



USER'S MANUAL

Chongqing Zongshen Motorcycle Industry Manufacture Co

FOREWORD

This motorcycle is only designed to ride on highway, and a driver and a passenger are limited.

Please read this manual before using, so as to master the basic function and using methods. The data, instructions and specifications in this manual are based upon the latest design features of your motorcycle. Our company reserves the rights to make changes to the specifications of its vehicles without notification. Without the permission, any company or person couldn't reprint any part of this manual. We sincerely hope you can give us your suggestions about the design, manufacture and quality of this type of motorcycle, so that we can do the improvement in time. This manual is only for reference, taking material objects as standard.

For any repairs not mentioned in this manual, please refer to the Maintenance manual and Parts catalog of this type for future reference. And for any unclear questions, please contact your local Service Center or dealer, and we will offer you the best and fast service.

Use only genuine spare parts and oil manufactured by our company.

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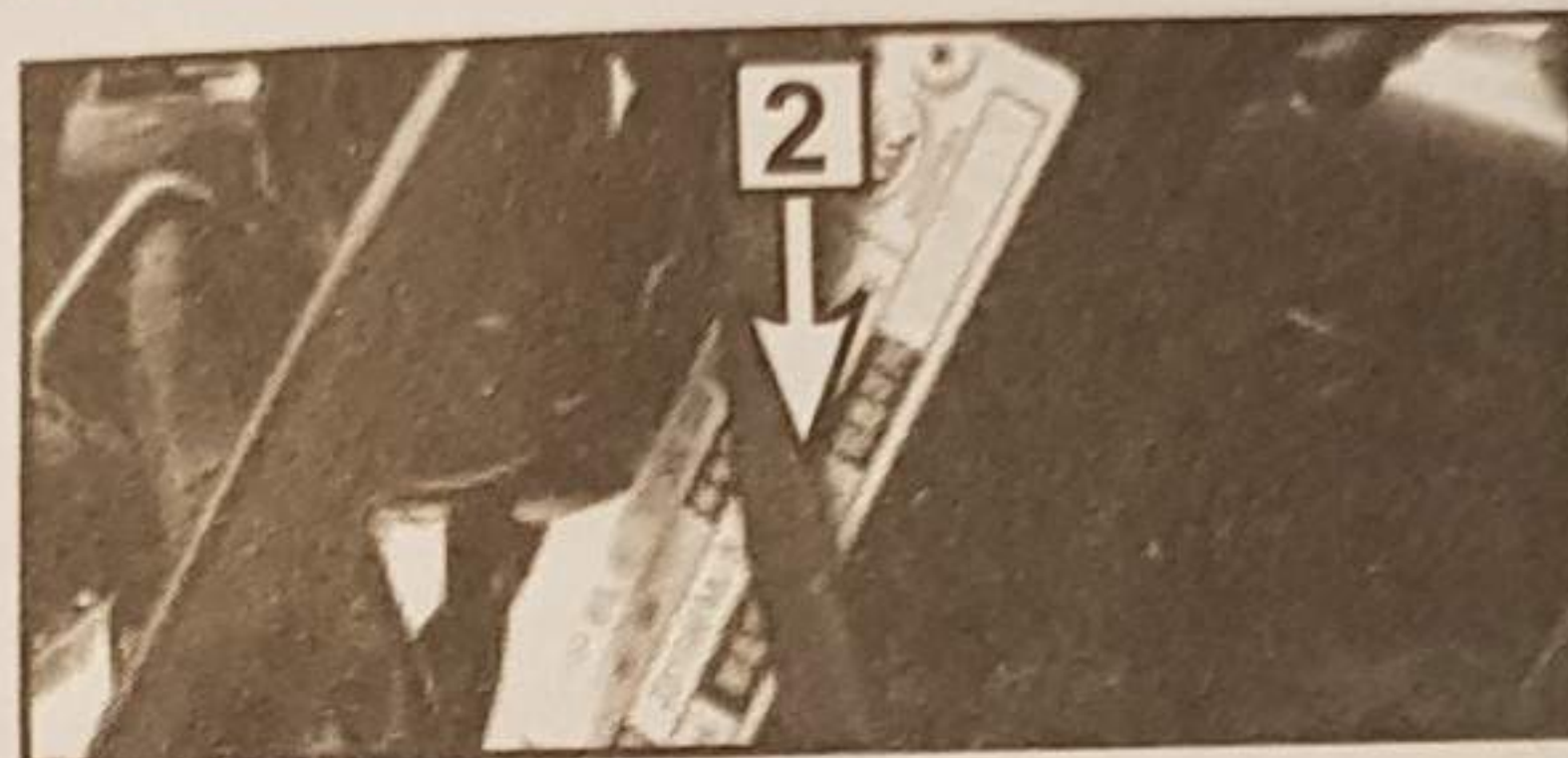
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Vehicle Identification Number(VIN) and Engine Number

