Welcome to VOGE

We say thanks and express our congratulations to your correct choosing on VOGE.
You need to know your motorcycle as well as yourself, to safely drive under various conditions. Please carefully read this book before your first driving, which includes important information and suggestion about driving and its equipment, also the maintenance and pre-cautions. In case there are some questions about this motorcycle, the VOGE dealers are very glad to suggest and help you. We hope you enjoy your every minute on driving.

Please purchase the helmet meets standard GB811 when you buying our motorcycle at VOGE dealer as possible, and wear it when you were driving.

Important information about this book

This book includes the important information, issues need pay attention to, warning and cautions about the motorcycle, so please always keep it on the motorcycle even lend or sell to others, this is very important. The pictures or details in this book may be different with the actual motorcycle, but their description and principle are the same. This book is a part of the motorcycle, keep it always on the vehicle even sell or lend. VOGE improves its products all the time to make sure its high quality and safety performance, so the information in this book may not be complete same with your actual motorcycle, in this case, the VOGE dealers are glad to provide your correct suggestions.
The standard of execution：Q/LX 1032-2022
This user manual meets the standards：GB/T 19678.1、GB/T 9969、GB/T 40494
All rights of final interpretation belong to Loncin Motor co.ltd.

Content list

I.Issues need pay attention to 1

II.Safe driving 2

- Loading, accessories and refit 2
- Checking before driving 3
- Issues need pay attention to during driving.....4
- Driving on road.....5
- Braking and parking 6

III.Main parameters 7

IV.Structure of motorcycle 8

- Identification for motorcycle 8
- Head part 9
- Left side.....10
- Right side 11
- Lower side of seat 12

V. Operation 14

- Ignition switch.....14
- Instrument and its indicating light.....16
- Negative display.....20
- Multi-media control.....21
- Steering switch set 22
- USB power socket.....24
- ABS system 25
- Driving recorder (Selectable).....26
- Automatic starting and parking 28
- TCS system 29
- Main stand system.....30
- Engine starting.....31
- Fuel filling-up 32

VI.Malfunctions

- Too hot the coolant 33
- Insufficient coolant 33
- Engine starting failure 34
- Difficult engine starting 34
- Weak engine power output 34
- Malfunction’s inspection and maintenance 34

Ⅶ.Grinding-in

- Grinding-in for new motorcycle 35
- Grinding-in for engine 35
- Grinding-in for tire 36
- Grinding-in for brake system.....36

Ⅷ.Adjustment.....37
Adjustment for back-view mirror.....37
Adjustment for throttle grip.....38
Adjustment for headlight dimmer.....39
Ⅸ.Inspection, repair and maintenance.....40
Fuel.....40
The fuel evaporation.....41
Three-way catalyst.....42
Tool box.....43
Moving parts and their maintenance.....43
Battery.....43
External power supply.....45
Maintenance for air filter.....46
Oil in engine.....47
Replacement for oil filter's element.....51
Coolant.....52
Brake liquid.....55
Tire.....56
Fuse chip.....58
The brake pads.....60
Replacement for secondary fuel filter.....61
The replacement for light signal.....62
Maintenance plan.....63
Ⅹ.Maintenance for the motorcycle in long parking.....66
Storage for motorcycle.....66
The cleaning up for motorcycle.....67
Cleaning up for motorcycle.....67
Ⅺ.Electrical diagram.....68

I.Issues need pay attention to

This user manual has the warning marks as below, when you saw it, please follow these driving and maintenance procedure.

⚠Danger This mark indicates it may lead to bad injury even death.

⚠Warning This mark indicates it may lead to damage on motorcycle.

⚠Caution This mark means more effective and convenient point for driving.

⚠Danger
This book fits for the driver with license only, please correctly and cautiously drive and pay attention to: Refit at will is not allowed; Please follow the local laws and regulations; Any refit on this motorcycle may be bad for noise, emission and performance.

Because we keep improvements on motorcycle, so the actual motorcycle may not be complete same with !this book, please set the actual motorcycle as standard while without further information.

II.Safe driving

Loading, accessories and refit

You can get the origin VOGE and authorized parts, accessories and other products from our official dealers, meanwhile, the specialized workers will introduce you how to use and assemble.

Please always adopt origin VOGE parts or our authorized ones. The parts nor from VOGE factory, incorrect accessories or loading are bad for motorcycle performance even break laws, please take responsibility for your safety and that of others.

⚠Caution

·The parts this model equipped have passed the test for safety, practicability, and matching performance, and we take responsibility for them, otherwise, we have no responsibility for the parts not from us or without our authorization. So we strongly suggest you adopt the parts and accessories from VOGE factory only.

·All your replacement for parts must obey local laws. Make sure your motorcycle won't beak any laws and regulations

⚠Danger

·Incorrect loading, refit, accessories and maintenance are all hidden risk, before driving, make sure there is not any overloading and obey the stipulations above.

·Refit the electrical or controlling parts at will may damage your motorcycle even lead to accident.

Change the curb weight of motorcycle may be bad for its power performance, so please surely adopt the cargo weight, passenger numbers and accessories from our suggestion only.

Checking before driving

Before driving,make the inspections as below to reduce accident or damage:

Steering system
–Flexible turning without jamming
–No runout or flexibility on steering stem
·Throttle
–Correct throttle cable clearance
–smooth operation
·without jamming
·Brake assy
–The operation is normal.
–Correct brake liquid level in oil cup
–Clear pressing point in braking
–No water and oil residual on
·Tire
–The air pressure in tire is correct.
–The depth for tire read is within limit.
–There is not crack or damage on surfaceof tire

·Oil in engine
–Correct oil level
–Cooling system
–Correct coolant level
–No coolant leakage
·light
–Headlight/ Front position light, tail light/brake light, turning signal light, frustration plate light and instrument lights
–brake plate and friction pad
The lights can normally work
·Indicating light
–Control through switch assy,the turning signal, high beam indicating light could normally work.
The oil pressure alarm light,engine malfunction light,water temperature ligh and fuel alarm light are not on or flashing when engine started.
·Horn
–Fine performance
·Side stand
–Normally pick up and lay down
–Normal interlock with ignition switch
·Back mirror
·Shock absorber
–press down and normally return
–Sit on the motorcycle to keep it upright ,and could see a material with width of 4m and 10m to the tail of motorcycle from back view mirror.
–In case it could not be seem clearly,please adjust the angle of back-view mirror.

Issues need pay attention to during driving

1. Any driver must know well about the motorcycle, the incorrect sitting position or off set during driving may be bad for operation or control of motorcycle; When driving, the passenger need. stably sit on his seat without influence driver. Passenger is an animal is not allowed.
2. Keep the luggage low to decrease the influence on focus, also the weight of luggage needs evenly spread on both sides, please avoid the luggage extend too long.
3. The luggage must fix on the motorcycle firmly, make sure it could not move before driving, in case it is unstable in driving, please check its fixing once again, and adjust if it is necessary.
4. Too heavy or big the luggage is not allowed, the overloading must be bad for driving and performance.
5. The accessories or luggage may decrease motorcycle performance shall not be loaded, make sure all what you do may not be bad for lighting system, ground clearance, brake performance, side angle, operation, compression distance of tire, working travel for front shock absorber or other performance related to driving.
6. More weight on handle bar or front fork may be and for turning, and lead to unsafe driving.
7. Fairing cover, wind shield glass, backrest or other parts with big size may have influence on stability or operation during driving, they increased not only the weight, but also the size, which lower down the power. In case their design lack of test, they may lead to unsafe driving.
8. Refit to tricycle with side car is not allowed, drawing for other vehicles is also not allowed, and we take no responsibility for refit without authorization.

The maximum loading: 175kg, including driver, luggage, and accessories.

Driving on road

·Get on the motorcycle from left side and ride on

·Pick up the side stand

·Get the motorcycle upright to the ground, get the handle bar face front, keep its wheel face forward.

·Tightly hold the brake lever.

·Slowly turn the throttle grip to accelerate, while slowly releasing the brake lever, the motorcycle slowly start.

·Wear helmet, gloves, driving boots, protective wear and pans before driving even only for a short driving.

·In case you drive fast, please pay attention to the factors below which bad for your driving.、

–Loose cloths

–Overload or imbalance load may be bad for your driving and controlling.

–Don't drive after drink wines, drugs even medicines, even a few alcohol or medicine is bad for your sense and reflection.

⚠ Caution
This model equipped the kill switch on side stand, lay down the side stand, the engine stopped immediately.

⚠ Danger
Before starting, please pick up the side stand to top position, otherwise, when you turning left, the side stand may touch the ground and lead to accident.

Braking and parking

·Please decelerate first when braking to reduce the speed and use the front and rear brake at same time.

·When braking, your body get front and press down the front shock absorber, so there is more weight suddenly focus on the front wheel, so the front brake is more reliable, so the front brake is more powerful than the rear one and more easily get motorcycle stop.

·When you are driving on maintain way, use the rear brake only is dangerous, under some limit conditions, the brake may overheat and damage, please use the front, rear brake sand engine coordinately to decelerate.

·Driving in water and rain, the brake plate may get wet and reduce its braking performance, be careful under this situation. Under this case, we suggest you dry it up and then continue the operation.

⚠ Warning

·After a long driving, when parking, because the engine is very hot at this moment, so keep it far away from kids to avoid hurt.

·Don't park the motorcycle on soft ground to avoid rollover even damage the motorcycle, in case parking on a gentle slope, let its head face to uphill to avoid the turning of side stand and rollover.

·Parking or running on combustible materials such as dry grass is not allowed, because the three-way catalyzer is working under very high temperature which is very easy to light up the combustible materials.

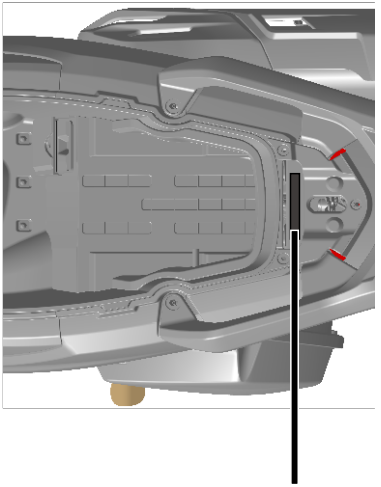
Ⅲ. Main parameters

Motorcycle parameters	
LxWxH	1945mmx740mmx1265mm
Wheelbase	1320mm
Seat height	755mm
Ground clearance	140mm
Curb weight	139kg
Max. loading	150kg
Max. Weight	289kg
Front wheel loading	60kg
Rear wheel loading	79kg
Max. speed	99km/h
Gradeability	≥ 25%
Braking deceleration	Follow GB20073-2018
Fuel consumption	≤2.3L/100km (Under WMTC working status)
Fuel tank capacity	8L
Coolant capacity	0.46L
Suspension rack/Brake system	
Front shock absorber type	Shock absorber/Fork tube φ31mm with stroke of 93mm
Rear shock absorber type	Straight pushing shock absorber/Stroke of 103mm
Front wheel hub size	2.5 x 14
Rear wheel hub size	3.5 x 13
Front tire size	110/70-14
Rear tire size	130/70-13
Front brake type	Single plate, double pistons, floating caliper, and fixed plate /Diameter of 240mm
Rear brake type	Single plate, single pistons, floating caliper, and fixed plate/Diameter of 220mm
ABS	Double passage prevent locking - up
Engine parameters	
Engine type	Singlecylinder/4 strokes/Water cooling/SOHC/Double valves
Bore x Stroke	57.3mm x 58.0mm
Displacement	149.6ml
Compression ratio	10.6:1
Clearance of air inlet valve	(0.06 - 0.08)mm
Clearance of air exhaust valve	(0.14 - 0.16)mm
Clearance of spark plug	0.8mm -1.0mm
Specification of spark plug	CPR8EA-9
Maxnetpower output/Rotation speed	10.5kW/8250rpm)
Max. torque/Rotation speed	14N.m/6500rpm
Idling speed	(1700 ±150)r/min
Gearbox type	CVT stepless speed change
Clutch type	Dry clutch
Oil capacity	0.9L for crankcase of 10W/40- SL or above 0.18L for gear box of gear oil of 80W/90-GL or above
Fuel supply	EFI system
Standard emission	State standard 4th stage
Power transmission system	
Total transmission ratio	7.984~24.839
Primary CVT	0.810~2.520
End transmission ratio	9.857

