with water:
・After cleaning or driving in the rain, the inner lens of the headlight may fog temporarily.This will not affect the function of the headlight.
・However, if you find a large amount of water or ice accumulated inside the lens, have it inspected by an authorized ZONTES flagship store or dealer.

7.Do not wax or polish matte paint surfaces:
・Clean matte paint surfaces with a soft cloth or sponge, plenty of water, and mild detergent. Dry with a clean soft cloth.

Follow these guidelines after cleaning:
1.Dry the motorcycle with a towel or absorbent cloth.
2.Spray anti-corrosion agent on all metal parts. WARNING! Do not apply anti-corrosion agent or oil spray on the seat cushion, handlebars, footrests, or tires. Otherwise, these parts may become slippery, leading to vehicle loss of control. Before operating the vehicle, thoroughly clean the surface of these parts.
3.Maintain rubber parts, plastic parts, and unpainted plastic parts with suitable maintenance products.
4.Wax all painted surfaces with non-abrasive wax or vehicle-specific spray.
5.After cleaning, start the engine and let it idle for several minutes to dry any residual moisture.
6.If the headlight lens fogs, start the engine and turn on the headlight to remove the moisture.
7.Store or cover the vehicle only after it is completely dry.

⚠WARNING

・Contaminants remaining on the brakes or tires may cause vehicle loss of control.
Ensure there is no lubricating oil or wax on the brakes or tires.
・If necessary, clean the tires with warm water and a neutral cleaning agent.
・If necessary, clean the brake discs and brake pads with brake disc cleaner or acetone.
・Before riding at higher speeds, test the braking performance and turning characteristics.

Exhaust pipe and muffler

The exhaust pipe and muffler are made of stainless steel but may become dirty due to mud or dust.

Remove mud or dust with a damp sponge dipped in kitchen liquid abrasive, then rinse thoroughly with clean water.Dry with a soft towel.

If necessary, remove burn marks with a fine-grained commercial compound, then rinse in the same way as removing mud and dust.

If the exhaust pipe and muffler are painted, do not use commercial abrasive kitchen cleaners. Clean the painted surface of the exhaust pipe and muffler with a neutral detergent. If you are unsure whether the exhaust pipe and muffler are painted, have them inspected by an authorized ZONTES flagship store or dealer

⚠CAUTION

• Although the exhaust pipe is made of stainless steel, it may still rust. Once rust is found, remove all traces and dirt immediately.

Aluminum components

Aluminum can be corroded when in contact with dirt, mud, or salt. Clean aluminum parts regularly and follow these guidelines to prevent scratches:

・Do not use hard brushes, steel wool, or other abrasive cleaning tools.

・Do not drive or scrape on the curb.

Panels

Follow these guidelines to prevent scratches and damage:

・Clean gently with a sponge and plenty of water.

・Clean stubborn dirt with diluted detergent and rinse thoroughly with plenty of water.

・Avoid getting gasoline, brake fluid, or detergent on the instrument panel, windshield, panels, or headlight.

Windshield

Clean the windshield with a soft cloth or sponge and enough water. (Avoid using detergents or any type of chemical cleaner on the windshield.) Dry with a clean soft cloth.

⚠CAUTION

• To avoid possible scratches or other damage, clean the windshield only with water, a soft cloth, or a sponge.

For heavily soiled windshields, clean with diluted neutral detergent, a sponge, and enough water. Ensure all detergent is rinsed off. (Detergent residue may cause the windshield to crack.)

・If scratches cannot be removed, replace the windshield as they may obstruct clear visibility.

・Keep battery electrolyte, brake fluid, or other chemical solvents away from the windshield and glass components. They can damage plastic.

Transportation

Check the motorcycle in accordance with the pre-driving check section. The fuel must be drained before transporting the motorcycle. Fuel is highly flammable and may explode under certain conditions. When draining, storing, or refueling fuel, strictly prohibit open flames. Ensure the engine is stopped and operate in a well-ventilated area.