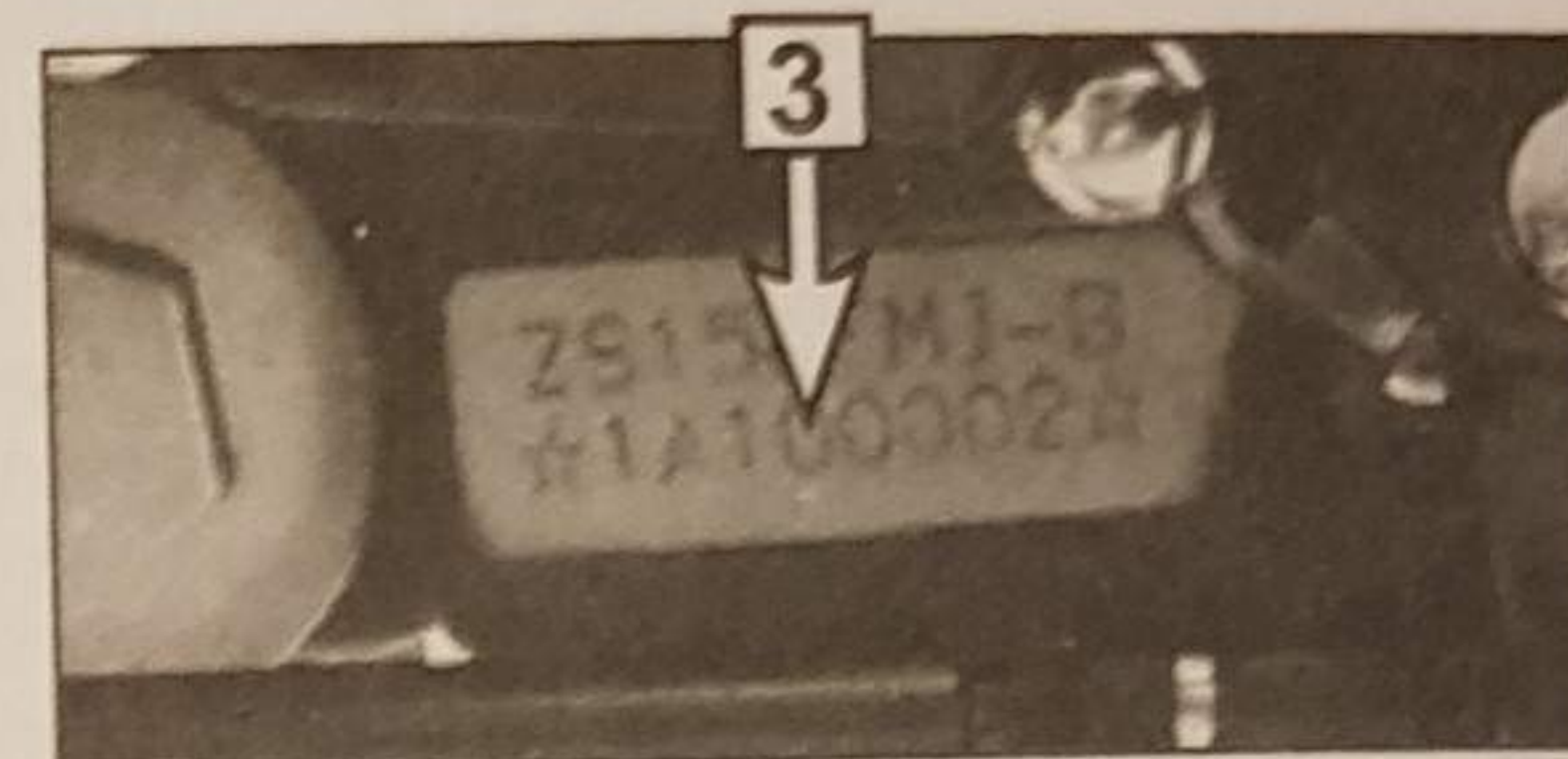
Vehicle identification number(VIN),engine number and certificate are used for license and registered residence.



1.VIN is stamped on the standing pipe of chassis



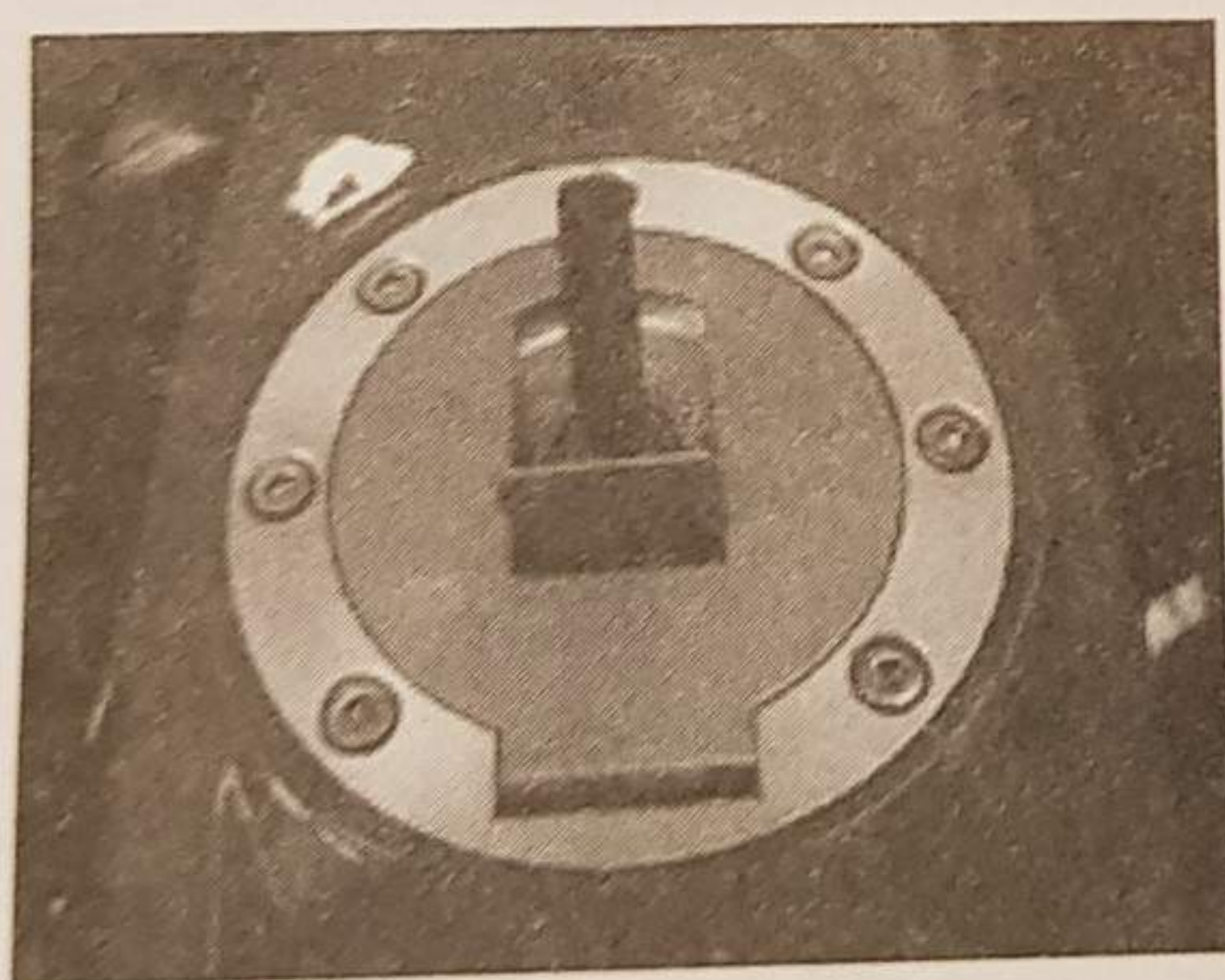
2.Nameplate is riveted the standing pipe of chassis.