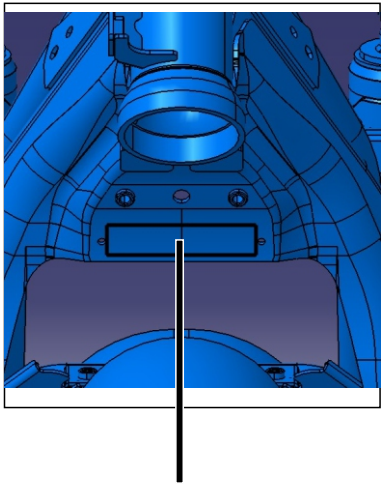
Ⅳ. structure of motorcycle

Identification for motorcycle

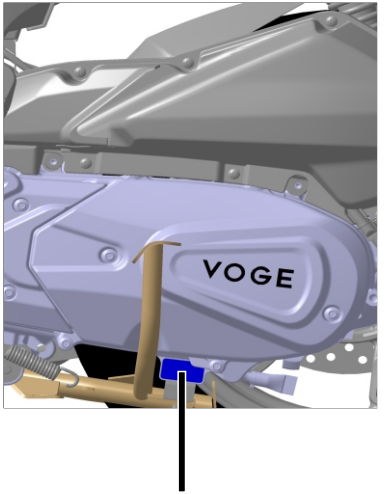
The Vehicle Identification Number (VIN) and name plate Engine type number and Delivery number



Vehicle Identification number



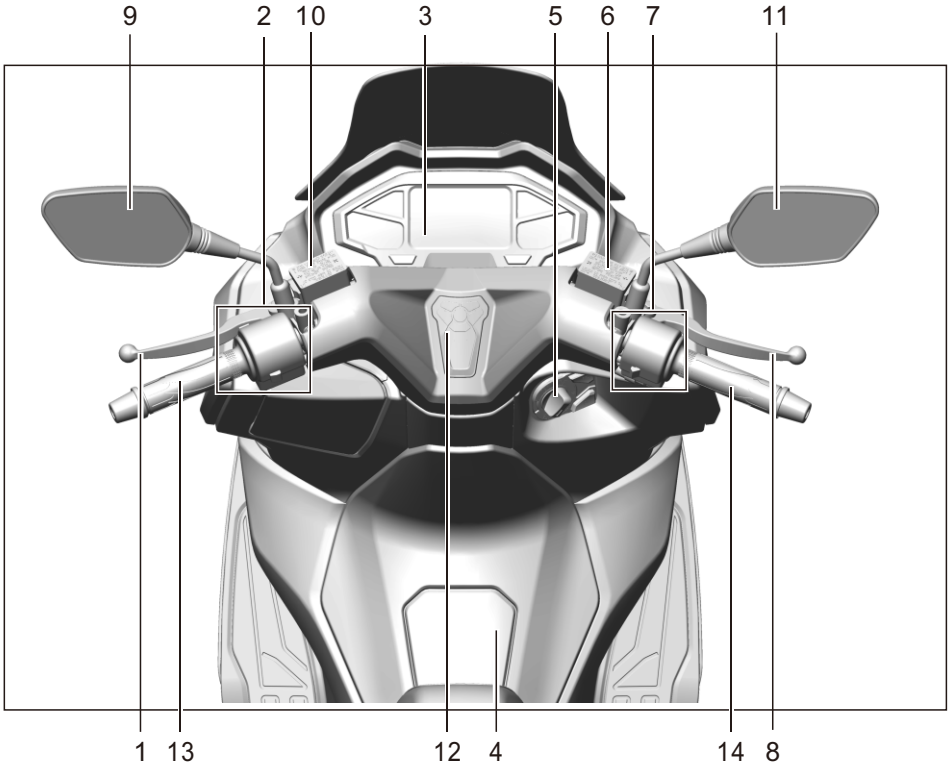
Products number



Engine type and Delivery number

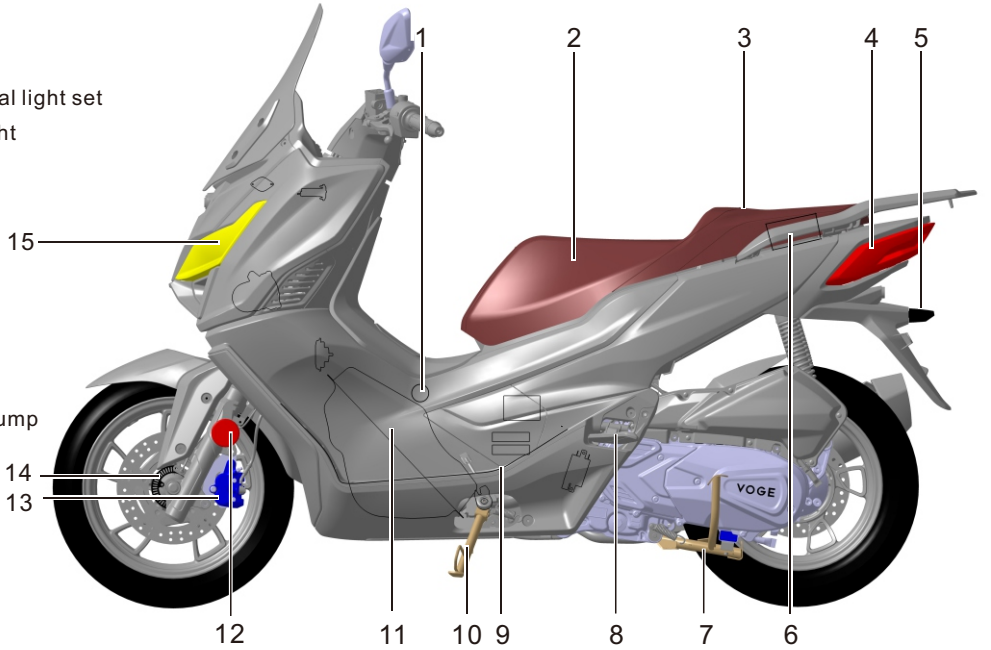
Head part

1.Rear brake lever
2.Left switch assy
3.Instrument
4.Fuel tank cap
5.Ignition switch
6.Front brake oil cup
7.Right switch assy
8.Front brake lever
9.Left back-view mirror
10.Rear brake oil cup
11.Right back-view mirror
12.Multi-media controller
13.Left grip
14.Greaser



Left side

1.Secondary fuel filter
2.Driver seat
3.Passenger seat
4.Taillight, rear turning signal light set
5.Rear registration plate light
6.Left armrest
7.Main stand
8.Left pillion step body
9.Left footrest body
10.Side stand
11.Fuel tank
12.Left reflector
13.Front lower disc brake pump
14.Ring gear for ABS
15.Headlight



Right side

1.Front turning signal light

2.Front disc brake plate

3.Right reflector

4.Right footrest body

5.Water filling up port of heat radiator

6.Oil filling up port and oil gauge

7.Muffler

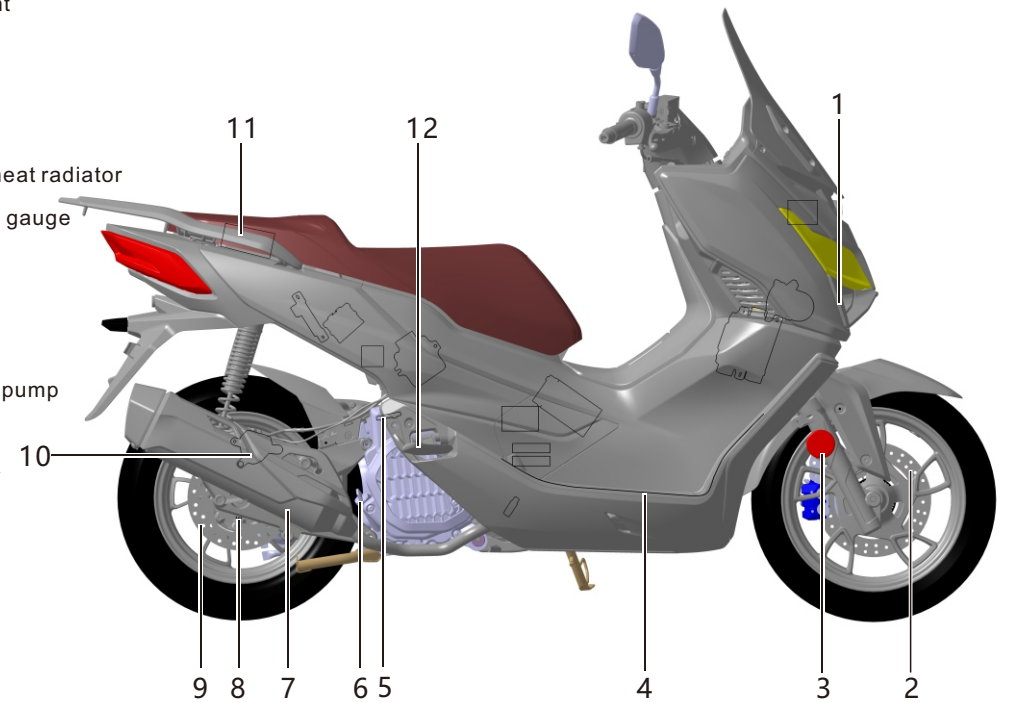
8.Ring gear of ABS

9.Rear disc brake plate

10.Rear lower disc brake pump

11.Right armrest

12.Right pillion step body



Lower side of seat

1.Main relay

2.Driving recorder (Selectable)

3.Antenna

4.ECU

5.Battery

6.Camera (Selectable)

7.Controller

8.Oil pump relay

9.Oxygen sensor

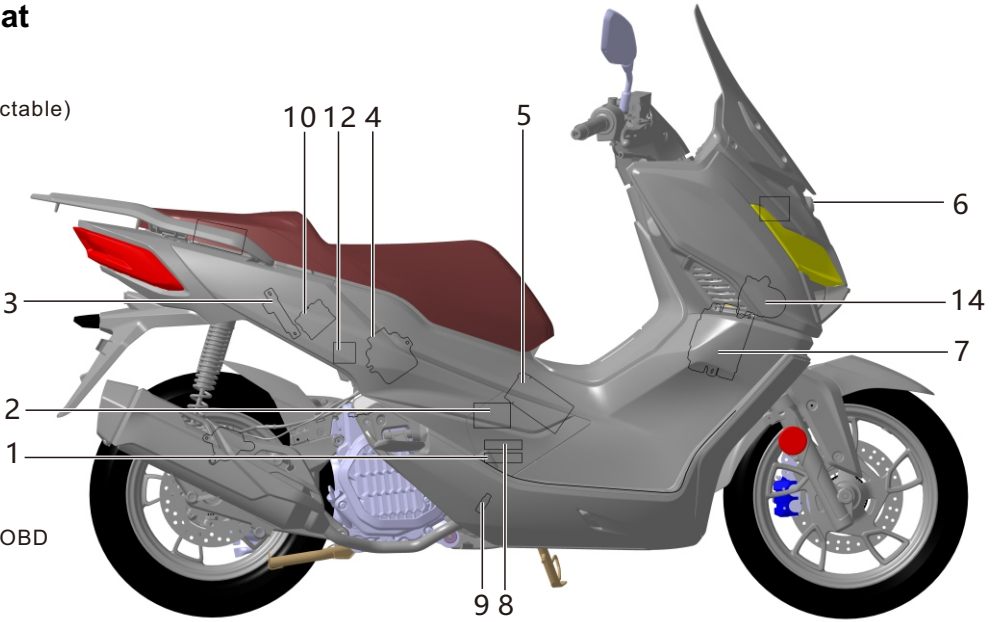
10.Controller for BCM

11.Tool box

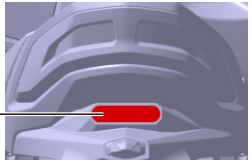
12.Diagnosis socket for OBD

13.Rear reflector

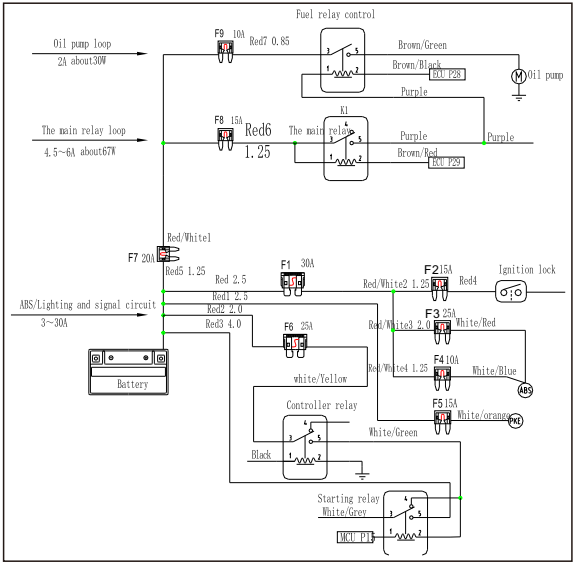
14.Right loudspeaker

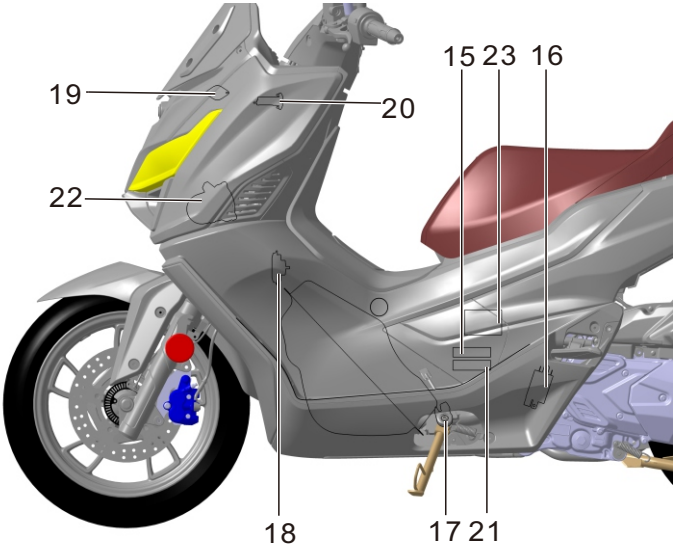






The simplified diagram of 4 fuses is show as below (The power supply of this model divides to 6 branches, in which each gets power from positive terminal of battery, and each branch has its own fuse who are mutually independent without influence)