Fuel Draining Steps:

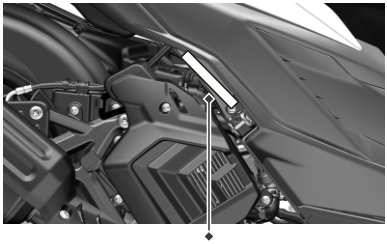
1. Stop the engine and turn off the electric door lock switch.
2. Drain the fuel from the fuel tank into a suitable container using a siphon or other appropriate method.

⚠ CAUTION

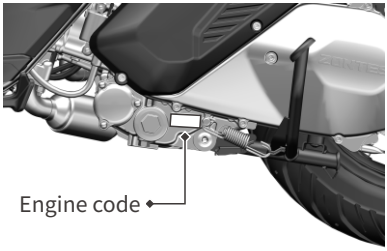
• When transporting the motorcycle, be sure to drain all fuel from the fuel tank. Transport the motorcycle in a normal driving position to prevent fuel leakage.

Numbers

The frame and engine numbers are unique and are used to identify your motorcycle. They need to be provided when registering your motorcycle. When ordering parts or requesting special services, these numbers enable the dealer to provide you with better service. Please record these numbers and keep them in a safe place.



Chassis code



Engine code

Nameplate

The nameplate paseted on the mounting point of the rear shock absorber and the frame.
Do not use high-pressure water guns to clean paper nameplates



Specifications (150X)

Dimensions and curb weight

Length	1975mm
Width	750mm
Height	1115mm
Wheelbase	1375mm
Ground clearance	130mm
Seat height	770mm
Dry height	108kg
Curb weight	117kg

Engine

Single-cylinder, horizontal, four-stroke, water-cooled, 149.5cc

Number of cylinders	1
Bore	58mm
Stroke	56.6mm
Displacement	149.9cc
Compression ratio	12∶1
Starting Method	Electric start
Lubrication method	Pressure and splash lubrication
Power	13.0kW
Clutch	Dry, automatic centrifugal clutch
Transmission	Automatic continuously variable transmission (CVT)
Primary reduction ratio	0.741-2.664
Final gear ratio	9.590
Drive type	Belt drive

Main Performance Indicators

Economic fuel consumption	2.1L/100km
Maximum speed	114km/h

Chassis System

Steering angle	43°
Tire specifications	
Front tire	110/70-14
Rear tire	130/70-13
Electrical System Ignition Method	Inductive discharge ignition
Spark plug model	CR8E
Battery specification	12V, 7Ah
Fuse specification	10A/15A/25A

Lamp Power

Power of the whole lamp＝Single-sided power X2

Low beam (one-sided)	6.2W@12V
High beam (one-sided)	9.7W@12V
Front position light (one-sided)	4.3W@12V
Front turn signal	5.6W@12V
Rear position light (one-sided)	6.5W@12V
Brake light (one-sided)	3.9W@12V
Rear license plate light	0.44W@12V
Rear turn signal	4.0W@12V

Capacity

Effective fuel tank capacity	11L
Engine oil capacity	950mL
Engine oil replacement capacity (with oil filter replacement)	870mL
Engine oil replacement capacity (without oil filter replacement)	800mL
Gearbox oil capacity	140mL
Gearbox oil regular replacement capacity	120mL

Specifications (150V)

Dimensions and curb weight

Length	1985mm
Width	750mm
Height	1115mm
Wheelbase	1375mm
Ground clearance	130mm
Seat height	770mm
Dry height	99kg
Curb weight	108kg

Engine

Single-cylinder, horizontal, four-stroke, water-cooled, 149.5cc

Number of cylinders	1
Bore	58mm
Stroke	56.6mm
Displacement	149.9cc
Compression ratio	12∶1
Starting Method	Electric start
Lubrication method	Pressure and splash lubrication
Power	13.0kW
Clutch	Dry, automatic centrifugal clutch
Transmission	Automatic continuously variable transmission (CVT)
Primary reduction ratio	0.741-2.664
Final gear ratio	9.590
Drive type	Belt drive