3.The engine number is stamped on the left side below the crankcase.

Fuel system

You must use No.92 unleaded gasoline or above




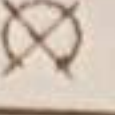
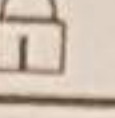
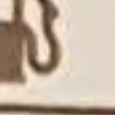
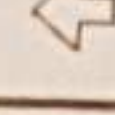
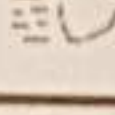
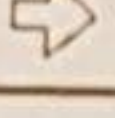
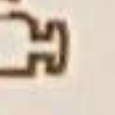
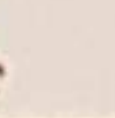
DANGER

Please shut the engine when refueling, then turn the ignition switch to OFF position and keep away from fire.

Refueling till the fuel head reaches at the bottom of the filler opening as shown, never excess. Or else, fuel will spill out when it expands with heat.

Do not wash fuel tank cap with high pressure water in case water will enter into the tank.

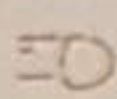
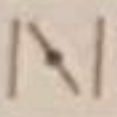
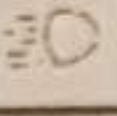
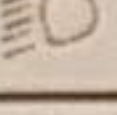
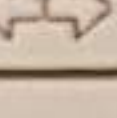
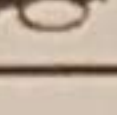

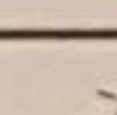
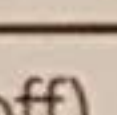
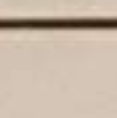
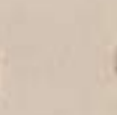

Lock and instrument

Name	Specifica tion
Ignition lock open 	Turn the ignition key to this position to provide power to the ignition.
Ignition lock close 	Turn the ignition key to this position to cut off the power.
Direction lock 	The direction is locked in this position. The bike can not be used.
Gear indicator	Indicate the present gear. N or 0 means neutral
Speedometer km/h	Indicate running speed
Fuel meter 	Indicate fuel volume in fuel tank.
Tachometer r/min	Record the rev of engine
Left turning indicator 	This light Illuminating means left turning indicator is working.
High Beam indicator 	This light Illuminating means high beam is working
Right turning indicator 	This light Illuminating means right turning indicator is working.
EFI failure indicator 	When the circuit is connected, the indicator is on. When people is driving normally, the indicator is on. If it' s on all the time, it means the EFI system is with problem.
Water temperature waring indicator 	When the temperature is beyond the standard, the light is on

WARNING

1. Park the motorcycle in safe place and lock the direction lock to avoid being stolen.
2. When the neddle of speedometer get out of the range red area (the riding speed should be control in red area), and rider should pay attention to road condition to avoid tumbling.
3. Never ride on high way for long time (keep the finger of tachometer out of red area) to avoid engine damage.

Left and right controller

Name	Specification
1.Overtake light switch 	When the motorcycle needs to overtake another one, press this button to warn others.
2.Choke handle 	Press it when cold starting, close choke,increase mixed gas.
3.High Beam indicator 	Turn the switch to this position to use high beam.
4.Low Beam indicator 	Turn the switch to this position to use low beam.
5.Turning light switch 	Turn left/right turning light switch to this position. when changing riding direction
6.Horn button 	Press this button to use the horn
7.Flameout switch	Turn switch to  to shut out engine, and turn to  to start to start it.
8.Headlamp(on) 	Turn switch to this position to turn the lamp
9. position lamp(switch) 	Turn switch to this position to turn on position light
10.Illuminating switch (off) 	Turn switch to this position to turn off illuminating system.
11.Electric starter button 	Press this button to use electric starter.(Caution:If motorcycle is at a gear,you should hold clutch handlebar or change the gear to the N-gear.Then electric starting is ready.)

CAUTION

When starting the motorcycle with electric starter,each starting time should not exceed 5s,each interval should not be less than 10s and check the motorcycle if it cannot be started successfully for continuous 3s.

Operation controls



Name	Specification
1.Throttle handlebar	Control the mixed gas flow of carburetor,free stroke:2mm~6mm
2.Gear-shift pedal	This bike adopts 5-gear shift method,decrease throttle when gearshifting
3.Starting lever	Used for kick starter.
4.Clutch lever	Control the output power of engine
5.Front brake handle	Control the speed of front wheel and its working stroke is:10mm~20mm
6.Rear brake pedal	Control the speed of rear wheel and its working stroke is:20mm~30mm

CAUTION

- 1.This bike adopts manual clutch, When starting motorcycle, shift gear at neutral position or hold the clutch handlebar.
- 2.If clutch slips or can not be separated completely,we advise users to adjust it at professional maintenance station or afterservice center of our company.
- 3.Brake matters to human and property safety, so it needs maintenance to reach safe riding. We suggest you to maintenance your motorcycle in our special Maintenance Service Center irregularly.