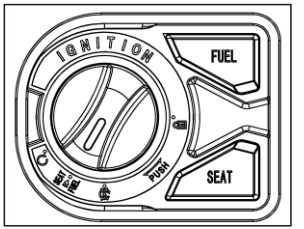


15 .Controlling relay
16 .Ignition coil
17 .Kill switch on side stand
18 .Horn
19 .Alarm of horn
20 USB power socket
21 Starting relay
22 Left loudspeaker
23. Fuse box

V .Operation

Ignition switch

They ignition switch on this model is at the right side of panel of front luggage case, the ignition switch and steering lock are in one piece.



There 2 pieces of key for this model, one is for remote control with a mechanical one in it; Another is for spare of mechanical, please keep them in place.

The ignition, steering, seat and fuel tank's lock share a same remote-control key.

The mechanical key can open the seat lock, whose hole is at the bottom of seat.

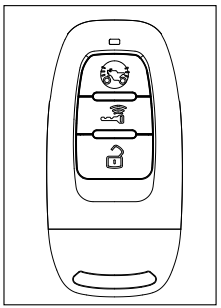
Press the ignition switch, the outer light belt of ignition switch gets on, then turn the ignition switch clockwise to position " ", the motorcycle gets power on, meanwhile the instrument begins its initialization.

Pick up the side stand, tightly hold the brake lever (The front one only or both the front and rear together), then press the starting button on the right switch assy., the engine normally starts.

Turn the ignition switch to position " SEAT FUEL ", the seat lock and fuel tank cap could be opened, then press the key " FUEL " to open the fuel tank switch; Press key " SEAT " to open the seat lock.

The logic for locking the motorcycle is the same position of " ", after the motorcycle locked up, the ignition switch could be turned to position " ".

When the ignition switch turned to position " ", the outer light belt keeps on, after 3 seconds later, in case the remote key is within the range of 1.2m to antenna, please make outer light belt of ignition switch gets on for 4 seconds, (The most circulation numbers are 4), when the outer light belt gets off while the buzzer shortly ringing, the ignition lock gets off, the motorcycle gets into the working condition of automatic anti-theft. In case in this process the remote key is out of the range of 1.2m to antenna, when the light belt gets off while buzzer shortly ringing, the ignition lock gets off, the motorcycle gets in the working condition of automatic anti-theft.



Turn the ignition switch to position "  ", the outer light belt of ignition switch keeps on, 3 seconds later, in case the remote key is out of range of 1.2m to antenna, the light belt gets off while buzzer shortly ringing, the ignition lock gets off, the motorcycle gets into the working condition of automatic anti-theft.

Turn the steering stem to left or right limit, then turn the ignition switch to position "  ", then the steering stem normally locks up.

Press the remote key "  ", the first press for left and right turning signal light, they get on while buzzer long ringing, the motorcycle gets into the working condition of manual anti-theft, press once again, the left and right turning signal lights get on 2 times while the buzzer shortly ringing twice, the working condition of anti-theft gets released.

Press the remote key "  ", start the function of Remote motorcycle search (Without shelter within 30m), the left and right turning signal gets on for 3 times while buzzer shortly ringing for 3 times. Press the remote key "  ", turn off the function of Entry without key, at this moment, the ignition switch could not be turned.

⚠Danger

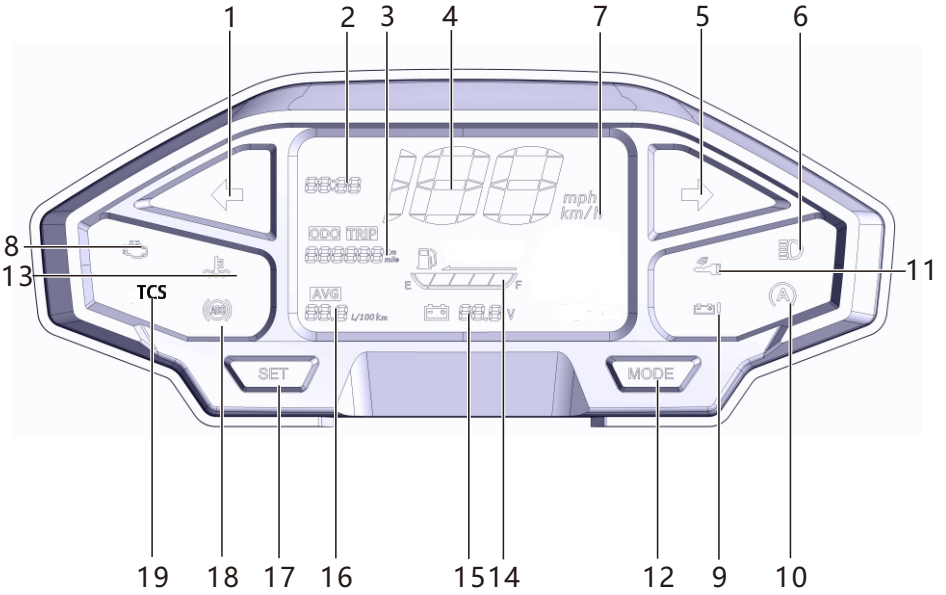
Please don't turn the ignition key to "  " during driving, otherwise the motorcycle may get out of control.

⚠Caution

Even within the range of 1.2m to antenna, put the remote key to some place may also lead to the abnormal communication between the key and motorcycle, which makes failure of motorcycle power on or starting engine. These places are but not only left front luggage case, position near steering stem, front of instrument, and rear luggage case.

Instrument and its indicating light

1.Indicating light for
left turning signal
2.Clock display
3.Total mileage/Single mileage
4.Speed display
5.Indicating light for
right turning signal
6.Indicating light for high beam
7.Speed unit
8.Alarm light for
engine malfunction
9.Alarm light for battery voltage
10.Indicating light for automatic
starting and parking
11.Indicating light for sensor key
12.Shift
13.Alarm light for
coolant temperature
14.Fuel display and alarm light
for low fuel level
15.Battery voltage
16.Average fuel consumption
17.Setup
18.Alarm light for malfunction in ABS
19.Indicating light for TCS switch



Turn the ignition key to position " ", the instrument begins its self-inspection
The display screen gets on and begins its self-inspection, and show you the status of motorcycle at the moment.
The alarm light " " of engine malfunction and that " " for ABS gets on.

Warning

Direct wash on instrument by high pressure water is not allowed. Wipe up the instrument by gasoline, ethanol or organic solvent is not allowed, or the instrument may partly crack or color fading.

Left turning light" ⇦ "

When push the left switch to" ⇦ " · the indicator" ⇦ "is on.

Caution

In case the turning light is damaged or in other malfunction,this indicator light " ⇦ " flashes faster than normal situation, which reminding you the malfunction of turning signal light.

Engine malfunction alarm" "

When the managing system of engine is in malfunction,the alarm light" "is on. When turned ignition key to position " ", the indicating light" "gets on,After the engine started, the indicating light " "goes off immediately.

Warning

After the engine started, the indicating light" "goes on or flashing,at this moment, the motorcycle may not be normally stated, and the fuel system may not work.
In motorcycle driving, in case the indicating light" " goes on or flashing, please stop using, then contact the VOGE dealers.

Alarm light " " for ABS malfunction

When there was malfunction in ABS system, the indicating light " " gets on.
Turn the ignition key to position " ", the indicating light " "gets on, when the motorcycle started driving, the indicating light " "gets off immediately.

Danger

After the engine started, the indicating light" " goes on or flashing,at this moment, the motorcycle may not be normally stated, and the fuel system may not work.
In motorcycle driving, in case the indicating light" " goes on or flashing, please stop using, then contact the VOGE dealers.

Right turning indicating light" ⇨ "

When pushed the right turning signal switch of right switch assy. to" ⇨ " · the light" ⇨ "gets on.

⚠ Caution

When the turning signal light got damaged or without getting on due to other malfunction, the indicating light " ⇨ " flashes faster than under common conditions, which remind you to check the malfunctions on turning signal light.

High beam indicating light" ≣D "

When pushed the headlight switch on left switch assy. upwards,the indicating light " ≣D "gets on.
When pressed the overtaking light switch on left switch assy.,"the indicating light " ≣D"gets on until you release the switch.

⚠ Caution

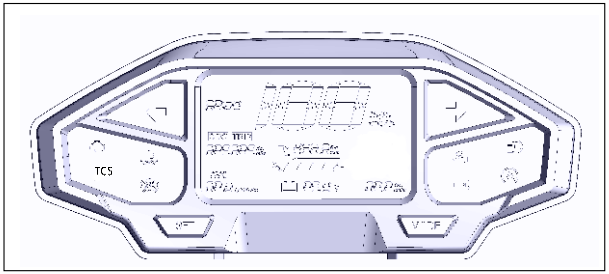
Please periodically check and confirm the normal oil level. The only way for checking the oil level is: Check the oil level on oil gauge to confirm.

This alarm light reminds you fuel filling-up

Caution: The fuel is not enough may lead engine starting failure or bad power performance, under this case, continue the use may damage the fuel pump.
Completely run out the fuel in the tank is not allowed, fill up the fuel before alarm light getting yellow.

Negative display

Speed: The running speed of motorcycle. (km/h-kilometers /hour or mph-mile/hour).
Water temperature: When the temperature was ≥120 ˚C, the alarm light for coolant temperature gets on.
Fuel level: Show you the current fuel residual.
When the residual fuel was ≤2L, the last cell for fuel display is flashing, meanwhile the fuel filling up mark also flashes, which reminds you fill up the fuel as quick as possible.



Get into the page of setup

Clear the single mileage to "0"	When the liquid screen shows under TRIP, long press MODE, the single mileage clear to 0.
Setup for clock	Long press the key SET, the time of liquid screen shows partly jump, then shortly press key MODE, adjust the current time.

⚠Caution

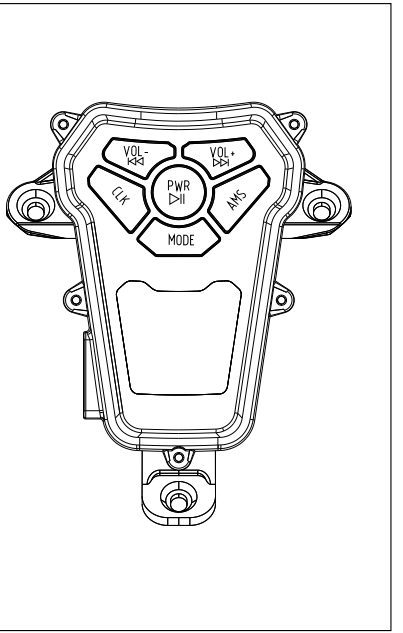
The fuel in the tank is waving in the running, when there is a few fuel, the indicating light may be not on, which is normal, don't worry.

⚠Danger

Operate instrument during driving is dangerous, the hand leaves handle bar may reduce your control on motorcycle.

