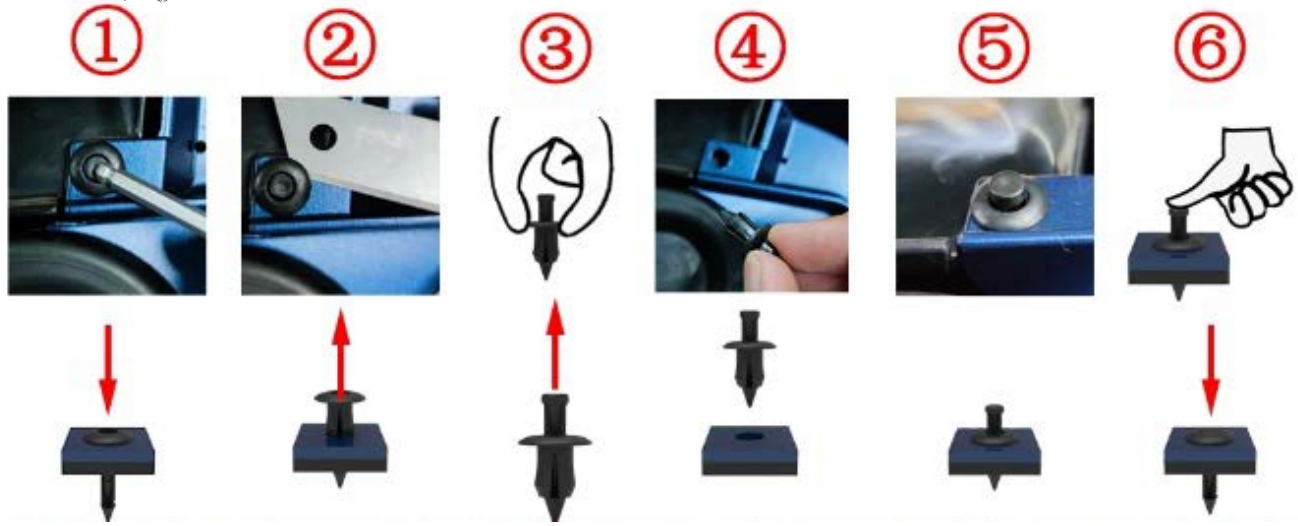
2. Maintenance

Notice before service

1. Use high-quality tools or special tools and fixtures designed by our company. Using inferior tools may cause damage to parts, coating shedding, inadequate assembly , etc.
2. O-rings , paper gaskets , copper gaskets, component sealing rings, etc. used for sealing must be replaced before assembly .
3. For fasteners with torque requirements, a torque wrench should be used to check the torque; for those without torque requirements, refer to the general torque values recommended for general fasteners .
4. Clean before assembly ; check whether the assembly is correct and in place after assembly.
5. The vehicle should be parked in a balanced position and attention should be paid to safety during disassembly and assembly. This includes but is not limited to the use of electric tools , hand tools, pneumatic tools, hydraulic tools, and handling . Avoid contact with skin, eyes, burns , electric shock, etc.
6. All types of replaced oils, liquids , batteries , etc. must be collected and handed over to qualified institutions for disposal; it is prohibited to dump them at will to pollute the environment or water sources.
7. Swallowing or inhaling coolant , brake fluid, etc. will cause certain harm to the human body. Wash hands, face and any exposed skin thoroughly after each addition. If swallowed by mistake, contact the poison control center or hospital immediately; if inhaled, go to a ventilated environment immediately. If accidentally splashed into the eyes, rinse the eyes immediately with plenty of running water and seek medical attention or treatment in time. Keep away from children and pets.
8. If you need to clean or wash the body parts of this vehicle, you should use neutral motorcycle wash liquid or tap water or diesel, kerosene, etc. Acidic or alkaline motorcycle wash liquids will cause irreversible corrosion to the paint, electroplated surface, anodized surface, etc. on the surface of the parts ; gasoline will cause premature aging or hardening of sealants, gaskets , rubber parts, etc., reducing the service life . Use non-woven cloth without residue for wiping. Ordinary rags may have cloth scraps or wool left , which may affect assembly or cause other adverse effects.
9. The following are instructions for disassembly and assembly of expansion nails.
10. If there is a “  ” symbol on the right side of the step , you can click it to quickly jump to the corresponding step.



① Use a 4# hexagon socket or other tool to press the center cylinder. You can hear a sound or the center cylinder moves 2mm (0.079 in) axially.
② Use a blade, fingernail or carving knife to pry open the gap and remove it. If space allows, you can reach out to the back and push it out.
③ Pinch the outer ring with two fingers and push the center cylinder up to the initial position.
④ Pinch the center cylinder with two fingers and install the expansion nail to the installation position.
⑤ The outer ring fits the connected parts. If not, check whether it is misaligned.
⑥ Press the center cylinder with your fingers or other tools. You can hear a sound or the top of the center cylinder is basically flush with the top surface of the outer ring, indicating that it is assembled in place.

the things that need to be paid attention to and the basic requirements for preventing accidental injuries ; it is impossible to list all situations in detail . Be sure to stay vigilant during the disassembly and assembly process to prevent accidents.

Maintenance cycle table

I: Check (clean, lubricate, adjust or replace if necessary) **R**: Replacement **T** : Tightening :annotation ★

Inspection items	drive inspection	Frequency* 1						Regular replacement (inspection)
		× 1000 km	1	4	8	12	16	
		× 1000 mile	0.6	2.5	5	7.5	10	
Cradle cushion rubber					I		I	1 year or 10,000 km (6214 miles) Check once
Air filter (filter element)								Replace every 6,000 km
Engine air inlet filter			R	R	R	R	R	
Muffler bolts and nuts			T		T	T	T	
** spark plug				I	R	I	R	
Engine oil	I		R	R	R	R	R	Note 1
Oil Filter			R		R		R	
* Throttle body			I		I			
* Throttle cable clearance			I	I	I	I	I	
Idle			I	I	I	I	I	
* Fuel evaporative pollutant control system					I			
Radiator pipe			I	I	I	I	I	
* Fuel pipe				I				
V- belts							R	Replace every 2 years
** Braking system				I	I	I	I	
Brake hose				I				Replace every 4 years
Brake fluid				I				Every 2 years
** Tire	I		I	I	I	I	I	
** Bolts and nuts in steering mechanisms			T	T	T	T	T	
Steering bearings in steering mechanisms				I	I	I	I	
Front shock absorber	I				I		I	
** Rear shock absorber	I				I		I	
Internal mechanism of faucet lock								
** Bolts and nuts for body and engine mounting			T	T	I	T	I	
Engine suspension				I	I			
Coolant	I		I	I	I	I	I	3 years or 30,000 kilometers (18,641 miles)
Gearbox oil			R		R		R	
** Valve clearance (cold check) Inlet: 0.08 ~ 0.12mm (0.003 ~ 0.005 in) Outlet: 0.18 ~ 0.22mm (0.007 ~ 0.009 in)			Check and adjust every 20,000 km (12,427 miles)					
Driving wheel, driven wheel					I		I	Note 2
Rim spokes	I		I	I				
Muffler anti-scalding plate buffer rubber			I	I	I	I	I	
Air filter oil pipe			I	I	I	I	I	

* This service is provided by dealers or qualified repair organizations , and can be performed by the owner if the owner has the appropriate tools , service information and a certain understanding of mechanics .

**For safety reasons, such items should be provided by dealers or qualified maintenance organizations .

Note 1: The first maintenance is carried out after 1000 kilometers (621 miles) or 3 months (whichever comes first). The second maintenance is carried out when the actual mileage on the instrument reaches 4000 kilometers (2485 miles) . Thereafter, regular maintenance is carried out every 4000 kilometers (2485 miles) or 15 months (whichever comes first).

Note 2: It is recommended to use Shell Gadus S3 V220 C2 extreme pressure grease or high temperature resistant No.2 grease of the same viscosity for maintenance and lubrication of the driving wheel and driven wheel bushing every 10,000 kilometers (6,214 miles) to ensure riding comfort. Transmission system : If the driving speed is found to be significantly reduced, it is recommended to maintain and inspect the CVT transmission system at any time and replace it in advance if necessary.

DANGER

● Initial maintenance should be performed strictly according to the above table, otherwise it may cause vehicle damage or other unpredictable failures.
● To keep your vehicle running normally, it is recommended that you have it serviced by a dealer or a qualified repair unit . Improper maintenance or care may cause vehicle damage or other unforeseen failures.
● Replacing unqualified parts will cause your vehicle to wear out faster and shorten its service life.
●When checking brake discs, mufflers, spark plugs, coolant, etc., wait until they have cooled down before proceeding.
●When replacing brake fluid and coolant, pay attention to protection to avoid contact with skin and eyes and cause harm. At the same time, avoid dripping onto the surface of parts and damaging the paint or surface.

CAUTION

● Waste generated during maintenance , such as cleaning agents, waste oil , etc., should be properly handled and are prohibited from being dumped at will to avoid causing environmental pollution.
● The items listed above are for normal use . If the product is often used in harsh environments, the frequency of maintenance should be increased .
●The steering system, braking system, electronic fuel injection system, shock absorbers and wheels are all key components and it is recommended that they are repaired by a qualified maintenance unit.

Air filter (filter element) , air inlet filter element

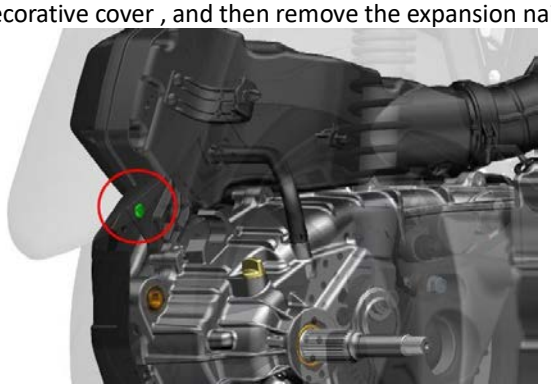
step :

1. Support the vehicle firmly

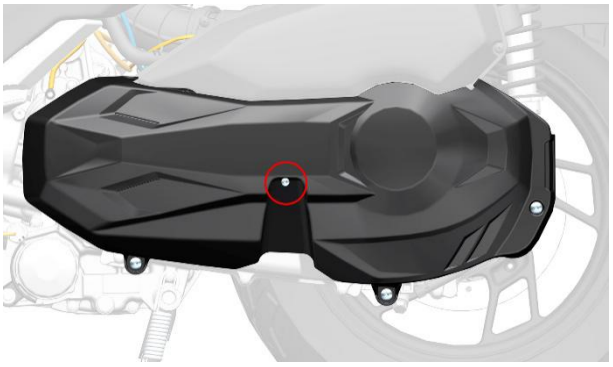
Prop the vehicle up on the main stand as shown .

2. Remove the left engine cover

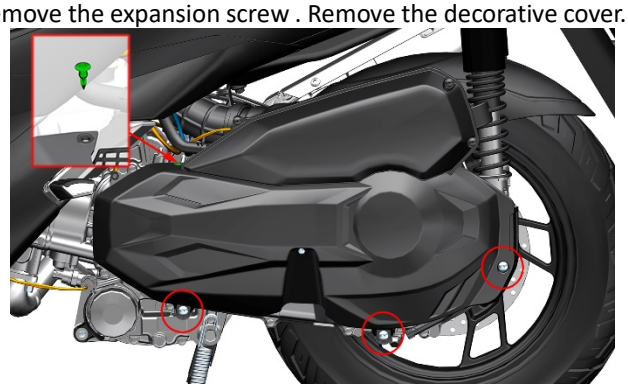
a. Use a 4 # hexagon socket to press down the center cylindrical pin of the expansion nail on the inside of the air filter decorative cover , and then remove the expansion nail .



b . Use T30 plum wrench with hole to remove the small flange bolt M6×16 or use 4# hexagon socket remove the M6×14 shoulder bolts shown in the figure . The bolt here cannot be removed for the time being, so just loosen it completely.

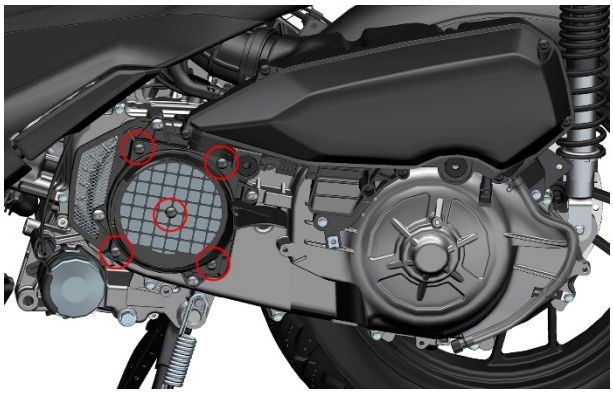


c . Use a 8 # sleeve or T30 plum wrench with hole to remove the three small flange bolt M6×16+flaning bushing+buffer rubber,be careful not lose flanging bushing and buffer rubber. or use 4# hexagon socket remove the three M6×14 shoulder bolts shown in the figure . Use a 4 # hexagon socket to press down the center cylindrical pin of the expansion screw of the air filter decorative cover , and then remove the expansion screw . Remove the decorative cover.



3. Replace the air inlet filter

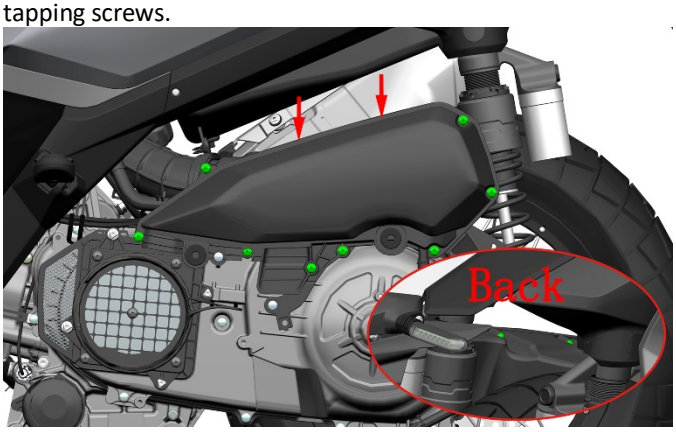
a. Use a Phillips screwdriver to remove the five self-tapping screws that come with the air inlet sponge filter assembly . Remove the front shell and then remove the air inlet sponge. Replace the front shell with a new sponge and then reinstall the front shell. Note that the screws must be installed vertically and the torque should not be too large . Replace the air inlet sponge filter every 4,000 kilometers (2,485 miles) or 15 months (whichever comes first).



b . Remove the sponge and replace the new filter element, with the black side facing the engine and the white side facing outwards .

4. Remove the air filter housing

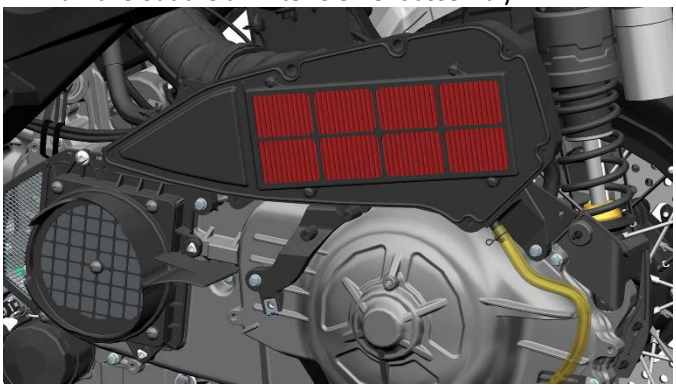
a. Use a Phillips screwdriver to remove the 10 self-tapping screws.