WARNING

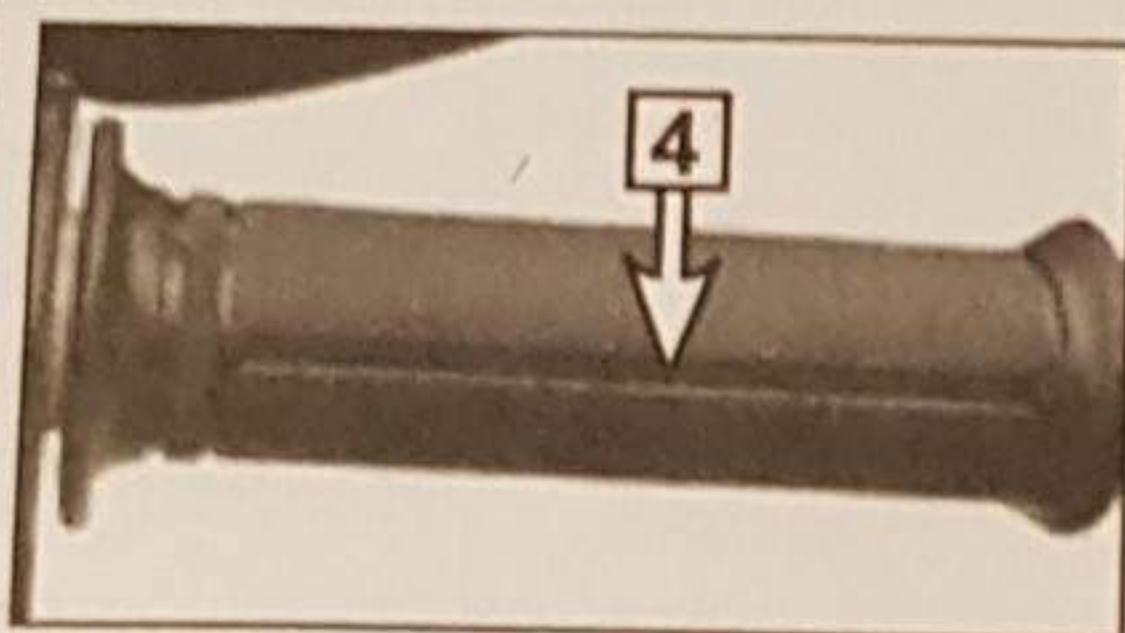
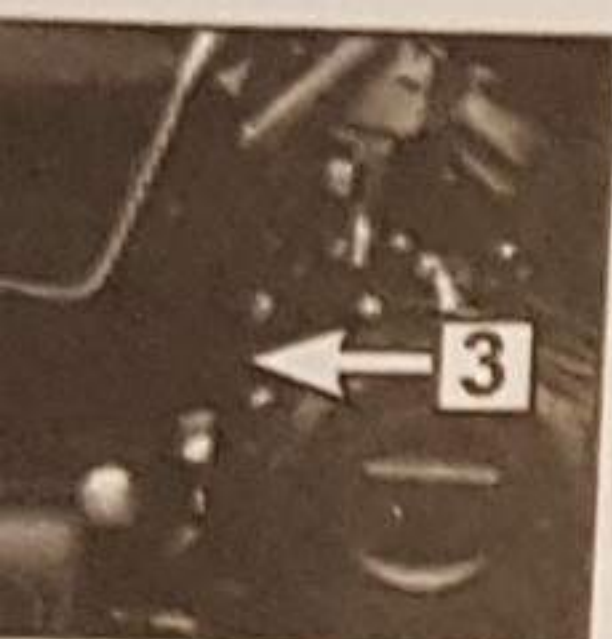
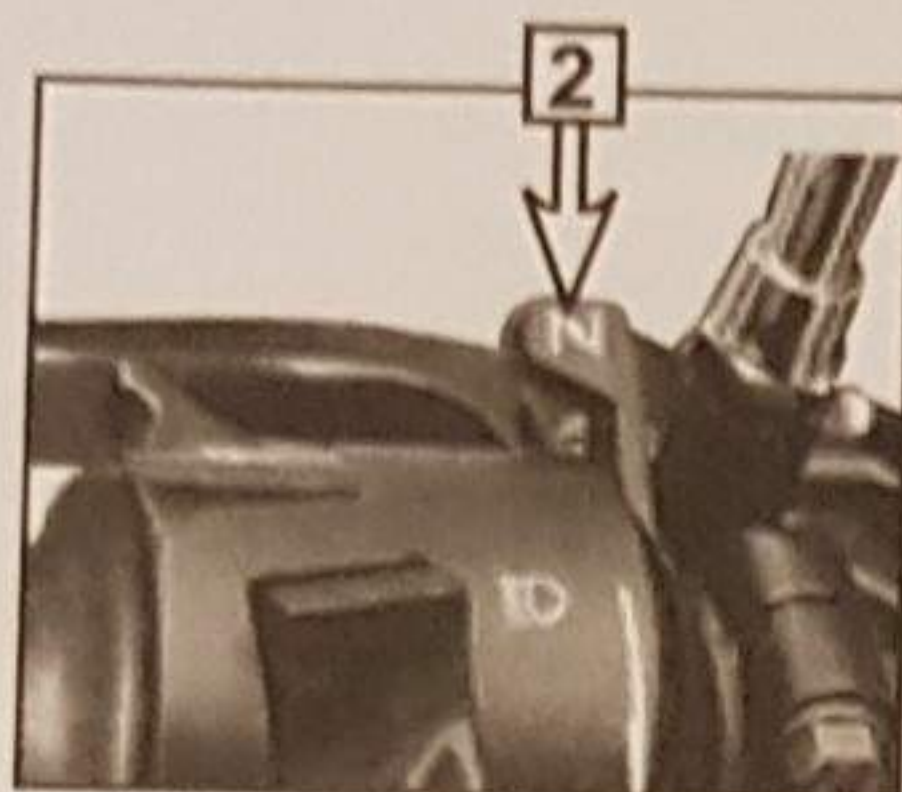
when press down the rear brake pad,if the front and rear brake can not operate at same time, the brake system should be checked and adjusted in time to avoid the front and rear wheel were locked to the motorbike to be fall down.

Inspection before Riding

In order to ensure your safety, make a general inspection before riding according

No.	Item	Inspection	Remark
1	Fuel system	Check fuel capacity and fuel leakage	<p>For the vehicles with different riding miles and performance, please adopt different maintenance.</p> <p>Elementary maintenance: 1000km~2000km riding, please lubricate and fasten vehicle.</p> <p>Secondary maintenance: 3000km~6000km riding, please check and adjust vehicle.</p> <p>Advanced maintenance: 6000km~10000km riding, please disassemble, inspect and do troubleshooting.</p> <p>To inspect and maintain your motorcycle at professional maintenance station or afterservice center of our company.</p>
2	Carburetor	Check carburetor for oil leakage and idle speed for stability and accelerating ability.	
3	Luboil	Check luboil for quality and whether capacity is lower than lower scale mark	
4	Electrical system	Check electrical system for condition	
5	Battery	Check whether voltage is lower than 12V and whether electrolyte level is lower than lower scale mark.	
6	Clutch/Front brake lever	Check whether free stroke is within stated value and clutch can be separated and meshed normally.	
7	Gearshift/Rear brake pedal	Check gearshift for flexibility and stability and whether travel of brake pedal is within stated value.	
8	Throttle lever	Check throttle lever for flexibility and stroke of (2~6)mm	
9	Steering mechanism	Check steering mechanism for flexibility and stability	
10	chain	Check chain for stroke of (15~25)mm, abrasion and lubrication	
11	Tire/Wheel	Check tires for pressure and abrasion	
12	Illumination/Signal indicator	Check illuminating lights/signal lights/indicators for condition	
13	Brake	Check brake disc for abrasion and brake performance	
14	Main/side stand	Check whether main stand and side stand are bended or deformed, whether they can return well	
15	Tightening parts	Check tightening parts for looseness and falling.	