Main Performance Indicators

Economic fuel consumption	2.1L/100km
Maximum speed	114km/h

Chassis System

Steering angle	43°
Tire specifications	
Front tire	110/70-14
Rear tire	130/70-13
Electrical System Ignition Method	Inductive discharge ignition
Spark plug model	CR8E
Battery specification	12V, 7Ah
Fuse specification	10A/15A/25A

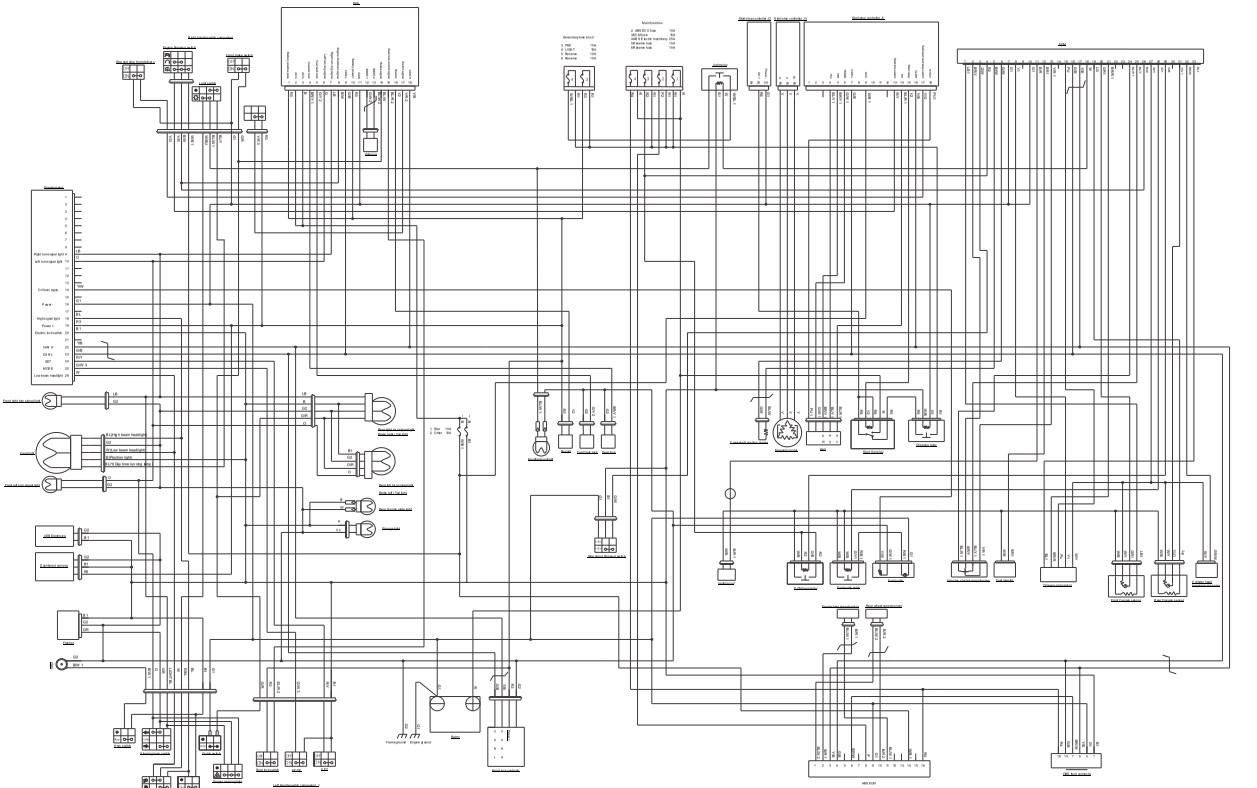
Lamp Power

Power of the whole lamp＝Single-sided power X2

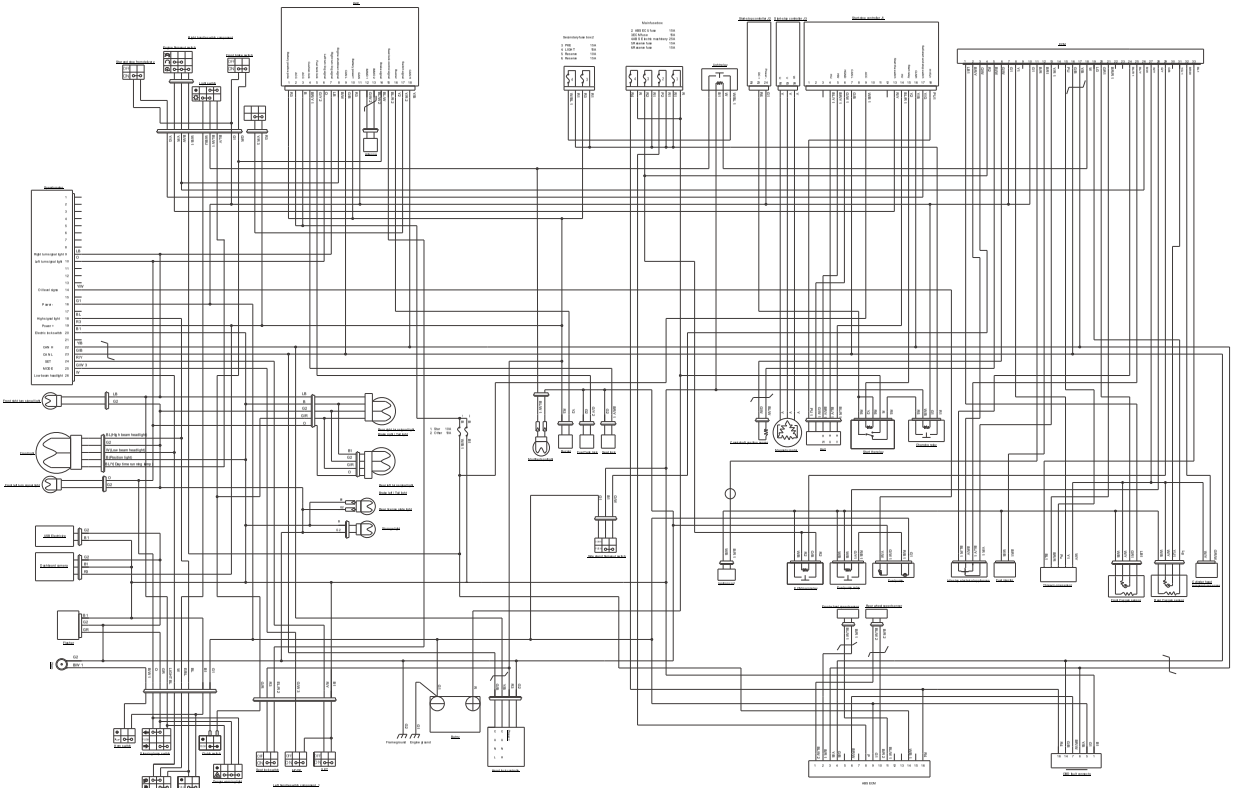
Low beam (one-sided)	9.3W@12V
High beam (one-sided)	16.4W@12V
Front position light (one-sided)	2.8W@12V
Front turn signal (one-sided)	2.7W@12V
Rear position light (one-sided)	8.3W@12V
Brake light (one-sided)	2.1W@12V
Rear turn signal	2.3W@12V

Capacity

Effective fuel tank capacity	11L
Engine oil capacity	950mL
Engine oil replacement capacity (with oil filter replacement)	870mL
Engine oil replacement capacity (without oil filter replacement)	800mL
Gearbox oil capacity	140mL
Gearbox oil regular replacement capacity	120mL



ZT150T-X CIRCUIT schematic English version



ZT150T-X CIRCUIT schematic English version



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