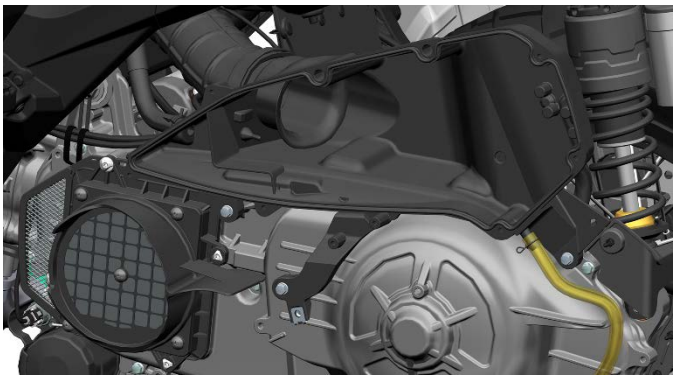
b. Remove the air filter housing.

5. Replace the air filter element

a. Take out the air filter element assembly.



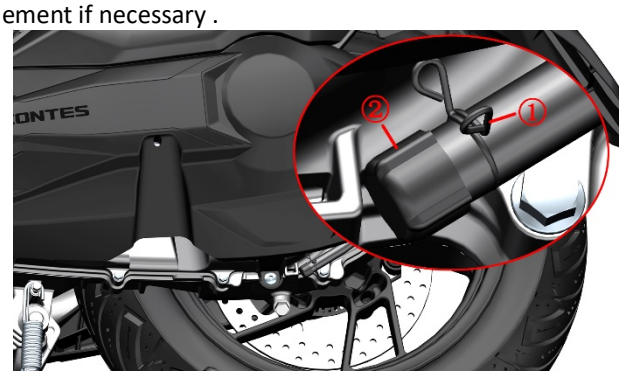
b. Remove the old air filter element. Use a dust gun to blow away the dust inside the intake pipe and then wipe the inner wall clean with a clean non-woven cloth.



c. Replace the filter element and sealing strip with a new one .

6. Check the air filter waste oil pipe

Observe whether there is dirt or water accumulation in the waste oil drain pipe . If there is, use pliers to remove the waste oil pipe clamp ① and then pull out the black plug , and reinstall it after draining the waste oil or sewage. Note that when the air humidity is high, the inspection frequency should be appropriately increased. If there is too much dirt in the hose, be sure to check whether there is too much dirt or damage in the air filter element , and replace the air filter element if necessary .



7. Reinstallation

Reinstall according to the disassembly steps.

DANGER

● The vehicle must be parked on a flat, stable ground or a lift.

WARNING

●The air filter element should be checked every 4000 km (2485 miles) or 15 months (whichever comes first), and replaced every 8000 km (4971 miles) or 30 months (whichever comes first). The air inlet sponge filter element should be replaced every 4000 km (2485 miles) or 15 months (whichever comes first).

● The air filter element and engine air inlet filter element should be cleaned regularly according to the regular maintenance and lubrication table.

● If you often ride in humid or dusty areas, you should inspect the air filter element more frequently. Be sure to check the air filter waste oil pipe frequently.

●If the filter element is damaged, it must be replaced, otherwise the dirt will flow into the engine and cause engine damage.

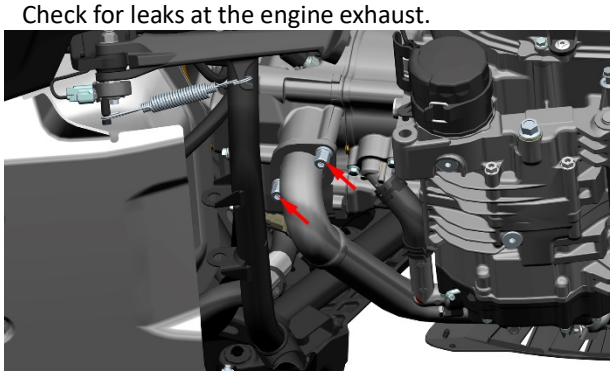
● Make sure the filter element is properly assembled.

CAUTION

●If the air filter is clogged with dust, the intake resistance will increase and the output power will decrease.
●If the engine air inlet filter is clogged with dust, the air intake resistance will increase, which will reduce the heat dissipation of the belt and affect the life of the belt.
● If the replacement cycle has not yet arrived, and the filter element is not damaged and the surface is relatively clean , you can use a dust blower to blow air from the clean side of the filter element to blow away the dust on the filter element surface .
Do not allow water to enter the air filter when washing the vehicle .

Muffler bolts and nuts

1、 Check for leaks at the engine exhaust.



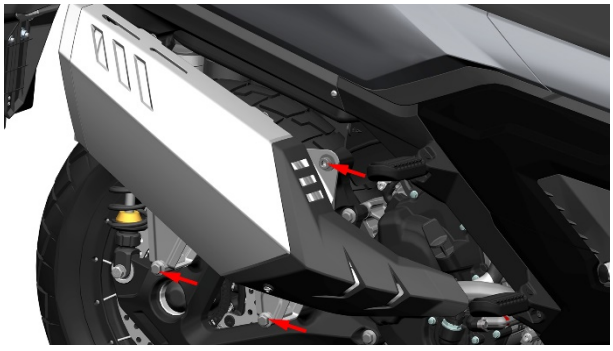
a. If there is a slight air leak, try to tighten the exhaust port nut with a 6 # hexagon socket; if the problem is not solved, remove the muffler and replace the engine exhaust port gasket with a new one.

b. If there is no sign of leakage, use a 6 # hexagon socket to check whether the M8 nut at the engine exhaust port is loose.

c. Remove the muffler anti-scalding plate if necessary.
368G:

1. Use a T25 hexagon socket to remove the five M6×16 bolts on the muffler . Remove the front, middle and rear parts of the anti-scalding plate.

Use an 8# hexagon socket to remove the M10 bolts fixing the top of the muffler, and use a 14 # sleeve to remove the two M10 bolts at the bottom. Use a 6 # hexagon socket to remove the M8 bolts on the inside, loosen the clamp, and remove the rear section of the muffler.



DANGER

● Do not touch any metal surface of the muffler when the engine is running or after riding to prevent burns.
● The vehicle must be parked on a flat, stable ground or a lift.
● If you need to replace the exhaust port gasket with a new one, you must wait until the muffler is completely cooled before starting the operation.

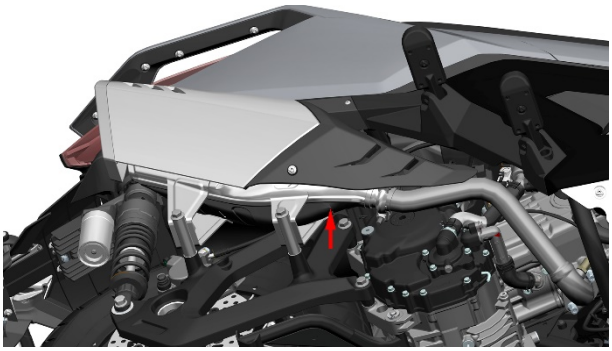
WARNING

●Never stand still for a long time while stepping on the accelerator.
● Long-term low-speed driving with heavy load may damage the engine and muffler.
●It is prohibited to use leaded gasoline to avoid catalyst failure and loss of exhaust purification ability.

CAUTION

● If you need to remove the muffler for other operations, it is recommended to cover the muffler air inlet and outlet holes with masking paper to prevent foreign matter from entering.

●Keep the drainage holes at the bottom of the muffler unobstructed to prevent condensed water from accumulating inside the muffler chamber .



● Oil, dirt and other stains on the surface of the muffler should be cleaned promptly .

Engine oil

DANGER

● The vehicle must be parked on a flat, stable ground or a lift.
● Wait until the engine and muffler have cooled down before operating.
When adding engine oil, prevent the oil from dripping onto the surface of the muffler.
● Keep engine oil away from children and pets. Short-term contact with engine oil may irritate the skin. Please wear long-sleeved clothes or sleeves and anti-shake gloves before changing the oil. If you accidentally get engine oil on your skin, clean it thoroughly with soapy water.
●The used engine oil must be collected and handed over to professional organizations for proper disposal. It is prohibited to dump it at will, pour it into the trash can or pour it directly onto the ground.

WARNING

● The engine oil and gearbox oil should be replaced according to the periodic table specified in the instruction manual .
●You need to purchase regular and qualified engine oil. Inferior engine oil will aggravate engine wear, and in severe cases it will cause engine failure and shorten its service life.
● The amount of engine oil should meet the requirements. Too much or too little may cause engine damage.

CAUTION

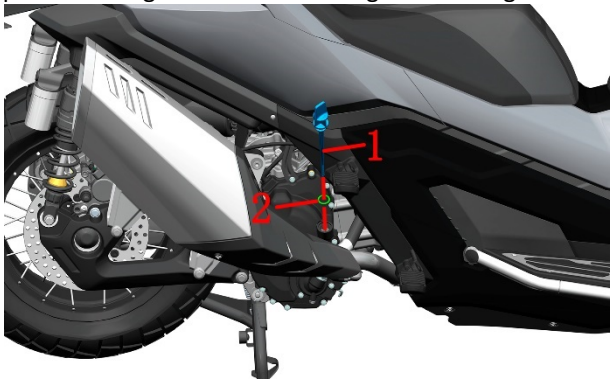
●The copper gasket and combined sealing gasket need to be replaced after removal; it is recommended to replace both the O-ring and the sealing gasket.
●The O-ring must be assembled in place to avoid cutting edges .
● After removing the oil dipstick and oil filler nut, prevent foreign matter from falling into the engine.

1. Drain the engine oil

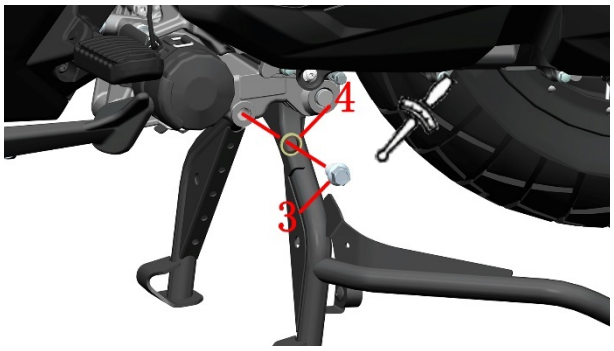
a. Start the vehicle, let it idle for 3-5 minutes, then shut it off for 3-5 minutes (when the temperature is below 10℃ (50F), the idling time should be extended appropriately) .

b. Use the main stand to park the vehicle securely.

c. Rotate the dipstick (1) on the right side of the engine counterclockwise and remove the dipstick (1) and O-ring (2). Leave the dipstick on the fuel filler port without removing it to prevent foreign matter from falling into the engine.



d. Place an oil pan under the drain bolt and use a 14# socket to remove the M12×1.5×15 drain bolt (3) and the 12×ϕ20×2 combined sealing gasket (4) .

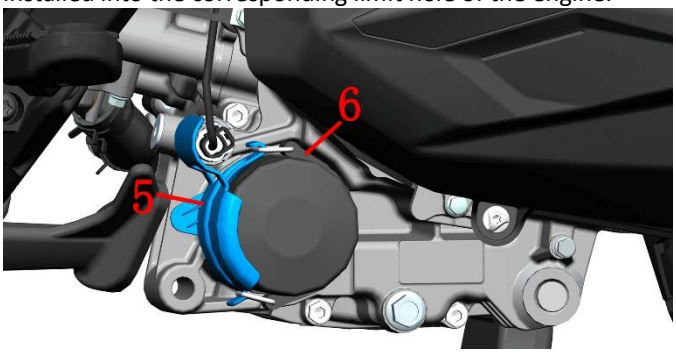


e. Wipe the joint surface clean with non-woven cloth. Check whether the joint surface of the drain bolt (3) is scratched; if so, replace it with a new one, otherwise wipe it clean.

f. Replace the new combined seal gasket (4), and use a 14# sleeve to install the drain bolt (3) and the combined seal gasket (4) back to the engine case. Torque: 25 Nm (2.6 kgf.m, 18 lbf.ft).

2. Replace the fine filter

a. Untie the battery strap (6) that secures the filter guard (5), and remove the filter guard (5). Note: When installing, the limit column of the filter guard needs to be installed into the corresponding limit hole of the engine.



b. Place the oil pan under the fine filter cover, and use a 14-sided 65mm cap filter wrench +1/2" (12.5mm) ratchet wrench to remove the fine filter by rotating it counterclockwise. The filter wrench model of SATA is 97401. Replace it every 1000 kilometers or 3 months (whichever comes first) for the first time, and then every 4000 kilometers or 15 months (whichever comes first).

c. Drain the oil in the fine filter.

d. Use a clean non-woven cloth to wipe off the residual oil and impurities on the engine.

e. Apply a layer of engine oil to the new fine filter seal and install it on the engine. Torque: 20 N.m (2 kgf.m , 15 lbf.ft).

Be careful not to miss the sealing ring, and check whether the sealing ring surface is damaged, hardened or other defects before assembly .

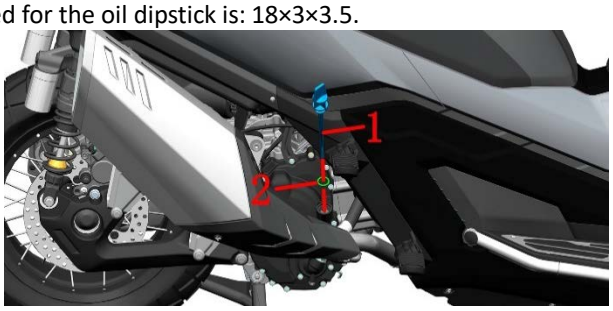
3. Add engine oil

a. If you replace the filter element, use a measuring cup to fill 1.75L (1.85 US qt, 1.54 lmp qt, 0.46 US gal, 0.39 lmp gal) of a new API SN grade or higher motorcycle-specific engine with a viscosity of SAE5W-40/10W-40/10W-50. If you do not replace the filter element, use a measuring cup to fill 1.55L (1.64 US qt, 1.36 lmp qt, 0.41 US gal, 0.34 lmp gal).

b. Remove the oil dipstick and use a funnel and measuring cup to add oil to the oil filling port on the right crankcase cover of the engine.

c. Clean the fuel filler port with a non woven cloth.

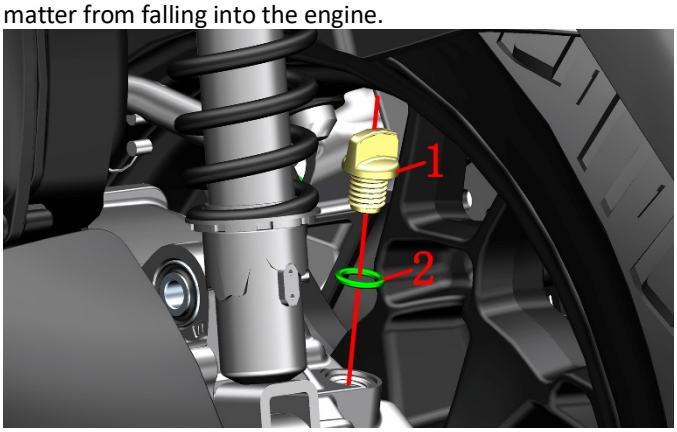
d. Check whether the O-ring (2) is damaged or aged. If not, clean it. If so, replace it. The specification of the O-ring used for the oil dipstick is: 18×3×3.5.