Starting and preheat



When electric starting, each starting time should not exceed 5s, each interval should not be less than 10s. If engine can not be started continuously for 3 times, inspect motorcycle. Undertake cold starting and preheating according to the following steps:

1. Turn ignition lock on, and turn ignition key to "ON" position. Shift the gear to "N" neutral position or hold clutch handlebar.
2. Close choke, and grip front brake handlebar or step rear brake pedal, and turn starting switch on.
3. Step starting lever powerfully. Or press electric starting button with right thumb.
4. Rotate throttle lever to add proper volume fuel and to start motorcycle. After motorcycle starting, return starting lever. Preheat 3~5 minutes at idle speed (1500 ± 100) r/min.

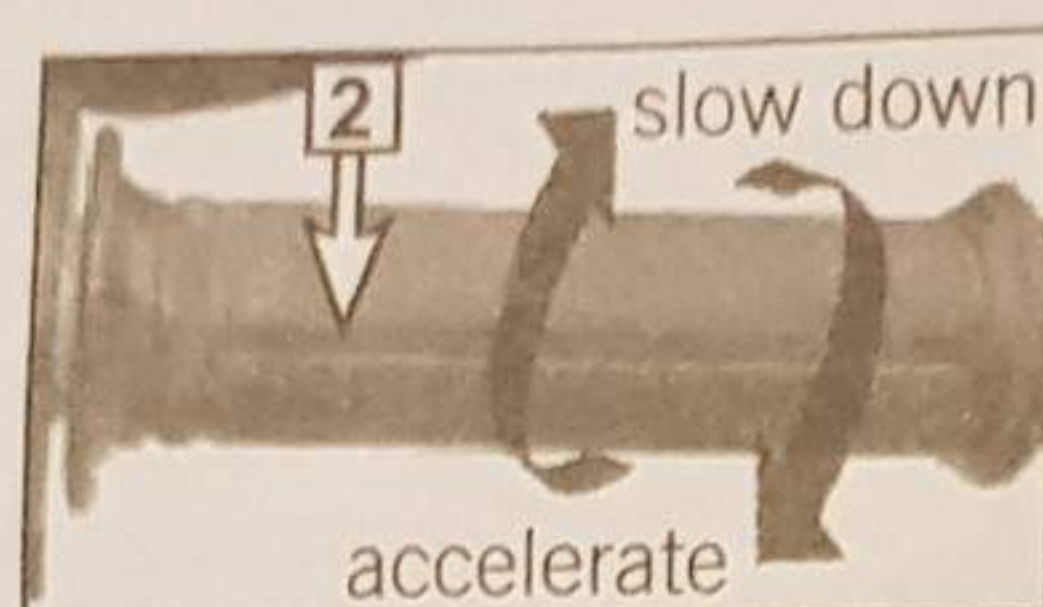
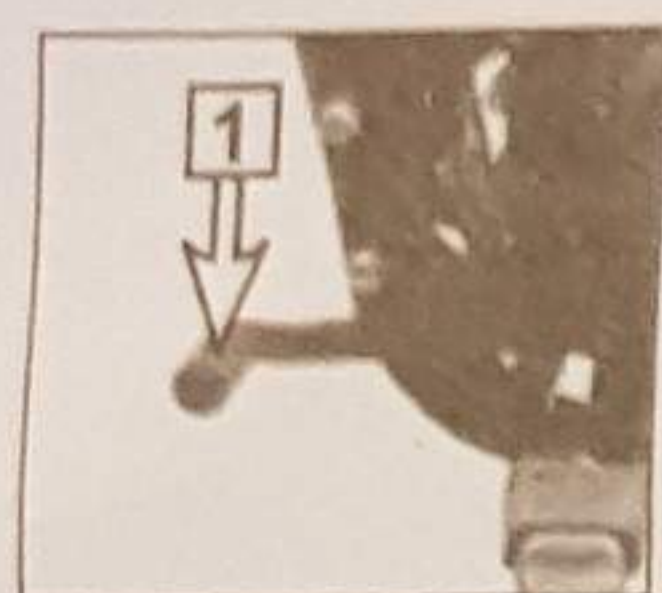
CAUTION

When starting, shift the gear to neutral or make clutch separate. If neutral indicator does not illuminate when the gear is at neutral, inspect motorcycle at maintenance center of our company or professional maintenance station. If engine can not be started electrically, wait for several minutes to protect battery and then re-start engine. Do not continue starting over 5s for each starting.

To prolong service lifetime, run motorcycle after preheating it for 3-5min when cold starting, at the same time, do not run with a very high speed. When preheating, do not rotate throttle lever excessively. When motorcycle runs normally, return choke handlebar. (If choke handlebar is not returned, do not run motorcycle, otherwise motorcycle cannot heat well).

The idle speed of EFI model is settled by ECU, do not disassemble. If failure, please hand it to the professional dealer from qualified dealer to deal with it.

Riding operation



1. After starting and preheating, return main and side stands. And hold clutch handlebar to release it. Then step starting lever down with left foot (caution: Before shifting gear from neutral, the brake is at brake condition) to shift to the first gear.

2. Release the brake and rotate throttle handlebar slowly to accelerate. Release clutch handlebar slowly to make motorcycle start to move. After clutch handlebar is released completely and motorcycle reaches a certain speed, shift the gear from lower one to higher one.

DANGER

1. Before riding, the driver should wear protector. (such as, helmet, protecting gloves, protecting glasses, protecting clothes, etc).
2. If clutch slips or can not be separated completely, the motorcycle are forbidden to ride.
3. Never rotate the throttle grip or release clutch suddenly when you want to increase the throttle.

Operation for new vehicle

After buying new vehicle, users should pay attention to the operation for it. (Primary 1000km is break-in period, use figure from odometer for standard). Break-in Period is very important for a new vehicle, which will have a direct impact on the service life. For the first 1000km, keep the engine rev below 6500 r/min at all gears (speed is below 50km/h, refer to the speedometer) and choose the right gear-shift method to make sure all the gear match well. Maintain the vehicle after the first break-in procedure, which will assure future performance and durability. Replace special engine oil of our company after running per 300km. Contact local distributor or service center of our company if there is any failure on engine during break-in period.