Multi-media control

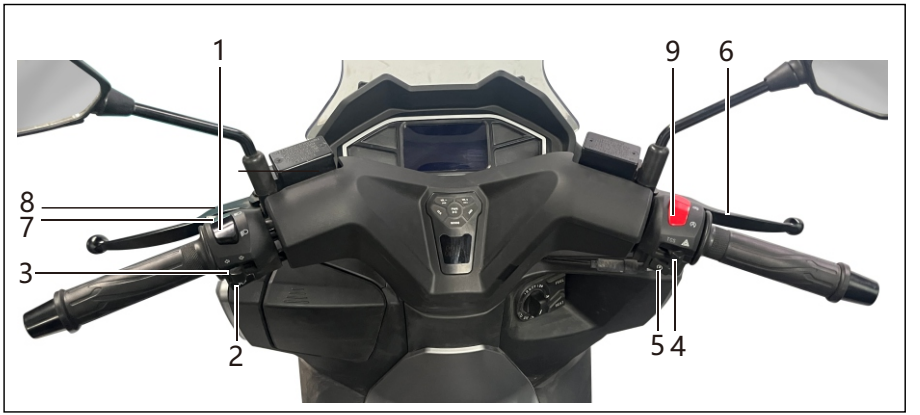
Funcion key	Operation	Function	Introduction
PWR	Short press	MP3 play	The music begins when power on voice finished
		MP3 pause	When MP3 is playing, short press to pause
	Long press	Stop	Turn off all the plays
MODE	Short press	FM play	FM plays, the screen displaying
		Blue teeth paly	Connect the cell phone, play the music
VOL- ⏮	Short press	Next song or channel	Fast response for next song or channel
	Long press	Turn down volume	The volume keeps reducing
VOL+ ⏭	Short press	Previous song or channel	Fast response for previous song or channel
	Long press	Turn up volume	The volume keeps getting louder
AMS	Short press	Automatic search	Automatic search for radio station and save it
	Pressonce again	Stop searching	Stop searching and get back to radioreception
CLK	Short press	Show you the time	Show you the playing time
	Long press	Adjust hour	Screen display jumps, press increase or reduce volume, adjust to corresponding hour place of clock
	Long press once again	Adjust minute	Screen display jumps,press increase or reduce volume, adjust to corresponding minute place of clock



The distance for blue teeth: When it is working (The blue teeth distance is ≤8m).

Steering switch set

1.Dimmer switch
2.Horn button
3.Turning signal light switch
4.Button for emergency light and TCS
5.Electrical starting switch
6.Front brake lever
7.Overtaking switch
8.Rear brake lever
9.Automatic starting and parking switch



High/Low beam and overtaking switch

When the high beam/overtaking switch push forward to" ≣D ",the high beam gets on,while the indicating light on instrument " ≣D " also gets on.
When the high beam/overtaking switch move back to" ≣D ",the low beam light gets on,while the indicating light on instrument" ≣D "gets off.
When move back the switch" ≣D ",the high beam is on,while the indicating light on instrument is on" ≣D ",and it recovers when released the switch.

⚠ Warning

The headlight could be on when the engine is stopped, the light depends on battery, so please don't long time turn on the light when the engine is stopped.

Button " " for horn

When pressing" ",the horn rings.

Turning signal light switch

When push the turning signal light switch on left switch assy. to the left" ",the turning signal light at left side both front and rear are all on, the indicating light " "on instrument is also on.

When the switch on left switch assy. push to right " ",the turning signal light at the right side both the front and rear are all on,its indicating light" " is also on.

When pressed the turning signal switch on left switch assy. inward, the turning signal lights get off while its indicating light on instrument also gets off.

Emergency light switch " "

In case the emergency switch hasn't got on yet, push the switch on right switch assy. to right limit, then the emergency switch gets on, in case the emergency switch is on, push the switch on right switch assy. to the right limit, the emergency switch gets off.

Every time when turned the ignition lock from other position to ON (Power getting on), the default for emergency light is off.

Automatic starting and parking switch

When this switch was at position " " , the starting and parking function could not work, in case at this moment the engine is working, the engine will not automatically stop.

When this switch was at position " " , the starting and parking function is on, in case at this moment the engine is working, when met the condition, the engine will automatically start/stop.

Front brake lever

Tightly hold the brake lever, the front wheel stopped, meanwhile the rear brake light gets on.

⚠ Danger

In case the motorcycle is in running, the starting and parking switch is on while engine is also in the same condition, please pay attention to the throttle position.

USB power socket "  "

The specification of output for this model's USB power supply socket is: 5V 2A.

The water-proof cap on USB power interface is with the mark "  ", pick the cap up the USB power supplying socket could be normally used.

⚠ Warning

When user need this function, please prepare a charging wire by himself. After used, please cover the water-proof cap in place to prevent water or dust getting in and reduce its working life.

ABS system

1.Deceleration and braking under normal situation, release the throttle first, tightly hold the handle bar and then brake.
2.Decelerate before turning, when passing the turning, do everything possible to keep an even speed, in case it is needed, slightly brake, the sudden braking is forbidden.
3.Decelerate in advance in case met the wet road even water on road, take care.
4.Judge the road condition in advance to avoid sudden braking.
5.When the emergency was met, swiftly release the throttle and tightly hold the handle bar and brake by full power.

⚠ Caution

The model with ABS, when fully braking, the bounce with some frequency on brake lever is obvious, this is normal, don't worry, please tightly hold the handle bar.

⚠ Danger

In case decelerate from high speed, use the front or rear brake only is dangerous, the motorcycle is easy to skid or get out of control, please use the front and rear brake in a balancing way.

Driving recorder (Selectable)

Operation for the APP

Preparation before use

1.ON and OFF: Turn the ignition key to position " ", the engine gets on automatically; When the ignition switch was on other positions, the engine stopped automatically.
2.Embedded memory card: Push the Micro SD memory card straitly into the groove, until you heard the sound of " Click " .
3.Remove the card: Push forward the card of Micro SD, when the card ejected out, it is removeable.

Caution

When the video is working, at this moment remove the TF card may damage the archives, so please turn it off first, and then remove the card.

The WIFI function

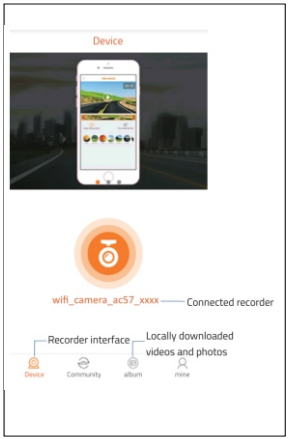
The Android cell phone please download the Road Cam from Application treasure.
The Apple cell phone please download the Road Cam from APP Store and scan the QR code below:

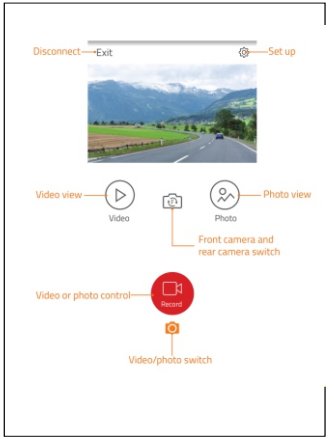
Introduction for APP of driving recorder.

1.Select the name of Wifi_camera on cell phone to connect the WIFI, with initial code of 12345678, then connect the OK, then get back to find out the Road Cam, the APP then gets on. Note: In case the cell phone of Android show you " Now the WLAN fail to get onto net, do you need to shift to other net connection? When you saw this, please select the cancel. The authorization for position must be opened.



2.Click icon " " to get into the main interface of APP





3.Check the normal video and the urgent one.

When the video was without working, click the " E quipment video " , it shows you the normal video; Press it and slide upwards is the normal video, slide to left, it shows you the urgent video, click the icon " " , it shift to another video and check its corresponding file.





File download: Long press the key Browse first, then the interface for download ejected out and the download could be done. The downloaded file please save into file Downloads from path roadcam.

Automatic starting and parking

When the switch is at position " Ⓐ " , it is on, when the motorcycle meet the condition, the corresponding indicating light " Ⓐ " on instrument gets on.

1)The coolant in engine reached even above 60℃

2)The driving speed has reached even above 15km/h and keeps over 4 seconds.

When the motorcycle met conditions below, it got into working condition of Starting & Parking, the engine gets stopped, while its indicating light " Ⓐ " on instrument gets permanently on:

1)The driving speed is under 1km/h.

2)The opening of throttle is less than 1.56%.

When the motorcycle got into the condition of Starting & Parking, turn the throttle the engine could be started once again, then the motorcycle gets into normal working.

When the Starting & Parking started, meet any conditions below, this function could be re-set, whose indicating light " Ⓐ " on instrument keeps on for 3 seconds and then goes off

1)The automatic starting and parking switch gets from ON to OFF.

2)The side stand picked up to parking condition.

Start the engine once again, pick up the side stand, tightly hold the brake (Only front, rear, or both), then press the starting key on right switch assy, the engine could normally start.

⚠ Warning
When the motorcycle got into stopping, please don't turn the throttle. In starting, please keep the motorcycle in braking condition. In case the motorcycle needs running for a long time, we suggest you open the function of Automatic starting and parking, to avoid hot coolant alarm from long idling after high speed running, which may damage the engine.

TCS system

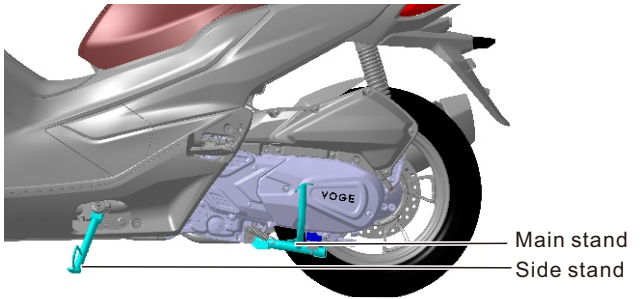
In case the indicating light with mark TCS on instrument is off, which means the TCS is on, turn the right switch assy. to left limit and keep over 3 seconds, the TCS indicating light on instrument gets on, which means the TCS goes off. In case the indicating light with mark TCS on instrument is on, which means the TCS is off, turn the right switch assy. to left limit and keep over 3 seconds, the TCS indicating light on instrument gets off which means the TCS gets on.

⚠ Caution

Every time the ignition lock moves to position ON from other position (The process of power getting on), the default for TCS is ON.

Main stand system

This model is designed with side and main stand.



⚠ Warning

1. Please park the motorcycle on solid and flat ground, otherwise the parking is not stable.
2 In case the motorcycle need be parked on slope, make its head forward to uphill to avoid turnover due to turning of side stand.
3. The design of side stand takes more consideration for the weight of motorcycle itself, so don't take your body on motorcycle when adopting the side stand to avoid distortion due to overweight.

Engine starting

Danger

The emission gas of motorcycle includes CO, which is a gas without color, smell but poisonous.
Idly run the engine in room without ventilation or poor ventilation is not allowed to avoid get poisoned.

The side stand is picked up.

Check if the remote key is in the range of 1.2m to motorcycle.

Turn the ignition switch to position " ON " .

When all the conditions above achieved, the left or right hand need to hold brake lever tightly to keep safety, the right hand can press the electrical starting button " START "without turning throttle grip.

Start the engine to let engine keep idling until fully pre-heated.

This model is designed with prevention for wrong ignition, the engine could be started under conditions below only:

-The ignition switch is at the position ON of " ON ", pick up the side stand and tightly hold the brake lever to keep safety.

Warning

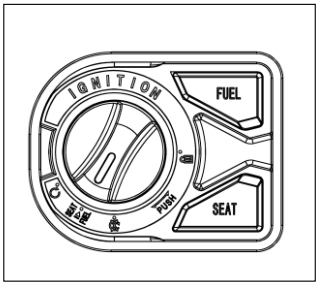
Enough pre-heating makes better lubrication, to decrease engine abrasion, the colder the weather the more pre-heating minutes are needed. Long time idling working of engine is not allowed, because the poor heat radiation lead to engine overheated and damage the inner parts.
Under cold conditions, suitably turn the throttle grip while pressing the starting button to easier start.
The lubrication works only when the engine is running, so don't push the motorcycle forward for a long way when the engine is stopping. After the engine started, check the flashing or abnormal power on of indicating lights on instrument, in case it is, please top the engine and make corresponding inspection.

Fuel filling-up

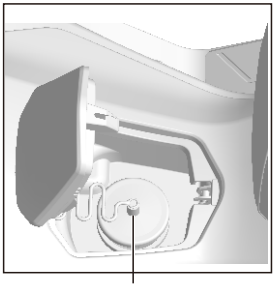
Turn the ignition switch to the position as picture shows, press the key FUEL, the decorative cover of fuel tank may automatically open, turn the fuel tank cap clockwise and then lift it up.

When the fuel filling-up finished, put the fuel tank cap back to its filling port, turn it anticlockwise to lock it down, and finally close the decorative cover of fuel tank.