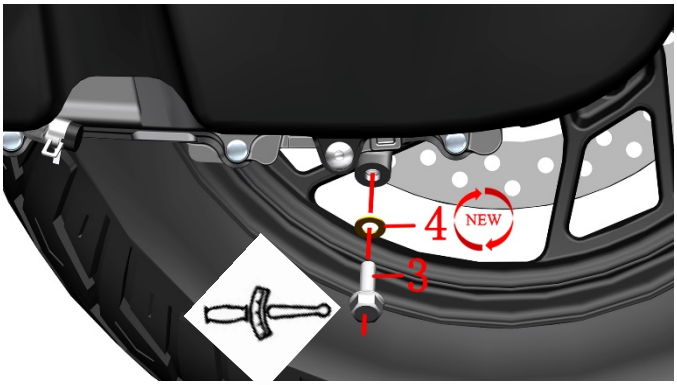
e. Wipe the oil dipstick clean, and install the oil dipstick (1) and O-ring (2) back to the right crankcase cover of the engine by rotating them clockwise by hand.

4. Replace gearbox oil

a. Rotate the oil filler nut (1) counterclockwise and remove the nut (1) and O-ring (2). The specification of the O-ring used for the oil filler nut is: 13.8×2.5. Place the nut (1) on the oil filler port without removing it to prevent foreign matter from falling into the engine.



b. Place the oil pan under the rear of the left engine. Use a 14# socket to loosen the oil drain bolt (3) counterclockwise .



c. Remove the M8×25 drain bolt (3) and 8.3×16×1.5 copper gasket (4).

d. After the gearbox oil is completely drained, wipe the surface of the oil drain port clean with a non-woven cloth.

e. Replace the new copper gasket (4), check whether there are any scratches on the joint surface of the oil drain bolt (3), if not, wipe it clean and reinstall it in order. Torque: 20 Nm (2 kgf.m , 15 lbf.ft) .

f. Use a measuring cup to fill with 0.2L of engine oil or gearbox oil (0.21 US qt, 0.18 lmp qt, 0.05 US gal, 0.04 lmp gal).

g. Check whether the O-ring (4) is damaged or aged. If not, wipe it clean; if so, replace it.

h. Clean the nut (3) and the oil filling port with a non woven cloth, first insert the O-ring (4) into the nut (3) and then rotate it clockwise by hand to install it back to the oil filling port of the gear box .

5. Confirm the oil level

a. Start the vehicle and run it at idle speed for a few minutes, then check all disassembled locations for leaks. If found, check for leaks.

b. After the engine has been idling for 5 minutes, turn it off for 3 minutes and check whether the engine oil level meets the standard. If not, drain the oil or add it to the

standard.

Throttle body

Notice:

●The throttle valve body sensor and stepper motor cannot be immersed in any liquid.

●It is prohibited to adjust the idle speed adjustment screw on the valve body.

1. Clean carbon deposits without removing the throttle valve body

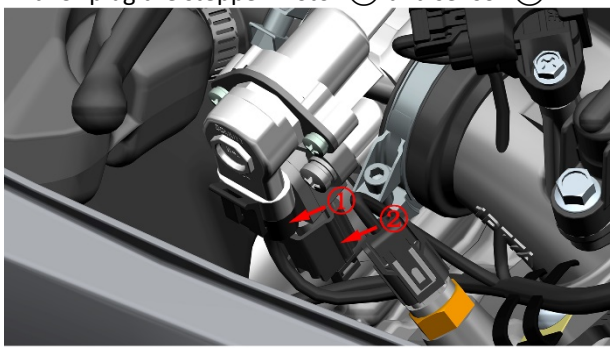
a. During riding, increase the throttle appropriately to increase the speed to above 7000 without affecting safety and complying with traffic regulations, and continue riding for at least 2 minutes. High-speed scavenging can effectively remove carbon deposits.

b. Use a regular and qualified fuel saver to add fuel according to the instructions. Frequent use may cause damage to the fuel supply pipeline.

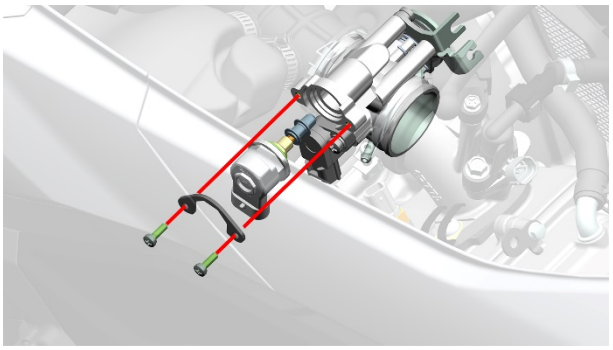
2. Remove the stepper motor and clean the carbon deposits

a . Remove the rear storage box according to the " Z T368T-G Rear Storage Box Disassembly and Assembly Video Tutorial" in the assembly video of ZONTES official website .

b. Unplug the stepper motor ① and sensor ②.



c. Use a short Phillips screwdriver to remove the two bolts and anti-drop card that come with the throttle valve body assembly, and then remove the stepper motor.

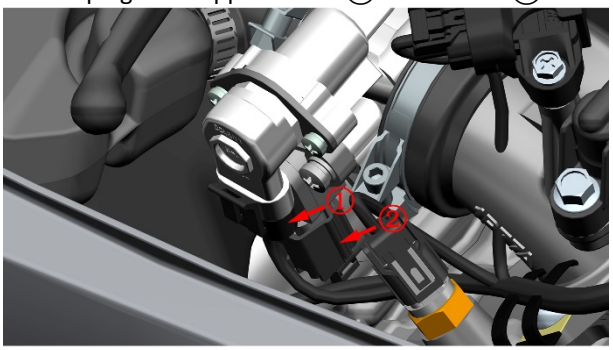


d. Use throttle cleaning agent to clean the carbon deposits on the head of the stepper motor. Spray a small amount of cleaning agent into the valve body hole. Do not soak the stepper motor with any liquid.

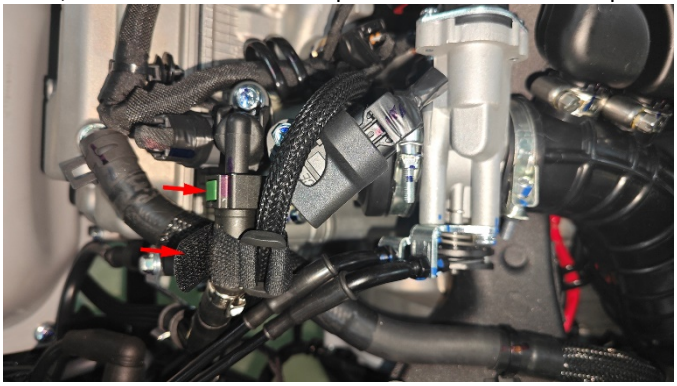
e. Install the stepper motor back onto the valve body, making sure the sealing ring is not missing. Plug the plug back in.

3. Remove the throttle valve body assembly and clean the carbon deposits

a. Unplug the stepper motor ① and sensor ②.

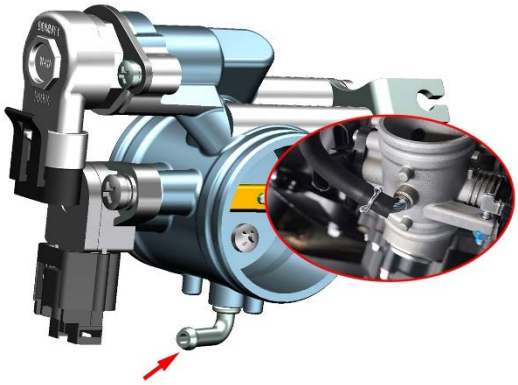


b. Place a small container under the high-pressure fuel pipe and untie the cable tie. Press the green buckle indicated by the arrow and pull out the high-pressure fuel pipe at the same time. A small amount of fuel will flow out when pulling it out, and it is forbidden to drip onto the surface of the parts.

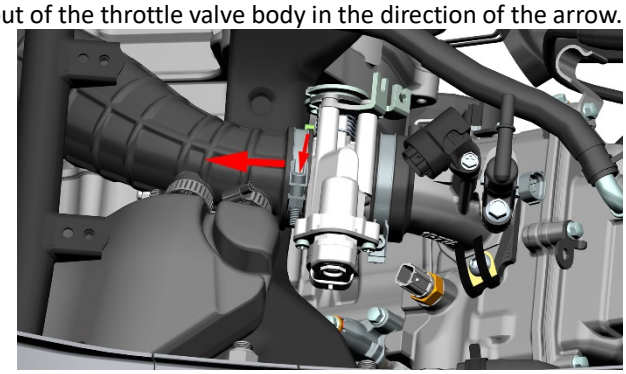


c. Find the retaining ring at the bottom of the valve body, pinch both ends of the retaining ring and move it out,

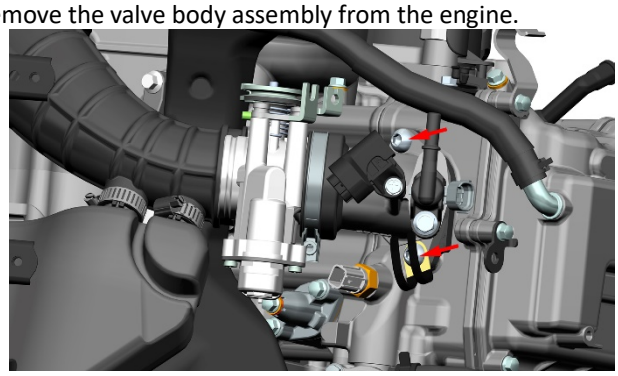
then pull out the desorption tube.



d. Use a 4# hexagon socket to loosen the bolts of the clamp and then pull the air filter outlet pipe and the clamp out of the throttle valve body in the direction of the arrow.



e. Use a 5# hexagon socket to remove the two bolts and remove the valve body assembly from the engine.



f. Remove the insulation pad and O-ring assembly, and remove the O-ring. Use a 4# hexagon socket to loosen the clamp and separate the intake manifold from the valve body assembly. Use two 10# open-end wrenches to loosen the two nuts on the fuel line and pull it out to remove it from the bracket; remove the cylindrical head of the throttle line from the turntable. After loosening the two nuts of the return oil line, completely loosen the bottom nut from the threaded sleeve and then pull out the bracket in the axial direction. Do not pull it directly outwards. Remove the cylindrical head of the return oil line from the turntable.

g. Use throttle body cleaning agent to clean the carbon deposits on the intake manifold and throttle body outlet. Do not soak the throttle body assembly and intake manifold assembly directly with any liquid.

h. After cleaning the insulation pad, replace two new O-rings (10) and assemble them in place. Clean the contact surface between the intake manifold and the insulation pad and the insulation pad and the engine end surface. Reset all parts in reverse order of disassembly.

4. Remove the sensor from the throttle valve body

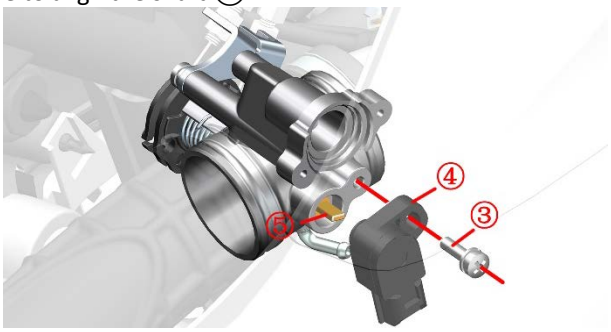
a. If the idle speed is abnormal, the engine is prone to stalling, and the spark plug and high-voltage coil are excluded, the sensor needs to be removed for inspection. It should not be removed under normal circumstances.

b. Refer to the steps for removing carbon deposits without removing the throttle valve body and unplug the stepper motor ① and sensor ②.

Simple test method: After turning off the power, take out the stepper motor, do not loosen the cable plug, press the flameout switch when turning on the machine, do not ignite, check whether the motor plug can shrink back and forth, and finally turn off the flameout switch to check whether the plug returns to its original position.

If you need to check whether the stepper motor is abnormal, you can measure the resistance between A and B to see if it is 53±5.3Ω.

c. Use a short cross screwdriver to remove the GB9074.4 M5×16 bolts ③ that come with the throttle body assembly, and remove the position sensor ④. When reinstalling, be sure to align the shaft ⑤.



Simple test method: Connect the vehicle to the diagnostic instrument, press the ignition switch (no need to start the ignition), turn the throttle handle from the initial position to full open, and check whether the throttle position signal changes from 0 to 100.

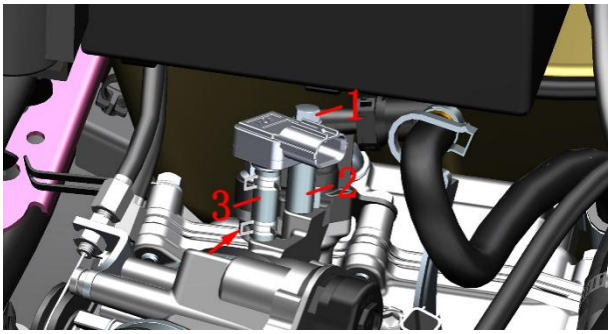
Position sensor output voltage value Idle position: 0.7±0.1V; Full open position: 3.6-3.9V, input voltage DC5V±0.1V. f. Check the external intake pressure sensor:

Loosen the connector and check if the pins are crooked or broken.

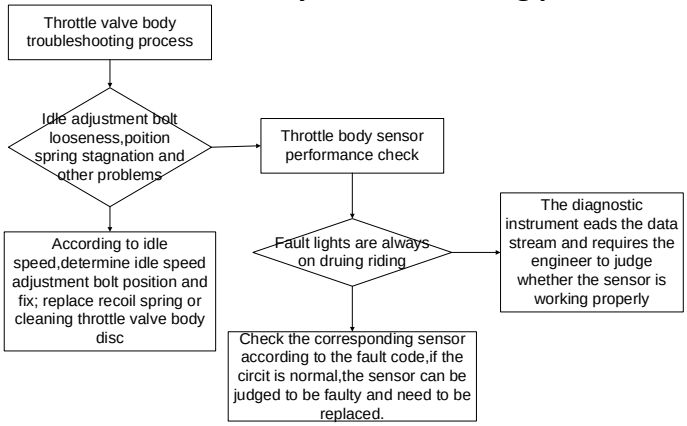
Connect the vehicle to the diagnostic instrument, and without starting the engine, check the engine parameters and

see if the pressure parameters are consistent with the local atmospheric pressure.

d. If you need to remove the intake pressure sensor, hold the bushing (2) firmly and remove the bolt (1) with an 8# short sleeve. If it is inconvenient to operate, remove the battery and the electrical device box before proceeding. Use pliers to clamp the clamp at the bottom and move it up to the top to remove the intake pressure sensor connecting hose (3) and the sensor together. Then remove the hose from the sensor.



5. Throttle valve body troubleshooting process



DANGER

●The vehicle must be parked on a flat, stable ground or a lift.
● Wait until the engine and muffler have cooled down before operating.
●When removing the high-pressure fuel pipe, prevent fuel from dripping onto the surface of the parts.
●Smoking, making phone calls, etc. are prohibited in the workplace.

CAUTION

●When removing the throttle valve body to clean the carbon deposits, the operation must be carried out in a dust-free environment to prevent dust from entering the engine.
●Prevent foreign objects from falling into the engine or air filter.
●If the stepper motor, sensor and thermal insulation pad are disassembled, do not miss the sealing ring and ensure that the sealing ring is properly assembled without any cutting edge.
●Never use carburetor cleaner or compressed air to clean the throttle body.
●After reinstalling the battery, the electronic fuel injection system needs to be reset. The specific method is as follows:

a. Unlock the vehicle and raise the main stand;
b. Press the brake and start the vehicle;
c. Increase the engine speed to over 3000rpm;
d. After releasing the accelerator, turn off the ignition switch and lock the vehicle;
e. Wait for 5 seconds and then unlock the vehicle again to complete the reset of the EFI system.