Guide for safe riding

1.Attention items for riding up and down slopes

When riding up and down slopes on mountain roads,shift gears according to the actual situation and do not make engine run under over loading condition.

①.When riding up sharp slopes,use lower gears to increase engine torque.Shift gears quickly to avoid engine flameout.

②.When riding down sharp slopes,use higher gears to avoid engine over heating.Control speed by engine rev and do not run with neutral gear.

2.Attention items for riding on wet and skiddy roads (in rain or fog)

The rainy day or foggy day will cause low visibility and poor adhesion between tires and ground,which might cause accident.So pay attention to the following items to ensure safety:

①.Keep a certain speed,do not accelerate or brake suddenly.Do not use over-worn tires.If tire abrasion exceeds maintenance limit value of 2mm,reduce speed and do not brake suddenly.

②.Keep low speed when riding on sludgy roads and do not start,accelerate,brake or turn suddenly.

3.Attention items for riding on ice and snow roads

When riding on ice and snow roads,assemble tire chain on tires or use antiskid tires.

①.Ride motorcycle with a low speed.Do not accelerate,brake or turn suddenly.Return throttle handlebar to decelerate,which is helpful for improving brake efficiency.Do not step brake pedal powerfully to brake.

②.When turning,reduce speed and turn steering handlebar slowly.Do not ride motorcycle with a high speed.

Guide for safe riding

4. Attention items for riding and braking

Much higher the speed is, much longer the brake distance is. Thus, control brakes according to speed and brake distance.

①. The rainy day or foggy day will cause low visibility and poor adhesion between tires and ground, which might cause difficult control for steering mechanism and brake system. Thus, reduce speed when riding on rainy day or foggy day. Ride through mountain pass and tunnel or overtake other vehicles with high speed, motorcycle might be influenced by side wind. Here, control the speed to avoid unexpected dithering. When using brake, first rear brake, then front brake, to control speed.

②. Put fingertip and tiptoe on the brake handle and rear brake pedal to avoid the accidental during riding. Use low speed after wash, and slightly hold the front brake handle and step on the brake pedal intermittently to make front or rear brake dry. Clean the brake drum and brake washer in time after riding on bad road with low mud and dene, to avoid damage for brake

③. When go down from sharp slope or run on long slope, do not step brake pedal for long time or brake too frequently, which might cause the brake over heating to influence brake performance. Brake motorcycle according to the actual situation. Do not ride motorcycle with high speed on rainy and humid road.

5. Attention items for emission and pollution from exhaust gas

Do not breath exhaust gas, because it contains CO, which is harmful to human beings. Users should take some measure to prevent breath CO. Do not start and ride motorcycle in carport or other close area. Ensure that the exhaust gas is emitted swimmingly without block, which is helpful for emission. Inspect exhaust muffler for air leakage and ensure that the exhaust gas is emitted from the tail of muffler.

Inspection and replacement for engine oil

Replace engine oil periodically; replace oil after preheating several minutes. Please obey the rules strictly



1. Take dipstick out. Check whether engine oil is blackened or becomes bad, if so, Replace engine oil. Check whether oil level is lower than lower mark, if so, add engine oil to the level between upper and lower marks.

2. When lube oil is blackened or bad, remove drain bolt to drain lube oil and replace engine oil.

3. Before pouring out oil, put a pan under the engine, and then disassemble the bolt. When the oil almost poured over, rotate engine to make sure all oil gone out. Then assemble the bolt and add special engine oil.

4. Use the special oil recommended by our company.

CAUTION

1. Support motorcycle with main stand to check oil level. Make motorcycle stable, because any incline might cause wrong reading.

2. Advise you to replace engine oil at maintenance center of our company and use special engine oil of our company.

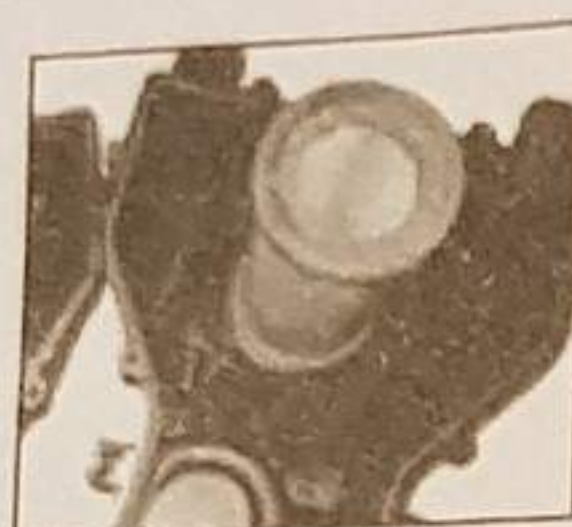
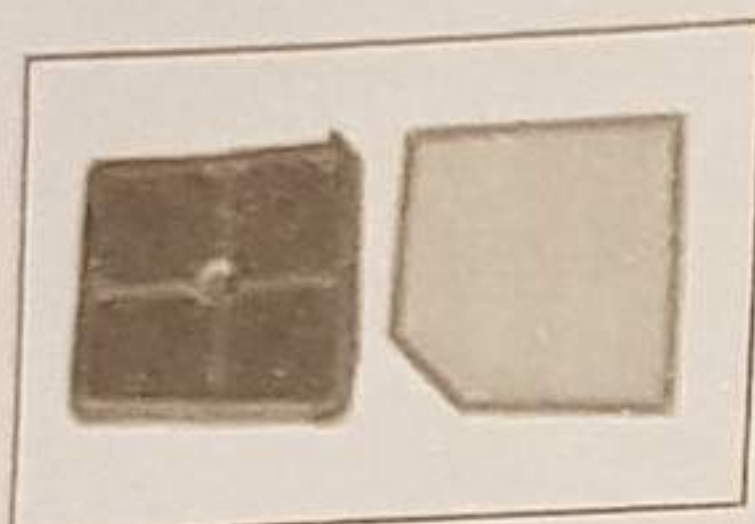
3. Do not add any chemical additive into engine oil, because engine oil can lubricate clutch, while additive can make it slip.

4. After replacing engine oil, check oil pressure according to the following details. Dismount oil-drain bolt, start engine and keep it in idling speed until engine oil drop out from oil-drain hole. If there is no oil dropped out within one minute, stop the engine.