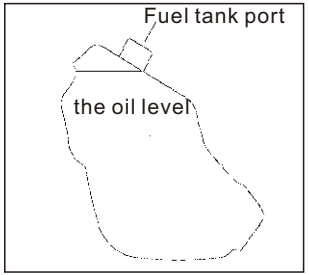
Please adopt unleaded or less lead gasoline above 92#.



Ignition switch



Fuel tank cap



Fuel tank capacity: 8L

⚠ Warning

The fuel is corrosive to painting surface, get its color fading and ugly. In case there is fuel on the painting surface, please wipe it up.

The fuel may expand when it is hot, fully fill up may lead to overflow due to too strong the internal pressure makes fuel tank distort.

When filling up the fuel, don't make it too full, let the fuel reach the bottom of anti-surge ring on fuel tank's port is enough.

⚠ Danger

Please stop the engine when filling up the fuel and get it far away from spark, smoke, fire or heat source.

VI.Malfunctions

Too hot the coolant

 This alarm light on means too high the coolant temperature.

When the engine overheated, continue the driving may damage the engine, so please follow the instructions below.

Stop driving and engine until the indicating light off. Check coolant and heat radiator when the motorcycle completely cool down.

–Check coolant level: In case too low the coolant level, fill it up.

–When the coolant temperature light got on, which means the fan of heat radiator is without working, please contact the service station for troubleshooting, it is better the station authorized by us.

Insufficient coolant

We suggest the operation below when the coolant is not enough or the heat radiator blocked by mud or sand:

–Reduce the loading to decrease the engine heat.

–Keep the engine idly run when in the traffic, don't turn the throttle to avoid engine temperature rise.

–In case the operation above fail to cool down, please stop the engine and contact the service station for troubleshooting.

 This alarm light on means there is malfunction in engine. Under this case, keep driving may lead to engine ignition failure or fuel supply stopped.

Please stop the engine, turn off the ignition switch, then start once again, in case the alarm light goes off, please keep driving, in case still on, please contact the service station nearby.

Engine starting failure

The side stand is laid down.

Didn't hold brake device tightly.

If the fuel is enough.

If the power in battery is enough.

Difficult engine starting

–If it is in cold temperature, in case it is, slightly turn the throttle when starting.

–Battery power loss.

–Too thick the oil; Confirm if the oil need be replaced.

Weak engine power output

–Check if the element of air filter is clean.

–If the motorcycle is at high altitude.

•Incorrect check and adjustment may damage your motorcycle and let you fail to find out the malfunction, which can't get the service of Quality Guarantee. In case you don't know much about the correct operation, please contact the VOGE dealer.

Malfunction's inspection and maintenance

The content for malfunction inspection and repair in this book can only help you on normal problems, of course they are just basic ones, in case the troubleshooting failed, please contact VOGE dealer.

VII.Grinding-in

Grinding-in for new motorcycle

The grinding -in period is important to working life and fuel consumption, so before driving, read the User Manual carefully. (The correct driving within the first 1000km is good for motorcycle performance and bring you fun of driving.

Grinding-in for engine

·No matter the engine is hot or cold, before starting, idly start the engine for enough time, to let oil spread to all positions need lubrication.

·During this time, the speed in the first 500km should not be over 50km/h, the second 500km without over 70km/h.

·During this time, in case the engine works under fixed low speed with light loading, this may lead to bad matching for parts and greater wear-out, so please don't drive under even speed with light loading for long time.

·During this period, the rotation of engine need be changed frequently, don't let it work under a fixed speed for a long time.

Grinding-in for tire

·The surface of new tire is smooth, so it is dangerous to driving too fast or at turning. To get the strongest gripping force, the grinding-in is important.

·In the first 200km, you can drive at turning in low speed until all angles of tire tread completely grinded-in.

·The protrusion on tire tread is dangerous, the grinding is a good way for avoid protrusion on tire tread.

Grinding-in for brake system

In the initial 500km, the new brake plate hasn't reached the best friction, to make up for braking loss, you can more powerfully draw the brake lever

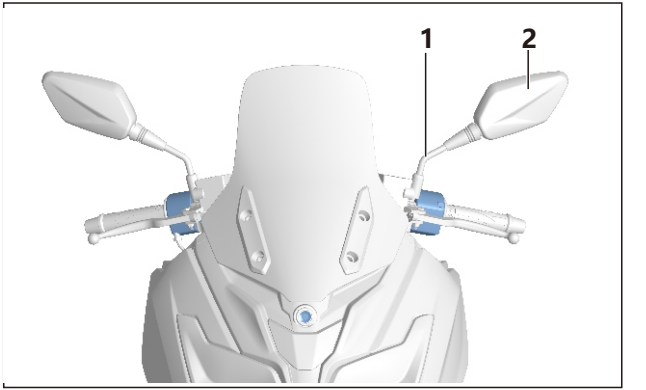
⚠ Danger
To get the best tire grinding-in, in its first 200km, sudden acceleration, turning or braking are not allowed.

VIII.Adjsutment

Adjustment for back-view mirror

Adjust the back-view mirror to correct position according to your own stature and driving posture.

The mirror body 1 and case 2 could adjust by hand directly.



⚠ Warning

Sit on the motorcycle and keep it upright, make sure you can clearly see the object in range behind the tail of motorcycle by 10m with width 4m.

⚠ Danger

Adjust the back-view mirror during driving may reduce your control on motorcycle, so please don't do this work during driving.

Adjustment for throttle grip

·The throttle lever is for controlling engine rotation

·Turn to your own direction is acceleration, the opposite direction is deceleration.

·The adjustment for clearance of throttle cable

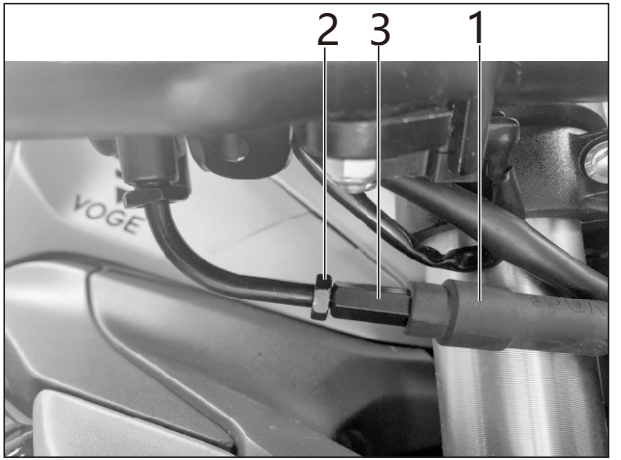
–Remove the rubber jacket 1.

–Loosen the locking nut 2.

–Turn the adjustor 3 to let the clearance of throttle cable to suitable distance.

–Lock up the nut 2

–Re-assemble the rubber jacket 1



⚠ Caution

After the clearance of throttle cable adjusted, make sure the throttle lever could return automatically whose idling speed should not rise.
After the clearance of throttle cable adjusted, turn the handle bar to the left and right limit, whose idling speed should not rise.

Adjustment for headlight dimmer

·All the height of headlight must be correct under any loading of shock absorber.

·To keep safe night driving, adjust the light angle of headlight to suit different loadings.

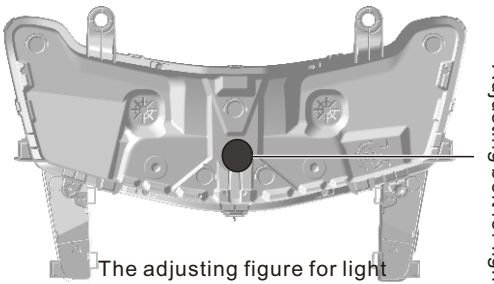
–The adjusting screw is at the lower rear of headlight, please align the adjusting screw of figure by cross screwdriver.

-The low beam shall be turned clockwise, the light gets low, opposite is high.

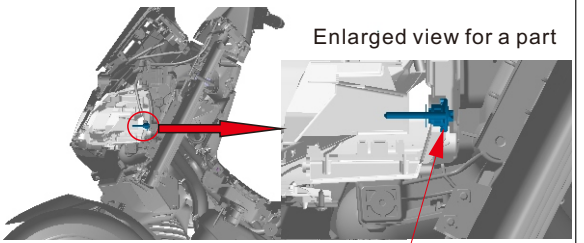
-The high beam shall be turned clockwise, the light gets high, opposite is low.

⚠ Danger

In case you don't know much about the height of light, please contact the VOGE dealer.



The adjusting figure for light



Insert the cross screwdriver along the arrow, clamp the gear combination surface and then start turning.

IX.Inspection, repair and maintenance

Fuel

The fuel parameter when you purchasing the motorcycle is the most fuel saving way or under a fixed speed, which is quite different to your actual driving, which may be higher than the fuel parameter for reference only.

·The operations below may decrease the fuel consumption under correct driving:

–The driving shall be gentle, stable and without sudden braking as possible, the re-start and acceleration may use more fuel.

–Driving in the city is bad for fuel consumption, the frequent stop and move means frequent start of engine.

–Avoid driving for short distance. The fuel consumption in the fist km after started is double times to normal situation due to the motorcycle hasn't reached the best working temperature.

–In case the air pressure in tire is not enough may increase the rolling resistance of wheel, and then increase the fuel consumption.

–Strictly follow the Period Maintenance table is important to save fuel.

Except the causes above, you may become more skillful with the mileage rise, for more driving fun, you may usually make sudden acceleration or deceleration, at this moment, the fuel consumption uprises compare to your former stable and gentle driving, which actually because of your change of driving style.

The fuel evaporation

When the fuel evaporation system gets failed, please contact the VOGE service station. Refit on fuel evaporation system is not allowed, otherwise the emission may not meet the standard. After removal and repair, check the connection of tube joint, leakage of pipeline, or block; Check the squeeze, crack or damage on rubber hose. The fuel vapor was released into carbon canister though the desorption tube, when the engine stopped, the activated carbon in the canister absorb the fuel vapor; When the engine is working, the fuel vapor in the carbon canister releases into combustion chamber through desorption tube join the combustion, which prevent the fuel vapor get into air directly to be pollution.

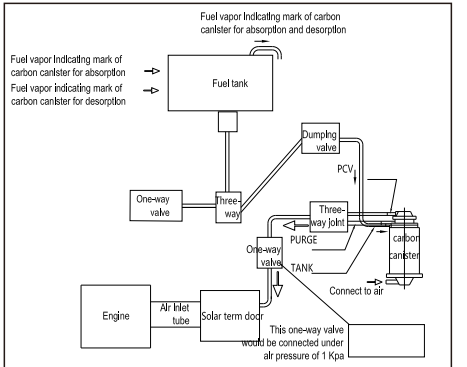
The absorbing tube also make the air pressure in fuel tank get balanced, when the air pressure in fuel tank was lower than air outside, supplement the air pressure through the absorbing tube on carbon canister; In this case, please make sure all the tube smooth without blocking and squeeze, make sure the correct installation of anti-toppling valve, otherwise the fuel pump may damage or fuel tank may get distortion even damage other parts.

The fuel evaporation control system works as below:

(1)When the gasoline in fuel tank gets heated, the gas vapor get out, absorbed after get though the end TANK of carbon canister of dumping valve.

(2)When the motorcycle inclined over 60°, the dumping valve gets closed, the gasoline failed to flow into carbon canister through dumping valve.

(3)The fresh air flow from end A of carbon cannister to the end PURGE to bring the gas vapor into throttle valve, then join combustion by getting though the air inlet tube.



Connectionoffuelevaporationcontrolsystem

Three-way catalyst

There is three-way catalyst in air exhausting system, which reduce the harmful agent in emission gas. The bad engine working may damage the three-way catalyst, so the actions below need be followed:

·Make period maintenance according to the stipulation in Quality Guarantee book

·When the engine works unstably, please contact VOGE dealer as soon as possible.

·When the fuel alarm light is on, fill up the fuel as quick as possible, too low the fuel level may lead to unstable fuel supply.

·Don't start the engine by pushing or dragging the motorcycle.

·Cut off the ignition when it is in idling only.

⚠ Warning

The three-way catalyst is fragile and expensive, please adopt the gasoline without lead, in case the gasoline with lead adopted, it may damage the three-way catalyst and other important parts.

⚠ Danger

Driving or parking on combustible material such as dry grass is not allowed, the working temperature of three-way catalyst is very high, it may catch fire if drive or park on combustible material.

Tool box

The tool box is laid under the seat, open the seat, it could be seen.

After driving under bad conditions, make lubrication after washed up or driving in the rain.

Moving parts and their maintenance

For safe driving, keep the good lubrication for moving parts is a necessary work for getting its working life longer.

-Brake lever's shaft

-Shaft for main stand

-Shaft for side stand

-Shaft for pillion step and returning spring.

⚠ Caution
Lubricant grease of lithium is recommended.