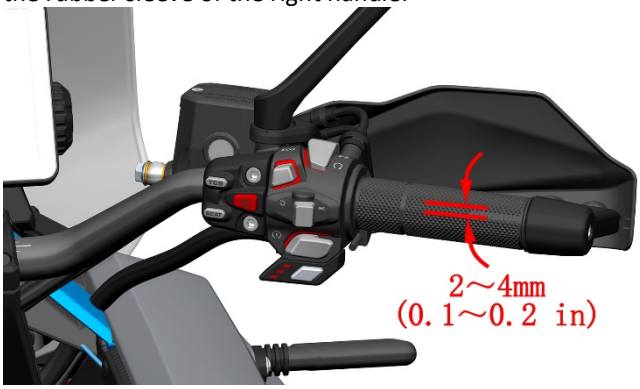
Throttle cable

1. Inspection

a. Check whether the right handlebar rubber sleeve and throttle cable are damaged.

b. Check whether the rubber sleeve can rotate smoothly with the right hand and can return to its original position automatically.

c. Hold the steering handle with both hands and turn it to the right hand while rotating the rubber sleeve of the right handle. Check whether the throttle can be reset normally after each turn. If it cannot be reset, lubricate the cable or the inside of the right handle; or replace the throttle cable or the rubber sleeve of the right handle.



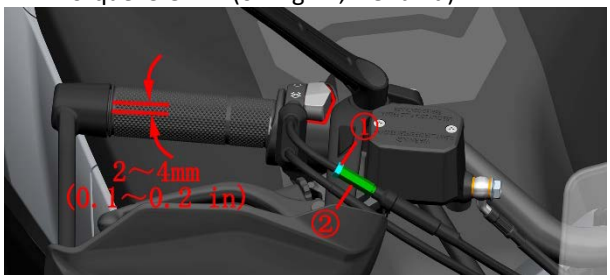
d. After starting the engine , turn the steering handle left and right to ensure that the idle speed remains unchanged during the steering process , and then turn off the engine.

e. Turn the rubber sleeve with your right hand to check whether the cable gap is between 2 and 4 mm (0.1 and 0.2 in).

2. Adjust the throttle cable clearance

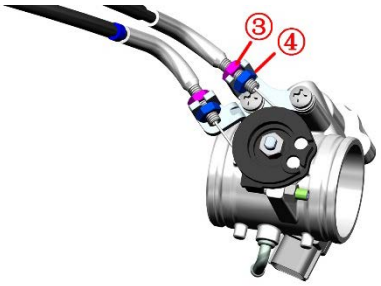
a. After removing the protective rubber sleeve, use an 8 # open-end wrench to fix the adjusting screw ②, and then use a 10 # open-end wrench to loosen the nut ① counterclockwise. Turning the adjusting screw ② clockwise can reduce the free travel , and turning it counterclockwise can expand it; adjust the gap to the specified value. After adjusting the gap, tighten the nut ① and then reset the protective rubber sleeve.

Torque: 3.8 Nm (0.4 kgf.m, 2.8 lbf.ft).



b. If the above adjustment cannot achieve the expected

effect, refer to the description in " Removing the throttle body assembly to clean carbon deposits" to remove the throttle body assembly. Use a 10# open-end wrench to loosen the two nuts on the bracket to adjust. Torque: 3.0 Nm (0.3 kgf.m, 2.2 lbf.ft).



c. If the above two adjustments are ineffective, replace the throttle cable with a new one.

Idle -Done

Notice:

● Before checking the idle speed, you should first check other engine maintenance items and make sure they are in normal condition .

● Before checking the idle speed , check the following items:

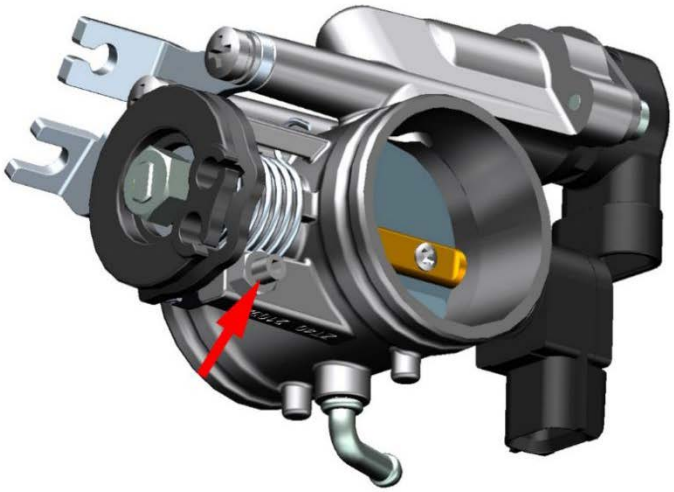
maintenance reminder light " " should not light up.

spark plug condition has been checked.

air filter element and air inlet filter element have been checked or replaced.

Check the throttle clearance.

● It is forbidden to adjust the limit screw on the valve body without authorization .



Check the idle speed :

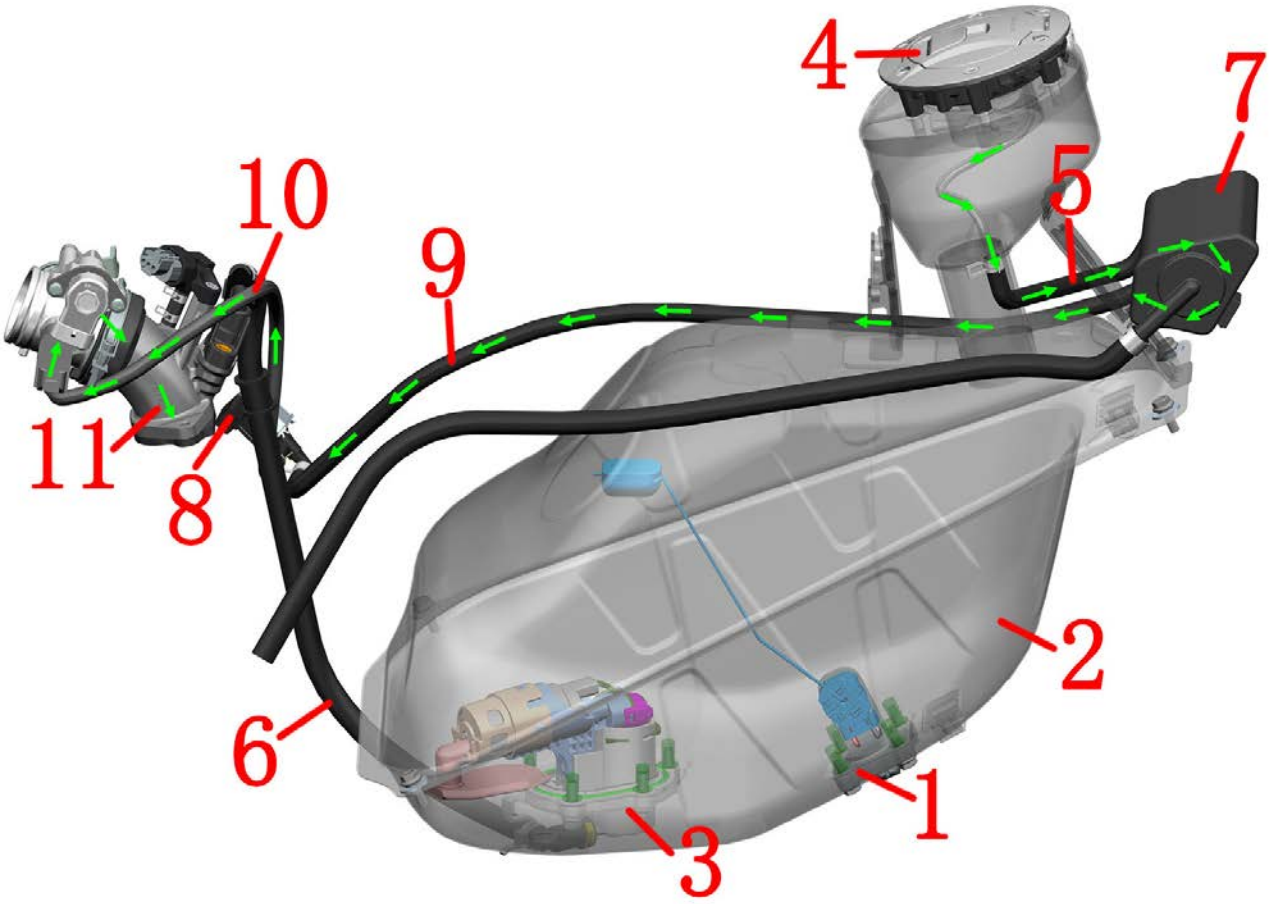
The engine idle speed should be checked when the engine is hot.

The engine idle speed range should be between 1500-1700 rpm .

If the idle speed is not within the standard range or the vehicle stalls at idle, you should go to a ZONTES authorized maintenance point or a qualified maintenance unit to have professional service personnel inspect and handle it.

idling or flameout requires inspection or repair according to the troubleshooting process in the "Electronic Fuel Injection System " chapter of this manual.

Fuel Evaporative Pollutant Control System



1 - Fuel level sensor 2 - Fuel tank 3 - Fuel pump 4 - Fuel tank cap 5 - Adsorption /vent pipe
6 - High pressure oil pipe 7 - Carbon canister 8 - Carbon canister solenoid valve
9 - Solenoid valve inlet pipe 10 - Solenoid valve outlet pipe 11 - Throttle valve body assembly

Fuel evaporation:
Oil and gas → Oil and gas separator (inside the fuel tank) → Adsorption /vent pipe → Solenoid valve inlet pipe → Solenoid valve outlet pipe → Throttle valve body assembly → Intake manifold → Cylinder

The evaporative pollutant control system can only be inspected after the covers are removed.
Inspect the canister for cracks or damage.
Inspect suction/vent tube for cracks or damage.
Check whether the carbon canister solenoid valve is working properly.
Check whether the inlet and outlet pipes of the solenoid valve are cracked or damaged.
Check whether the hoses are bent or not, which may cause airflow obstruction.

Heat sink

DANGER

● The vehicle must be parked on a flat, stable ground or a lift.
● Wait until the engine and muffler have cooled down before operating.
●Swallowing or inhaling coolant can be harmful to the human body.

CAUTION

●Check the coolant level regularly and always keep it above the “L” line.
●It is recommended to replace the coolant every 4 years or 40,000 kilometers (24,855 miles) .
● Swallowing or inhaling coolant will cause certain harm to the human body. Wash hands, face and any exposed skin thoroughly after adding coolant each time. If swallowed by mistake, contact the poison control center or hospital immediately; if inhaled, go to a ventilated environment immediately. If splashed into the eyes, rinse the eyes immediately with plenty of running water and seek medical attention or treatment in time. Keep away from children and pets.
● The engine coolant must be a model suitable for aluminum radiators, based on ethylene glycol. Use a coolant suitable for aluminum radiators, which is a mixture of coolant concentrate and distilled water in a certain proportion. If water needs to be added, only distilled water can be added. Other water qualities may corrode the engine cooling system or cause more serious consequences.
● The corresponding antifreeze should be selected according to the lowest temperature that can be reached in the local area. The vehicle is factory-added with Total -35 ℃ (-31F) green antifreeze. The total amount of coolant is 1.44L (1.52 US qt, 1.27 lmp qt, 0.38 US gal, 0.32 lmp gal).
● Coolant may damage the paint surface, so be careful when adding it. Any small amount of splashes should be wiped off immediately with a clean soft cloth.

1. Check the coolant

a . Straighten the vehicle and check from the right rear gap with a flashlight whether the coolant level is between "H" and "L". Make sure the ground is as flat as possible and do not check on a slope. The engine must be cold.

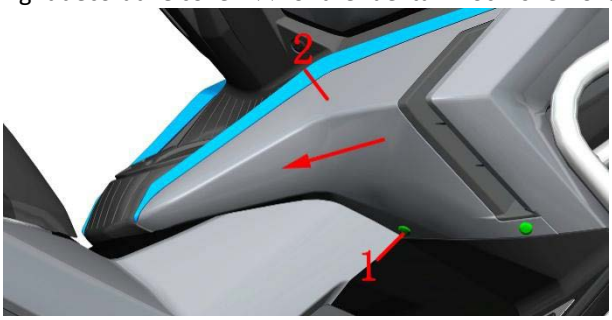
2. Add coolant (antifreeze) to the auxiliary water tank

If the water level in the auxiliary water tank is lower than the "L" line, you need to add an appropriate amount of coolant . If there is no coolant in the auxiliary water tank, you need to first check whether the cooling system has leaks, and you can only add it after the inspection is completed.

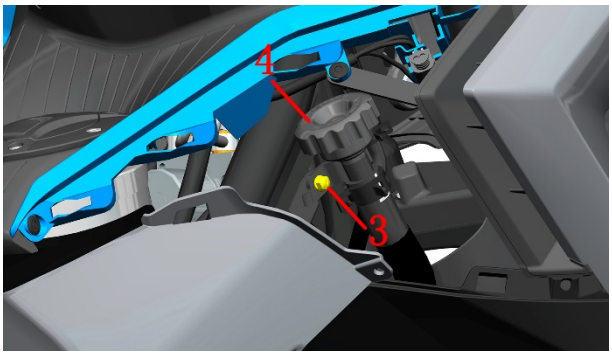
Open the auxiliary water tank cap and add an appropriate amount of coolant with the help of a funnel. Straighten the vehicle and use a flashlight to check whether the liquid level in the auxiliary water tank is between "H" and "L". Make sure the ground is as flat and level as possible and do not check on a slope. The engine must be in a cold state.

3. Add coolant to the main water tank

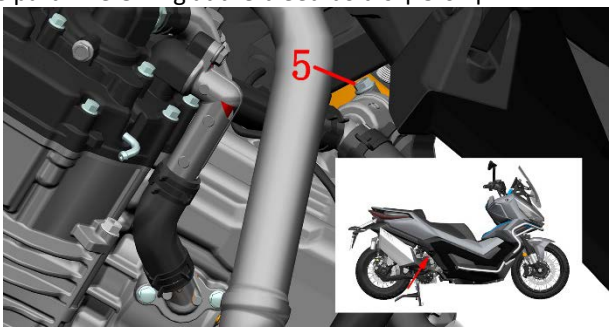
a. Use a 4# hexagon socket to remove the two expansion nails (1) that fix the right decorative cover (2) of the fuel tank lock, and then push the right decorative cover (2) of the fuel tank lock in the direction of the arrow until the right decorative cover (2) of the fuel tank lock is removed.



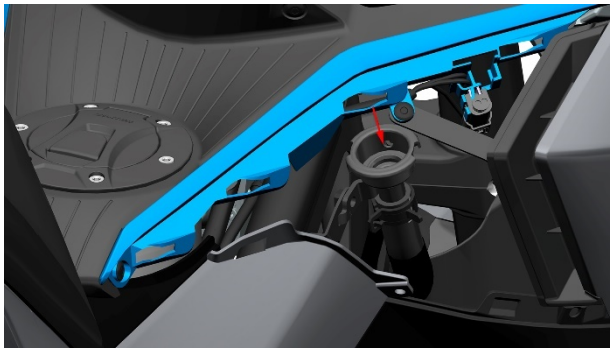
b. Use an 8# socket to remove the M6 × 12 bolt (3) that secures the water inlet , press down the water inlet cover (4), turn it counterclockwise, and remove the water inlet cover (4).