Electrical conversion instructions

The installation of the electrical load power can not exceed 20W; modified GPS and anti-theft alarm when the engine is prohibited to cut off the coil wiring harness, otherwise it will cause high-speed off the fire. The Company shall not be responsible for any consequences resulting from failure to comply with the above requirements.

Air cleaner cleaning



A dusty and blocked air cleaner element will cause a low power, high fuel consumption and rich concentration of mixed gas. So inspect, clean and replace the element periodically.

1. Remove the core of air cleaner.
2. Wipe the dust and dirt of core with compression air or change the core. Clean the net with neutral liquid, and dry it.

WARNING

1. Install the element or strainer on the right position. When motorcycle often runs at a dusty place, shorten the maintenance cycle of air cleaner.
2. These stuffs are forbidden to clean strainer: gasoline, solvent of low-burning point and acidity or alkalescence naphtha gasoline.
3. Do not start motorcycle until the element or strainer is installed well, otherwise the piston, piston ring and cylinder block might be worn.
4. Clean, maintain or replace the element periodically at service center of our company.

Spark plug inspection and adjustment



1. Remove spark plug. When the plug with gray deposit on isolater skirt indicates an overheated engine. The reasons are the heat value of spark plug is small or the spark plug is revolved too long. Replace the spark plug. Clean the air cleaner when the plug insulator with sooty black deposit indicates mixture is rich. When the spark plug insulator with brown indicates balanced combustion of engine.

2. When cleaning spark plug, first soak spark plug with detergent or gasoline for half an hour and then remove the carbon deposit with nonmetal brush. Measure the clearance of spark plug with feeler gauge before assembling spark plug. If necessary, adjust the clearance to the stated value. Wash the gasket and tighten spark plug to right torque.

Brake inspection and adjustment

Hydraulic brake inspection

1. Check the stroke of brake handlebar and pedal to see if it is in the range of standard value. When the handlebar and the pedal can not be readjusted which means the broken of brake shoe and unable to maintain, replace the brake shoe.
2. Check the oil level from the observation hole. When the oil level is lower than the lower limit, add brake oil to upper limit. Recommended brake oil: DOT4 or DOT3.
3. The brake plate thickness limit is 2.0mm, brake disc jump limit is 0.3mm, if more than the above limit, should be replaced.

Drum brake adjustment

1. Check the stroke of brake handlebar and pedal to see if it is in the range of standard value. When the pedal can not be readjusted or the needle of brake arm surpass the mark of drum cover which means the broken of brake shoe and unable to maintain, replace the brake shoe.
2. Hold the brake arm, and adjust the adjusting nut clockwise to decrease the free stroke of pedal, otherwise, adjust in anticlockwise to increase. So to reach the standard value.
3. If brake switch needs to be adjusted, hold it still first and then turn the adjusting nut. when step on the pedal, brake light illuminate mean the brake switch is in the right position.

Standard value of brake handlebar: 10mm~20mm **Standard value of brake pedal:** 20mm~30mm

CAUTION

1. After adjusting transmission chain or dismantling rear wheel, recheck and adjust the free stroke of rear brake pedal.
2. After adjusting rear brake, must readjust rear brake light switch. Also check whether the wheel can rotate freely.
3. Adjust rear brake or replace brake pads at after-service center of our company.
4. Inspect and adjust brake system periodically at service center of our company.

Wheel inspection

1. high tire pressure of motorcycle will decline the comfort of riding and quicken the abrasion of components. low tire pressure will increase the rolling resistance of wheel, increase the fuel consumption. seriously, it will make tire take off and damaged.
2. if the valve core of inner tire has leakage, repair or replace it. if the inner tire has leakage, repair or replace it.
3. adjust the spoke wheel once per 300km and readjust the wheel after changing the broken spoke.
4. inspect and adjust wheels periodically at service station of our company.

Limit value of outer tyre abrasion		
Limit value of outer tyre abrasion	Front wheel	2.0mm
	Rear wheel	3.0mm

The limit value of wheel warp

Limit value	Axial	spoke wheel 2.0mm	Aluminum wheel 0.8mm
	Radial	spoke wheel 2.0mm	Aluminum wheel 0.8mm

Chain cleaning and adjustment

Clean mud and dirt of the chain with brush and cotton cloth, and then add some grease on it (Clean and grease it once per 500km), or take out the chain and dip in detergent for 30 minutes and then clean it. Do that several times and then take out chain to dry, then dip it in grease for 10 minutes. After that, take it out and wipe it. At last, assemble the chain and add grease.

Standard value of free stroke of driving chain: 15mm~25mm

Check if the free stroke is in the range of standard value. If less, the chain will be abraded very soon. And add wear piece in the lower chain box, so if the value is greater than the standard, the chain will abrade with the chain box to make noise. So the stroke of chain need to be readjusted. At the same time check the abrasion of sprocket and the chain. If it is bad, replace the whole set. When readjust the stroke of chain, release the nut and adjusting nut of rear wheel first. Attention, rotate the adjusting nut anticlockwise means tight, otherwise means release.

Throttle cable adjustment

In order to adjust free stroke of throttle handlebar, adjust steel wire of choke through rotating the adjusting nut.

- 1.If the maximum free stroke of throttle handlebar is exceed or under the standard value 2mm~6mm, readjust it.
- 2.The adjustment way of throttle valve cable free stroke: unscrew the locknut.Adjust the adjusting nut until free stroke reaches standard value.Tighten the locknut.



- WARNING**
- 1.Adjust idle speed before adjusting free stroke of steel wire of choke.
 - 2.If steel wire of choke intervenes or is worn,disassemble throttle handlebar and steel wire to wash or replace and add some grease.

Battery The battery could be used after adding electrolyte for 30mins (Advice:slowly charge the battery once).

CAUTION

1. Inspect charge periodically at service station of our company.replace the battery if the electrode board has sulfuration or there are a lot of deposits under the board.
2. There is vitriol contained in the electrolyte,so avoid contacting the electrolyte with skin,eyes or clothes and go to hospital at once if splash the electrolyte on skin or into eyes.
3. Charge the battery in a ventilative place and far away from fire.stop charging when the temperature of electrolyte exceeds 45°C.
4. Send waste battery to recycle pin and deal with it according to regulations because waste battery will cause environmental pollution.
5. After the replacement of the new battery, the first power for 15 seconds or so, and then disconnect for 10 seconds or so, and then re-power, the ECU system reset, to avoid replacement of the battery, the short period of time without idle.