Battery

Maintenance for battery

The battery on this model is completely free of maintenance which needn't check the electrolyte level and its ratio, but need to check the power charging periodically.

⚠ Caution
In case it is possible, charge the new battery by 30 minutes for the first time, which could effectively make working life longer.

The power charge for battery

In case the ignition lock is off, while the voltage of battery is lower than 11.5V, we suggest charge the battery.

·Charge the battery by stable DC power source or use the suitable power charger and strictly follow its instruction.

·The DC charging voltage shall be DC (14.5±0.3)V with current no more than 1A;

·The charging hours is 6 to 8, don't let the current than the maximum limit.

·The overcharging may shorten the batter working life, so don't adopt this way.

⚠ Danger

The battery may produce hydrogen, so keep it far way to heat source of park.

Wipe up by dry cloth may produce spark of static electricity, to avoid this, please adopt wet one.

·Cut off the power circuit with motorcycle before charging.

·Usually check the cleanliness of terminal or wire joint, in case already corroded or oxidized, please clean it up.

·In case the motorcycle is usually in driving, the motorcycle may charge the battery automatically. In case just a few times or driving for short time, the power in battery may not be enough. The battery may discharge by itself, whose speed depends on the battery specification or surrounding temperature. When the surrounding temperature gets rise, the discharge speeds up, for example, the discharge speeds up by 100% with each temperature rise by 15℃

·In case the battery is without suitable charge in cold weather, the electrolyte may get frozen, then makes the battery damage or terminal distort, make the battery full of power can let it stronger in low temperature.

·Parking for a long time without driving need to cut off the negative terminal of battery first, otherwise the electrical parts on the circuit may gradually make power run out.

·Parking without driving more than 1 month need to charge the battery monthly. In case the battery is without charging for a long time may lead to natural failure.

·Correctly dispose the abandoned battery or electrolyte, don't let it be the pollution to the environment.

Disassembly and re-assembly for battery

·Before the disassembly and re-assembly, turn off the ignition switch first.

·Remove the negative terminal first when disassembling the battery, then the positive one.

·Install the positive terminal first when re-assembling, then the negative one.

·Every time when re-assembled the battery, turn on the ignition switch for 1 minute and then turn off to let the electrical equipment initialize.

⚠ Warning

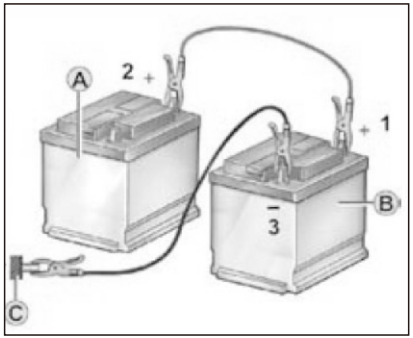
Don't put the battery up side down, otherwise the electrolyte may flow out from the breathing hole.

External power supply

·When the power in battery fail to start engine, the outer power source could be adopted for engine starting.

·When the outer power source is adopted, use the wire clip for spring only of completely insulated to avoid short cut or non-jump spark between guiding wires. The battery A is the power source on motorcycle while the battery B is an outer one. The positive terminal 1 on outer power source B connect to positive terminal 2 on power source A on motorcycle, while the negative terminal 3 connect to the metallic part C on engine to connect the ground. Start the engine, in case failed, wait for minutes and then start once again to protect the engine and battery.

Before removing the guiding wire of outer power source, let engine run for minutes, then cut off the negative wire and ground wire first, then the positive wire.



Maintenance for air filter

·The air filter locates above engine, if it is blocked by dust, the air inlet may get harder, which reduce power output and increase fuel consumption.

·In case driving under dusty condition, clean up and replace the element more frequent.

·The cleaning up and replacement for air filter element:

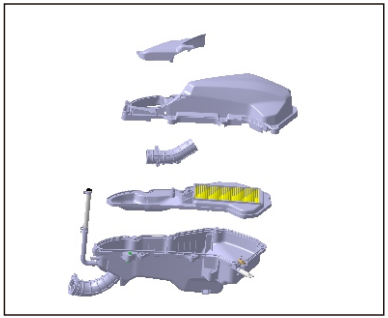
Remove the 9 pieces of screw on the case of air filter, then draw out the case of air filter.

Remove the air inlet tube of air filter.

Remove the element of air filter.

·The broken element may let dust get into engine and make engine damage, so please replace the broken one.

·In case the element is installed in wrong position, the dust may bypass the element and get into engine then get engine damaged, so please install it in place.



⚠ Caution

When cleaning up the element, the blowing air shall inlet from the side of metallic net, in case get in from another side, the dust may stay in the clearance of element, which largely reduce the effect of cleaning up.

Oil in engine

engine Check the oil level

·The oil inspection window and filling up port are both at the right cover of engine.

·The checking for oil level:

–Do this work when the engine is cold.

–Keep the motorcycle upright.

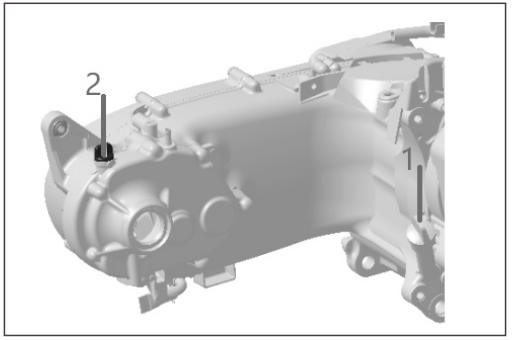
–Remove the oil gauge 1st and 2nd to check the oil level.

–The correct level shall be within the upper and lower scale lines of oil view window.

·In case the oil level is higher than upper line, outlet some oil.

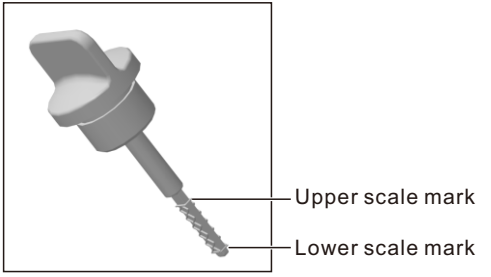
·In case the oil level is lower than the lower line, inlet some oil.

·No matter inlet or outlet, check the oil level once again when the operation finished.



The maintenance for oil in engine

The oil can make sure the effective lubrication for parts in the engine, besides more, the oil helps cooling down the engine, in addition, the oil is also good for sealing the engine, so the maintenance of oil is very important.



·Outlet the oil:

–In case too high the oil level, please remove the oil drainage bolt by socket wrench, the oil drainage bolts are at the middle place of engine bottom (Picture 1) and left side of tail (Picture 2).

–Outlet some oil then re-assemble the oil drainage bolt. Too high or low the oil level may both damage the engine Please make sure the oil is at a correct level.

Figure 1

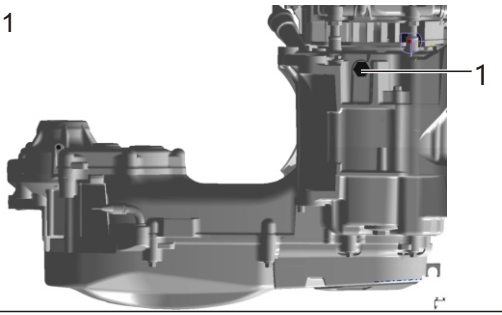
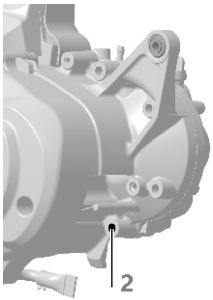


Figure 2



⚠ Caution

The oil may expand with temperature rise, so its level also changes. The hotter the engine the higher the oil level, while the colder engine with lower oil level, which both are normal.

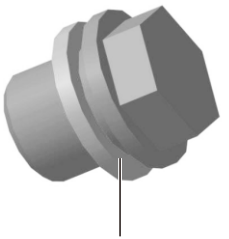
Keep the motorcycle upright when checking the oil level, in another word is vertical to the ground.

⚠ Danger

The oil drainage bolt is near the muffler, please drain the oil off when the bolt and muffler basically cooled down, when draining the oil, protect yourself from hot oil to avoid scald.

Replacement for engine oil

·Replace the engine oil when maintenance period reached.
·Replace the oil when engine is hot to totally drain off the old oil.
·The replacement for oil:
–Keep the motorcycle upright by standing rack.
–Turn the cap of oil filling-up port anticlockwise.
–Lay an oil tray under oil drainage bolt, then remove the bolt by tools and drain off the old oil.
Fasten the oil drainage bolt before filling up with new oil.


Seal washer

⚠ Warning

Replace the oil drainage bolt and its seal ring for a new one when re-assembling, in case still use the old one, it is easy to make oil leakage.

⚠ Danger

Drain off the oil when the engine is hot makes total drainage, but the hot oil and muffler may get user hurt, so before the drainage, wait for the bolt and muffler basically cooled down.

Oil filling up for engine

·Confirm the oil element already replaced and its cover already assembled.
·Confirm the oil drainage bolt and gasket are both replaced and re-assembled.
Fill up with new oil from the filling-up port on crankcase with volume of 900mL (800mL in case without replacing secondary oil filter), fill up new gear oil from the filling-up port on gear box with volume of 180mL (120mL in case without replacing secondary oil filter),
Start the engine to let it idly run for seconds.
Stop the engine and wait for one minute, Remove the oil gauge to check the oil level, when checking, the motorcycle must be horizontally upright, in case the oil level is under lower scale mark, please fill up to the middle position between upper and lower scale marks.

⚠ Caution

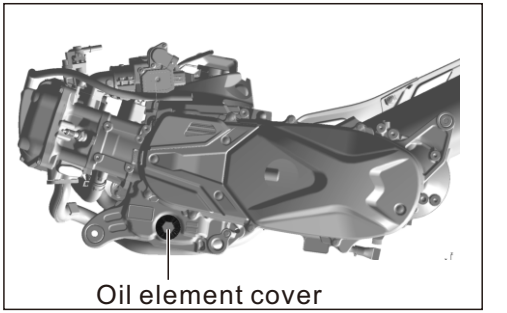
Replace the oil when engine is warm.
Specification of oil: For crankcase, 10W/40-SL or above with volume of 0.9L, for gear box, 80W/90-GL with volume of 0.18L. Dispose the replaced old oil and element in environment friendly way.

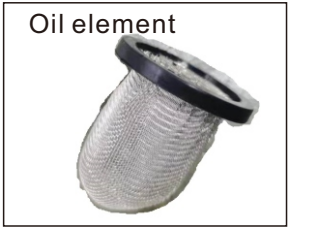
⚠ Warning

Wrong oil specification or bad oil may damage the engine, EFI system and shorten the working life of spark plug and catalyst in muffler, don't use them.

Replacement for oil filter's element

When each Maintenance period was reached, please replace the oil element for engine.
Replace the oil element when the oil in engine was drained off.
Support the motorcycle by side stand.
Remove the screw plug on the bottom of crankcase and drain off the oil in engine.
Lay a piece of oil absorption paper or a cotton cloth under the oil element's cover of engine, to avoid the overflow oil gets engine surface dirty when the cover was removed.
Remove the oil element's cover on the left side of engine.
Remove the oil element itself and drain off the oil.
Replace the element with mark 04A0 for a new one.
(Note: The pressing spring is necessary, in case there is damage on o-ring, please replace it for a new one, then fasten the bolt for the cover with fastening torque of (20~25)N.m, then fasten the oil drainage plug: Middle place of botton (25~30) N.m, left side of tail part (18~22) N.m





⚠ Warning

Check the gasket on cover of oil element, replace for a new one if it is necessary. A wrong oil element may damage the engine, please surely adopt the origin VOGE parts.

Coolant

Check and maintenance for coolant

The coolant can radiate the heat for hot parts in engine and keep its normal working temperature.

·The check and filling-up of coolant are all done in sub tank.

·Stop the engine

·Check when the engine is cold, because the coolant may expand when it got hot.

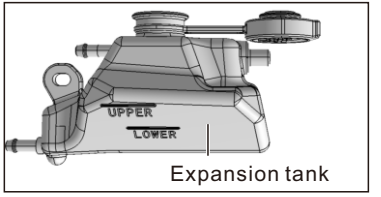
·Keep the motorcycle upright.

·Check the coolant level through expansion tank, whose level shall be between the scale line LOWER and UPPER.

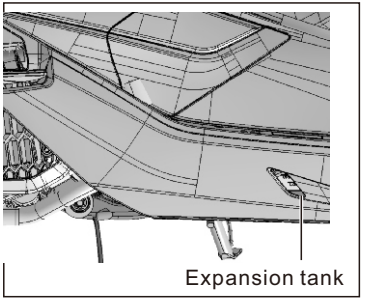
·In case the coolant level is under scale mark LOWER, fill up from the port of expansion tank.

·In case the coolant level is higher than scale mark UPPER, the coolant may overflow from tube when it got hot and expand in working, for avoid hurting by hot coolant, fill up too much is not allowed.

·In case the motorcycle need fill up the coolant frequently, which means there is malfunction in the cooling system, under this case, please contact the VOGE dealer.



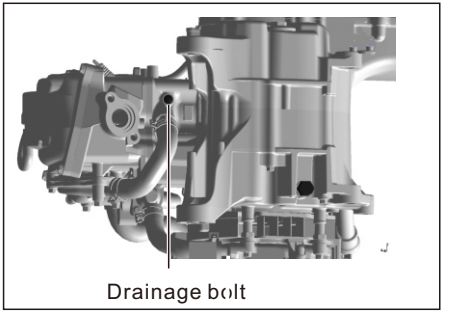
Expansion tank

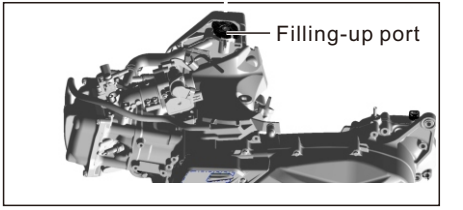

Expansion tank

⚠ Warning

When the expansion tank is totally dried up, don't fill up coolant by yourself, because under this case, the air may already get into the cooling system and need to be exhausted, so please contact the VOGE dealer for maintenance.

The replacement for coolant





·The coolant drainage:

–Keep the motorcycle upright by standing rack.

–Lay a liquid tray under the engine.

–Remove the water drainage bolt, because all the heat radiation system is connected, so all the coolant may flow out from this port.

–After the old coolant drained off, install and fasten the water drainage bolt in place.

·The coolant filling-up:

–The coolant need be filled up from the heat radiator and expansion tank the two positions:

–Open the tank cap of heat radiator and fill up with the coolant

–Check the full filling-up of coolant from the tank cap of heat radiator, pinch the water tube until it is full, then well
cover the tank cap.

–After the tank's cap of heat radiator covered, start and run the engine for 30 seconds to make the coolant fully reach every position need it.

–Make the engine stop, after the engine cooled down, open once again the tank's cap of heat radiator, check if the coolant already was full, in case the level fell down, please fill up once again until it is full, then well cover the tank's cover of heat radiator, repeat this action until it gets full, in case it is necessary, it may need to repeat two times or more.

–Remove the black rubber cap of expansion tank, then fill up with coolant to the level between scale mark UPPER and LOWER.

⚠ Warning

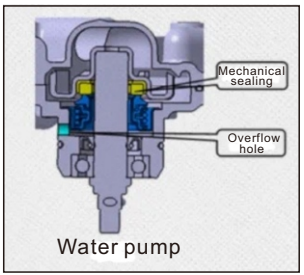
Fill up with running water is not allowed, otherwise it may damage the cooling system, the mixture among coolant of different brand of specification is not allowed.

·In case the air temperature is lower than the one marked up on the label, please adopt the coolant fits for lower temperature.
·The VOGE coolant is with ice point of -40℃ with ethylene glycol but without silicate, so we suggest purchase or replace by Made in VOGE.

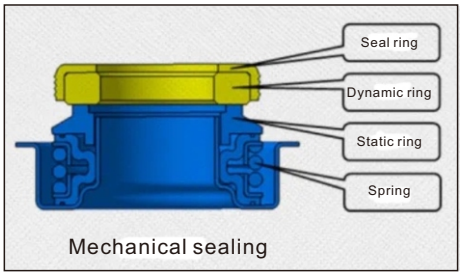
⚠ Caution	⚠ Danger
To keep the coolant performance, replace each two years. Coolant specification: VOGE coolant is with ice point of -40℃ with ethylene glycol but without silicate. The filling-up volume: 460ml. Dispose the replaced old coolant in environment friendly way.	When filling up the coolant, in case open the tank's cap of heat radiator after engine started, please let the engine cool down first, otherwise the hot coolant may inject out and make you hurt when you opening the cap of heat radiator.

The SR150GT engine adopts the mechanical water sealing which usually on auto or motorcycle as picture 1 shows, who are made up by dynamic ring, static ring, spring and seal ring with overflow hole as picture 2 shows, the static ring tightly stick to dynamic ring under the force of spring, which produce pressure on surface for a long term and then the reliable moving seal occurs, when the water pump is working, the dynamic and static ring are relatively sliding, which could not be completely sealed, so there may a little leakage of water drop gets out from overflow hole, this situation is normal , which is not harmful to normal driving and not any damage on motorcycle.

Picture 1



Pictur2



Brake liquid

The brake liquid is an important part in hydraulic system for power transmission, so it need be reliable under high, low temperature or flowing performance at low temperature and good in anti-corrosive, so please adopt the correct one.

Check the brake liquid

·Too low the liquid level in brake oil cup may let air get into brake system to reduce the braking performance. So please periodically check the liquid level.

·Check and fill up the brake liquid shall conduct at the front and rear oil cup.

·The liquid level shall not be higher than mark (MAX),when it lower than mark(MIN),please fill up immediately.

·The brake liquid is corrosive, which is bad for the surface of plastic or paint.

⚠ Warning

In case the filling-up of brake liquid is needed, open the cap of oil cup by yourself may let air and moisture in, which largely reduce the braking performance even failure, so please contact VOGE dealer to do this work.



The specification of brake liquid

·When there is impurity or moisture in the brake liquid, please filter or replace, otherwise it may reduce the pressure for braking and make bad braking performance, especially in wet weather or place.

·The brake liquid works more than 2 years, it may get bad due to the long work, please replace immediately.

The specification for brake liquid is: DOT3 or DOT4,Please dispose the replaced old liquid in environment friendly way.

⚠ Caution

Mixture of brake liquid among different brand and specification is not allowed due to the different formula of different brake liquid may let the braking performance fall down.

Tire

The tire connects the motorcycle and ground, it is very important, the incorrect specification and status is very bad for motorcycle performance.

The tire pressure in tire

·The wrong tire pressure makes its working life shorter.
·Too low the tire pressure makes difficult turning, and speed up the tire wear-out.
·Too high the tire pressure decreases the contact area between tire and ground, which is easy to skid and out of control.
When driving in high speed, the centrifugal force may open the air valve core on the tire, to avoid the sudden air leakage, we equip it a rubber with metallic liner, cap and connect with air valve core by thread.
·The pressure of tire's air charging rises with tire temperature, so adjust the tire charging pressure when it is cold and its temperature almost the same with surroundings.

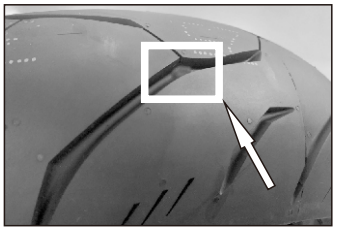
⚠ Danger

The incorrect tire pressure is not only bad for performance, but also lead to accident.
Overloading may lead to tire failure and bring motorcycle out of control.
Make monthly inspection on tire pressure.

Under normal temperature, please check the tire pressure as table below.

	Pressure in tire
Front tire	200KPa
Rear tire	210KPa

Check the limit of tire wear-out



·The tire surface is with the mark of wear-out.
·In case the tire tread already reached the mark, which means the tire could not be used any more.
·The wear-out mark is near the TWI mark at tire edge, the wear-out mark is in the water drainage groove on tire tread, which is a protrusion, when the protrusion is worn out, means the tire already worn out and need to be replaced.
·The worn out tire may get penetrated and bring motorcycle out of control.
·When the depth of tire tread reached the minimum limit, its performance and gripping force may largely fall down.

The repair for tire

Repair the small hole on tubeless tire, please remove the tire first, patch up inside of tire without outside, because the high speed driving may lead the outside patch outside flexible under centrifugal force.

·Within 24 hours after patched up, the max speed shall not be higher than 80km/h.

·In case the side of tire get broken while the breaking size is bigger than 6mm, the tire could not be used any more.

·In case many damages such as damage, scratch or wear-out were found on the tire, the tire need be replaced.

The replacement for tire

·When replacing the tire, two tires on one motorcycle with different brand, specification, tire tread or 1 new while another is old are all not allowed.

·After the tire replaced, the motorcycle needs to make dynamic balance and alignment, in case the dynamic balance is poor, the operation performance of motorcycle may fall down, also makes uneven wear-out on tire.

·The rolling direction of tire has the mark arrow, turn the tire along this direction only, which make sure water & skidding proof, improve gripping force, reduce noise and make working life longer, get the tire performance better.

·The tires with given specification are all strictly tested, who meet the demands of most road conditions, while the ones without test can't make sure the safety and suitability.

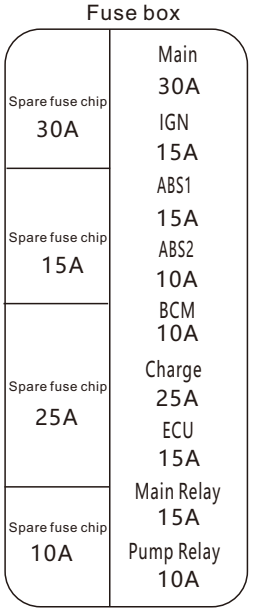
·Seal the contact position between the wheel rim and tire lip of tubeless tire.

·To avoid air leakage, the tubeless tire needs special tool and machine for disassembly and re-assembly, while pay attention to protect the tire pressure sensor.

·The tire replacement need be done by VOGE dealer, they are skillful and with necessary tools or machine.

Fuse

Before replacing the fuse chip, please know well about the root cause first and make troubleshooting.
This model adopts fuse box (1 pcs).
We marked up the specification and how to use for each fuse chip.
-Fuse chip for power supply to motor of ABS1 system (15A): Control power supply to motor of ABS system. Spare chip: 15A (In the fuse box).
-Fuse chip for power supply to solenoid valve of ABS2 system (10A): Control power supply to solenoid valve of ABS system. Spare chip: 10A (In the fuse box).
-Fuse chip for power supply to non-EFI system IGN (15A): Control the instrument, lights, horn, starting relay, and switch assemblies. Spare chip 15A (In the fuse box).
-Fuse chip for power supply to EFI system ECU (15A): Fuse for main power supply of EFI and oil pump. Spare chip: 15A (In the fuse box).
-Fuse chip for main power supply of EFI and main relay (15A): Control power supply for ECU of EFI system, oxygen sensor, ECU interface for diagnosis, oil injector, ignition coil and other parts of EFI. Spare chip: 15A (In the fuse box).
-Fuse chip for power supply of fuel pump and pump relay (10A): Control the power supply for fuel pump. Spare chip: 10A (In the fuse box).



-Fuse chip for main power supply (30A): Control the power supply to all motorcycle system except Charging supply for EFI system and BCM. Spare chip: 30A (In the fuse box).
-Fuse chip for BCM (10A): Control power supply to left and right turning signal light, braking light, and ignition switch. Spare chip 10A (In the fuse box).
-Fuse chip for charging power supply (25A): 2 in 1 controller and charging circuit fuse chip. Spare chip : 25A (In the fuse box).
-When the fuse chip was checked or replaced, please well cover the cap of fuse box to avoid water getting in in rainy day or after motorcycle washed, which is easy to lead to electrical malfunctions.

⚠ Caution

In case the fuse chip usually burns out in short time, which indicates there is malfunction in electrical system, please contact the VOGE dealer immediately.

⚠ Danger

Please use the fuse chip with given specification, substitution such as aluminum sheet or iron wire are not allowed.
Connect the fuse chip out of our suggestion is not allowed, otherwise it is very bad for circuit even catch fire or burn out the motorcycle.

The brake pads

The abrasion of brake pad passed the min. thickness limit may lead to poor braking performance, under some cases, it may lead to brake system damage. For the reliability for braking, the abrasion passed Min. thickness limit is not allowed.

Replacement for brake pad

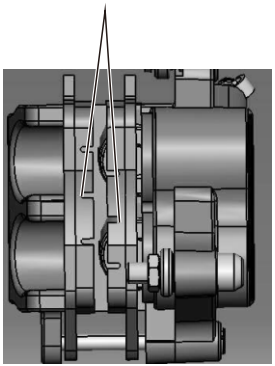
The correct replacement needs to remove the wheels, so this work shall be done by VOGE dealer.

No matter the front or rear brake pads, replace them in pairs as a set, in case only replace one piece of them, it may make imbalance brake even accident.

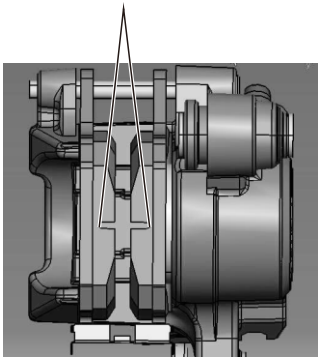
After the brake pads removed, don't operate the brake lever, otherwise the brake piston may return hardly, meanwhile making leakage of brake liquid.

The oil or other dirt touches brake pad and plate when replacing is not allowed, in case if there is, please clean it up, otherwise it may make poor braking performance.

Limit for front pad:



Limit for rear pad:



⚠ Danger

When replaced for new pads, please repeatedly confirm the brake lever, confirm the pads tightly press the brake plate, meanwhile confirm the free travel of brake lever.

Replacement for secondary fuel filter

The secondary fuel filter is for filtering the impurity in fuel and stop it getting into fuel injector. The nozzle for fuel injector is a fine work, easy to be blocked by impurities, in case it is, the blocked fuel injector can not work and makes engine starting failure. Please replace the secondary fuel filter on time.

-Remove the front panel cover, middle cover, and protective plate 2 for fuel tank.

-Remove the clamp on secondary fuel filter for fixing it by screwdriver.

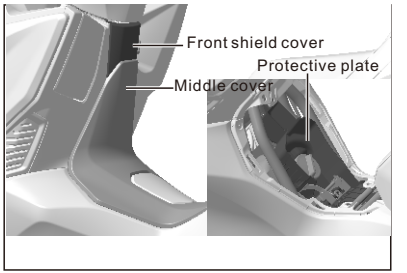
-Wrap the both ends of secondary fuel filter by cotton cloth to avoid the fuel splashing when removing the clamps on both ends, because there is residual fuel and pressure in the tube, the internal pressure makes the residual fuel splash out of the tube.

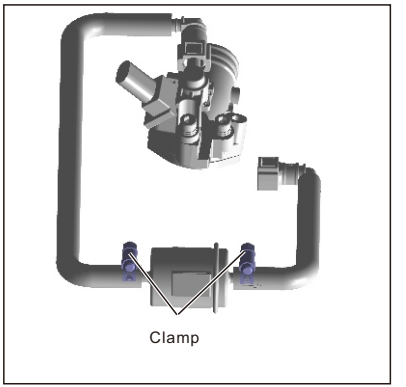
-Remove the clamps on both ends of secondary fuel filter by screwdriver.

-Replace the secondary fuel filter for a new one.

-The re-assembly is precisely opposite to disassembly.

-When removing the secondary fuel filter, absorb the splashing fuel from tube inside by cotton cloth.





⚠ Caution

Replace the secondary fuel filter each 5000km.

Dispose the replaced secondary fuel filter in environment friendly way.

The replacement for light signal

·If there is no light signal, you may be in danger, because the light helps others easily pay attention to you and your motorcycle.
Please replace the broken lights.

·The headlight, front position light, turning signal light, rear position light, brake light and registration plate light are all LED and sealed, in case broken, go to the service station for replacement. The replacement for lights please follow the description and specification below:
The dirt especially the grease on light's surface may be bad for heat radiation, which lead to light overheat even reduce its working life.

Parameters for electrical system	
Battery specification	12V8Ah
Headlight (High/Low beam)	12V 33W/14W
Front position light	12V 4.8W
Rear position light	12V 0.5W
Rear brake light	12V 12.6W
Front turning signal light	12V 1.2W
Rear turning signal light	12V 6W
Rear registration plate light	12V 0.257W
Specification for fuse chip	30A, 25A, 15A, 10A

⚠ Warning

When a signal light is broken, replace for a new one with completely same rating power and specification, otherwise the different one may lead to electrical circuit overload or light broken very early.

Maintenance plan

The table below shows you the inspection for each periodic maintenance, whose interval of time and mileage, set whom reached first as standard, and make the inspection as table below every time.

Items		Interval	Km x 1000						
			1	5	10	15	20	25	30
Power operation system	Lubricant		The first maintenance at 300km, second at 800km, the third at 1500, then replace lubricant each 2000km, then replace the synthetic lubricating oil of complete SN each 5000km						
	Element for lubricant		R	R	R	R	R	R	R
	Checking for lubricant level		I	I	I	I	I	I	I
	Checking for sealing of fuel pipeline		I	I	I	I	I	I	I
	Checking for element of fuel pump		\	\	I	\	I	\	I
	Fuel filter		\	R	R	R	R	R	R
	Throttle valve body		\	C	C	C	C	C	C
	Checking for coolant level		I	I	I	I	I	I	I
	Coolant	2 years	\	\	\	\	\	\	R
	Checking for sealing of air inlet system		I	I	I	I	I	I	I
	Valve clearance		I	I	I	I	I	I	I
	Spark plug clearance		\	I	I	R	I	I	R
	Element of air filter		I	C	R	C	R	C	R
	Oil for gear box		R	\	\	\	R	\	\
	Operation for throttle system		A	A	A	A	A	A	R
	Operation for clutch system		A	A	A	A	A	R	A
Lubrication system	Checking for tightness and lubrication for steering bearing		I	\	L	I	L	I	L
	Checking for lubrication of bearings on sprocket, front and rear wheel		\	L	L	L	L	L	L
	Checking for lubrication of turning shaft for main footrest and pillion step		\	L	L	L	L	L	L
	Checking for lubrication of shaft of side stand		\	L	L	L	L	L	L
	Checking for lubrication of shaft for brake and clutch lever		\	L	L	L	L	L	L
	Checking for lubrication on bearings of swinging rack of rear shock absorber		\	L	L	L	L	L	L
	Checking for lubrication for bearing on rear fork		\	L	L	L	L	L	L
Others	Voltage of battery		\	I	I	I	I	I	I
	Sealing performance of brake oil tube		I	I	I	I	I	I	I
	Brake liquid	2 years	I	I	I	I	I	I	I
	Brake liquid level		I	I	I	I	I	I	I
	Front and rear brake pad		I	I	R	I	R	I	R
	Front and rear brake switch		I	I	I	I	I	I	I
	Checking for fuel evaporation system		I	I	I	I	I	I	I
	Checking for flexibility of fastening piece		I	I	I	I	I	I	I
	Leakage on front and rear shock absorber		I	I	I	I	I	I	I
	Guiding rod of rear brake pad		Replace each 12000km						
	Engine front damping sleeve								
	Engine rear damping sleeve								
	I-ring for fuel tube								
	Meaning for each marks in table: I: Inspect C: Clean up R: Replace A: Adjust L: Lubricate								

Routine check table for key fastening parts

Ref. No.	Fastening position	Installation position	Thread	Numbers	Torque (N.m)
1	Installation bolt for lower disc brake pump	Front disc brake pump	M8 x 1.25	4	26±3.9
		Rear disc brake pump			
2	Locking nut and bolt for handle bar	Handle bar and steering stem	M10 x 1.25	1	40±5
3	Dust proof nut for steering stem	Steering stem and frame	M26 x 1	1	Fasten by torque of 80N.m for front wheel, then swing left and right twice, then turn back by 1/2 round, then lock up by torque of 10N.
4	Locking nut for steering stem	Steering stem and frame	M26 x 1	1	65
5	Locking bolt for front shock absorber	Front shock absorber and steering stem	M10 x 1.25	4	40±5
6	Locking nut and bolt for front wheel	Front wheel and front shock absorber	M12 x 1.25	1	50±5
7	Locking bolt for disc brake plate	Front brake plate and front wheel	M8 x 1.25	5	26±3.9
		Rear brake plate and rear wheel		4	
8	Locking bolt for ring gear	Ring gear and front wheel	M5	3	6±0.9
		Ring gear and rear wheel		4	
9	Locking bolt for fuel tank	Fuel tank and frame	M8 x 1.25	4	22±3.3
10	Locking bolt and nut for side stand	Side stand and frame	M10 x 1.25	1	40±5
11	Shaft and nut for engine holder	Engine holder and frame	M10 x 1.25	1	50±5
		Engine holder and engine		1	
12	Locking nut for rear shock absorber	Left rear shock absorber and frame	M12 x 1.25	1	50±5
		Left rear shock absorber and frame		1	
13	Locking bolt for rear shock absorber	Left rear shock absorber and engine	M8 x 1.25	1	26±3.9
		Right rear shock absorber and its connecting piece		1	
14	Locking bolt for main footrest's bracket	Bracket of left main footrest and frame	M6	2	9±1.35
		Bracket of right main footrest and frame		2	
15	Locking bolt for pillion step	Left pillion step set and frame	M8 x 1.25	2	22±3.3
		Right pillion step set and frame		2	
16	Locking bolt and nut for windshield's bracket	Windshield's bracket and frame	M8 x 1.25	2	26±3.9
17	Cap-shaped nut for locking muffler	Muffler and engine	M8 x 1.25	2	26±3.9
18	Locking bolt for muffler	Muffler and connecting piece of rear shock absorber	M8 x 1.25	3	26±3.9
19	Locking bolt for connecting piece of rear shock absorber	Connecting piece of rear shock absorber and engine	M10 x 1.25	2	40±5
20	Locking nut for output shaft of rear wheel	Output shaft of rear wheel	M16 x 1.25	1	120±5
21	Locking bolt for luggage rack	Luggage rack and frame	M8 x 1.25	4	22±3.3
22	Locking bolt for air filter	Air filter and engine	M6	2	9±1.35
23	Locking bolt for upper brake pump	Front upper brake pump and handle bar	M6	4	9±1.35
		Rear upper brake pump and handle bar			
24	Locking bolt for ABS oil tube	ABS oil tube and ABS controller	M10 x 1.0	4	24±3.6
25	Locking bolt for ABS oil tube	ABS oil tube and front brake pump	M10 x 1.25	4	35±5.25
		ABS oil tube and rear brake pump			
26	Connecting piece for high pressure oil tube	Oil tube of high pressure and fast change joint	Clamp set	4	4.5±0.5
		Oil tube of high pressure and fuel filter			

·Please carefully and strictly make periodic maintenance according to requirement of this book.

·The maintenance in the table only the least user needs to do. In case your motorcycle is usually driving under bad conditions, the maintenance shall be more frequent than the table

·After a long driving in sandy weather or muddy road, the special maintenance is necessary.

·We suggest this kind of work shall be done by VOGE dealer.

·Correctly dispose the abandoned materials such as cleanser or waste oil, don't let them to be pollutions.

The key for correct maintenance is the spare parts, in case you fail to confirm who made the parts, this kind of parts may lead to accident.

·We suggest this kind of work shall be done by VOGE dealer.

x.Maintenance for the motorcycle in long parking

Storage for motorcycle

The storage

·In case the motorcycle needs to park for a period without driving, the special maintenance is necessary, which need some special tools, equipment or technologies, because of this, we suggest these works shall be done by VOGE dealers.

·If your prefer to do these works by yourself, please do as below:

–Totally replace for new oil.

–Block the air inlet port of air filter and exhaust port of muffler by cloth with new oil, to avoid moisture get into engine,

–Totally drain off the fuel in the fuel tank.

–Remove the battery, then wash its surface by neutral soap water, meanwhile cleaning up the oxidizing material on its terminals.

–Store the battery in a room with temperature above 0℃.

–Adjust the tire pressure to stipulated one/

–Totally wash up the motorcycle.

–Spray the protective agent on rubber parts' surface

–Spread the protective wax for auto on the covering parts of this motorcycle

–Finally well cover the motorcycle by dry cloth and park the place with fine air ventilation.

⚠ Caution
Charge the battery monthly.

The re-use

·Totally clean up the motorcycle. Remove the cloth blocked the air inlet port of air filter and exhaust port of muffler.

·Totally replace the oil in engine and oil element. Re-install the battery. Start the motorcycle.

Protection for motorcycle

·According to the daily driving, usually wash the motorcycle and keep it clean and dry.

·Wash up the dirt, bird shit, asphalt or salt on motorcycle surface as quick as possible.

·Try best to cover the motorcycle by dry cloth, long time exposed under sunshine may make covering parts get aged or color fading.

The cleaning up for motorcycle.

·Wash the motorcycle by cold water.

·Totally wash up the motorcycle by soft cloth and neutral cleanser.

·Don't wash the motorcycle by spray.

·Don't wash the motorcycle by high pressure water.

·When driving motorcycle in low temperature, high moisture, rain or after washed, there may be some moisture in the lights, turn on the light for a while the moisture may disappear, because there is design of ventilation hole, which are normal.

⚠ Danger
The wet brake may have poor braking performance, so please repeatedly test the brake system after motorcycle washed, and fast dry it up.

XI.Electrical diagram