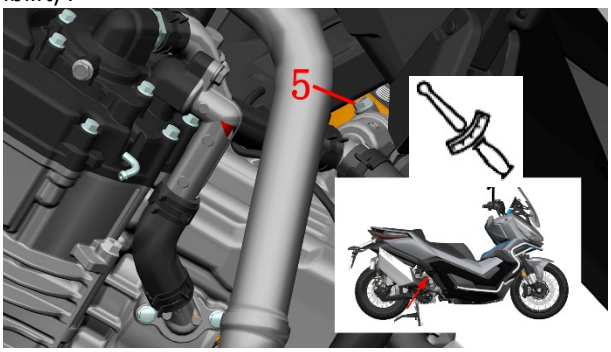
c. Use a 10# sleeve to loosen the thermostat's M6×12 bleed bolt (5) counterclockwise for 4 to 5 turns. Do not remove it completely. Note that a small container should be used to collect the coolant overflowing from the bleed bolt. Do not allow the coolant to drip directly onto the surface of the part. The O-ring at the bleed bolt is ϕ 5.6×ϕ1 .



d. Wear waterproof gloves and use an extended funnel to add coolant to the main water tank water inlet. Wait until the thermostat bleed bolt position is stable and the coolant overflows, and the coolant level can be seen at the water inlet.

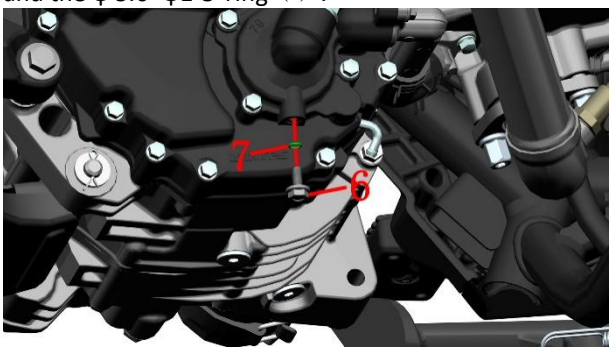


d. Tighten the main water tank water inlet cover. Tighten the exhaust bolt (2) ; torque: 8 ~ 10N. m (0.8 ~ 1 kgf.m, 6 ~ 7 lbf.ft) .



4. Release coolant

a. Place the oil pan underneath, wear waterproof gloves and use a 10# socket to remove the M6×12 drain bolt (6) and the ϕ 5.6×ϕ1 O-ring (7) .



b. Remove the main water tank filler cap to speed up the coolant outflow.

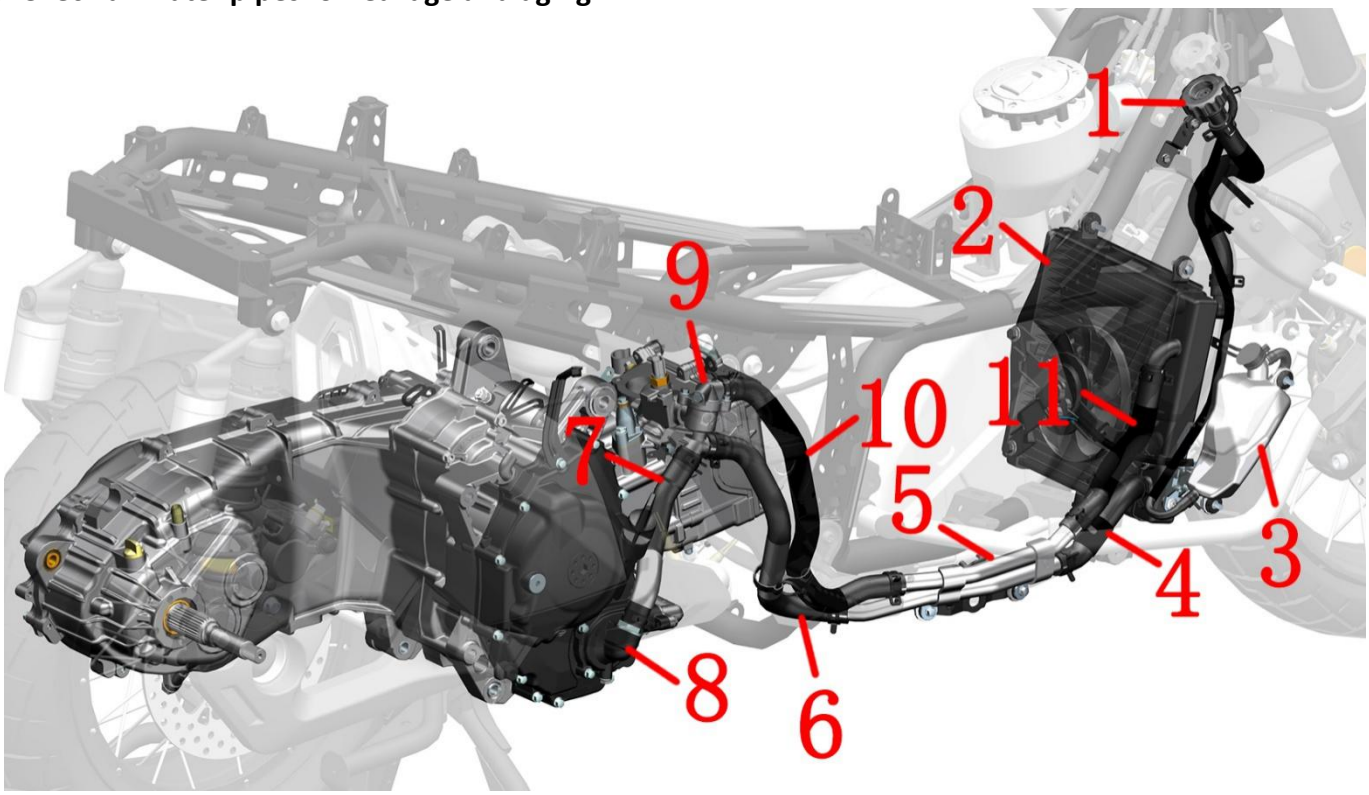
all joint surfaces clean with non-woven fabric , check whether the joint surface of bolt (6) is scratched, if so , replace it with a new one . The O-ring (7) needs to be replaced every time it is disassembled .

d. Put the new O-ring (7) onto the bolt (6) first , and be careful not to scratch the O-ring . Torque of bolt (6) : 8～10N.m (0.8 ～ 1kgf.m,6 ～ 7lbf.ft) .

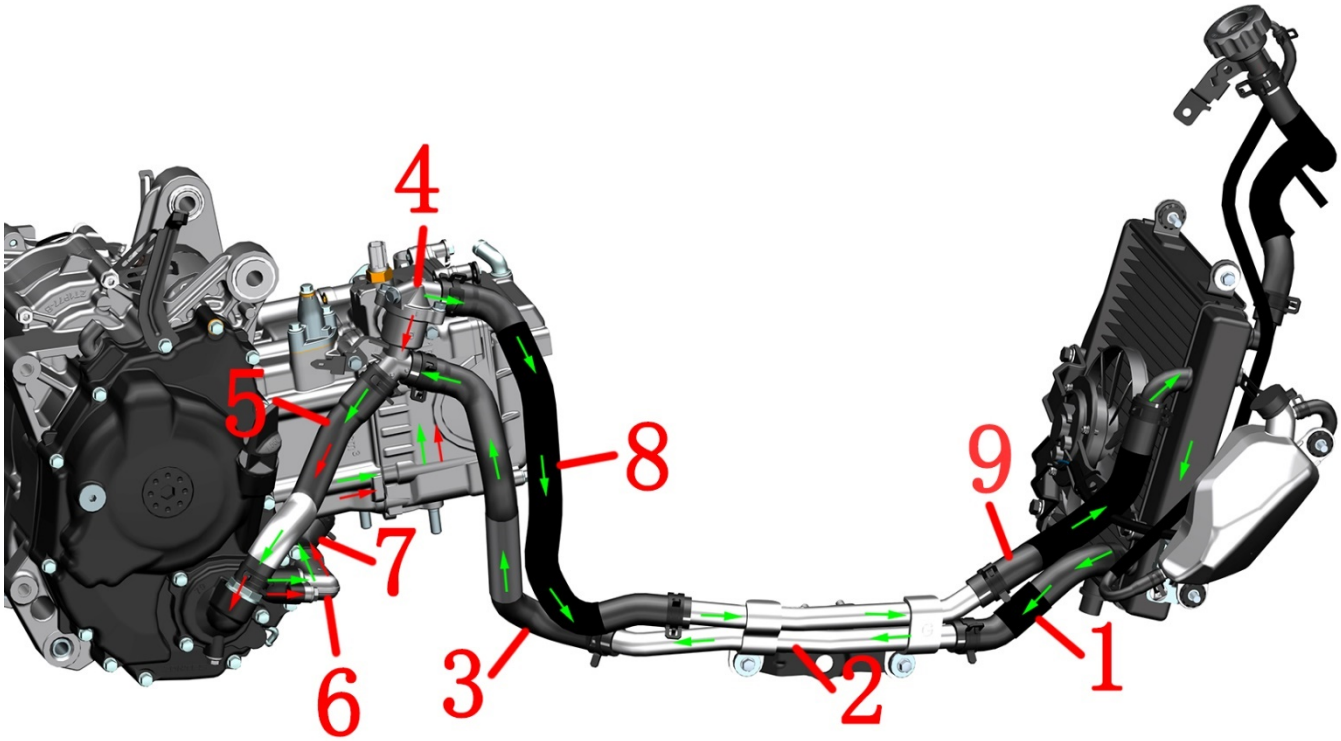
5. Check whether the fins of the radiator tank are deformed or the air duct is blocked

a. Use compressed air or low-pressure water guns, brushes, etc. to remove dirt such as sand and insects from the surface of the radiator . When using compressed air, be careful not to get too close to the fins. Do not use high-pressure water guns to directly flush the radiator to avoid deformation of the fins and blockage of the air duct.

6. Check all water pipes for leakage and aging



1 - Main water tank filling port 2 - Main water tank 3 - Auxiliary water tank
4 - Main water tank outlet pipe 5 - Aluminum water pipe 6 - Engine water pipe
7 - Water pump cover water inlet pipe 8 - Water pump cover assembly 9- Thermostat assembly
10- Thermostat water outlet pipe 11- Main water tank water inlet pipe



1- Main water tank outlet pipe 2- Aluminum water pipe 3- Engine water pipe 4 - Thermostat
5 - Water pump cover water inlet pipe 6 - Water pump cover water outlet pipe joint
7 - Water pump cover water outlet pipe 8 - Thermostat water outlet pipe
9 - Main water tank water inlet pipe

Brake hose

Notice:

●This inspection should be completed by a qualified maintenance unit .

● Inspect the brake hose regularly according to the maintenance period table .

●It is recommended to replace the brake hose every 4 years .

Refer to steps 1 and 2 of inspecting brake accessories in the brake system. You can use an endoscope with LED to inspect the oil pipe joints of the ABS hydraulic control unit and the main pump, or remove the corresponding covering parts for inspection.

Brake fluid

Notice:

●This inspection should be completed by a qualified maintenance unit .

● It is strictly forbidden to flush the main pump directly with high-pressure water .

● After disassembly, make sure all parts are reinstalled correctly.

● It is strictly forbidden to mix water, dust, impurities, and silicate or petroleum liquids, otherwise it will cause serious damage to the brake system.

●This vehicle uses DOT 4 brake fluid and it is forbidden to mix it with other brake fluids.

●You need to wear protective gloves / protective clothing /protective eyes /protective mask.

● Brake fluid must be used promptly after opening, and be sealed and moisture-proof during storage; it is recommended not to exceed 1 month. Poor quality or damp brake fluid will have adverse effects on the brake system, and in severe cases may cause brake failure.

● Avoid dripping brake fluid onto the painted surface of covering parts or the surface of components . If accidentally splashed, rinse with clean water immediately .

DANGER

● If brake fluid is swallowed by mistake, contact a poison control center or hospital immediately; if it gets into eyes, rinse with clean water and seek medical attention immediately.

● Keep brake fluid away from children and pets.

● The vehicle must be parked on a flat, stable ground or a lift.

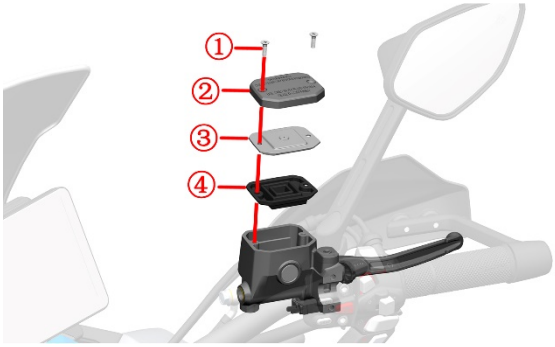
1. Add brake fluid to the front and rear disc brake master cylinders

a. Take adding brake fluid to the front disc brake master pump as an example. The steps for adding fluid to the rear brake master pump are the same.

b. Place the vehicle in a horizontal position.

c. Wrap the main pump with oil-resistant plastic film to prevent brake fluid from dripping onto the surface of components and damaging the paint layer.

d. After wearing waterproof gloves, use a cross screwdriver to remove the bolts ①, and take off the upper cover ②, cover plate ③, and sealing gasket ④.



e. Use a brake fluid water content tester to measure the water content. If it is > 2%, replace all brake fluid ; if it is ≤ 2 %, add newly opened DOT 4 brake fluid to 3/4 of the transparent observation window of the front disc brake master cylinder. The recommended water content should be less than 1.5 %. This vehicle is factory-added with TOTAL Total HBF 4 (DOT 4) Brake fluid.

The above picture is a brake fluid water content tester. The picture comes from the Internet and the copyright belongs to the original author. Please do not use it for other purposes.

f. Clean away any foreign matter before reassembling.

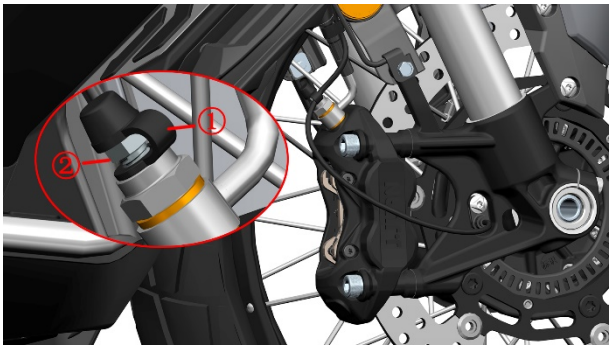
2. Replace brake fluid

Refer to the steps for adding brake fluid on the previous page. If the water content is > 2%, the brake fluid needs to be replaced. This inspection should be done every 4,000 kilometers (2,485 miles) or every 15 months. It is recommended to replace the brake fluid every 2 years. If the brake fluid is not replaced for a long time, flocs will form and block the oil pipe , the oil hole of the disc brake master pump or the piston, causing the braking effect to deteriorate or fail, thereby affecting driving safety.

2.1 Replace the front brake fluid

a. Wrap the front brake master cylinder with oil-resistant plastic film as shown in the previous section.

b. Remove the rubber cap of the bleed nozzle① and put on a 8# plum wrench. Put a 6mm (0.23 in) hose into the bleed nozzle②, and be careful not to remove the plum wrench.



c. Place the other end of the hose into the oil container.

d. Refer to the steps for adding brake fluid on the

previous page to remove the upper cover of the front brake master cylinder.

e. Use your right hand to rotate the 8 # plum wrench counterclockwise to loosen the bleed nozzle, and use your left hand to slowly and evenly squeeze the front brake handle to the bottom and keep it still. Tighten the bleed nozzle clockwise and then slowly loosen the handle. Pay close attention to the fluid level of the front brake master pump. If it is too low, add it in time to prevent bubbles from entering the brake hose. Repeat the previous steps until transparent and clean light yellow brake fluid flows out.

f. Observe whether the liquid level of the main pump is at the 3/4 position of the transparent inspection. If not, add liquid or draw out or discharge it with a syringe.

g. After replacing the brake fluid, unplug the 6mm (0.23 in) hose and tighten the bleed nozzle to the standard torque of 10 Nm (1 kgf.m, 7 lbf.ft) with a torque wrench. Then put the rubber cap back on the bleed nozzle.

h. Reinstall the main pump cover.

i. Repeatedly squeeze and release the brake handle to check whether the brake returns to normal hydraulic resistance.