Fuse replacement

There is fuse in charging and discharging. If the current exceeds the stated value,the fuse will be burned out to protect the battery and electric components from damage.

CAUTION If the fuse is burned-out,inspect it at service station of our company and replace the fuse with the same type.

Horn adjustment

The fixing nut and adjusting screw of horn will loose and horn will has no sound after running a certain time. Adjust horn must at the service station of our company. The users should never adjust the fixing nut and adjusting nut horn. Otherwise, our company will comply with Three Guarantees.

Cleaning and storage

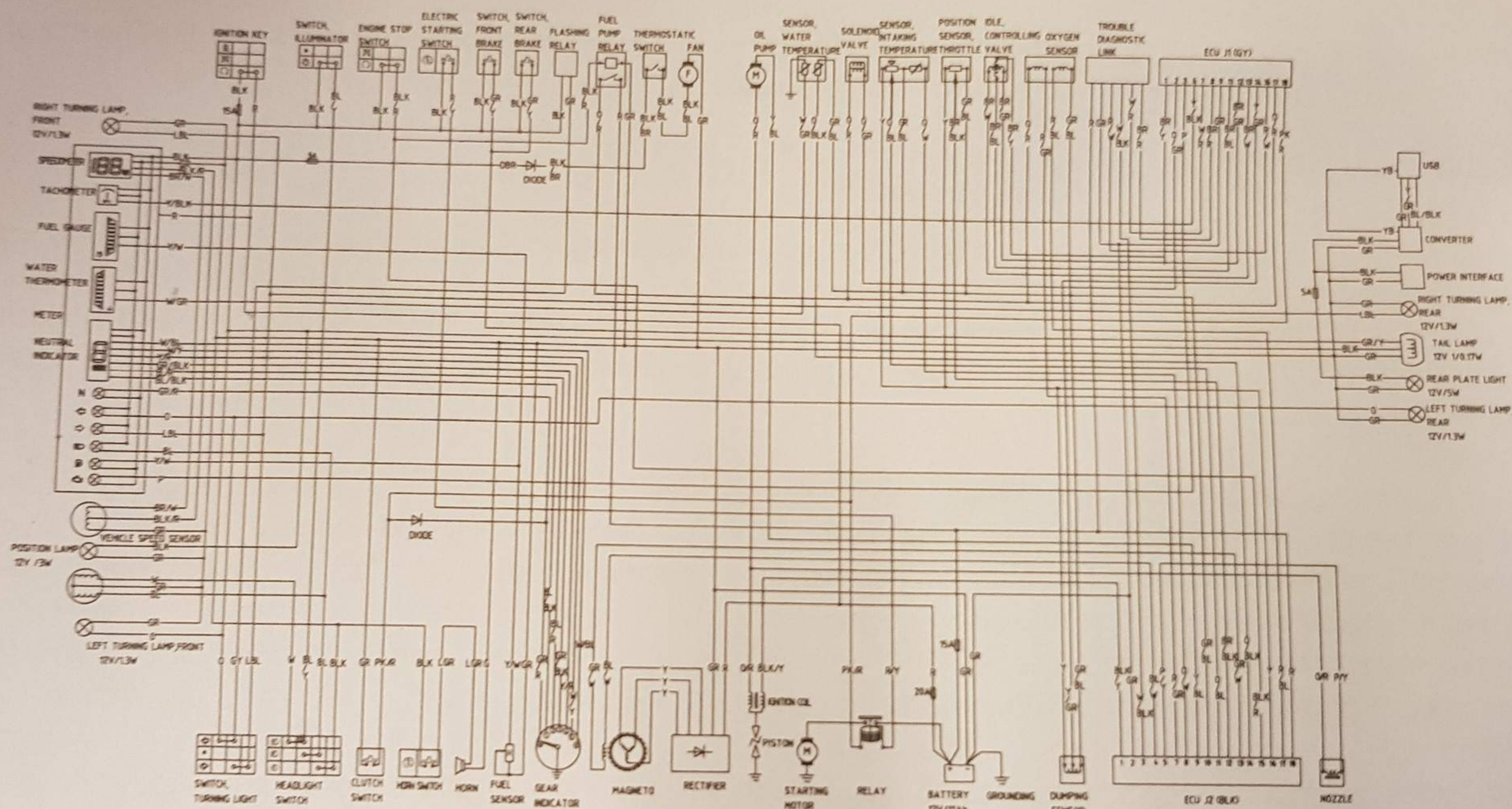
1. Cleaning

(1) Before cleaning the vehicle, block the tail of muffler. Then clean dust and dirt with high-pressure water gun. Do not make the pressure too high, otherwise it will clean grease on some parts (such as: wheel bearing, steering bearing, seal, etc.). (2) After cleaning the vehicle, dry motorcycle and parts with clean cotton cloth, dry driving chain and lubricate it. (3) Smear wax on the surface of varnished parts, antirust oil on chromed parts. Then start engine under idle speed condition for minutes.

2. Storage

(1) For long-term storage (above 60 days), store the vehicle after it is cleaned completely. Drain fuel in fuel tank, fuel pipe and spray some antirust oil into fuel tank, then close fuel tank cap. (2) Disassemble spark plug, add 5ml SF10W30 or SF20W50 into cylinder, and assemble spark plug. Step starting lever for several times (turn ignition lock to OFF position) to make the lubeoil distribute evenly inside combustion chamber, which will make cylinder wall lubricated. (3) Disassemble driving chain, clean it and lubricate it. Reassemble the chain or store it in a plastic bag. Seal muffler tail with a plastic bag to avoid humidity or pollution. (4) Remove battery, charge it once slowly, and store it under a dry and no vibration environment. Do not store battery at a hot or humid environment: lower than 0°C or higher than 30°C. (5) Disassemble control cables and lubricate them. Make tires off ground with wood block after inflate tires to stated pressure. (6) Store the vehicle under a ventilated, dry, clean, rainproof and sunproof environment. Make the vehicle away from combustible materials and corrosive chemicals. (7) After storage, clean and check the vehicle completely, add fuel in fuel tank after cleaning antirust oil in it. Charge battery once slowly. Replace engine lubeoil if the vehicle is stored a long time.

CIRCUIT DIAGRAM





ZONGSHEN MOTORCYCLE

CHONGQING ZONGSHEN MOTORCYCLE INDUSTRY MANUFACTURE CO.,LTD.

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