⚠WARNING

● The discharged waste brake fluid must be properly handled and is prohibited from being used. It is prohibited to dump it at will to pollute the environment; or to place it at will. It should be properly disposed of by a qualified recycling unit.
● The steps for draining the brake fluid must be strictly followed and not confused; avoid bubbles entering the brake pipe.
●Pinch and release the brake handle slowly and evenly to avoid air bubbles entering the brake line.
The brake handle can only be released after the bleed nozzle is locked in place. Half-locking is prohibited; and do not use excessive force.

2.2 Replace rear brake fluid

Replace the rear brake fluid by referring to the steps for replacing the front brake fluid.

3. Exhaust of brake system

If the brake handle feels soft and the braking performance is significantly reduced , first check whether the brake fluid level of the main pump is below the "LOW" line and whether the brake system is leaking. If the problem still exists after eliminating the above two items, try to bleed the brake fluid. The bleed operation is similar to the previous operation of replacing the brake fluid. When replacing the brake fluid, clean, transparent, light yellow brake fluid should flow out steadily, while the bleed operation will cause foamy brake fluid to flow out.

bleeding is completed, check whether the brake fluid level of the main pump meets the standards.

⚠WARNING

● The discharged waste brake fluid must be properly handled and is prohibited from being used. It is prohibited to dump it at will to pollute the environment; or to place it at will. It should be properly disposed of by a qualified recycling unit.
● During operation, pay close attention to the fluid level in the main pump and replenish it in time to prevent air from entering the brake hose.

Tire

⚠DANGER

● Check the condition and tire pressure of the tires before driving .
●When the tire is worn to the limit or has cracks or scratches on the surface, it should be replaced in time .
●When using new tires, you must pay special attention to driving safety. New tires that have not been run-in may slip and cause the vehicle to lose control.
● Avoid sudden acceleration , sharp turns, emergency braking, etc. within 150 kilometers (93 miles) after replacing new tires.
The standard front tires of this vehicle are 110 / 70-17 and the rear tires are 150 /70-14. When replacing tires, you should use standard tires. Using non-standard tires may cause problems.
●It is not recommended to use external patching to repair tires . You need to remove the tire for internal patching. External patching can be used for temporary emergency, but you should reduce the speed of the vehicle and go to the maintenance unit for internal patching as soon as possible. If the sidewall is hit, punctured, or scratched, and the tread is damaged and has a large hole, it should be replaced directly. Dynamic balancing should be performed again after the tire is repaired.

⚠WARNING

● Check tire pressure regularly. The standard is 230 kPa (2.35 kgf/cm2, 33.4 PSI) at normal temperature, and 230 kPa (2.35 kgf / cm2 , 33.4 PSI) for the rear wheels. The maximum tire pressure in cold state shall not exceed 300 kPa (3.1 kgf/cm2 , 44 PSI).

●When you find that the tire pressure has dropped, you should check whether there are nails or small holes in the tire; whether the side of the rim has been deformed or cracked due to collision.
● When using a tire changer to remove a tire, be careful to avoid the valve stem . Be careful to protect the contact area between the rim and the tire lip. If scratched, it may cause air leakage.
● Too high tire pressure will reduce the contact area with the ground, which may cause slipping and loss of control , and it is also more likely to cause tire blowouts in summer . Too low tire pressure will cause steering difficulties, accelerate wear, increase engine load and increase fuel consumption.
● Frequent exposure to the sun can cause tires to crack and age. It is recommended to park the vehicle in a dustproof, sun-proof, and ventilated place; or cover the vehicle with a motorcycle cover to protect both the body parts and the tires. If the vehicle is not driven for a long time, the vehicle should be supported firmly and the tires should be suspended to avoid deformation caused by long-term load at the contact point with the ground.
●Tire self-filling fluid should not be used because it may clog

the air holes of the tire pressure monitoring sensor, causing difficulty in inflation or tire pressure monitoring failure.

1. Check the tires

a. Park the vehicle on a flat and stable ground or a lifting platform and lower the main bracket.

b. Support the front wheel with a suitable tool so that the front tire is suspended in the air, then rotate the tire and carefully check if there are any abnormalities, such as uneven wear, nail punctures, cracks, etc. Clean the small stones or other foreign objects embedded in the tread. Check if the tread and sidewall have been worn to the mark. If they are nearly worn to the mark or have been worn to the mark, replace them with new tires of the same specifications in time. Use a tire pressure gauge to measure the tire pressure when the tire is cold, and add or deflate it to the standard value.

of the raised wear mark on the tread is 1.6mm (0.06 in). The triangle mark (△TWI) on the sidewall indicates the position of the wear strip . If the wear reaches the mark point, it means that the wear has reached the limit. Continuing to drive will be a safety hazard and you must replace the tire with a new one of the same specification.

c. The inspection of the rear tire is the same as that of the front tire and will not be repeated here.

2. Replace tires

a. Replace the front tire

Refer to the steps for disassembling the front wheel assembly in the "Front Fork Assembly" section of this manual to remove the front wheel assembly. Use a tire remover to remove the tire. When removing the tire, be careful to avoid the valve position. Do not use a crowbar to pry open the tire at the valve position to avoid damaging the tire pressure sensor. Before pressing the tire, install it according to the rotation direction indicated on the sidewall, and align the yellow mark lightly with the valve position. After replacing a new tire or repairing a tire, you need to re-do dynamic balancing to avoid front wheel shaking due to imbalance that affects the driving experience.

b. Replace the rear tire

Refer to the previous steps for replacing the rear brake disc to remove the rear wheel assembly. Other operations are similar to those for replacing the front tire and will not be repeated here. Click the arrow to view the steps for replacing the rear brake disc.

Front fork

Notice:

● Every 8000km (4971mile), check whether the front fork is leaking or deformed, and whether the shock absorber rebound is normal.

● Before each ride, check whether the front shock absorber has leakage and whether the fasteners are loose to ensure driving safety.

● Torque of bolts at the hollow shaft of the front wheel of the shock absorber bottom tube : 20N.m (2.0 kgf.m, 15 lbf.ft).

● When replacing hydraulic oil, use kerosene or diesel to thoroughly clean all parts and use a measuring cylinder to measure 497 ± 5ml (16.8 ± 0. 17 US oz , 17.5 ±0. 18 lmp oz , 30.3 ±0. 3 cu-in) Pour 10W hydraulic oil at one time to avoid mixing different hydraulic oils.

●After driving on dusty or muddy roads, foreign objects on the front fork tube (exposed chrome-plated section of the barrel) should be cleaned promptly to avoid scratching the dust seal or oil seal and causing leakage ; it can be wiped clean with a soft cloth .

●Never use a high-pressure water gun to wash the dust seal directly at close range .

● If the vehicle is not driven for a long time , it should be parked in a ventilated and dry environment. A dark and humid environment will easily cause the front fork tube to rust and other parts of the vehicle to rust. The front shock absorber should be maintained more frequently in coastal areas than inland areas. After wiping it clean, a small amount of anti-rust oil can be sprayed to prevent rust.

1. Check the appearance

a. After parking the vehicle firmly, let the front wheel hang in the air, turn the handlebar to check if there is leakage on the front shock absorber; check if there are scratches, pits , rust, etc. on the surface of the front fork tube . Shallow scratches, small pits, and slight rust can be smoothed with fine sandpaper of about 2000 mesh. Wipe clean the dust or foreign matter on the dust seal.

b. Check the bottom of the drum for paint peeling; check the front fender , front wheel hollow shaft and front brake caliper mounting points for signs of breakage or cracking . Check the bottom of the drum for leakage.

c. If there is a lot of hydraulic oil on the front fork tube, wipe it clean and then ride and observe. If there is no oil stain or slight oil stain, it is the hydraulic oil accumulated during the assembly of the dust seal , and it can be judged that the oil seal is not leaking. If there is a small amount of oil stain or oil sludge mixture , remove the dust seal and wipe the surface of the front fork tube and the oil seal clean , compress the front shock absorber once, wipe it clean, and then compress it again ; repeat the above operation 10 times . Observe whether there is still oil on the front fork tube . If there is, the front shock absorber is leaking and the dust seal and oil seal need to be replaced. If there is no oil stain, it is a normal phenomenon that a small amount of hydraulic oil has accumulated during assembly .

d. Use a mirror or mobile phone camera to check if there is any leakage at the bottom of the bottom tube . If there is slight leakage, first check if the bolts are loose . The bolt torque here is 20 ~ 26N.m (2 ~ 2.7 kgf.m, 15 ~ 19 lbf.ft). If there is still leakage after tightening , replace the gasket .

2. Check shock absorption performance

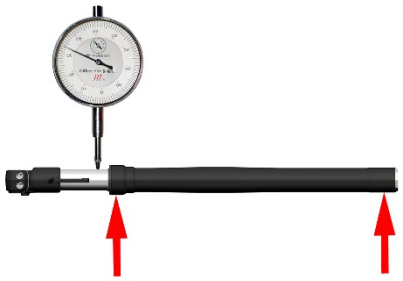
Hold the front brake handle and press down the direction handle firmly. After releasing it , it should be able to compress smoothly and then return to normal. Repeat the operation several times to check . If there is any blockage, remove the shock absorber for inspection. If there is a collision with the front wheel or high-speed crossing, check whether the shock absorber is deformed. Check the shock absorber performance according to the maintenance period table. Prevent the vehicle from rolling over during operation .

3. Disassemble the front shock absorber

"Front Fork Assembly " of this manual to remove the front shock absorber.

4. Correct the front fork tube

If the front wheel of the vehicle passes over a bump at high speed or after a collision, check whether the front fork tube is deformed. Take the left shock absorber as an example. Use the end face of the shock absorber bottom tube at the front wheel axle and the end face of the front fender mounting point to fix the shock absorber ; or remove the front fork tube . Use a dial indicator to detect the deformation of the front fork tube in the axial direction , and rotate the front fork tube to measure different positions.



For slight deformation of less than 0.2 mm (0.008 in), the front fork tube can be supported by a V -shaped iron block and soft glue or rubber, copper sheet, etc. can be placed on the contact surface to prevent scratches on the front fork tube. Use a press to slowly straighten it with small pressure and small stroke for multiple times , and measure while straightening. The radial runout after correction should be less than 0.05 mm (0.002 in) . If the original bent and deformed part loses roundness after correction, it should be replaced . If the deformation is too large, the shock absorber should be replaced.

5. Troubleshooting

a. If there is a noticeable knocking sound when driving on an uneven road or during emergency braking , the following items need to be checked:

Whether the shock absorber spring is broken or the elastic force is reduced ;

Whether the hydraulic oil is insufficient or air has entered ;

Is there too much hydraulic oil ?

Check whether the spring is axially bent and rubs against the front fork tube .

b. If the shock absorption is too strong , check the following items:

Is there too much hydraulic oil ?

Whether the front fork tube is bent or deformed;

Have the springs been modified ?

c. If the shock absorber is too soft, check the following items:

Whether the hydraulic oil with low viscosity has been replaced ;

Whether the spring force decreases ;

Is hydraulic oil too low?

Side Bracket - Complete

Notice

●Park the vehicle on a flat and stable ground or a lifting platform and lower the main bracket .

When removing or installing the spring, prevent the spring from flying off suddenly and causing personal injury.

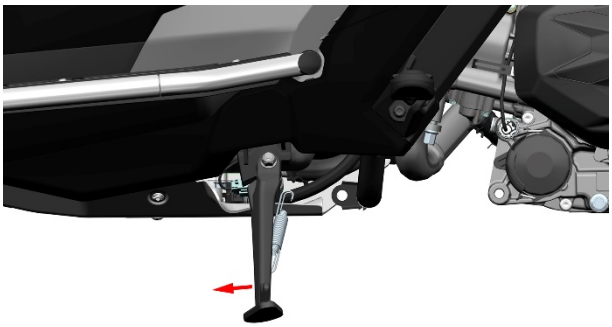
1. Inspection

1. Side stand 2. Side stand spring 3. Side stand flameout switch

① is the parking position ② is the driving position

a. Check whether the side bracket spring is damaged and whether the elastic force is normal.

b. Check whether the side stand rotates normally. When it turns to the angle shown in Figure 1, it should be able to automatically turn to the parking position under the spring force ; when it turns to the angle shown in Figure 2, it should be able to automatically turn to the driving position. If necessary, remove the side stand for lubrication.



c. Check whether the shutdown switch functions normally

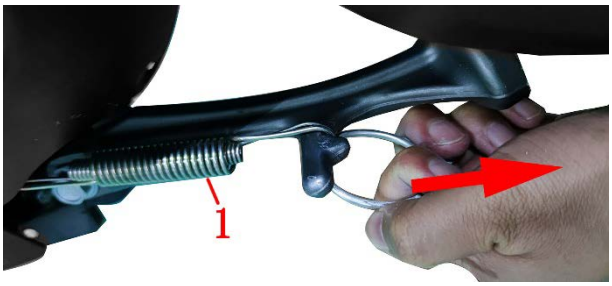
should not be able to be started when the side stand is lowered (parking position) ; the vehicle should not be able to be started when the side stand is retracted (driving position) without pinching the front or rear brake handle ; the vehicle should automatically shut down when the side stand is lowered after starting the vehicle, otherwise the shutdown switch or brake switch needs to be checked .

d. Check whether the side bracket mounting plate is deformed or cracked.

2. Lubrication

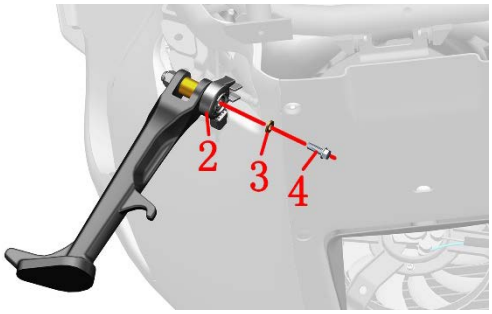
a. Fold up the side bracket and put the spring in the shortest position for easy disassembly.

b. You can use thick steel wire to roll it into a circle and put it into the spring (1) hook . Be careful to ensure that the steel wire does not loosen or spread out during the pulling process .

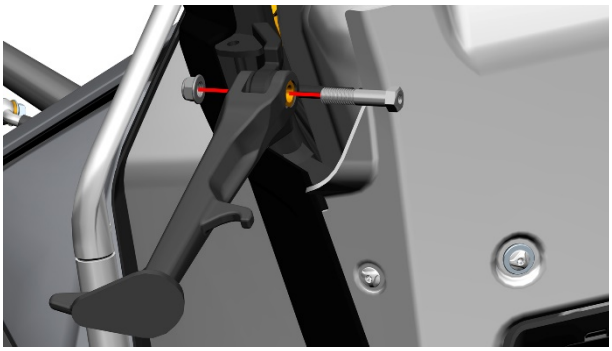


c. Grasp the side bracket with one hand and pull it in the direction of the arrow with the other hand to remove the spring .

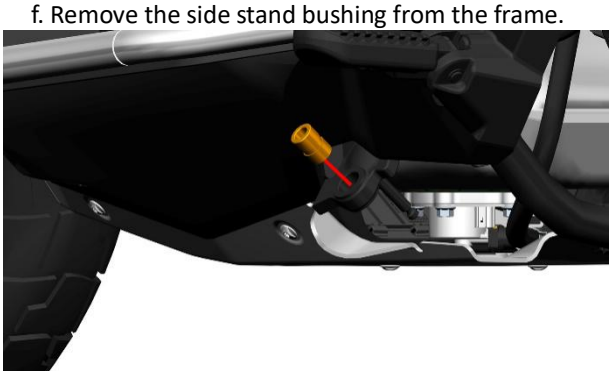
d. Lower the side bracket, remove the bolt (4) with a 8 # socket or a plum wrench , and take out the gasket (3) and the flameout switch (2).



e. Use a 14 # sleeve to secure the bolts on the inside and a 14 # sleeve to remove the nuts on the outside.



f. Remove the side stand bushing from the frame.



g . Use diesel or kerosene, or a clean rag to wipe off the remaining grease. Apply a proper amount of grease to the two mounting surfaces inside the side bracket and the outer surface of the bushing , and try not to apply it to the threaded holes.

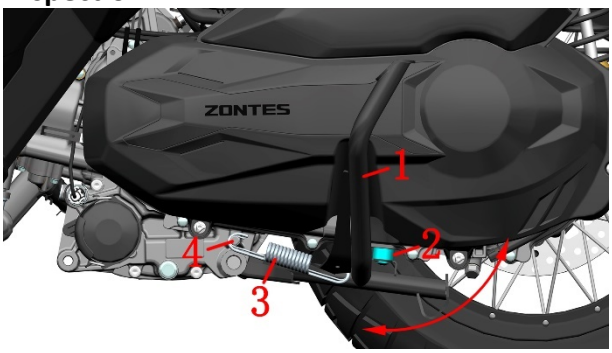
Main bracket

Notice

●Park the vehicle on a flat, stable surface or a lift and lower the side stand .

When removing or installing the spring, prevent the spring from flying off suddenly and causing personal injury.

1. Inspection



1. Main bracket 2. Buffer rubber 3. Main bracket spring 4. Main bracket reset spring column

a. Straighten the vehicle, step on the force-saving rod of the main bracket with your foot , and check whether the spring force is normal . The main bracket should be able to quickly return to the driving position under the action of the spring's own elastic force .

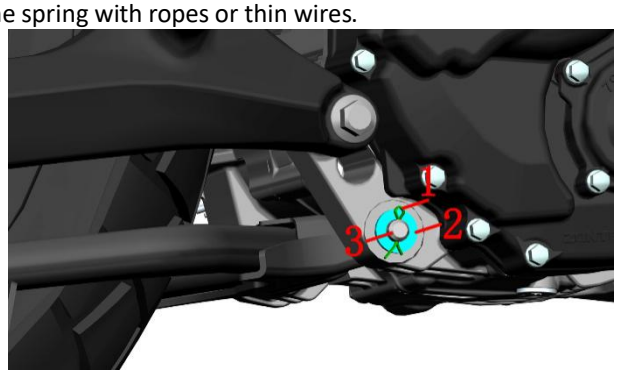
b. Check whether the buffer rubber is aged and ineffective.

c. Check whether the main bracket return spring column is deformed.

d. Check whether the main bracket has obvious deformation and whether the welding parts are cracked.

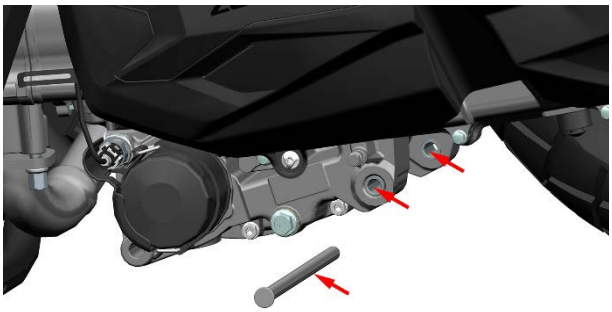
2. Lubrication

a. Keep the main bracket in the stowed position, use pliers to remove the retaining spring (1) on the right side , and remove the gasket (2). Knock out the main bracket shaft (3) from right to left . Note that protective measures must be taken at the main bracket spring to prevent the main bracket spring from suddenly loosening and flying out, causing personal injury. You can use hard objects to cover it, or tie the spring with ropes or thin wires.



b. Remove the spring from the main bracket .

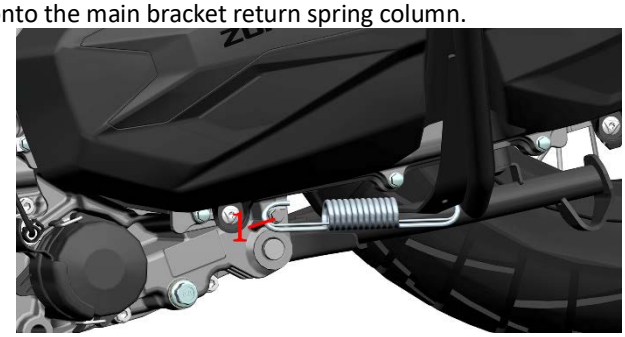
c. Apply an appropriate amount of grease to the end face , inner hole of the engine case bushing and the surface of the main bracket shaft.



3. Install the main bracket

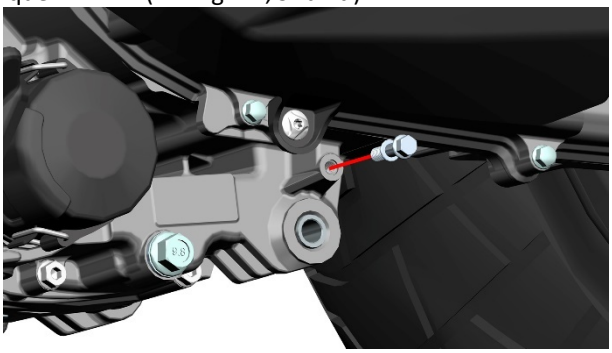
First align the main bracket with the mounting hole, and then insert the main bracket shaft from the left side . After inserting the gasket , insert the split pin and bend the two legs of the split pin to both sides to prevent it from falling off .

Hang the main bracket spring onto the main bracket first , and then use a cross screwdriver to hang the spring onto the main bracket return spring column.



4. Replace the main bracket reset spring column

according to the previous steps, use an 8 # socket to remove the main bracket return spring column counterclockwise . It is recommended to apply an appropriate amount of thread fastener before assembly . Torque : 12 Nm (1.2 kgf.m , 9 lbf.ft).



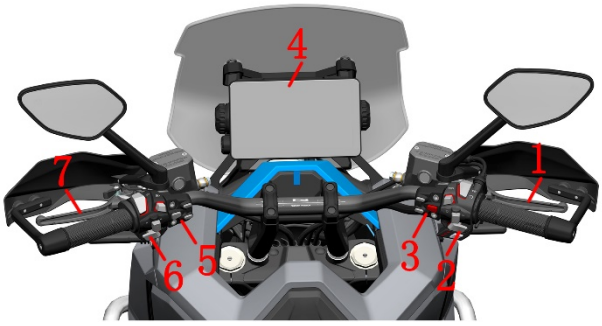
Sound, light and electrical device inspection

Notice:

● Before driving, check whether all vehicle lights are working properly, including turn signals, tail lights, brake lights, headlights , etc. Check whether the horn is working properly and whether the windshield is rising or falling normally.

1. Inspection

For details of all vehicle lamps, please refer to the lamp distribution diagram in the vehicle information of this manual.



1. Front brake handle 2. Right handle switch 3. Right auxiliary switch 4. Instrument 5. Left auxiliary switch 6. Left handle switch 7. Rear brake handle

a . Park the vehicle on flat ground or on a lifting platform, lower the main stand , and fold up the side stand.

b. Press the unlock button on the right auxiliary switch

①After unlocking and powering on the vehicle , make sure the ignition switch is turned to " " , hold the front or rear brake handle, and press the start button.

②Start the engine.

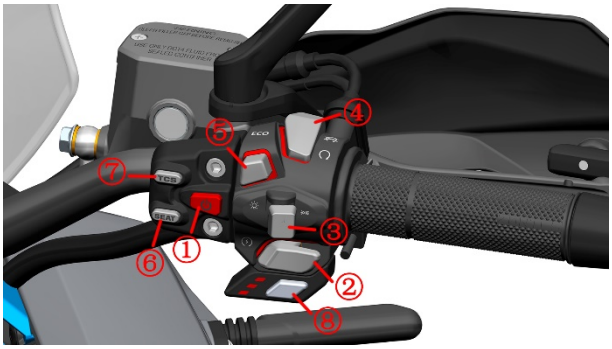
③Light switch : Keep it in the " ● " position , check whether the front position lights, rear position lights and license plate lights are on normally ; pull it to " " to check whether the handlebar backlight, headlight, front position lights, rear position lights and license plate lights are all on .

⑤ ECO button: Press the instrument and "E" will light up. Press it again and "S" will light up . The two modes can be switched freely .

⑥SEAT: Press to check whether the seat lock opens normally.

⑦TCS : By default, TCS is on . Press and hold the button to switch between off and on.

⑧Electric heated handlebar button: For detailed instructions, see the driver's manual included with the vehicle.



c . Test the left switch button . If you need to know more about the functions of each button, please refer to the driver's manual . Here we only briefly explain how to test whether it is normal.

①SET button : Short press SET to enter the main menu /confirm the selection . Long press to return to the main interface. Do not operate this button while driving the vehicle.

②MOD button : Select the next item. Do not operate this button while driving the vehicle.

③Fog lamp switch : Press to turn on the fog lamp switch, and the fog lamp logic is controlled by the fog lamp driver.

Fog light control logic

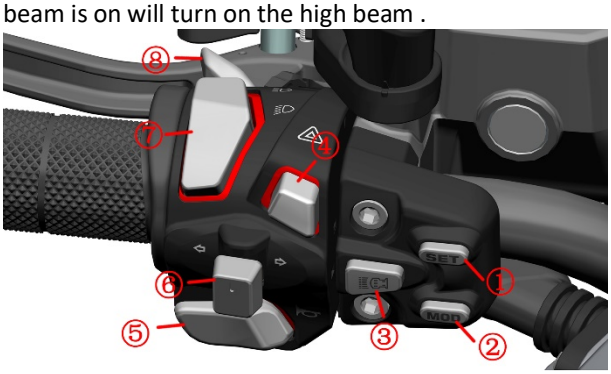
When the fog lights are off, short press the switch to illuminate white light, and long press the switch to illuminate yellow light.

After the fog lights are turned on, short press the switch and the fog lights will cycle through white light → white light flashing → yellow light . Long press the switch to turn off the fog lights .

④Hazard warning lights: Press to make the 4 turn signals flash, press again to turn them off. Traffic regulations must be followed and they should not be used except in emergency situations .

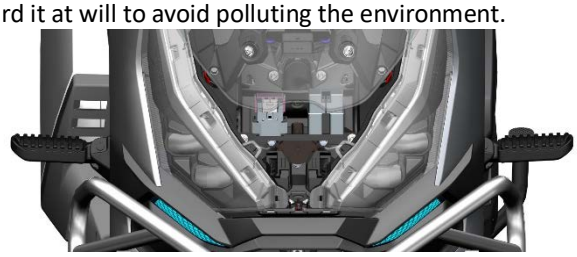
⑤ Horn : Press the horn once to confirm whether the sound

is clear and loud.
⑥ Steering switch: Push it all the way to the right to check whether the right front and right rear turn signals are flashing normally ; press the turn signal to turn it off; push it all the way to the left to check whether the left front and left rear turn signals are normal.
⑦ Dimming switch : Pull it to " " to check whether the high beam is on and the high beam indicator on the instrument is on at the same time. Pull it to " " to check whether the low beam is on. Traffic regulations should be followed to use high and low beams reasonably .
⑧ Overtaking warning light switch : Pressing it when the low beam is on will turn on the high beam .



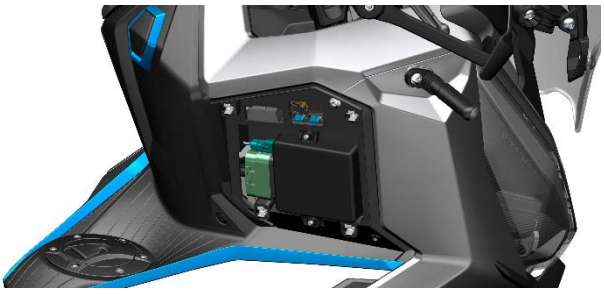
d. Check the battery voltage

After removing the front panel, use a multimeter to measure the battery voltage. If it is lower than 12V, use the charger provided with the vehicle to charge it in time. Be careful not to overcharge or over-discharge , and the charging voltage of the charger should not be higher than 15V. If the vehicle is not used for a long time , it should be charged regularly according to the requirements of the driver's manual . If the battery fails, it should be handed over to a professional recycling agency for proper disposal . Do not discard it at will to avoid polluting the environment.



Charging method

main cable has an OBD interface . For details on its location, see the official website assembly video "ZT368T-G Charging Port, OBD Interface, and Fuse Box Location Instructions" . Remove the expansion pins at the bottom of the right storage box cover, and you can see it after removing it.



Open the rubber plug and insert the original standard charger DC plug. Then plug the AC socket into a 110-220V power source. If the battery is damaged by using a low-quality charger, it is not covered by the warranty.

●Note: When reassembling the battery or fuse, be sure to reset the EFI hardware. For detailed instructions , see the service information in this chapter.

2. Headlight height adjustment

Notice

● Headlight height that is too high or too low will affect safe driving. The headlight height should be adjusted reasonably according to the presence or absence of passengers and the weight change of the driver.
to adjust the light height on a flat road with a straight-line distance of about 150 meters at night without affecting traffic safety .

a cross screwdriver with a rod diameter of 6mm (0.24 in) and a length of 150-200mm (6-8 in) to penetrate the dimming hole from the bottom to the top , align the dimming bolt serrations , and rotate counterclockwise to lower, and vice versa to raise . For specific methods, please refer to the "ZT368T-G Headlight Height Adjustment Video Tutorial" in the assembly video of the corresponding model.

3. Fuse box

Notice:

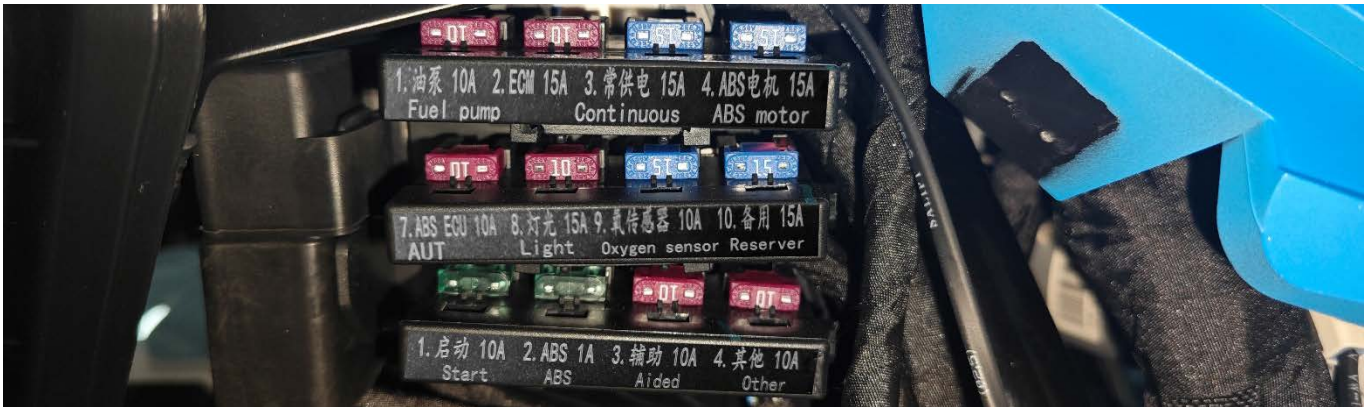
●If the fuse blows, it must be replaced with a fuse of the same specification . It is prohibited to use wires such as copper or iron wire for direct connection .

●If the fuse blows again after replacement, you need to check the entire vehicle cable fault before replacing it.

●This vehicle uses a small fuse , about 11mm (0.43in) wide , 17mm (0.67in) long, and 4mm (0.16in) thick .

●You can use the buzzer function of a multimeter to connect the exposed metal part of the upper part of the fuse to determine whether it has blown , or use a tool to unplug it and observe .

"ZT368T-G Charging Port, OBD Interface, and Fuse Box Location Instructions" in the corresponding vehicle assembly video to remove the left decorative cover of the fuel tank lock to find the fuse box. Open the fuse box cover and check whether the fuse is normal.

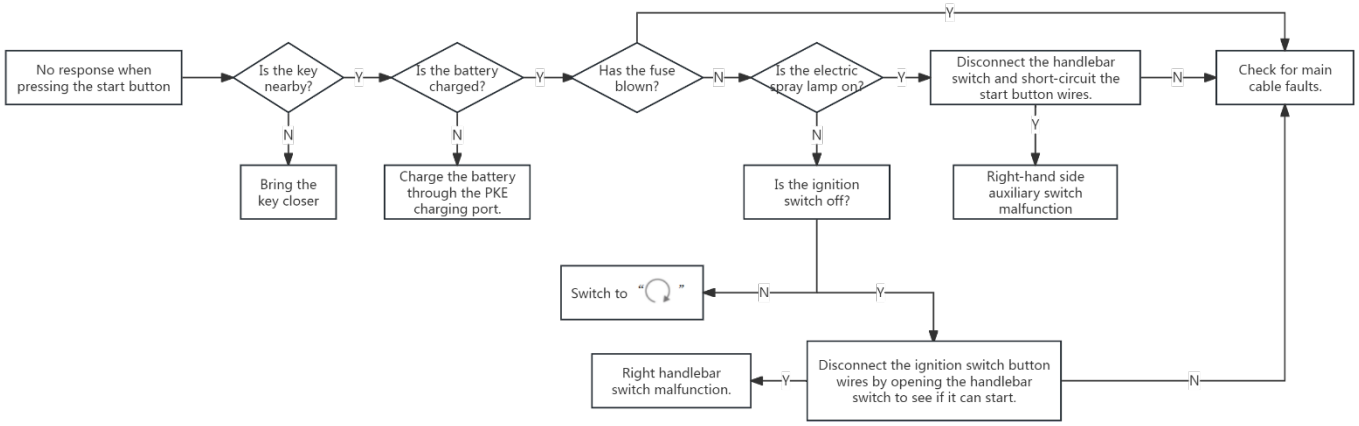


4. Troubleshooting

If the button cannot be pressed, it can be directly judged that there is a problem with the switch. If there is no response when pressing, it is necessary to judge whether there is a problem with the switch, circuit or electrical component itself .

4.1 Right-hand switch

a. Press the start button and there is no response :



b. If the headlights do not light up when the light switch is turned to " ☼ " , check whether the light fuse is blown. If so, check for cable faults. If normal , remove the handle switch to short-circuit the light switch wires. If they light up, it is a switch fault. Otherwise, check for cable or headlight faults.

c. If pressing the ECO button fails to switch to "E"/"S" mode , disassemble the switch and short-circuit the ECO button switch line. If it lights up , it is a switch failure. If it does not light up, check the instrument or cable for failure.

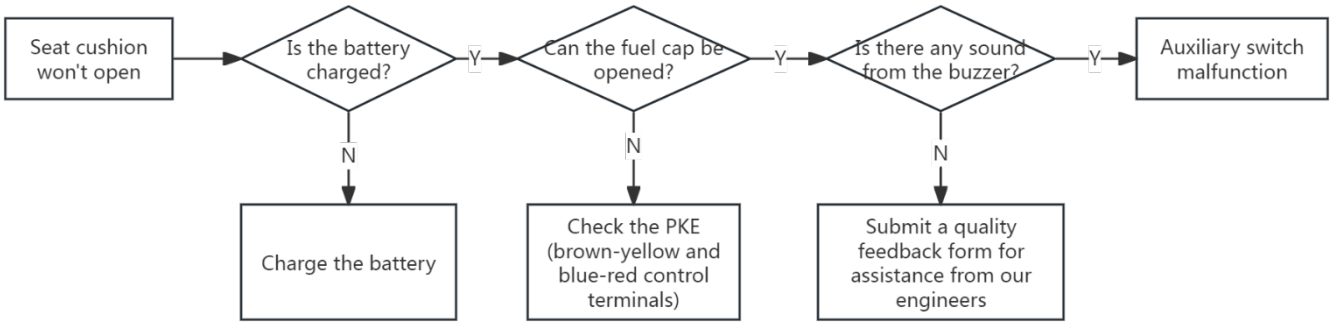
4.2 Right-hand handle auxiliary switch

a. No response at startup

If the engine cannot be started , refer to the previous " No response when pressing the start button " steps to troubleshoot.

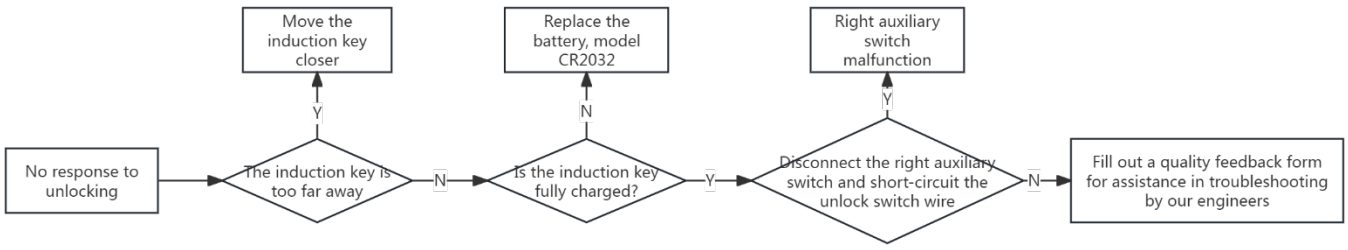
b. " SEAT" button failure

If the battery is dead and it is inconvenient to charge or the seat lock fails and cannot be opened, you can fill in the quality feedback form and ask the engineer to guide you on how to manually open the seat. For safety reasons, this manual does not provide this method.

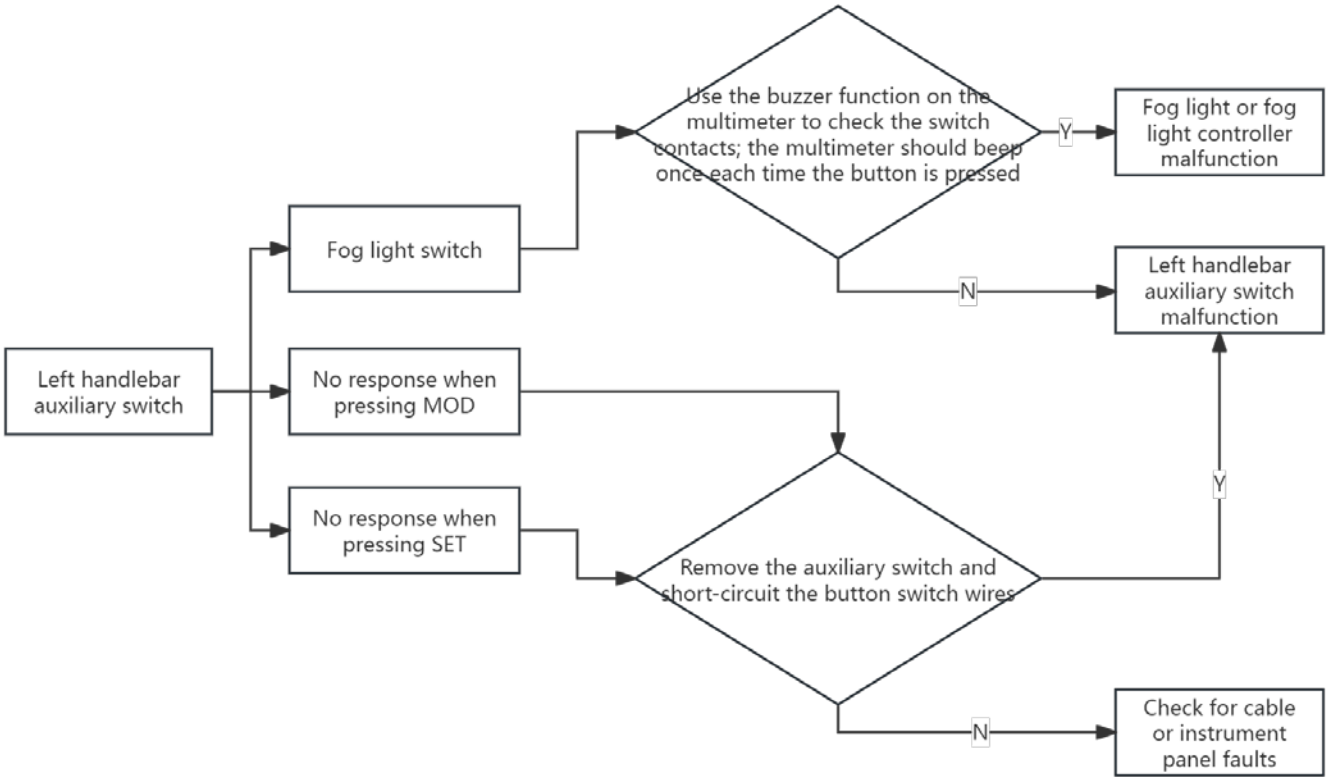


c. " ⏻ " No response

The driver's manual contains a detailed description of the PKE function , including how to start the vehicle in an emergency when the induction key runs out of power, and the specific meaning of the buzzer tone . I will not repeat it here .



4.3 Left handlebar switch



4.4 Speakers

Notice:

● When adjusting or checking the horn , the interval should be more than 5 seconds . Continuous sounding may cause the internal coil of the horn to burn out .

●The speaker is riveted and difficult to restore after being disassembled .

●The bracket nut ③ is prohibited from being adjusted.

a. If the horn switch does not respond, refer to the next page for the left handlebar switch troubleshooting process.

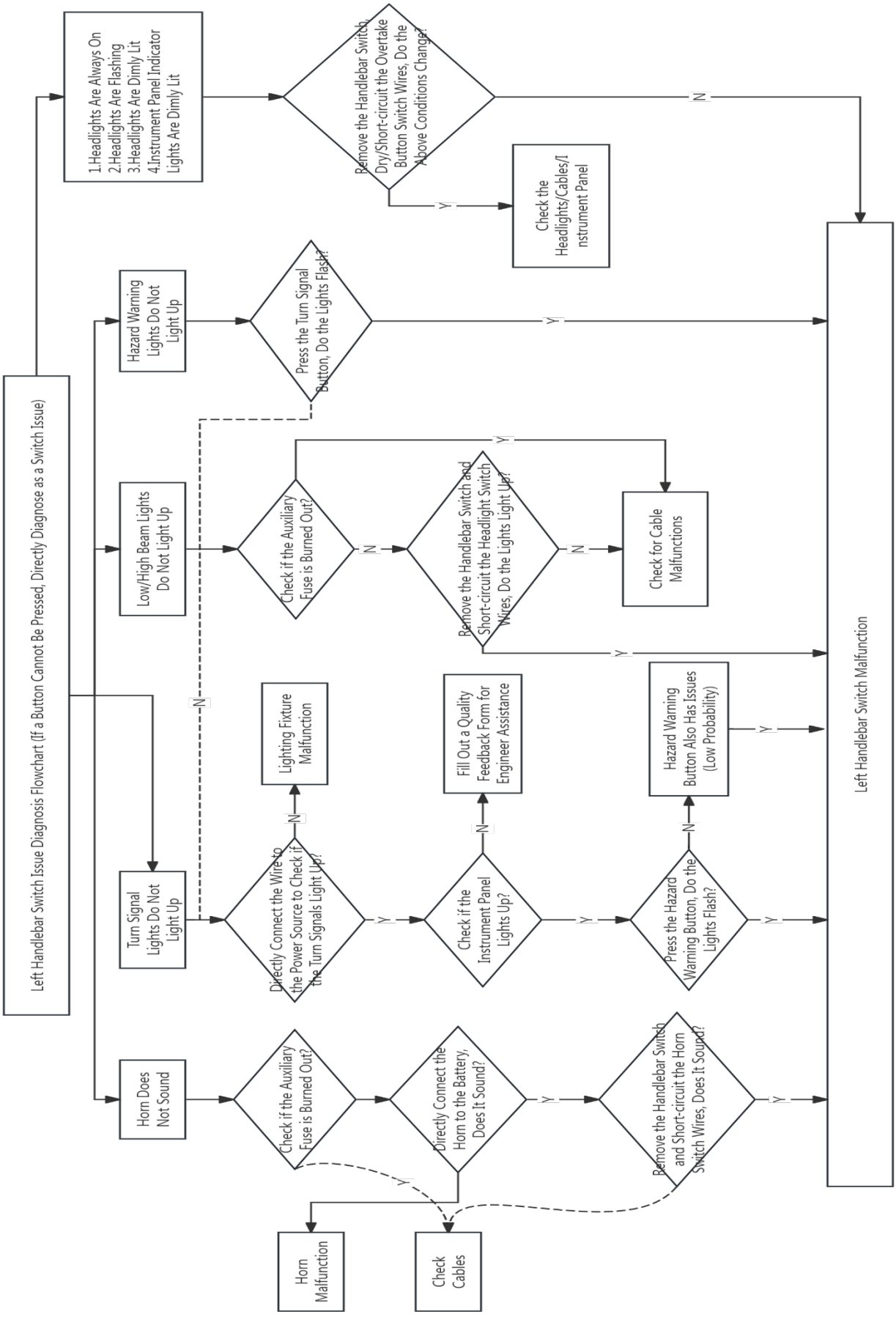
b. Abnormal speaker sound

If the sound is low or hoarse , first check whether the battery is sufficient. You can turn on the headlights and judge whether the battery is sufficient by the brightness of the light . If the sound is normal when starting the engine and increasing the speed , but abnormal at low speed , it can also be judged that the battery is insufficient. The battery needs to be charged.

If the battery is sufficient, check whether the speaker adjustment bolt ① and nut ② are loose. If they are loose, tighten them and check again. If the fault cannot be eliminated after tightening , try to loosen the nut ② and then use a cross screwdriver to fine -tune the bolt ① . If the speaker does not sound, turn it counterclockwise about 270 degrees . If it is hoarse , turn it clockwise until the sound is normal ; tighten the nut ② after the sound is normal . If the fault persists , it is judged that the speaker is faulty and needs to be replaced.

4.5 Left handle switch

The left-hand switch controls the turn signal, horn, high and low beam lights , hazard warning lights , and overtaking lights. There are many lines, making it difficult to check .



4.6 Lamps

Notice:

● When using wires to test lamps, be careful to distinguish between positive and negative poles. For detailed wire colors, please refer to the electrical schematic diagram in the driver's manual that comes with the vehicle .

The troubleshooting method for lamps is basically the same. You can first directly lead the wire to the battery with a battery. If the lamp is normal, you need to check the cable or switch failure. If it is not normal, it is a lamp failure. The lamps on this vehicle are all LED, and the lamp housing is generally ultrasonically welded or sealed with glue. The waterproof performance will be invalid after disassembly .

●There are ventilation holes reserved on the lamp . When the ambient humidity is high , water mist may form inside the lamp , which generally does not affect the use . It will disappear automatically when the humidity drops.

● The surface of the lamp should be kept clean. You can wet it with clean water and then wipe it gently with a clean soft cloth . After each wipe , the soft cloth should be moved to another position or cleaned with clean water . If you wipe it directly, the remaining fine sand may scratch the surface of the lamp.

lamp troubleshooting: