VOGE

Far & Beyond Quality

MOTORCYCLE OPERATION MANUAL

SR450X

Welcome to VOGE

We say thanks and congratulations for your best choice on VOGE.

You need to know well about your motorcycle as same as yourself to keep driving safety under various road conditions. Please carefully read this book before your first driving on new motorcycle, which includes important information such as driving method, equipment and suggestions you need to strictly follow, also has messages of repair, maintenance, use and prevention, if there is still something in doubt, please contact VOGE dealer who is at your service any time. Best wishes for your every happy moment on driving fun.

About this book

This User manual includes important information such as attention, warning and danger reminder. Please make sure you are able to visit this book in official way all the time during service time of this motorcycle when it is under your name, especially when you are lending or selling this book to others, please make sure its new owner also be able to visit this book all the time, which is significantly important. The illustrations in this book may have tiny difference to actual model in some details, but their basic principles are completely same. The VOGE always keeps her high safety and quality due to constant research and improvement on design, so the User manual may be different to actual models in some tiny details, under this case, the VOGE dealers are at your service all the time on these questions for a correct guidance.

The Loncin Motor reserves the final authority for interpretation.

The directory

1.Issues need pay attention to 1
2.Safe driving 2
Information for loading, accessories and refit 2
Inspection before driving.....4
Issues need pay attention to before driving 6
Driving on road.....7
Braking and parking 8
3.Main technological parameters..... 10
4.Motorcycle structure 12
Motorcycle identification.....12
Head part 13
Left side 14
Right side 15
Lower side of seat.....16
5.Operations..... 18
Ignition switch 18
Meters and indicator lights 20
Meter operation.....30
APP installation for VOGE Global.....34
Installation and using for Carbit Ride 39
Switch assembly for handle bar 77
USB power supply joint “ ”.....82
ABS kit 83
TCS traction control system.....85
Side stand 86
Kill switch of side rolling 86

Fuel filling-up.....87
Seat opening.....90
Using of front luggage case 90
Opening and closing for fuel tank lock.....91
Remote key.....91
Electrical windshield.....92
Radar 93
6.In fault..... 96
Insufficient oil pressure 96
Hot coolant.....96
Insufficient coolant 97
Fault in engine management kit.....97
Engine starting failure 97
Difficult engine starting.....97
Weak engine power output 98
Troubleshooting 98
7.Grinding-in 99
Grinding-in for new motorcycle 99
Grinding-in of engine.....99
Running-in of tires.....100
Grinding-in of brake kit.....100
8.Adjustment..... 101
Back-view mirror adjustment.....101
Front brake lever adjustment 102
Adjustment for throttle grip.....103
Adjustment for rear shock absorber.....104
Adjustment for headlight beam 105
9.Inspection repair and maintenance 107

CVT kit maintenance.....107
Fuel.....108
Fuel evaporation.....109
Three-way catalyst..... 111
Tool kit.....112
Turning parts maintenance.....112
Battery.....113
Battery power charging.....113
External power supply and its using.....116
Air filter maintenance.....117
Maintenance for air filter outflow tube.....119
Engine oil.....120
Oil element replacement.....125
Coolant.....126
Brake liquid.....130
Tire.....132
Fuse chip.....136
Brake pad.....138
Light signal replacement.....140
Shock absorber inspection.....141
Maintenance plan.....142
10.Maintenance in parking time..... 144
Motorcycle storage.....144
Motorcycle protection.....145
Motorcycle cleaning-up.....145
Motorcycle working life and disposal.....146
11.Electrical diagram..... 147

1.Issues need pay attention to

The warning signs appear several places in this book, when you saw them, please strictly follow procedure for safe driving and daily maintenance.

⚠Danger	This sign means potential danger which lead to bad injury even death.
⚠Warning	This sign means probable damage to motorcycle.
⚠Caution	This sign means more effective and easy points for driving.

⚠Danger
This product suits driver with corresponding certificate for correct and cautious driving. Please pay attention to issues below: •Refit at will on this model is strictly forbidden; •Please strictly follow local laws and regulations; •Any refits on device or electrical parts of this model are all bad for noise, emission and other performance of this model.

With keeping improvement on this model, the actual model in your hand may not be the complete same to that in this book, please set the actual model as standard without our other related notice.

2.Safe driving

Information for loading, accessories and refit

The parts, accessories and other products authorized by VOGE dealer could be adopted, and there would be specialized service men to teach you their ways for assembly and using.

Please always adopt parts from VOGE directly and the ones permitted by us, if they are not made by VOGE or incorrect loading and accessory assembling are all bad for vehicle performance even breaking laws, please be responsible for safety on yourself and others.

⚠ Caution

All parts we equipped on this model were already passed test for safety, practicality and matching performance, and we are responsible on these parts, otherwise, we take no responsibility.

Any parts you planned to be replaced, please strictly follow local laws and regulations.

⚠ Danger

Incorrect loading, refit, accessories and maintenance are all the hidden risk for safe driving; Before driving, please confirm the vehicle is without overloading and strictly follow these descriptions.

Refit at will on parts such as controller kit may lead to accident and damage on motorcycle.

The change on motorcycle weight is a significant influence on power output performance, please strictly follow our requirement on loading and numbers for passengers.

Inspection before driving

If there is not inspection before driving, it is more likely lead to accident or damage. Please pay attention to issues below:

Steering kit

•Handle bar could be freely turned without jamming.

•Steering stem is without flexibility and run-out.

Throttle

•Gap for Throttle cable is correct.

•Operation of throttle grip is smooth without jamming.

Brake kit

•Brake lever could be normally operated.

•Brake liquid is at correct position in oil cup.

•No residual moisture and greasy dirt on working surface of brake plate and pads.

Shock absorber

•Press it down and it returned back smoothly.

•Check if there is oil leakage on front and rear shock absorber.

•No sand, ice and impurities on surface of fork tube of front shock absorbers.

Tire

•Air pressure in tire is correct.

•Depth for tire tread is correct without wearing out.

•No crack, damage or protrusion on tire surface.

Engine oil

•Oil level is correct.

Cooling kit

•Coolant level is correct

•Coolant is without leakage.

Lighting

•Headlight/Front position light, tail light/Brake light turning light, registration plate light and background light for meter could be normally on.

Indicator lights

•High beam indicator on meter, turning indicator, ABS and TCS indicator light could normally work. Indicator light for oil pressure alarm, engine fault, coolant temperature and fuel level are not on or blinking when engine started.

Horn

•Normally works.

Engine kill switch

•Normally works.

Side stand

•Could be normally laid and picked up.

•Interlocking to ignition switch normally works.

Back-view mirror

•Sit on motorcycle and keep it upright, the object with width of 4m and 10m far from motorcycle tail could be clearly seen from the mirror.

•If failed to be seen, please adjust angle of mirror.

Issues need pay attention to before driving

The driver and passengers should sit at front part of seat without moving left and right too much, which means the gravity center shall be in the front of seat. Animal passenger on the motorcycle is not allowed.

Make sure there is not any loosen cloth, skirt or other binding materials could get into turning wheel.

Overloading or unevenly distributed loading is bad for steady driving.

Suspending weight on handle bar is bad for turning even driving safety.

Fairing cover, windshield glass, backrest and other parts with large size are bad for steady driving and operation, which not only increased weight, but also decrease power performance due to bigger areas. Because parts above lack of test for design, so their assembly are bad for driving safety.

Please keep loading on installation position of joint between rear armrest and bracket under 10kg, otherwise it is bad for driving stability and safety, also bad for strength of rear armrest..

Driving on road

Before driving, please wear helmet, gloves, driving boots and other protective clothing and pants, which are necessary for short journey.

If you drive fast, factors below may be bad for your operation.

•Setup of spring kit

•Uneven distribution of loading

•Loosen clothing

•Too low the tire pressure

•Poor tire tread condition

Driving after drunk or took drugs is strictly forbidden.

⚠ Caution
This motorcycle equipped side stand/ignition interlock switch, even engine is working, lay down the side stand, the engine stops immediately.

⚠ Danger
Before motorcycle starting, please make sure the side stand is picked up to the top, otherwise, during driving, the side stand may touch ground and lead to accident.

Braking and parking

When front brake kit is working, the driver body leans forward and press front shock absorber down, there may be more weight focusing on front wheel instantly, in this case, the braking on front wheel is more reliable, so when using the brake, the front brake is more powerful than the rear one and get motorcycle stopping easier.

When driving on long and downhill road, please correctly use front and rear brake, otherwise overheat on brake kit may reduce braking performance even get failure, which is bad for safety.

When driving in rainy days or after water wading, the brake plate may have less braking performance due to touching water, please pay attention to and beware of effect from this kind of situation.

Moisture and dirt may reduce braking performance even lead to accident. Please dry and clean up brake kit, clean it totally if it is necessary. Make braking in advance, until the brake completely recovered its braking performance.

Moisture and dirt on brake plate and pad may get braking performance lower down. Under case below, please take the delayed or lower braking performance into consideration: Driving in rainy days or after wading, after motorcycle washing, driving on road with de-icing salt or with residual grease or oil on brake kit when it is maintained.

⚠ Warning

Parking on soft ground is not allowed to prevent side rolling and damage on motorcycle.

In case parking on gentle slope, please push forward the parking rod on rear brake lever and get the head of motorcycle facing to uphill side to prevent the turning of side stand which may lead to rolling over.

Parking on combustible material such as dry grass is not allowed, the three-way catalyst in muffler is with high working temperature which may get combustible materials catching fire.

3.Main technological parameters

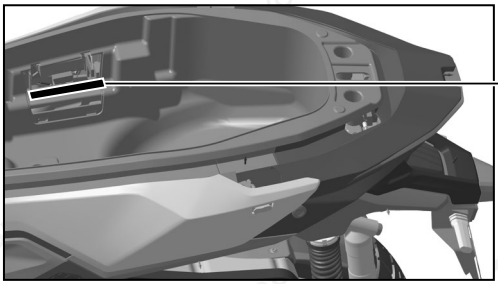
Parameters of motorcycle	
L X W X H	2175mm x 885mm x 1395mm
Wheel base	1525mm
Seat height	795mm
Ground clearance	180mm
Motorcycle weight	210kg
Max. loading	150kg
Max. weight	360kg
Front wheel loading	145kg
Rear wheel loading	215kg
Max. speed	139km/h
Max. gradability	≥44°
Brake deceleration	Execute according to GB20073
Fuel consumption	4.3L
Fuel tank capacity	18L
Coolant capacity	1.3L
Belt specification	1004mm x 27mm x 13.4 slope of 28°
Suspension/Braking kit	
Front shock absorber type	Shock absorber upside down/Fork tube φ37mm/Stroke 123mm
Rear shock absorber type	Dual rear shock absorber of air bag/ Stroke 122.5mm
Front wheel rim specification	3.0 X 17
Rear wheel rim specification	4.25 X 17
Front tire specification	110/70-17M/C
Rear tire specification	150/70-14M/C
Front brake type	Single plate, 4 pistons, floating caliper/ plate diameter 300mm
Rear brake type	Single plate, single piston, floating caliper/ plate diameter 240mm
ABS	ABS kit of dual passages

Engine kit	
Engine type	Twin cylinders, 4 strokes and water cooling
Bore x Stroke	64.0mm X 61.8mm
Displacement	397.6ml
Compression ratio	11.0:1
Air intake valve gap	0.18mm
Air exhaust valve gap	0.28mm
Spark plug gap	0.8mm-0.9mm
Spark plug specification	LMAR8J-9E
Max. net power/Rev	31kW/7500r/min
Max. torque/Rev	42N.m/5750r/min
Idling speed	1300±100r/min
Gear box type	Automatic
Clutch type	Dry and centrifugal
Oil capacity	1.7L
Fuel supply kit	EFI
Emission standard	State IV
Transmission kit	
Total transmission ratio	5.997-22.689
Primary CVT	0.692-2.618
End transmission ratio	8.667

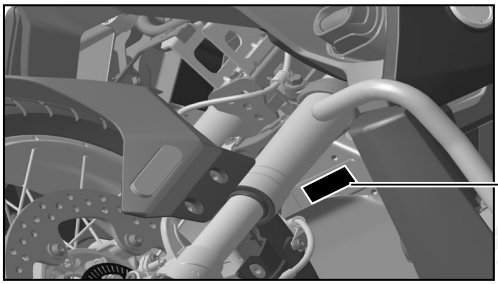
4.Motorcycle structure

Motorcycle identification

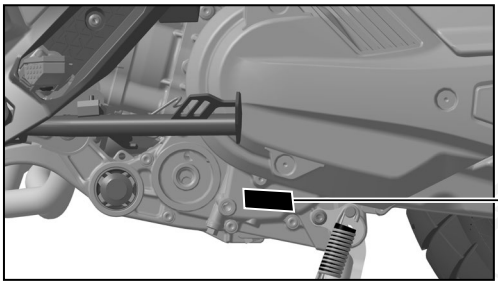
Vehicle Identification Number(VIN), Nameplate and Engine number



Vehicle Identification Number

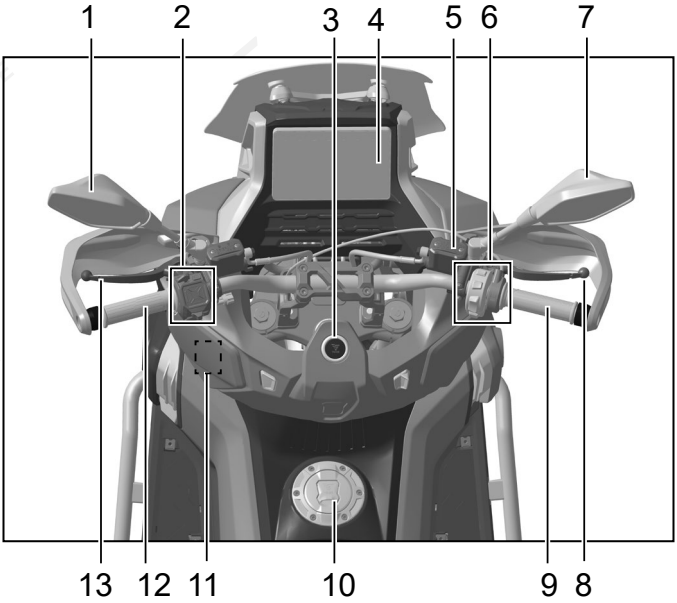


Nameplate



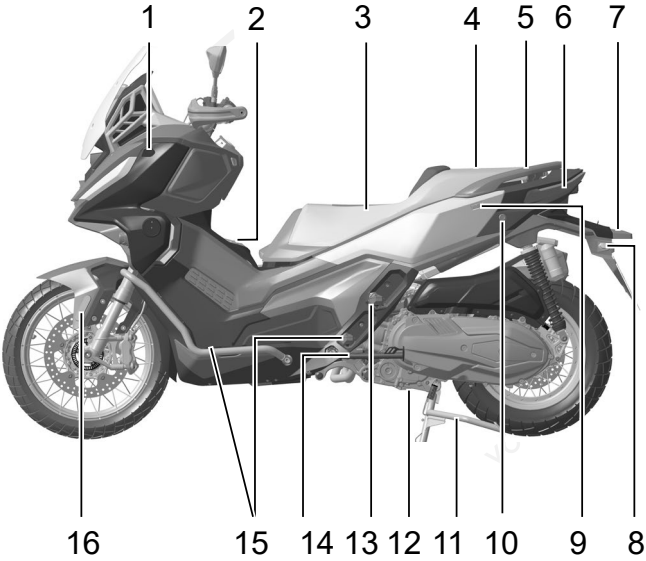
Engine Number

Head part



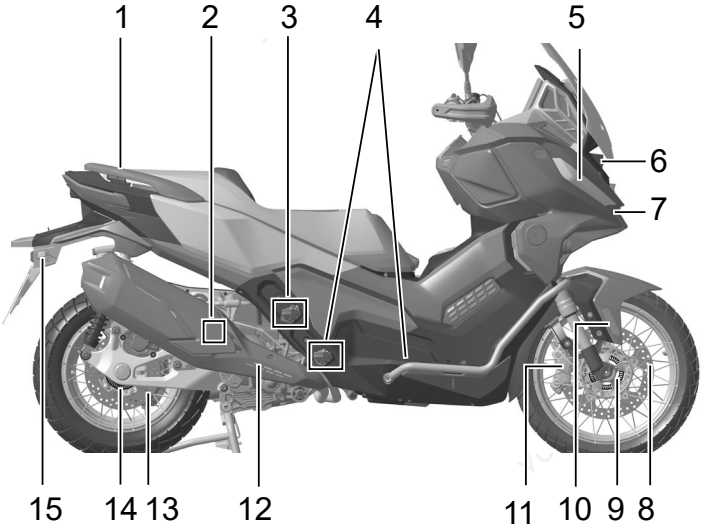
1.Left back-view mirror
2.Left handlebar switch
3.Ignition switch
4.Instrument cluster
5.Front disc-brake oil cup
6.Right switch assembly and accelerator base
7.Right back-view mirror
8.Front brake lever
9.Accelerator
10.Fuel tank cap
11.Power supply joint of USB
12.Left grip
13.Rear brake lever

Left side



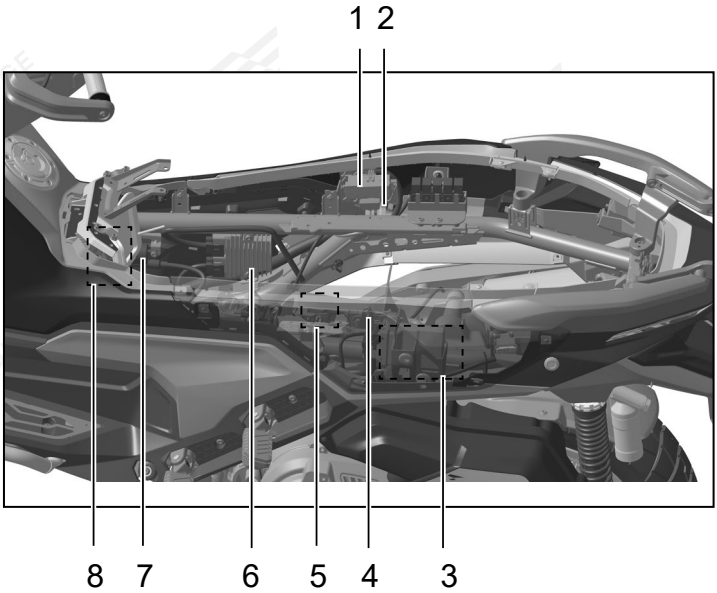
1.Left front turn signal lamp
2.Fuel tank
3.Driver seat
4.Passenger seat
5.Left side armrest
6.Taillight
7.License plate lamp
8.Left rear turn signal lamp
9.Passenger seat heating button
10.Seat lock
11.Main stand
12.Engine oil drain bolt
13.Left pillion step
14.Side stand
15.Left footpeg
16.Left side reflector

Right side



1.Right side armrest
2.Oil filling-up port
3.Right pillion step
4.Right footrest
5.Front position lamp
6.Camera
7.Headlight
8.Front brake disk
9.ABS gear ring（front）
10.Right side reflector
11.Front brake caliper
12.Muffler
13.Rear brake disk
14.ABS gear ring（after）
15.Right rear turn signal lamp

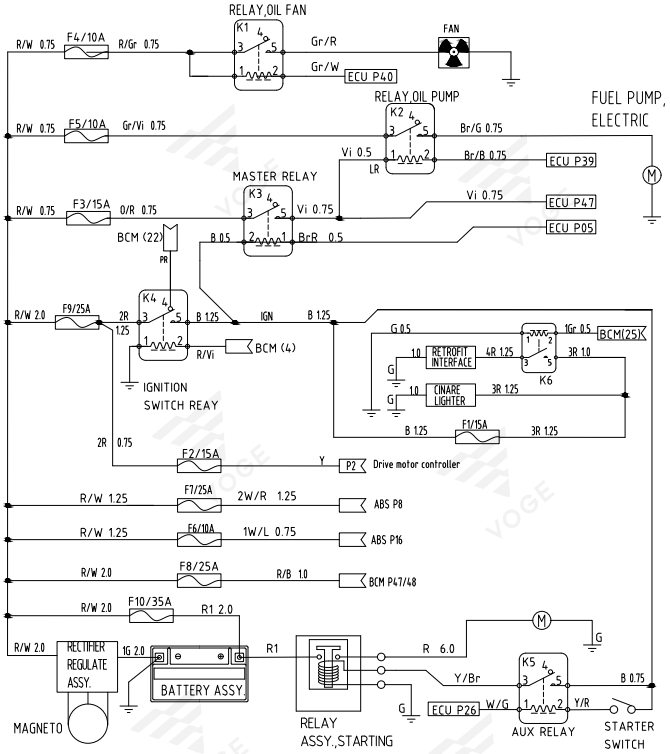
Lower side of seat



1.Fuse case
2.OBD diagnosis interface
3.BCM controller
4.ECU
5.Starting relay
6.Pressure regulating rectifier
7.Ignition coil
8.Battery

Simplified diagram for fuse and controlling relay

The power supply for this model separated to 10 branches, each branch got power from positive terminal of battery and with 1 fuse, which is separate without interference.



5.Operations

Ignition switch

The ignition switch of this model locates on the front of head part. This model equipped two pieces of remote key. (Include mechanical key). Ignition switch, steering lock, seat lock and fuel tank lock share a same key. Operation for ignition switch and steering lock is as below:

•When using the motorcycle, the remote key shall be within range of 1.3m to antenna.

•When motorcycle is power off, long press ignition switch could lock up the steering lock, then slightly turn the head to confirm if it is locked up.

•When wheel is running, the steering lock could not be locked up.

•When locking up the head, please turn the head to left limit, otherwise the locking-up may fail.

•When motorcycle needs be powered on, if head part is locked up, please short press ignition switch, then the steering lock may unlock, when the blue indicator for ignition switch off was blinked for 5 seconds, then short press once again to get motorcycle powered on.

•When head part is locked up, long press ignition switch for 3 seconds, the steering lock would unlock and motorcycle power on at same moment.

•When steering unlocked/locked up, the buzzer beeps once for reminder.

•When motorcycle was powered on, the blue indicator on ignition switch may keep on by 1 minute.

•When power in remote key ran out, stick the key to vertical groove on decorative cover of fuel tank lock on front of fuel tank, meanwhile short press ignition switch to get motorcycle powered on and start engine in one minute, otherwise the motorcycle may power off automatically.

•When driving speed is 0, if need to power off, only need to short press ignition switch. If long press ignition switch by 3 seconds, the power off and locking up of head part may achieve in same time.

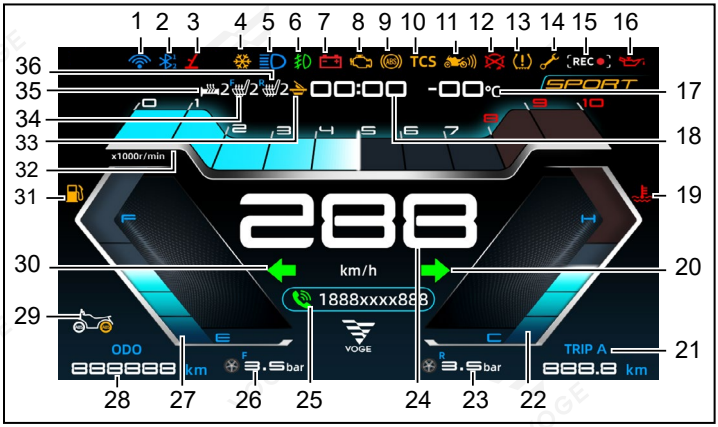
•When driving speed is higher than 0, press ignition switch, the motorcycle won't be powered off.

•Even within the range of 1.3m to antenna, put remote key to somewhere of motorcycle may lead to abnormal communication between remote key and motorcycle, which gets failure of power on or starting engine, wherever includes but not only front luggage case, places nearby steering stem, front surface of meter and rear luggage case.

⚠ Caution
For ensuring parking stability, please turn handle bar to left limit rather than right limit when locking it up. Red indicator light on ignition switch blinked for 3 times, which means there is abnormal communication between key and motorcycle. Blinked for 5 times, indicates steering lock is abnormal.

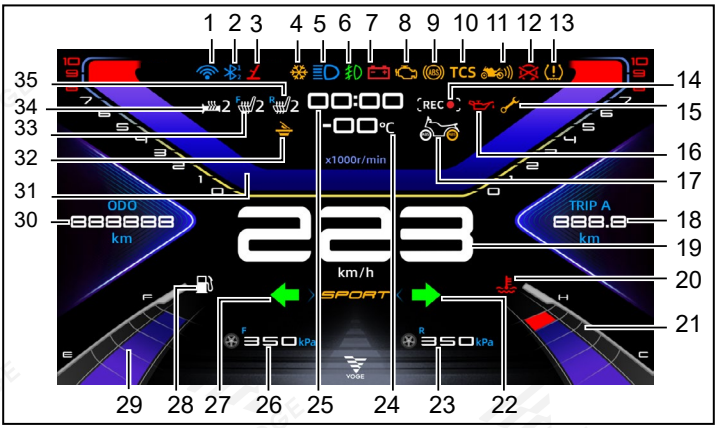
Meters and indicator lights

Sporty mode interface



1.WIFI connection
2.Bluetooth connection
3.Side stand status indicator
4.Surrounding low temperature indicator
5.High beam indicator light
6.Front fog light indicator light
7.Voltage alarm
8.Engine malfunction
9.ABS malfunction alarm light
10.TCS indicator
11.Radar
12.Indicator light for kill switch
13.Tire pressure warning
14.Maintenance reminder
15.Driving recorder
16.Oil pressure alarm
17.Surrounding temperature
18.Clock
19.Coolant temperature alarm
20.Right turning indicator
21.Trip
22.Coolant temperature indicator
23.Air pressure in rear tire
24.Vehicle speed
25.Call reminder
26.Air pressure in front tire
27.Fuel level indicator
28.Odometer
29.Front and rear wheel ABS indicator light
30.Left turning indicator
31.Low fuel level indicator
32.Engine speed
33. Fuel tank cap
34.Seat heat up indicator light(Front)
35.Grip heat up indicator light
36.Seat heat up indicator light(later)

Normal mode interface



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21.Coolant temperature indicator
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23.Air pressure in rear tire
24.Surrounding temperature
25.Clock
26.Air pressure in front tire
27.Left turning indicator
28.Low fuel level indicator
29.Fuel level indicator
30.Odometer/Call reminder
31.Engine speed
32.Fuel tank cap
33.Seat heat up indicator light（Front）
34.Grip heat up indicator light
35.Seat heat up indicator light(later)

TFT screen display

Meter power-on: When meter powered on, it shows you the setup of last time.

Bluetooth connection: When mobile phone was connected to meter through Bluetooth, the meter could achieve incoming call reminder (Shows call number + name), call listening, speaking and basic navigation.

Revving speed: Revving speed of engine. (r/min – Revving speed/Minute—Revving circles of crankshaft in current minute).

Coolant temperature: Current temperature of coolant. (Unit: ℃ , display range of -48 ℃ ~143 ℃ , when temperature is ≥116℃ , the alarm light of coolant temperature gets on, whose temperature indicator bar gets wholly red. When current temperature is out of range -48℃ ~143℃ , it shows you “—“).

Fuel level: Shows you the residual fuel level. When fuel in tank is about running out, the alarm light of fuel level gets from white to amber, and the last cell for displaying fuel level is blinking, which reminds you a prompt fuel filling-up.

⚠ Caution

The fuel in tank during driving is easy to wave, when fuel level is low, the level indicator may be sometimes amber and sometimes white due to fuel waving, which is normal, please don't worry. In case the alarm light changed to amber color, which means the residual fuel in tank is about 3L, please fill up with fuel as soon as possible.

⚠ Danger

Please cautiously operate the meter during driving, otherwise it may reduce your control on motorcycle.

Press down ignition switch, and meter starts self-inspection when it powered on:

•When self-inspection powered on, it shows you the current status of motorcycle.

•The alarm light "" for engine fault and oil pressure alarm light "" were powered on; ABS alarm light "ABS" and TCS indicator "TCS" are slowly blinking.

⚠ Warning

Please don't directly wash meter by high pressure water. Please don't wipe up meter by organic solvent such as gasoline and alcohol, they may lead to meter partly crack or color fading.

Left turning signal light“ ”

When pushed turning signal light switch on left switch assembly to left “ ”, the indicator light “ ” gets on and blinking.

Right turning signal light“ ”

When pushed turning signal light switch on left switch assembly to right “ ”, the indicator light “ ” gets on and blinking.

Engine malfunction alarm light“ ”

When there is fault in engine management system, alarm light “ ” gets on. Press down starting button, the indicator light “ ” powered for self-inspection; When engine started, the indicator light “ ” went off immediately.

Warning

If indicator light “ ” is on or blinking when engine started, at this moment, keep using motorcycle may lead to engine starting failure or fuel supply stopping.

If indicator light “ ” is on or blinking during driving, please stop driving immediately and contact VOGE dealer as soon as possible. When blinking frequency of turning signal indicator got higher, please check and confirm normal work of turning signal light.

ABS alarm light“(ABS)”

When there is fault in ABS kit, the indicator “(ABS)” keeps on; When turned off the ABS kit, the indicator light “(ABS)” is frequently blinking and only rear wheel is under control.

Short press ignition switch and motorcycle got power on, the indicator light “(ABS)” is slowly blinking; When driving speed is higher than 10km/h, the indicator light “(ABS)” goes off immediately.

⚠ Danger
When ABS is working, if indicator light “(ABS)” keeps on during driving, please stop driving immediately and contact VOGE dealer as soon as possible.

TCS indicator light “TCS”

When motorcycle was powered on, the TCS indicator light “TCS” is slowly blinking, when recovered normal driving, the light goes off.

Long press key “TCS” to get TCS On/Off. When it is off, the indicator light “TCS” for TCS keeps on. When every time motorcycle powered on, the default status of TCS is on.

When TCS is on, during driving, when rear wheel is skidding, the TCS may automatically reduce engine torque to get tire skidding less. When TCS is working, its indicator light “TCS” is frequently blinking.

⚠ Warning
When When TCS is on, during driving, if its indicator light “TCS” keeps on, which means there is fault in TCS, please contact VOGE dealer immediately.

High beam indicator light“”

When engine is running, push switch on left switch assembly of headlight forward, its indicator light “” powered on.

When engine is running, press down overtaking switch on left switch assembly, its indicator light “” powered on until you released the switch.

Oil pressure indicator light “”

When oil pressure is lower than normal range, the indicator light “” ” powered on.

Short press ignition switch and motorcycle powered on, the indicator light “” ” powered on immediately; When engine started, the indicator light “ ”” goes off immediately.

⚠ Caution

Indicator light “” for oil pressure doesn’t show you oil level, instead it indicates abnormal oil pressure, so please periodically check oil level.

Only correct way for checking oil level is: Check and confirm through the oil viewing hole.

⚠ Warning

If indicator light “” keeps on when engine started or during driving, at this moment, keep driving may leave damage on engine due to low oil pressure and poor lubrication. In this case, please stop driving and engine immediately and then check oil level.

Tire pressure alarm light “ ”

When matched up with tire pressure sensor, if there is pressure under or over range and power loss of sensor, the alarm light “ ” for tire pressure powered on.

When pressure in front tire is < 1.9 bar, the tire pressure shows red, meanwhile pressure alarm light powered on, when tire pressure is > 2.0 bar, the tire pressure shows white, meanwhile the alarm light goes off.

When pressure in front tire is > 3.0 bar, the tire pressure shows red, meanwhile pressure alarm light powered on, when tire pressure is < 2.8 bar, the tire pressure shows white, meanwhile the alarm light goes off.

When pressure in rear tire is < 2.0 bar, the tire pressure shows red, meanwhile pressure alarm light powered on, when tire pressure is > 2.1 bar, the tire pressure shows white, meanwhile the alarm light goes off.

When pressure in rear tire is > 3.2 bar, the tire pressure shows red, meanwhile pressure alarm light powered on, when tire pressure is < 3.0 bar, the tire pressure shows white, meanwhile the alarm light goes off.

If the tire pressure shows you a red bar instead of data, which means fault in pressure monitoring kit, please contact service station. Only when driving speed is over 25km/h or when tire pressure is changing, then the sensor send wireless signal to receiver.

⚠ Caution

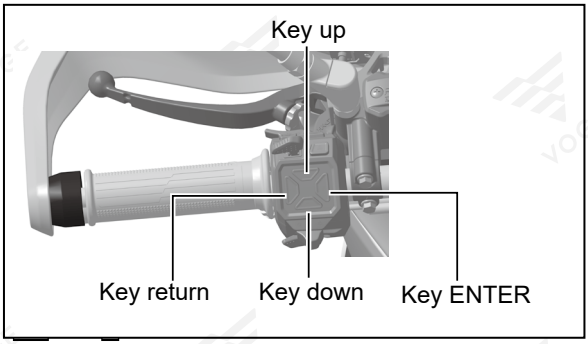
Only tire sensor of VOGE origin could be adopted.

When replaced tire pressure sensor or meter, please match up tire pressure once again, whose method please refer to Introduction for meter function.

When matching up the tire, please confirm which one is under matching and ID number shows on meter after matched to avoid mistake for tire identification between the front and rear one.

Meter operation

Button introduction



⚠ Caution

Short press means pressing for 0.5 second.

Short press key up to get into interface of internet mode, short press key return to quit.

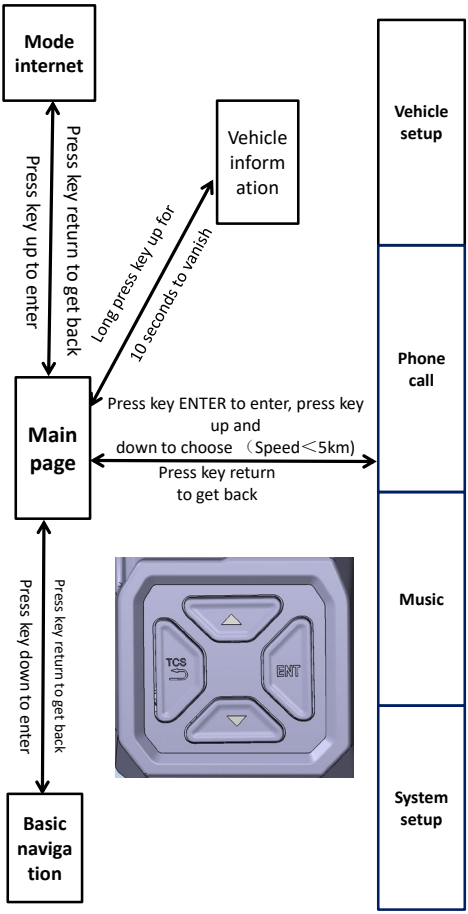
Under Bluetooth connection, when there is incoming call, short press key down to listen, short press key up to hang up, to achieve function of phone, please connect Bluetooth headset and mobile phone to meter.

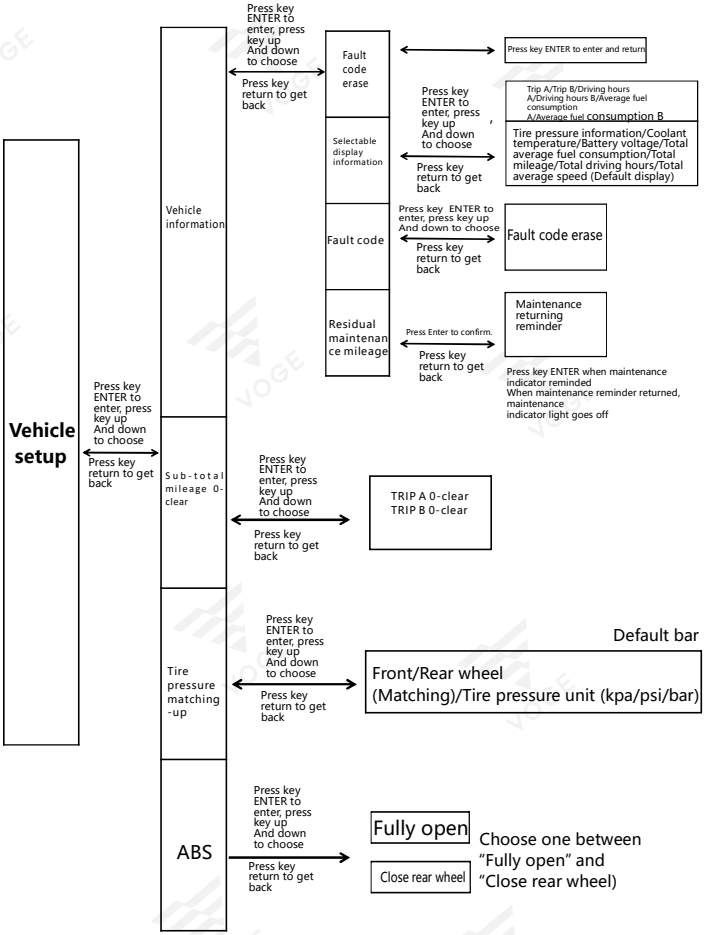
Short press key ENTER to get into interface of setup.

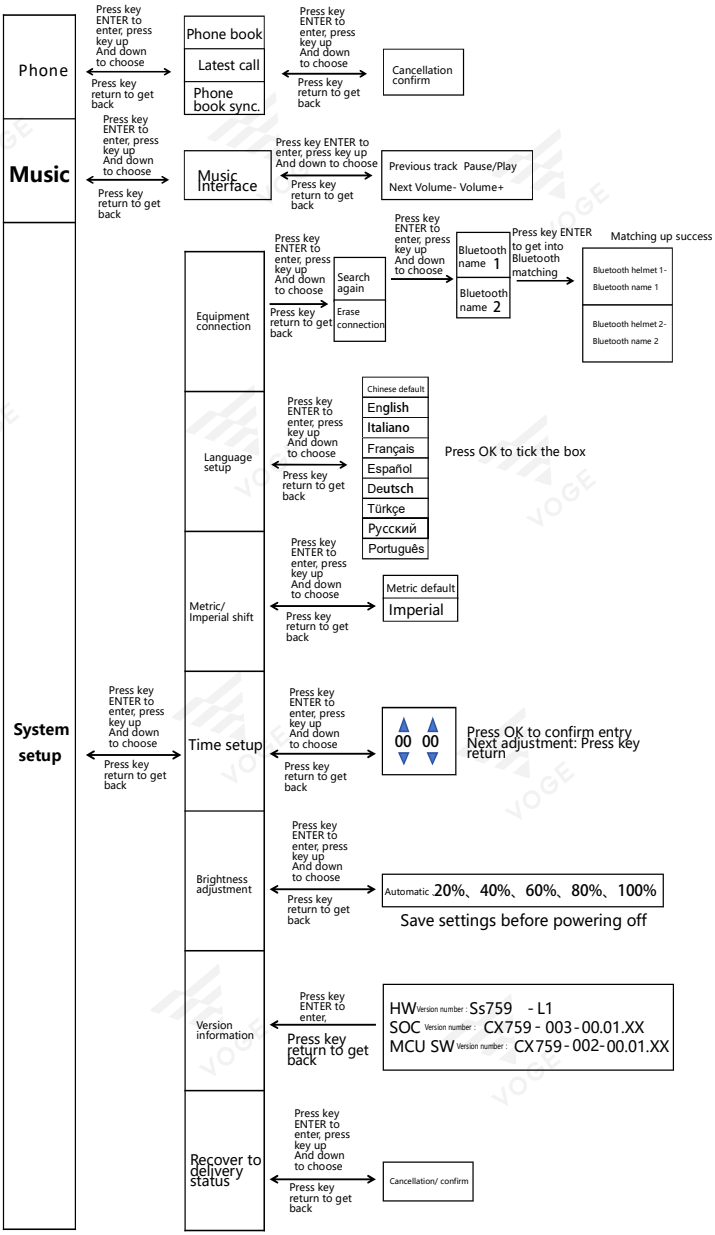
Primary menu: Motorcycle setup, phone, music and system setup.

Bluetooth basic navigation: Short press key down to shift to mode of basic navigation, short press key return to quit interface of internet and back to meter page.

Operation guide for meter menu




Vehicle setup
Press key ENTER to enter, press key up And down to choose
Press key return to get back
Vehicle information
Press key ENTER to enter, press key up And down to choose
Press key return to get back
Fault code erase
Press key ENTER to enter and return
Selectable display information
Press key ENTER to enter, press key up And down to choose
Press key return to get back
Trip A/Trip B/Driving hours A/Driving hours B/Average fuel consumption A/Average fuel consumption B
Tire pressure information/Coolant temperature/Battery voltage/Total average fuel consumption/Total mileage/Total driving hours/Total average speed (Default display)
Fault code
Press key ENTER to enter, press key up And down to choose
Press key return to get back
Fault code erase
Residual maintenance mileage
Press Enter to confirm.
Press key return to get back
Maintenance returning reminder
Press key ENTER when maintenance indicator reminded
When maintenance reminder returned, maintenance indicator light goes off
Sub-total mileage 0-clear
Press key ENTER to enter, press key up And down to choose
Press key return to get back
TRIP A 0-clear
TRIP B 0-clear
Tire pressure matching-up
Press key ENTER to enter, press key up And down to choose
Press key return to get back
Default bar
Front/Rear wheel (Matching)/Tire pressure unit (kpa/psi/bar)
ABS
Press key ENTER to enter, press key up And down to choose
Press key return to get back
Fully open
Close rear wheel
Choose one between "Fully open" and "Close rear wheel)


Phone
Press key ENTER to enter, press key up And down to choose
Press key return to get back
Phone book
Latest call
Phone book sync.
Press key ENTER to enter, press key up And down to choose
Press key return to get back
Cancellation confirm
Music
Press key ENTER to enter, press key up And down to choose
Press key return to get back
Music Interface
Press key ENTER to enter, press key up And down to choose
Press key return to get back
Previous track Pause/Play
Next Volume- Volume+
System setup
Press key ENTER to enter, press key up And down to choose
Press key return to get back
Equipment connection
Press key ENTER to enter, press key up And down to choose
Press key return to get back
Search again
Erase connection
Press key ENTER to enter, press key up And down to choose
Bluetooth name 1
Bluetooth name 2
Press key ENTER to get into Bluetooth matching
Matching up success
Bluetooth helmet 1- Bluetooth name 1
Bluetooth helmet 2- Bluetooth name 2
Language setup
Press key ENTER to enter, press key up And down to choose
Press key return to get back
Chinese default
English
Italiano
Français
Español
Deutsch
Türkçe
Русский
Português
Press OK to tick the box
Metric/ Imperial shift
Press key ENTER to enter, press key up And down to choose
Press key return to get back
Metric default
Imperial
Time setup
Press key ENTER to enter, press key up And down to choose
Press key return to get back
00 00
Press OK to confirm entry
Next adjustment: Press key return
Brightness adjustment
Press key ENTER to enter, press key up And down to choose
Press key return to get back
Automatic 20%、40%、60%、80%、100%
Save settings before powering off
Version information
Press key ENTER to enter,
Press key return to get back
HW Version number : Ss759 - L1
SOC Version number : CX759 - 003 - 00.01.XX
MCU SW Version number : CX759 - 002 - 00.01.XX
Recover to delivery status
Press key ENTER to enter, press key up And down to choose
Press key return to get back
Cancellation/ confirm

APP installation for VOGE Global

Installation and use

Download of VOGE Global

•Download of mobile Apple

Scan the QR code by camera on Apple mobile, when it identified, click the link then it jump to store interface for download;

Go to App Store of Apple mobile to search “VOGE Global” and download.

•Download of mobile Android

Open “Google” of mobile Android, then click button on right side of camera on Search bar, scan by camera, when it identified, it jump to store for download.

Scan QR code above by any scanner tool, when it identified, it jump to store for download;

Go to Play Store of mobile Android for searching and download directly.

Download of Apple mobile
App Store

Download of Android mobile
Google Play

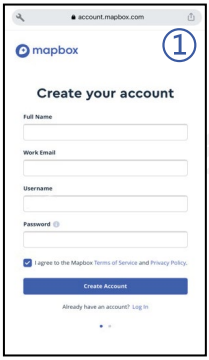
Obtain Mapbox token

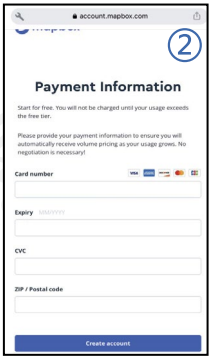
Open browser and search for mapbox. or click Mapbox

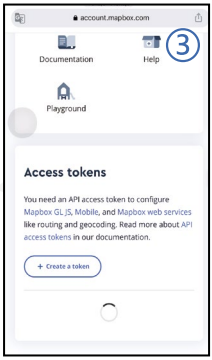
Input account information (Picture 1)

Input payment information (Picture 2)

When account registered, find out and clock “Create a token”, then apply for a certificate (Picture 3)



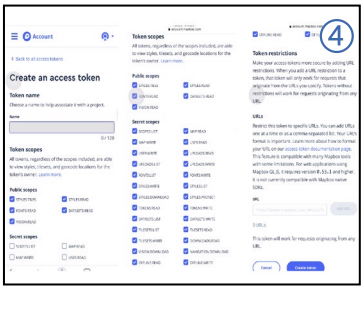


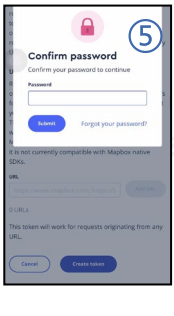


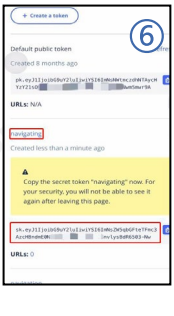
Input name of certificate and choose the scope of application, then click “Create token” (Picture 4)

Input code for confirmation and achieve certificate creation (Picture 5)

The created token could be found at bottom of page, but it won’t show you at your next login, so please carefully keep the token (Picture 6);

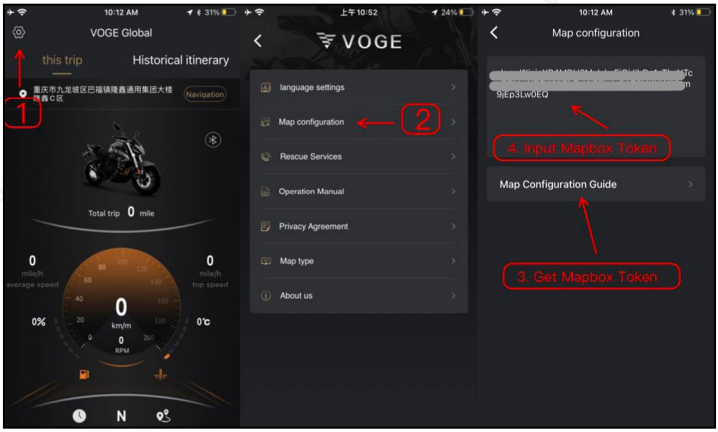




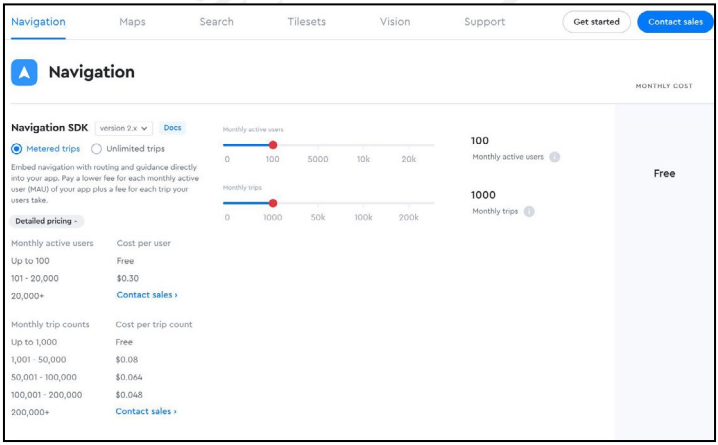


Map configuration of VOGE Global

Open VOGE Global, then open Setup->Map configuration->Map configuration guide->Fill blanks for Mapbox Token. (The user needs apply for Mapbox Token by himself then fill its blanks, otherwise the navigation doesn’t work)

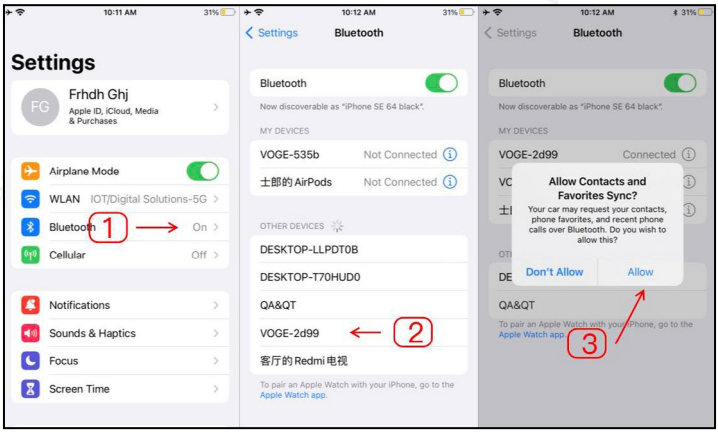


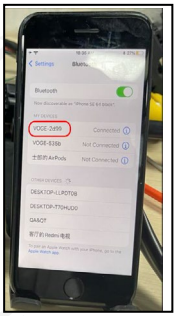
Price introduction for Mapbox



The use of basic Bluetooth navigation

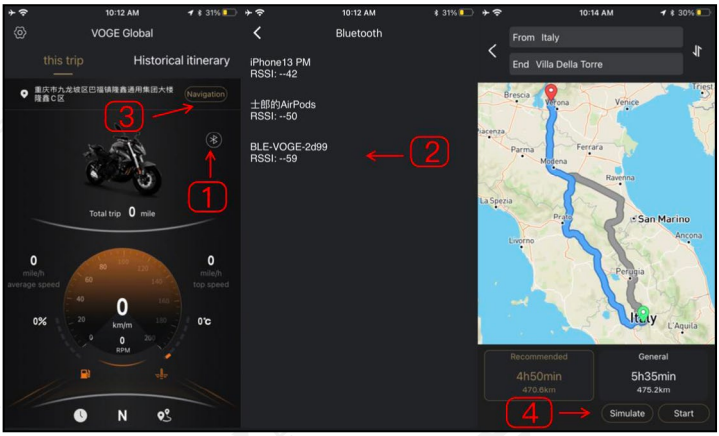
Get motorcycle power on, Open Setup->Bluetooth, choose Bluetooth name with beginning of (VOGE-), then connect to the Phone book the one is allowed, when connected, the meter may show you icon of (Bluetooth 1);

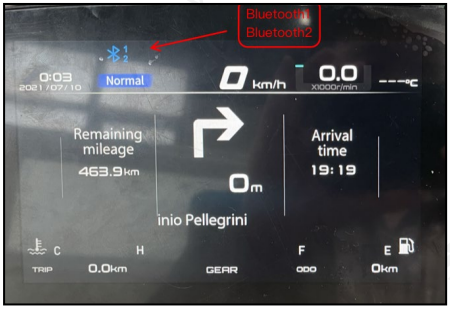


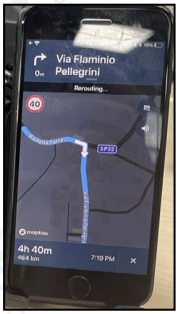


Click icon of Bluetooth then connect to Bluetooth with beginning of (BLE-VOGE-), when it connected, the icon of Bluetooth may get to yellow, the meter may how you (Bluetooth 2) icon, at this moment, click key down on switch assembly to shift to page of navigation of meter;

When using navigation of VOGE Global, the meter may shows you information of navigation.





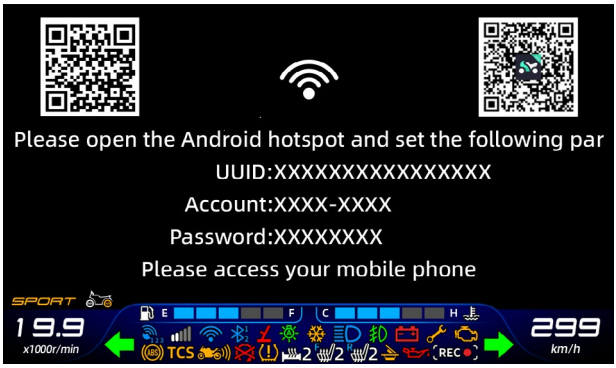


Installation and using for Carbit Ride

APP connection of mobile internet

Short press key “▲” to shift to mode internet, short press key “▲” once again the quit page

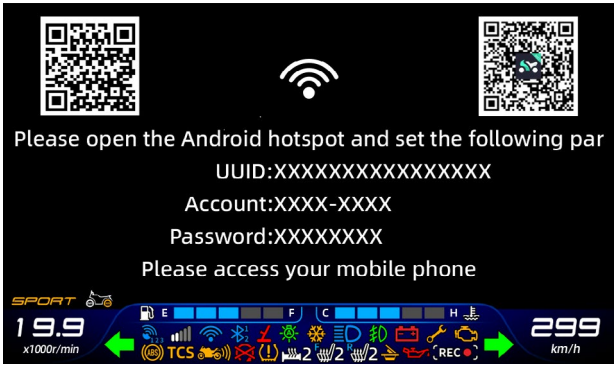
of internet and get back to meter page. (The button function please refer to P30)



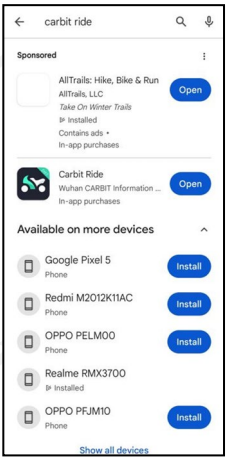
•APP downloading

Short press “▲” and “▼” to choose mode internet, then short press key ENT on switch

assembly to confirm, then scan QR code on right upper corner of meter screen to download.



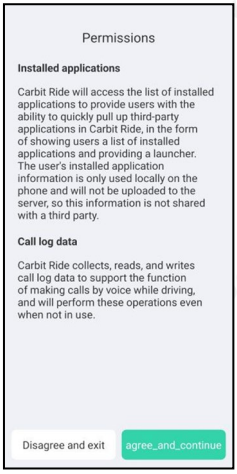
Search APP Google from application store to download “Carbit Ride”.

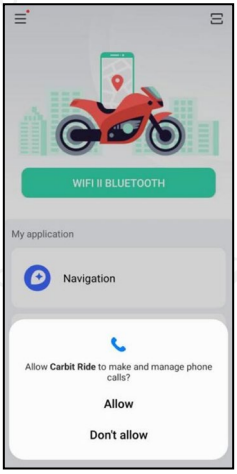


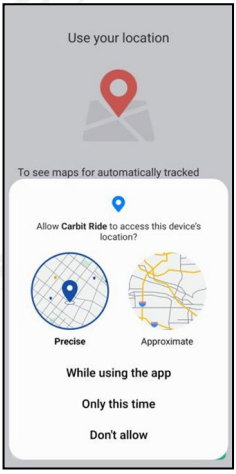
•Installation of APP

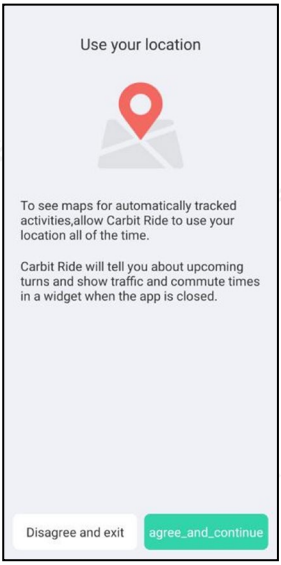
When downloading finished, choose installation and begin to install APP, the first time open

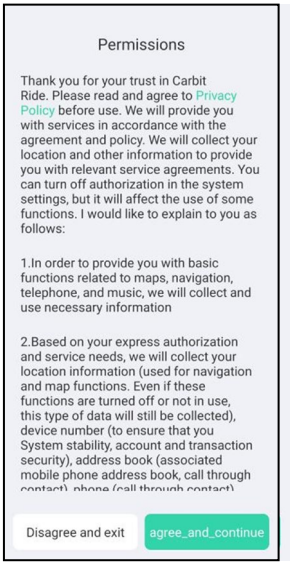
the APP there is page and permission for authorization, choose agree for both of them.

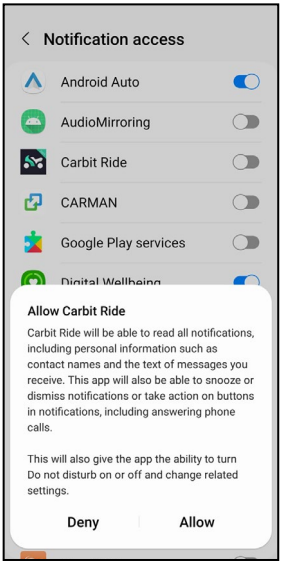


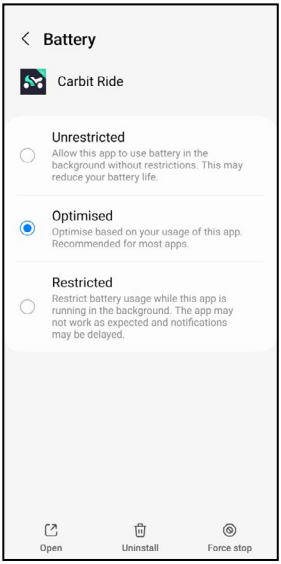





Use your location
To see maps for automatically tracked activities,allow Carbit Ride to use your location all of the time.
Carbit Ride will tell you about upcoming turns and show traffic and commute times in a widget when the app is closed.
Disagree and exit
agree_and_continue

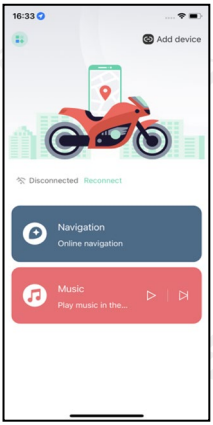

Permissions
Thank you for your trust in Carbit Ride. Please read and agree to Privacy Policy before use. We will provide you with services in accordance with the agreement and policy. We will collect your location and other information to provide you with relevant service agreements. You can turn off authorization in the system settings, but it will affect the use of some functions. I would like to explain to you as follows:
1.In order to provide you with basic functions related to maps, navigation, telephone, and music, we will collect and use necessary information
2.Based on your express authorization and service needs, we will collect your location information (used for navigation and map functions. Even if these functions are turned off or not in use, this type of data will still be collected), device number (to ensure that you System stability, account and transaction security), address book (associated mobile phone address book, call through
Disagree and exit
agree_and_continue

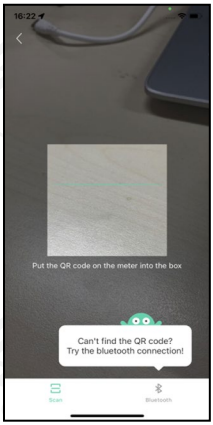

Notification access
Android Auto
AudioMirroring
Carbit Ride
CARMAN
Google Play services
Allow Carbit Ride
Carbit Ride will be able to read all notifications, including personal information such as contact names and the text of messages you receive. This app will also be able to snooze or dismiss notifications or take action on buttons in notifications, including answering phone calls.
This will also give the app the ability to turn Do not disturb on or off and change related settings.
Deny
Allow

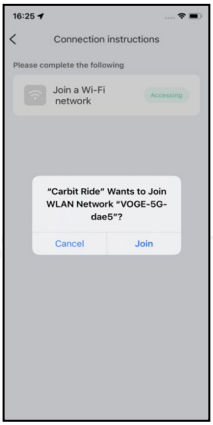

Battery
Carbit Ride
Unrestricted
Allow this app to use battery in the background without restrictions. This may reduce your battery life.
Optimised
Optimise based on your usage of this app. Recommended for most apps.
Restricted
Restrict battery usage while this app is running in the background. The app may not work as expected and notifications may be delayed.
Open
Uninstall
Force stop

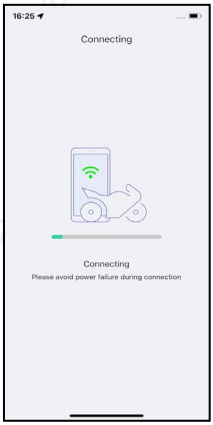
•Scan and connect

Open APP “Carbit Ride”, choose [WiFi connection II Bluetooth connection], scan QR code onleft upper corner on screen, then connect to WiFi according to reminder, the APP may start theconnection automatically without setting up. When it scanned, it may start connection tonternet, when it connected, it reminds you whether connect to internet, choose agree to connect to internet.









•Manual connection

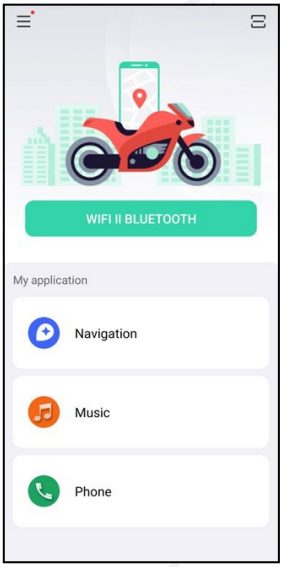
Mobile Android

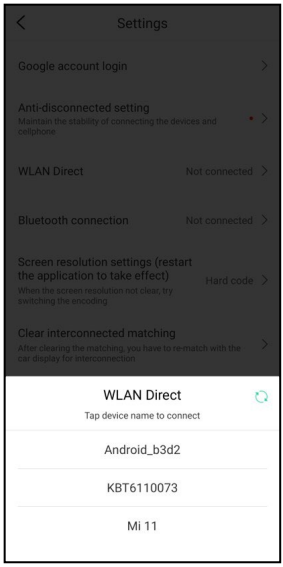
Step 1st : Choose icon or 3 bars on left upper corner of APP to get into page of setup;

Step 2nd : Choose direct connection of WLAN, then search for equipment of connection;

Step 3rd: Choose the equipment with WiFi name displaying on screen to connect;

Step 4th: When it connected, choose internet connection immediately.



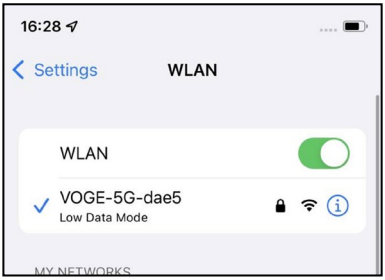


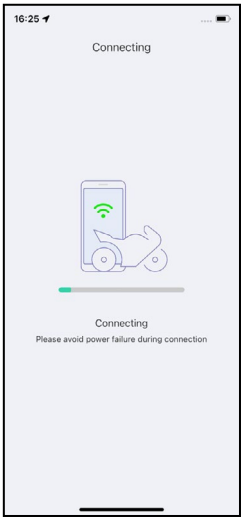
Mobile Apple

Step 1st: Get into page of setup, choose wireless LAN, find out the WiFi equipment with same name to screen display and connect;

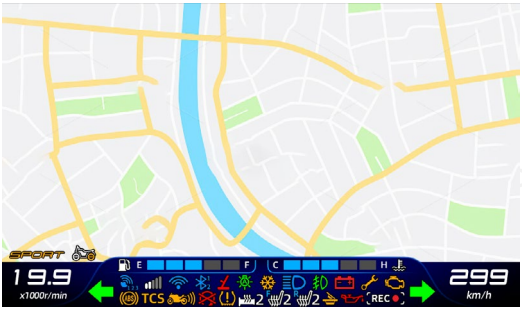
Step 2nd: Input code 12345678 to finish WIFI connection;

Step 3rd: When it connected, then open APP “Carbit Ride”, it may achieve internet connection automatically and show you successful connection.





When it connected, the blue indicator sigh of WiFi powered on, show you the navigation projection as below:



⚠ Caution

During scanning and connection, the WiFi of mobile phone must be always open.

When the screen of Mobile Apple locked up, the meter shows you the mode of basic navigation without map, only arrow and letters.

Mobile phone in different specification may not be same due to various net signal, during navigation, the net may sometimes cut off for a while.

The WLAN in different versions are with problem of compatibility, so this terminal end could not make sure all mobile phones are able to connect through WLAN/Hot point.

Installation or using for APP “Carbit Ride”, the setup of mobile phone shall give all permissions from reminder.

Anti-disconnection for screen locking-up

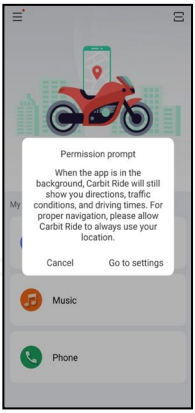
•Allow permission for background functioning of navigation

Step 1st: Long press [Carbit Ride], then click[Application information].

Step 2nd: Choose [Permission].

Step 3rd: Choose [Position information].

Step 4th: Choose [Always allow].

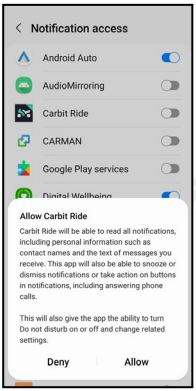


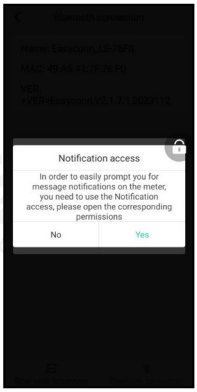
•Allowing notification access

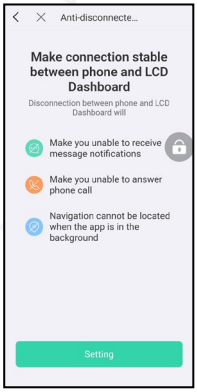
Step 1st: Long press [Carbit Ride], then click [Application information].

Step 2nd: Choose [Notification].

Step 3rd: Choose [Notification access].





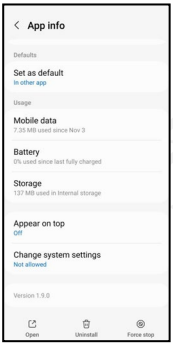


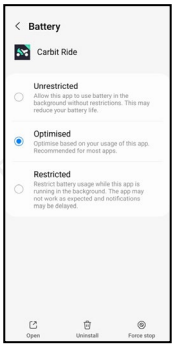
•Allowing application automatically start

Step 1st: Long press [Carbit Ride], then click [Application information].

Step 2nd: Choose [Battery].

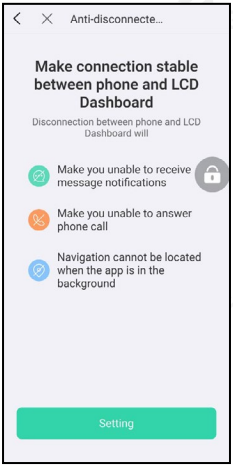
Step 3rd: Choose [Allow background functioning].

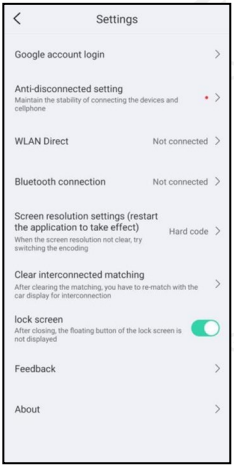


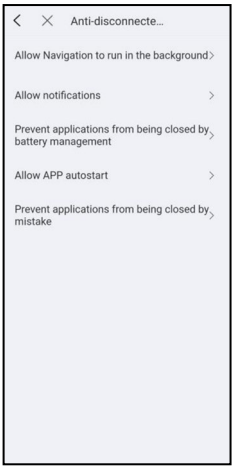


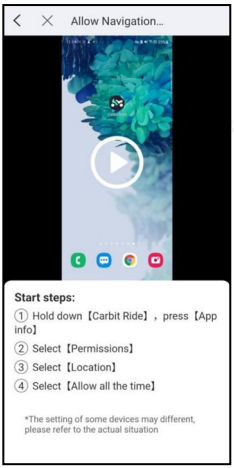
•Anti-disconnection video

There is video of anti-disconnection in APP, please click icon on left upper corner of APP to enter, then choose viewing.





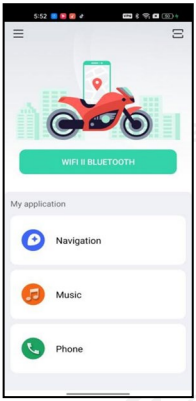




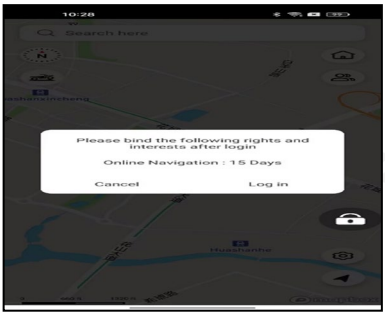
Using introduction for Mapbox

APP CarbitRide provides overseas navigation basing upon Mapbox, which supports you viewing location, searching address, planning route and navigation at real tine. This function is subscription, please pay it first them it unlocked and could be using, whose operation steps shows as below:

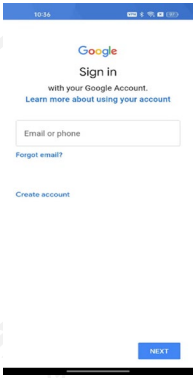
•When APP was opened, it connected to meter:



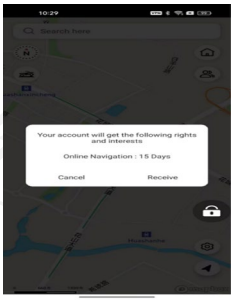
•Click access of [Search] on map page, it reminds you when you logged in, it binds your right of navigation.

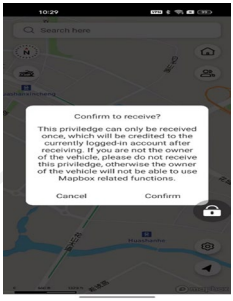


•When clicked [Google sign in], please choose [Create account], then get enter into page needs to log in.

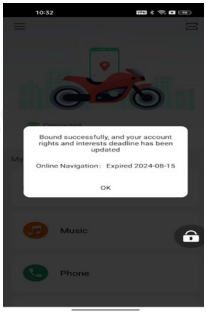


•When logged in, please click access of [Search] on map page, then it reminds you if you need the right.

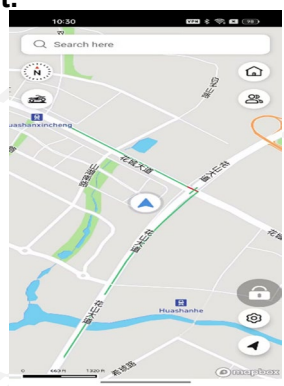




•Confirm receive the right, bind the right to your account.

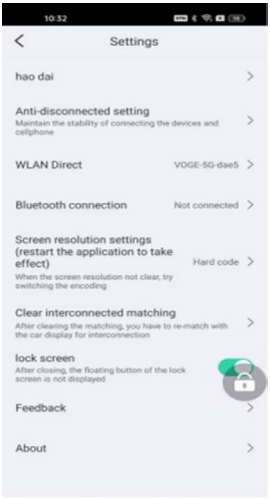


•Confirm receiving of right, then bind the right to your account.

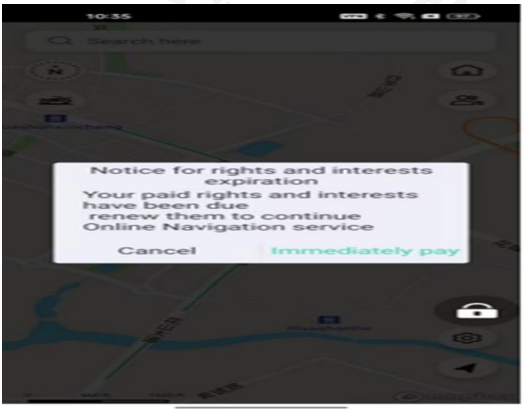


•Search the destination then start the navigation and it could be normally projected to meter.

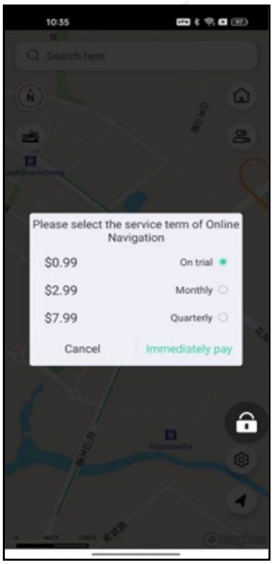
•You can find out access of login in Setup, also could shift account and check days remaining.

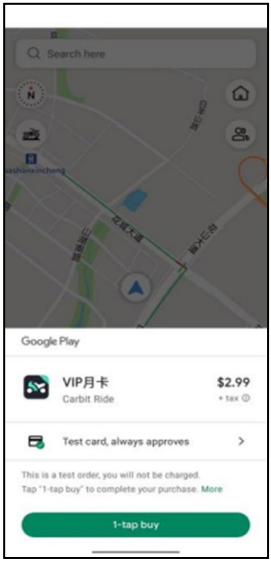


•When expired, click once again the access of [Search] on map page,then it reminds you payment once again.



• **Click immediate payment, choose the products you need to pay.**

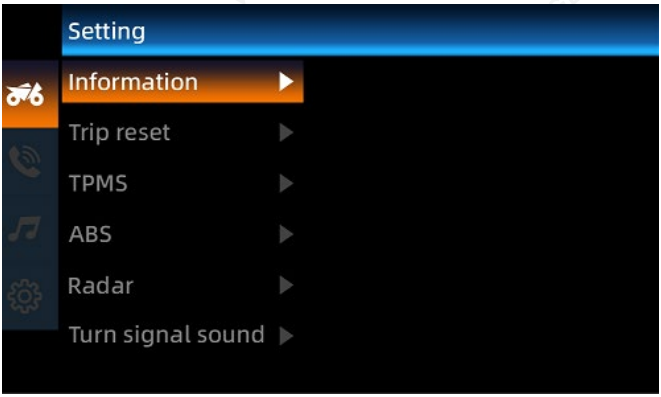




⚠ **Caution**
Please set the actual version of “Car bit Ride” as standard, this book is for reference only.

Enter page of Setup

In the menu of Setup, the user could read, check, adjust and set up for contents below:Motorcycle information, Sub-total mileage 0-clear, tire pressure matching up, ABS and radar.



Motorcycle information-Basic information

In the page of basic information, the user could check battery voltage, total driving hours,coolant temperature, total mileage, average speed, total average fuel consumption, tirepressure and tire temperature.

Short press key ENTER to enter menu page;

Short press key up or down to choose motorcycle setup, short press key ENTER to enter page of Setup; Short press key up or down to choose motorcycle information, short press keyconfirm to enter page of motorcycle information, then the basic information could be checked.

Short press key return to quit basic information.

Motorcycle information – Selectable displaying information

In the page of Selectable displaying information, the use could choose or cancel sub-total mileage A, sub-total mileage B, driving hours A, driving hours B, average fuel consumption A,average fuel consumption B, tire pressure information, coolant temperature, battery voltage,total average fuel consumption, total mileage and total driving hours.

Short press key ENTER to get into menu page;

Short press key up or down to choose motorcycle setup, short press key ENTER to enterpage of Setup; Short press key up or down to choose motorcycle information, short press keyconfirm to enter page of motorcycle information;

Short press key up or down to choose Selectable displaying information, short press keyconfirm to spread the Selectable displaying information; Short press key return to quit Selectable displaying information.

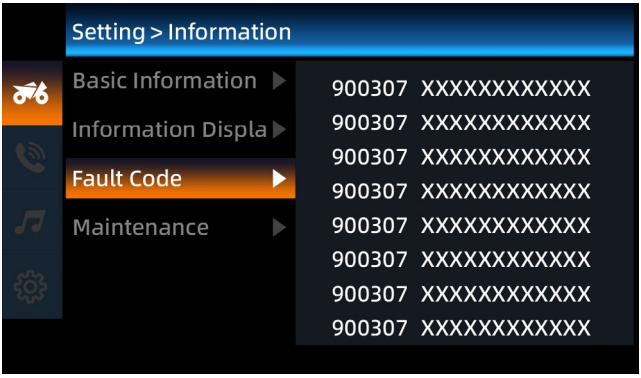
Motorcycle information – Fault code

In the page of fault code, the user could check fault content and its reminder from monitoring kit, when fault code was seen, please make troubleshooting immediately, please contact VOGE service station.

Short press key ENTER to get into menu page;

Short press key up or down to choose motorcycle setup, short press key ENTER to enter page of Setup; Short press key up or down to choose motorcycle information, short press key confirm to enter page of motorcycle information; Then the current fault could be checked.

Short press key return to quid fault code.



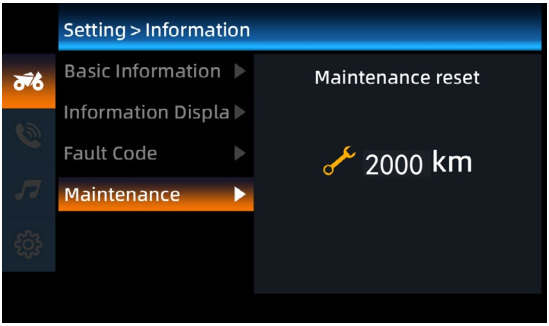
Motorcycle information– Remaining maintenance mileage

In page of remaining maintenance mileage, user could check current remaining maintenance mileage, its related information and reset the remaining mileage. When motorcycle reached mileage for maintenance, the meter may show you reminder sign, which reminds you to contact local VOGE dealer or service station for maintenance.

Short press key ENTER to get into menu page;

Short press key up or down to choose motorcycle setup, short press key ENTER to enter page of Setup; Short press key up or down to choose motorcycle information, short press key confirm to enter page of motorcycle information; Short press key up or down to choose remaining mileage for maintenance; Short press key ENTER to enter maintenance information return then the remaining mileage could be checked;

Short press key return to quit remaining maintenance mileage.



Reset for remaining maintenance mileage

When the remaining mileage is “0 km”, in the page for checking it (Choose maintenance reminder return), directly short press key ENTER could achieve the reset, the meter reset shows you the distance to next maintenance;

Short press key return to quit remaining maintenance mileage.

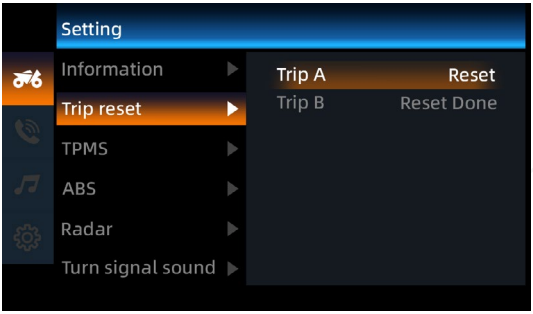
Sub-total mileage 0-clear

Short press key ENTER to enter menu page;

Short press key up or down to choose motorcycle setup, short press key ENTER to enter page of motorcycle setup;

Short press key up or down to choose sub-total mileage 0-clear, short press key ENTER to enter its page;

Short press key up or down to choose Trip A 0-clear/Trip B 0-clear, short press key conform to clear data of Trip A/Trip B to 0; Short press key return to quit sub-total mileage 0-clear.

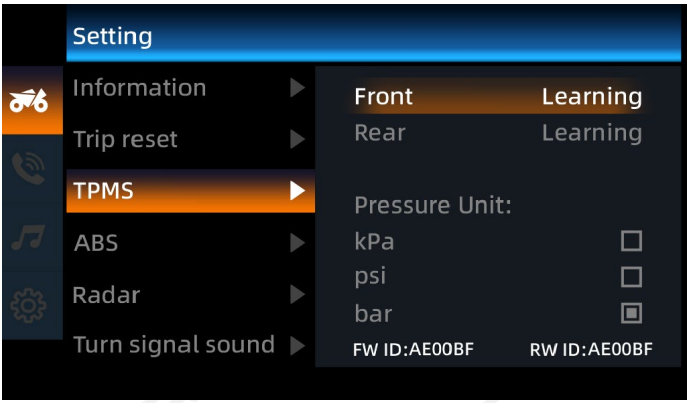


Tire pressure matching-up

Short press key ENTER to enter menu page;

Short press key up or down to choose motorcycle setup, short press key ENTER to enter page of motorcycle setup; Short press key up or down to choose tire pressure matching-up, short press key ENTER to enter page of tire pressure matching-up;

Short press key up or down to shift between front and rear tire, short press key ENTER to confirm which need to match up, keep discharging for tire until reminder success could be seen; Short press key up or down to choose corresponding unit for tire pressure, then short press key ENTER to choose shift; Short press key return to quit tire pressure matching-up.



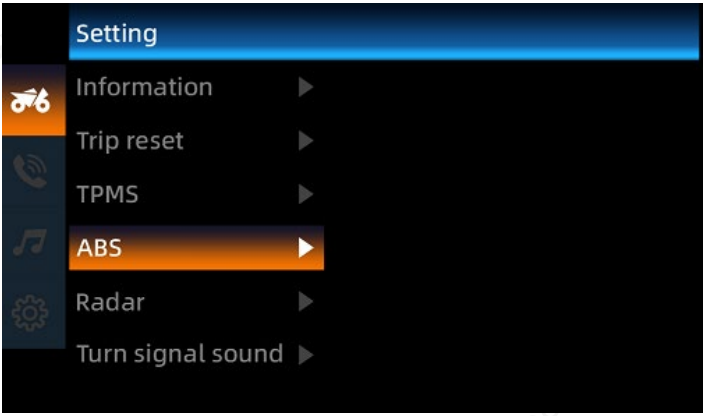
ABS switch

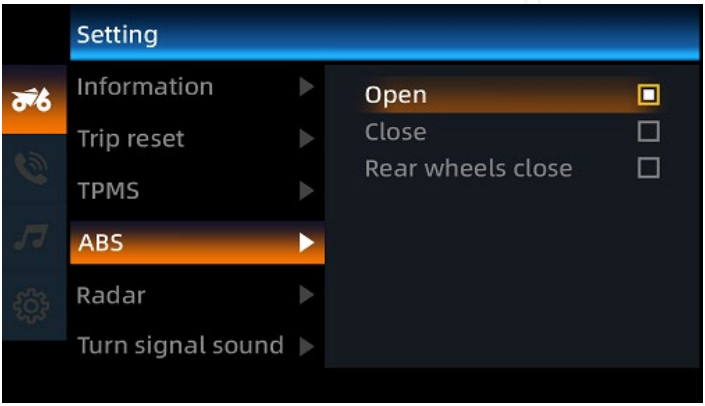
The default for ABS when motorcycle powered on is open.

•Enter menu ABS, short press key ENTER to enter setup of ABS.

•Short press key ENTER for on/off for ABS of rear wheel.

•Short press key return to quit setup of ABS.



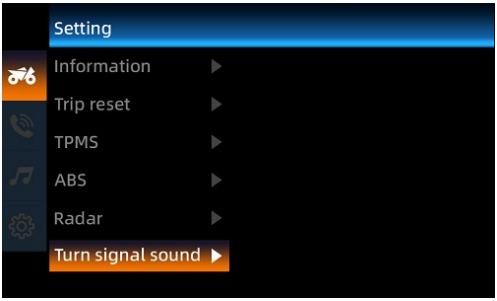


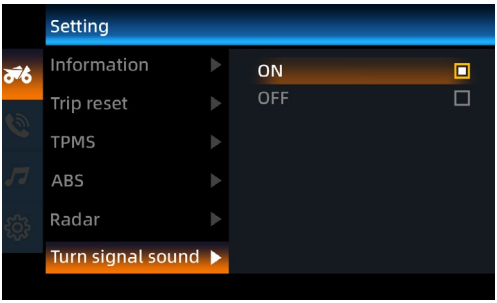
Steering voice switch

•Enter menu of steering voice, short press key ENTER to enter setup.

•Short press key ENTER to get steering voice switch on/off.

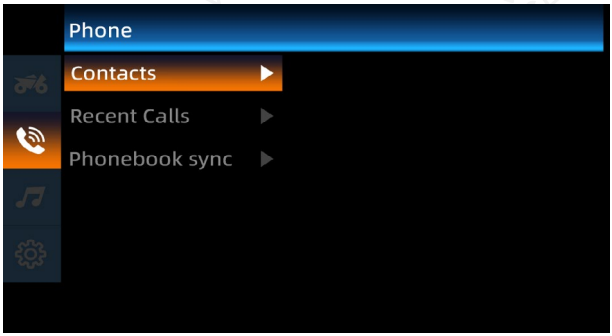
•Short press key return to quit setup of steering voice.





Phone call

In the list of phone call, the user could make phone book sync., check phone book and the latest call.

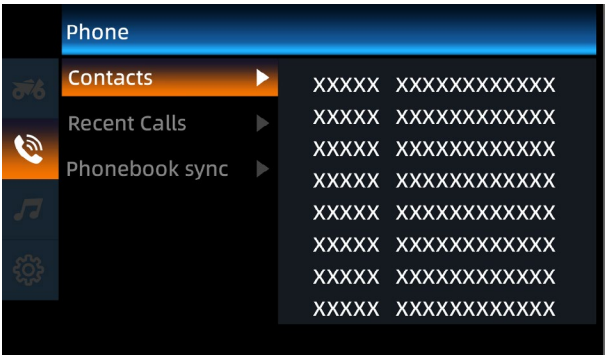


Phone book

In the page of phone book, the user could make phone call in phone book and record through Bluetooth connection. Short press key ENTER to enter menu page;

Short press key up or down to choose phone call, short press key ENTER to enter page of phone call;

Short press key up or down to choose phone book, short press key ENTER to enter page of phone book; Short press key up or down to choose the person in phone book, short press key ENTER to make phone call; Short press key return to quit phone book.

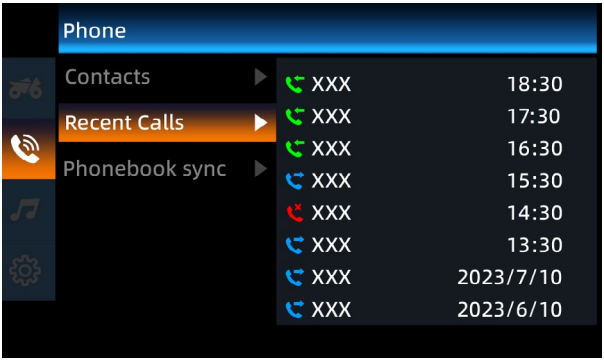


The latest phone call

In the page of latest phone call, the user could make phone call in the latest call record through Bluetooth connection. Short press key ENTER to get enter menu page;

Short press key up or down to choose phone call, short press key ENTER to enter page of phone call;

Short press key up or down to choose latest phone call, short press key ENTER to enter page of latest call; Short press key up or down to choose the name or number in latest call, short press key ENTER to make phone call; Short press key return to quit latest phone call.

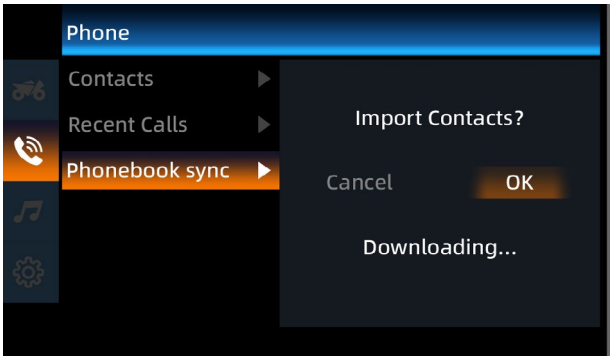


Phone book sync

In the page of latest phone book sync., the user could achieve phone book sync. in call record list of phone book through Bluetooth connection. Short press key ENTER to get enter menu page;

Short press key up or down to choose phone call, short press key ENTER to enter page of phone call;

Short press key up or down to choose phone book sync., short press key ENTER to enter page of phone book sync.; Short press key up or down to choose confirmation, then short press key ENTER to achieve phone book ync.; Short press key return to quit phone call sync.

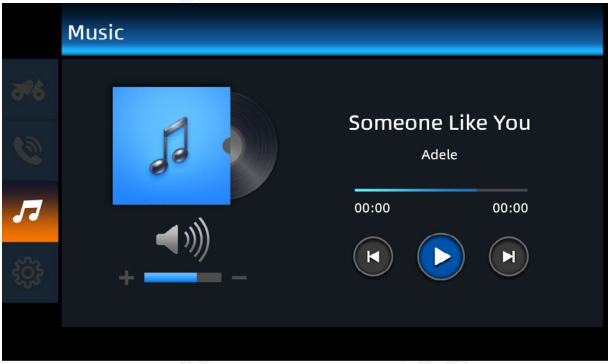


Music

In page of music, the user could play the song through Bluetooth connection, cooperated with left hand to achieve function such as previous song, next, continue and volume.

Short press key ENTER to get into menu page;

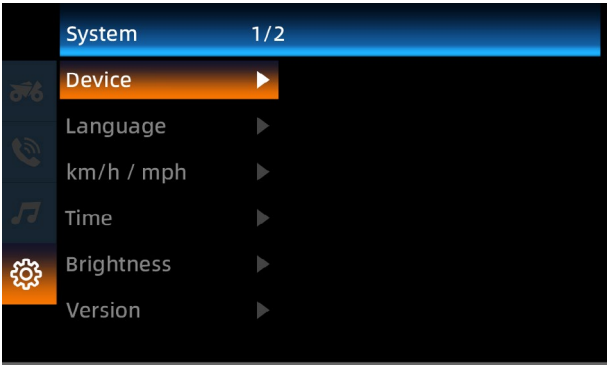
Short press key up or down to choose music, short press key ENTER to get into page of music; Play song through mobile phone.



System setup

In list of system setup, the users are able to adjust and set up content below:

Equipment connection, language setup, Metric/ Imperial, time setup, brightness adjustment, version information and delivery state recovery.



Equipment connection

When mobile phone connected to meter, headset of Bluetooth on helmet connected to meter, when both are connected through Bluetooth, the function such as phone call and music could be used. Connect to Bluetooth of helmet as below:

•Make sure Bluetooth on helmet needs to connect is on;

•Short press key ENTER to enter menu page;

•Short press key up or down to choose system setup, short press key ENTER to enter system setup page;

•Short press key up or down to choose equipment connection, short press key ENTER to enter page of equipment connection;

•Short press key ENTER, short press key up or down to choose to enter searching once again or erasing connection;

•When pressed key ENTER for searching once again, when long pressed key ENTER, press key up or down to choose the equipment name you want to connect, short press key ENTER to connect the Bluetooth; When equipment is successfully connected, there would be reminder “Connection success”.

•Short press key up or down to choose Bluetooth helmet 1/Bluetooth helmet 2, short press key ENTER to enter, when entered. The meter may search equipment could be found automatically.

Erase connection, operate according to steps below:

•Short press key ENTER to enter menu page;

•Short press key up or down to choose system setup, short press key ENTER to enter page of system setup.

•Short press key up or down to choose equipment needs be connected, short press key ENTER to enter;

•Short press key up or down to erase connection, short press key ENTER to enter pop-up.

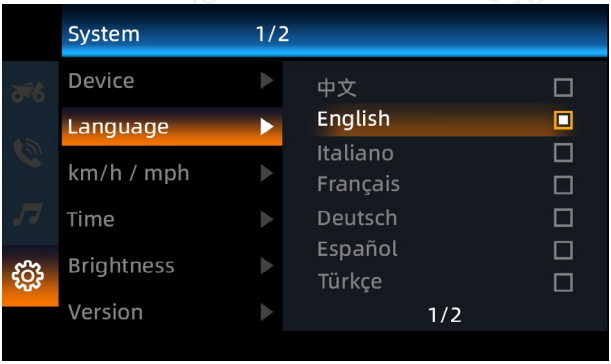
•Short press key up or down to choose Cancel/ Confirm, short press key ENTER for confirmation.

Language setup

Shift language display on meter to suit your own reading. Short press key ENTER to enter menu page;

Short press key up or down to choose system setup, short press key ENTER to enter page of system setup; Short press key up or down to choose language setup, short press key ENTER to enter page of language setup; Short press key up or down to choose the corresponding language, short press key ENTER to choose language shift.;

Short press key return to quit language setup.



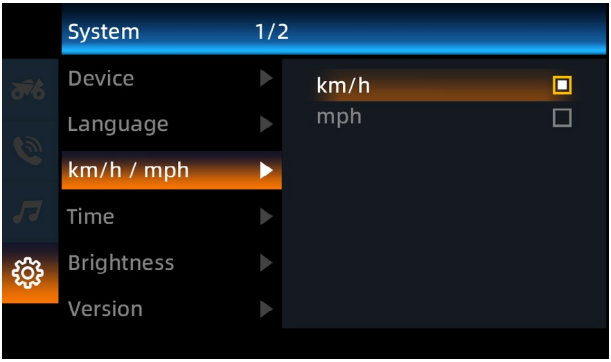
Shift between Metric/Imperial

Shift speed unit to suit your own reading. Short press key ENTER to enter menu page;

Short press key up or down to choose system setup, short press key ENTER to enter page of system setup;

Short press key up or down to choose Metric/Imperial, short press key ENTER to enter page of Metric/Imperial shift; Short press key up or down to choose the unit you need, short press key ENTER to choose unit shift;

Short press key return to quit Metric/Imperial shift.



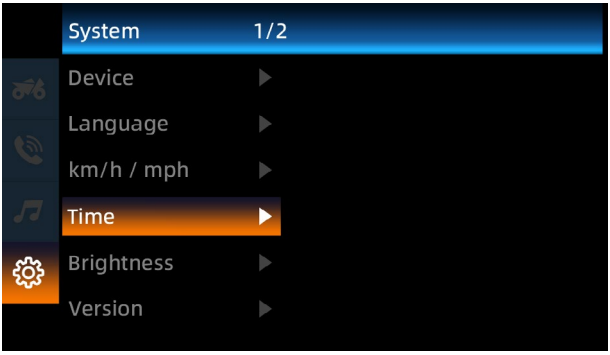
Time setup

Adjust time display on main page. Short press key ENTER to enter menu page;

Short press key up or down to choose system setup, short press key ENTER to enter page of system setup;

Short press key up or down to choose time setup, short press key ENTER to enter page of time setup;

Short press key up or down to choose the time display you need, short press key ENTER to choose shift for time display; Short press key return to quit time setup.

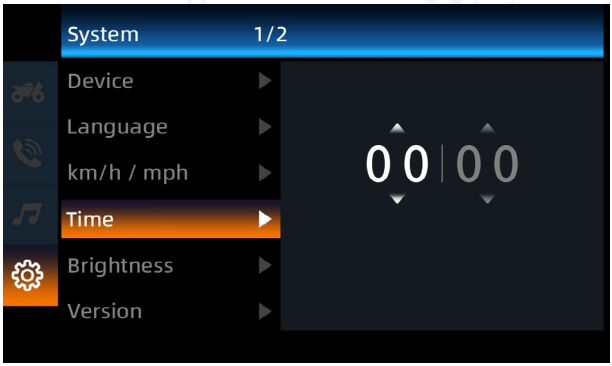


Time setup – Time correction

Short press key ENTER to enter menu page;

Short press key up or down to choose system setup, short press key ENTER to enter page of system setup; Short press key up or down to choose time setup, short press key ENTER to enter page of time setup; Short press key up or down to choose time correction, short press key ENTER to enter page of time correction.

Short press key ENTER could shift circularly among time section, hour and minute, cooperating with key up or down to adjust the time you need, short press key ENTER to save; Short press key up the numbers increase, short press key down the numbers decrease; The shifting range of hours place is: Circulation shift within 01-12; Shifting range of minutes place is: Circulation shift within 00-59; Short press key return to quit time setup.

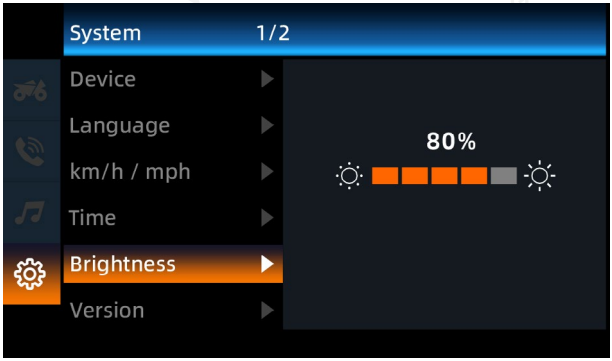


Brightness adjustment

Short press key ENTER to enter menu page.

Short press key up or down to choose system setup, short press key ENTER to enter page of system setup; Short press key up or down to choose brightness adjustment, short press key ENTER to enter page of brightness adjustment;

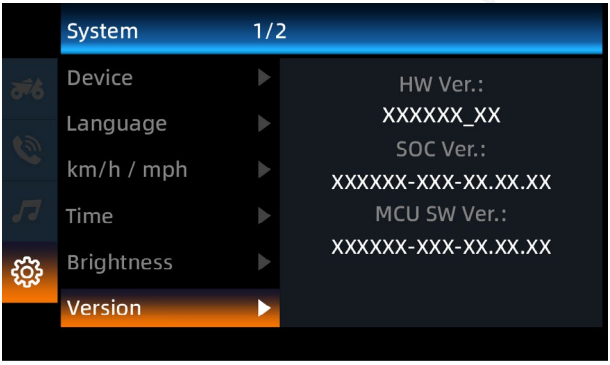
Short press key up or down to adjust brightness, when adjusted it to the brightness you need, short press key ENTER to save; Short press key return to quit brightness adjustment.



Version information

In page of version information, the users are able to check current version number such as HW, SOC and MCU Sw.

Short press key return to quit version information.



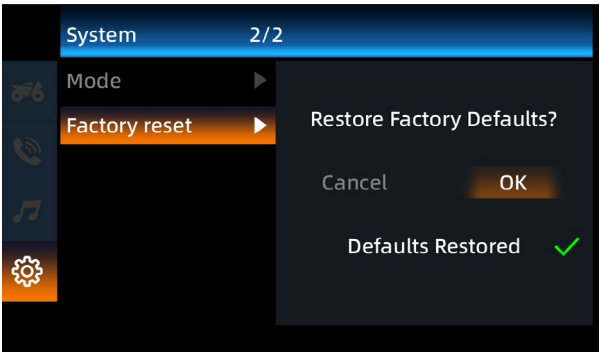
Recovery of delivery state

Recover all setup to delivery state. Short press key ENTER to enter menu page;

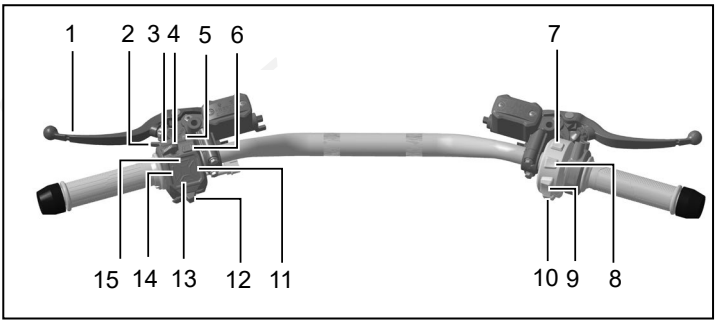
Short press key up or down to choose system setup, short press key ENTER to enter page of system setup;

Short press key up or down to choose delivery state recovery, short press key ENTER to enter page of delivery state recovery;

Short press key up or down to choose Cancel/ Confirm, Short press key ENTER to confirm; Short press key return to quit delivery state recovery.



Switch assembly for handle bar



1.Rear brake lever
2.High & Low beam/ overtaking switch Kill switch
3.Grip heating up
4.Electrical windshield adjusting switch
5.Driver seat heating up
6.Emergency button
7.Sitting barrel button
8.Button MODE for function shift
9. Starting motor/Engine
10. Front fog light switch
11. Key confirm on meter
12. Turning signal light switch
13. Key down on meter
14. Return key on meter
15. Key up on meter

High & Low beam/Overtaking switch

When engine started, push switch forward to “”, the high beam powered on, meanwhile its indicator “” on meter for high beam also powered on.

When pull switch backwards to “”, the low beam powered on, meanwhile the indicator light “” on meter for high beam goes off.

When press backwards the button “”, the high beam powered on, meanwhile indicator light “” for high beam also powered on. When released the switch, it recovers.

Horn button“ ”

When pressing down horn button “”, the horn rings.

Turning signal switch

When pushed turning signal light switch to left side “”, the turning signal on left side both front and rear are powered on, meanwhile the indicator light “” on meter is also blinking.

When pushed turning signal light switch to right side “”, the turning signal on right side both front and rear are powered on, meanwhile the indicator light “” on meter is also blinking.

When pressing switch of turning signal light on left switch assembly inwards, the turning signal light goes off, meanwhile its indicator light on meter also powered off.

If either turn signal lamp on one side malfunctions (short circuit or open circuit), turning on the turn signal switch of the faulty side will cause the corresponding turn signal indicator on the meter to flash rapidly to alert the user of the lamp failure.

The rapid flashing state of the turn signal can only be cleared by short-pressing the hazard warning light button twice consecutively or restarting the power supply.

Front fog switch “ ”

When engine is not working, press down the switch button could see only indicator sign “” on meter powered on, but the fog light doesn’t work, only when engine works, the fog light may power on.

Key confirm ENTER

Short press key ENTER to enter page setup.

Key return on meter/TCS switch

When long pressed key return, the TCS gets on/off, when ignition switch opened once again, the default for TCS is open, when meter got into menu page, press key return to quit menu and setup page.

Emergency button“ ”

When pressed down button “ ”, all the turning signal lights and their indicators on meter are all blinking.

Please use emergency light for warning other vehicles when emergency or accident was met.

Electrical starting/Engine kill switch

When pressed electrical starting/engine kill switch to “ ”, the electrical starting for engine works.

When turned electrical starting/kill switch back to “ ”, the engine is under normal working.

When engine is under normal working, then press electrical starting/kill switch to “ ”, the engine goes off immediately.

The electrical starting/kill switch is the quickest and easiest way to stop engine.

Danger
The emission gas from motorcycle contains gas CO, one kind of gas is not smelly and without color but highly poisonous. Idly run in doors without or with poor air ventilation is not allowed to avoid poisoning.

Front brake lever

Tightly hold this lever, the front wheel brakes, meanwhile its indicator light powered on.

Rear brake lever

Tightly hold this lever, the rear wheel brakes, meanwhile its indicator light powered on.

Mode shift button MODE

Short press button “MODE” to shift modes between normal and sporty, also the interfaces on meter also shifts.

Key up and down on meter

Short press key up to enter internet page, short press key down to enter page of Bluetooth connection. Under the connection of Bluetooth, when there is incoming call, press key down to listen the phone call, press key up to hang it up.

Grip heating up switch “”

Adjusting level of grip beating up by its adjusting button, which has corresponding display on meter.

When motorcycle powered on, the default level for heating up is “Neutral”, every press on heating up button, there is one level change, whose sequence is “Neutral-3-2-1-Neutral-3…” in circulation.

When engine is not under working, the meter only shows you the change of heating level without actual heating, only when engine is working, the real heating up may start according to what meter shows you.

“Neutral” means heating up is off.

Driver seat heating up switch “F 2”

Adjusting level of driver seat beating up by its adjusting button, which has corresponding display on meter.

When motorcycle powered on, the default level for heating up is “Neutral”, every press on heating up button, there is one level change, whose sequence is “Neutral-3-2-1-Neutral-3…” in circulation.

When engine is not under working, the meter only shows you the change of heating level without actual heating, only when engine is working, the real heating up may start according to what meter shows you.

“Neutral” means heating up is off.

Passenger seat heating up switch “ R 2”

There are 3 adjustable positions for this switch, the position with 1 round point is level 1st, the middle one is neutral while the position with 2 round points is level 2nd, When engine is not under working, the meter only shows you the change of heating level without actual heating, only when engine is working, the real heating up may start according to what meter shows you.

⚠ Warning
Long time heating up on grip/seat is forbidden, which may damage them.

USB power supply joint “ ”

The power supply for USB of this model is inside front luggage case with output specification: A+C dual joint, according to different agreement of mobile phones, the max. power for single joint is 18W (5V3A, 9V2A, and 12V1.5A), the max power for dual joints at same moment is 20W (5V4A).

The water proof cap for USB power supply joint is with mark “ ”. Pick up the water proof cap then the joint could work, only when battery voltage reached 13.5V (When engine started), it starts working, when voltage is lower than 12.8V, it stopped working.

⚠ Warning

When this function is needed, please prepare a charging wire by yourself. When finished using, please cover the water-proof cap in place to prevent water and dust getting into joint even bad for working life.

For keeping the service life for battery, please stop the using of socket of 12V and USB joint when engine was stopped.

ABS kit

The deceleration under normal speed, please release accelerator grip first, tightly hold the grips, then make braking. When motorcycle was slower down, to avoid engine stopping, please grasp the clutch and get into low gear position.

Before turning, please make braking and deceleration in advance. When it is at turning, please keep even speed, if the model without ABS equipped, make slight braking if it is necessary, and the sudden braking is forbidden.

When met the road surface with snow or ice on it, please make deceleration in advance, please cautiously drive.

Judge the road condition in advance to avoid sudden braking.

When emergency was met, please release accelerator grip immediately, tightly hold the handle bar and fully brake.

On and off for ABS: Get motorcycle powered on, when it is parking, operate button “ENTER” on left switch assembly to enter page of setup/turn off ABS of rear gear (Please refer to meter operation), when motorcycle got powered on once again, the default for ABS is on.

⚠ Danger

When slow down the motorcycle during high driving speed, singly use front or rear brake is very easy to get wheel locking-up even lead to side skidding or bring motorcycle out of control, please use front and rear brake in balancing way, judge braking distance in advance, correctly brake and slow down.

⚠ Caution

If the model is the one with ABS, when you fully brake, there is obvious bounce back with some frequency, which is normal, please don't worry and tightly hold handle bar.

The driving assistance could prevent rolling over within its limit only, under some extreme condition such as high gravity center of loading, variously changed road condition or sharp slope, it also may roll over.

TCS traction control system

The function of TCS is in same piece of ABS kit, it monitors wheel speed difference between front and rear wheel through wheel speed at rear time, when there is skidding on wheel, the TCS works, which send torque control signal through EFI kit and adjust output torque from engine and bring the skidding under best range, which quickly recover the ground grasping force of tire and ensure driving power enough and its stability.

⚠ Caution

Some special operations of TCS under some special road conditions.

If front wheel got apart from ground contact, the TCS may reduce engine torque until the front wheel contacted ground once again. We suggest under this kind of situation, please turn back a little of accelerator grip to get it back to stable driving as soon as possible.

Fully speed up on smooth ground is not allowed, the torque output from engine may lead to rear wheel skidding even unstable driving, which could not be controlled by TCS.

On soft ground (Snow or sand), the control from TCS may greatly reduce driving force of rear wheel even lead to it is too weak to drive. Under this kind of situation, we suggest get TCS off for a while.

Except the special conditions above, otherwise please always get TCS opened.

The shift between on and off of TCS please refer to P26.

Side stand

•The design for this model includes side stand.

•Design of side stand is the one for safety, which is one part of starting circuit of engine.

⚠ Warning
The design for side stand considers motorcycle net weight more than loading. So please don't rely on motorcycle when it is parking, otherwise the side stand may distort due to extra loading over its highest strength.

Kill switch of side rolling

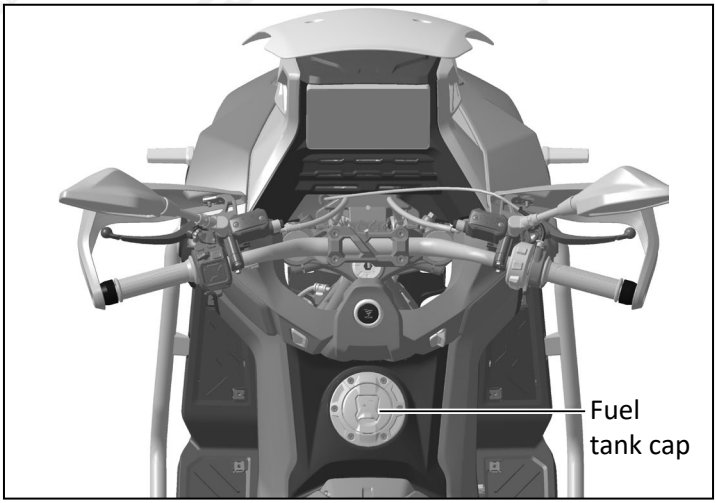
• This model equipped kill switch for preventing side rolling, when motorcycle rolling over, the engine stops automatically, when got it upright, the motorcycle gets powered on once again, which could be normally started.

Fuel filling-up

Blinking of this alarm light reminds you a prompt fuel filling-up.

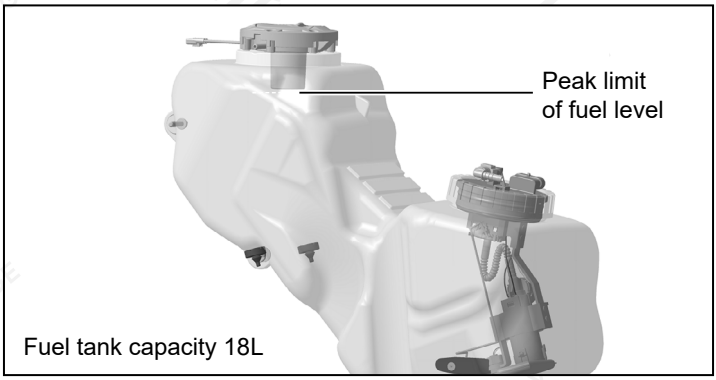
Caution: Insufficient fuel may lead to engine starting failure or abnormal power output, under this case, keep ignition or driving may damage fuel pump without retrieving.

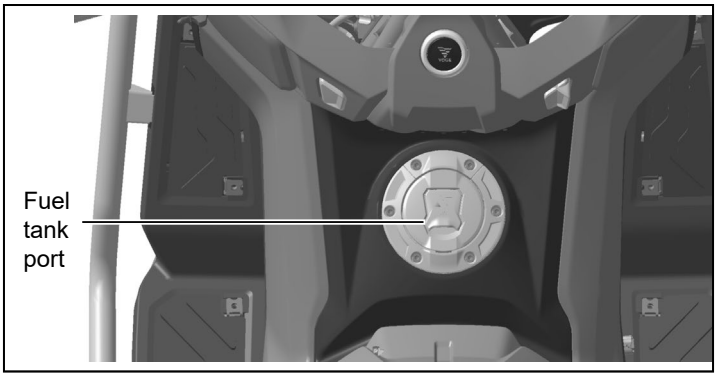
Please don't wash fuel tank lock by high pressure water to avoid water getting into fuel tank, please adopt unleaded gasoline of 92# or above.



The peak limit for fuel level：

Hold the motorcycle by side stand, the just contact between fuel level and fuel tank lock is the peak limit of fuel level.





⚠ Danger

Please stop engine when it is in fuel filling-up, smoke, fire and heat source nearby are not allowed.

⚠ Warning

Fuel is corrosive to painting surface, of there is fuel on it, please wipe it up immediately.

The fuel may expand when it is hot, too full the tank may lead to fuel overflow or tank distortion due to powerful internal pressure.

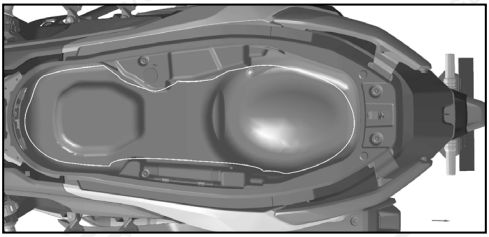
When filling up fuel, its level over peak limit is not allowed, the overfilling may lead to surplus fuel overflow to carbon canister through fuel evaporation kit and damage it, gets engine performance bad even starting failure.

Seat opening

A single press by seat button on switch assembly could open the seat.

Insert the internal key of remote key into lock hole of seat on left lower side, then turn the key clockwise, the seat would be opened. If motorcycle powered off while forgetting lock up the seat, when key got apart, the buzzer may ring for 3 times for reminder. Then it closes the light case for helmet automatically.

When store good inside of luggage case, please don't get its position over white line, otherwise the electrical unlocking may fail.



Using of front luggage case

Only when motorcycle powered on, press the button then the front luggage case may get opened.

⚠ Caution
The light for luggage case may power on along with seat opening, when seat locked up, it goes off. So when put in or took something from luggage case, please make sure the seat lock is locked up in place.

⚠ Warning
The luggage case is only with limited function for anti-theft, please don't leave expensive material in luggage case to prevent its loss.

Opening and closing for fuel tank lock

Within 30 seconds when motorcycle was powered off, slowly turn fuel tank cap once, then cap could be opened.

When powered off over 30 seconds, please get key aside the motorcycle, turn the cap the 1st time to get it back to its place, then slowly turn it the second time, the fuel tank cap could be opened.

Powerfully press down the fuel tank cap, then it closed.

Remote key

The left key on remote controller is the one for searching:

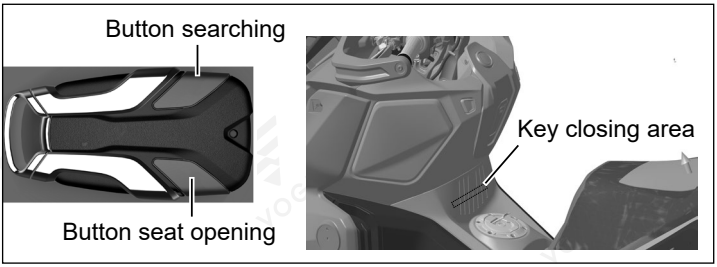
•Short press button searching, the turning signal may blink for 10 times while horn ringing for 3 times.

The key on the right is the one for opening seat:

•Long press right key for 3 seconds, then seat could be opened.

The remote control distance in empty space is about 30m, if there is material in the space, its distance may be smaller than 30m.

When power in remote key ran out, the function of "Stick on" could get it unlocked.



•Get remote key closed to antenna within 3cm (Figure 1), press ignition switch to get motorcycle powered on.

When got key closed to antenna and engine started, put key out of range 3cm, if engine stopped over 1 minute, the motorcycle may power off automatically.

Put key closed to antenna and when engine started, the put key out of range 3cm, then press kill switch to stop engine, then motorcycle may power off automatically.

⚠ Caution
Other operation for function “Stick on” is the same to normal use of remote key such as open fuel tank lock and seat lock.

Electrical windshield

When motorcycle was powered on, press key “ ”, the windshield glass rising up; When it reached top, the driving motor stops, then press this key, it doesn’t work.

Press key “ ”, the windshield glass falls; When it fell to the lowest position, the driving motor stops,

then press this key, it doesn't work. When motorcycle powered off, the windshield glass falls to the lowest place automatically; When motorcycle powered on, then glass moves to the place of last time power off (Its function of memory).

⚠ Danger
During driving, please don't operate windshield glass to avoid accident!

⚠ Caution
When motorcycle powered off due to battery cut off or fuse chip damage, when it powered on once again, the windshield glass may remain at the lowest position without recover to the place of last time power off, which needs manual adjustment.

Radar

Open the setup of radar in meter menu, then the radar could work.

When the triangle sign on left back-view mirror keeps on, which means there is fast approaching vehicle on left side or nearby.

When the triangle sign on right back-view mirror keeps on, which means there is fast approaching vehicle on right side or nearby.

When turned on the left turning signal, the triangle sign on left back-view mirror is blinking, which means

there is fast approaching vehicle on left side or nearby, lane shift at this moment is dangerous.

When there is fast approaching vehicle behind, the turning signal on motorcycle may blink for reminder.

When the radar sign “ ” in amber color of meter page keeps on, which means there is fault in radar kit or it is off.

The design for radar is for detecting vehicles on lane with normal width, this kind of sensor is under limitation of technology, under some cases, there would be situations below:

•The related warning may be delayed.

•Without warning or reminder.

•There would be warning or reminder even no vehicle in blind area or nearby.

Under some special cases but not limited:

•Bad weather (Rainy, snow or thick fog)

•Wrong cleaning up for sensor.

•Front surface of radar was covered by something such as sticker, paint or other material, which are bad for radar working.

•Surrounding electromagnetic reflection or interference (Bending, narrow, tunnel with changeable radius or obstacles; Wide lane, subsident road or rough surface);

•Large speed difference at overtaking, the sensor may not send you any signal (Warning).

•ABS or torque controller is abnormal.

⚠ Warning

The system may not be able to identify static materials (Such as traffic light bar, charge station or parking vehicles).

In addition, the system may not be able to identify some kind of motorcycle, bicycle, vehicle or materials apart too high or low from ground.

This system could not detect walking man, the man on bicycle or skateboard, also the man pushing bicycle, skateboard or other materials.

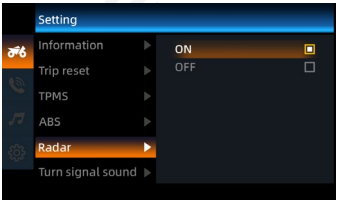
The dirt sensor, rough road or sudden moving may lead to offset from initial position of radar.

⚠ Warning

If the offset is too big, it is bad for system performance and getting effect lower, such as accident, motorcycle falling, replaces or dissembles components from radar, all above may lead to offset from initial position of radar. Once offset is too big, please contact local VOGE dealer.

The path for closing radar function

Setup on meter → Radar setup



6.In fault

Insufficient oil pressure

This alarm light powered on indicates too low the pressure in lubrication kit. At this moment, please stop engine immediately.

Meanwhile please check oil level in engine, if too low the oil level, please fill it up.

Keep motorcycle upright, check oil level through view window on right lower side of engine and confirm if it is within correct range. If oil level is correct but this light keeps on, there may have other faults lead to it power on, please stop driving.

Please contact specialized service station nearby for troubleshooting, the best choice is the one with VOGE authorization.

Hot coolant

This alarm light powered on indicates too hot the coolant. When engine is overheated, keep driving may damage engine.

Please stop driving and engine at some suitable place, when motorcycle cooled down, please check coolant and heat radiator.

Check coolant level: If the level is too low, please fill up with coolant.

Check heat radiator: If cooling fan doesn’t work when coolant alarm light is on, which means there is fault in cooling fan.

Please contact specialized service station nearby for troubleshooting, the best choice is the one with VOGE authorization.

Insufficient coolant

If the coolant is not enough or surface of heat radiator is blocked by mud and sand, we suggest adopt measures below:

Reduce loading to make engine produce less heat.

When traffic jam was met, please get engine in idling, meanwhile please don't turn the accelerator grip to avoid temperature keeping rise.

If operation above still fails, please stop engine and contact service station nearby for troubleshooting.

Fault in engine management kit

This alarm light powered on means there is fault in engine management kit. When this light is on, keep driving may lead to engine starting failure or fuel supply stop.

Please stop engine and turn off ignition switch, then start once again, if the alarm light goes off, the motorcycle could keep driving; If the light is still on, please contact service station nearby for troubleshooting.

Engine starting failure

Whether the indicator sign on meter is on, brake lever is tightly held, or side stand is picked up.

Whether low position indicator of fuel level is on.

Whether indicator light for abnormal voltage of battery is powered on.

Difficult engine starting

Whether the surroundings of motorcycle is cold, if it is, please slightly turn accelerator grip when starting the engine.

Whether indicator light for abnormal battery voltage on meter is powered on.

Too thick the oil, please judge if the oil needs be replaced.

Weak engine power output

Check if the element of air filter is clean.

Check if fuel filter is blocked up.

Check whether motorcycle is at high altitude.

Incorrect inspection and adjustment may lead damage on your motorcycle instead of finding out fault, this kind of damage is out of our range for quality guarantee.

If you don’t know the correct operation, please contact VOGE dealer.

Troubleshooting

The content of troubleshooting helps you on normal fault, but they are against normal ones, if troubleshooting still failed, please contact VOGE dealer.

7.Grinding-in

Grinding-in for new motorcycle

The period of grinding-in has important influence on working life and fuel consumption of motorcycle, before driving, please carefully read this book (Correct driving for the initial 1000km may ensure motorcycle performance and let you get driving fun).

Grinding-in of engine

No matter engine is hot or cold, before starting, please let engine fully and idly run to let oil spread to all positions need lubrication.

During grinding-in period, within 0-400km, we suggest the revving speed of engine shall not be over 5000r/min, 400-1000km, no more than 6500r/min, above 1000km, not more than 9000r/min.

During grinding-in, engine under fixing revving speed with light loading may speed up wear-out and poor cooperation of parts, so long time driving with even speed and light loading is not allowed.

During grinding-in, except emergency, please prevent sudden speeding up and braking.

Long journey during grinding-in shall be avoided, let engine have enough rest.

Running-in of tires

The surface of new tire is smooth, driving in high speed at this moment or passing the turning road is dangerous. To reach the strongest ground grasping force, the period of running-in is necessary.

In the initial 200km, the tire running-in could be done by slowly passing the turning of road until each angle of tire tread completely meet demands.

Grinding-in of brake kit

The new brake pad must be grinded-in first, then it reaches its best performance. In the initial time of new motorcycle or just replaced brake pads, increase operation force on brake bar to make up for the braking loss.

⚠ Danger
For the best running-in for tire, in the first 200km, please try to avoid sudden speeding up, turning and braking.

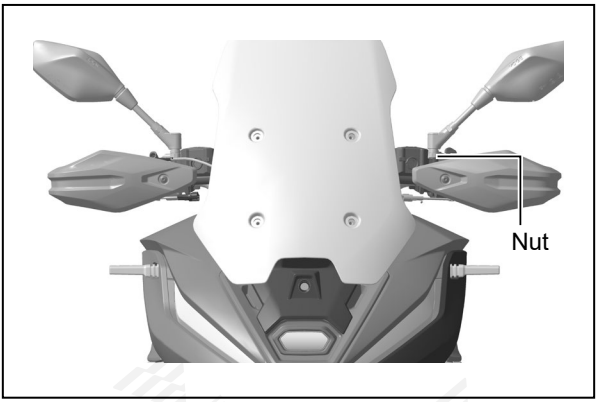
8.Adjustment

Back-view mirror adjustment

Adjust back-view mirror to correct position according to you stature and driving posture.

Adjusting mechanism 1 of back-view mirror could be adjusted of universal angle in small range.

Loosen nut by tool, then adjust to suitable position, then fasten it.



Installation torque for back-view mirror:15N.m

⚠Warning

Sit on motorcycle and keep it upright, the object with width of 4m and distance 10m to motorcycle tail could be clearly seen from mirror.

⚠Danger

Adjust back-view mirror during driving may reduce your control on motorcycle, so don't operate it during driving

Front brake lever adjustment

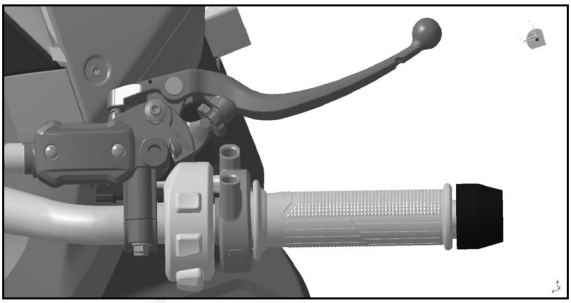
The distance between lever and accelerator grip could be adjusted by knob.

There are 5 adjustable levels for this distance, whose adjustment is as below:

•When adjusting, please push forward the lever.

•Turn the knob to the position you need.

•Release the pushing on lever, the adjustment finished.



⚠ Danger
Adjust front brake lever during driving is dangerous, get hands apart from handle bar may reduce your control on motorcycle.

Adjustment for throttle grip

The accelerator controls revving speed of engine.

Turn it to the direction of your own side is speeding up, the opposite side is slow down.

The adjustment for gap of throttle cable.

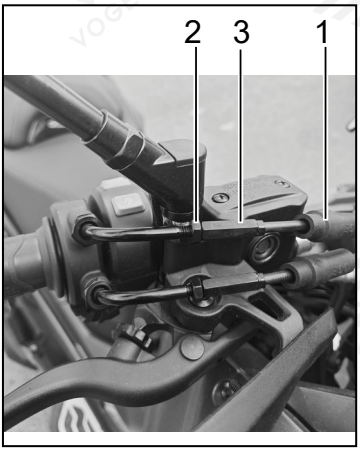
•Remove rubber jacket 1

•Loosen locking nut 2

•Turn adjustor 3, adjust gap of throttle cable to 2-6mm.

•Lock up nut 2.

•Re-assemble rubber jacket 1 in place



2-6mm: Free play for throttle cable: 2-6mm

Adjustment for rear shock absorber

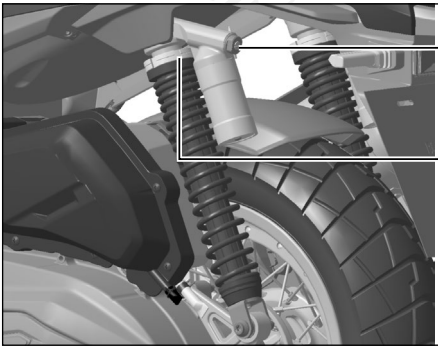
Adjustment for pre-loading of rear shock absorber is for suiting different drivers, loading, driving style and road conditions.

The pre-loading for spring is adjustable.:

•Turn adjusting nut 1 anti-clockwise, the pre-loading of spring gets weaker.

•Turn adjusting nut 1 clockwise, the pre-loading of spring gets stronger.

•2 is the locking nut for adjustor, every time when adjusted spring loading, please lock up nut 2.



⚠ Caution

The adjustment for pre-loading of rear shock absorber needs tools for this work only, the VOGE dealer provides you this kind of service.

⚠ Danger

Adjustment for pre-loading of rear shock absorber at will is not allowed, improper adjustment may reduce your control on motorcycle.

If adjustment is necessary, please contact VOGE dealer for this work.

Adjustment for headlight beam

The lighting of headlight shall keep a suitable height when shock absorber under any loading.

For ensuring driving safety at night, adjust the angle of headlight beam to suit its demands under different loadings.

•Turn handle bar to limit of one side.

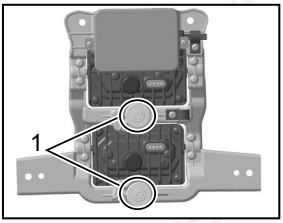
•The adjusting screw is under headlight, please align cross screwdriver to adjusting screw in figure 1 on the right.

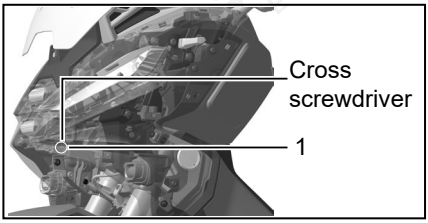
•Turn the adjusting screw clockwise, the light beam rising up.

•Turn the adjusting screw anti-clockwise, the light beam falling down.

•The adjustment for another side is in the same way (Before adjusting, please turn the handle bar to limit of another side0).

•Adjust the left and right light beam to the same height.





View of motorcycle (Adjusting screw is above front fender)

⚠ Warning

The adjustment for high and low beam needs meeting demands of local laws and regulations, set the light beam when wheels touching ground and driver sited on motorcycle as standard.

If you are not sure about the correct lighting height, please contact VOGE dealer.

9.Inspection repair and maintenance

CVT kit maintenance

•Remove covering plate of breathing groove, its filtering screen and left crankcase cover kit.

•Remove fixing plate in driving belt wheel, then remove the belt.

•Remove shoes kit in driven belt wheel.

•Remove moving plate in driving belt wheel.

•Clean up filtering screen of breathing groove, then replace sealing strip for a new one.

•Clean up dust on driving, driven wheel kit and CVT chamber.

•Check crank and abrasion on driving belt, check abrasion on outer diameter of roller, also check abrasion for friction material of shoes (If abrasion reached limit, please replace).

•Re-assemble moving plate for driving wheel and shoes for driven wheel (Replace flat washer at place of fastening nut; Clean up needle bearing on shoes of driven wheel and coat with lubricant could bear temperature above 150 ℃ ; The fastening torque for shoes in driven wheel is (100±7)N.m).

•Open belt plate of driven wheel by tools for this work only, then put the belt in (Letter side on belt is the same to visible direction).

•Re-assemble fixing plate of driving wheel (Replace 2 flat washer of fastening nut for new ones; Fastening torque for driving wheel is (100±7)N.m).

•Remove 2 seal rings at holding place of bearing on crankshaft, then coat the seal groove with lithium lubricant could bearing temperature above 180℃ ,then replace seal ring for a new one.

•Remove 2 seal rings at holding place of shoes in driven wheel, then coat the seal groove with lithium lubricant could bearing temperature above 180℃ , then replace seal ring for a new one.

•Re-assemble left crankcase cover kit, filtering screen of breathing groove and outer plate of the groove (Fastening torque for bolt is (11±1)N.m.)

Fuel

The fuel consumption for reference is the one in the least way under an even speed, which is greatly different to actual data under your daily operation, so you may find the actual fuel consumption is higher than you one for reference only.

The driving shall be gentle, stable, and avoid frequent sudden braking, the re-start for engine and acceleration lead to more fuel consumption.

Driving in urban area is bad for fuel consumption, frequent start and stop means more re-start for engine.

Please try to avoid journey of short distance. Before engine reached the best working temperature, the fuel consumption is twice to normal driving.

Insufficient air pressure in tire increase rolling resistance against tire gets fuel consumption higher.

Strictly follow the request of period maintenance is also an important part for saving fuel consumption.

Fuel evaporation

When there is fault in fuel evaporation kit, please contact VOGE service station for troubleshooting. Refit on fuel evaporation kit is not allowed, otherwise the incorrect emission may beak laws. When it maintained, please confirm the connection for all tube lines, confirm no air leakage on each tube joint without blocking-up; Rubber hose without squeezing, crack and damage. The fuel vapor was released into carbon canister through desorption hose, when engine stopped working, the active carbon absorbs fuel vapor; When engine is working, the fuel vapor in carbon canister gets into combustion chamber through desorption hose and joins combustion to prevent releasing the vapor into air directly.

Meanwhile the absorption hose is also balancing air pressure in fuel tank, when air pressure in fuel tank is lower than air outside, it makes up for air pressure through air hose of carbon canister and absorption hose, so please make sure all tube lines are smooth without blocking-up and squeezing, make sure the assembly for tilt valve is correct, otherwise the incorrect assembly may lead to damage on fuel pump, distortion and crack on fuel tank or damage on other parts.

Working principle for fuel evaporation controller kit:

When gasoline in fuel tank was heated up, the vapor runs out, get end TANKS of canister through tilt valve, then it is absorbed.

When the inclining angle is over 60°, the tilt valve closed, the gasoline fails to get canister through the tilt valve.

The fresh air flows to end PURGE from end A of canister and bring gasoline vapor to throttle valve, the join engine combustion through air hose.

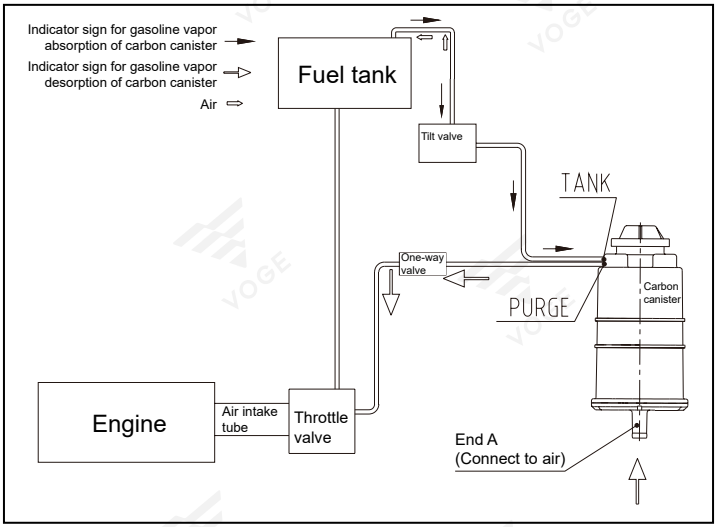


Figure for connection of fuel evaporation controller kit

Three-way catalyst

The air exhaust kit for this model equipped three-way catalyst, which gets emission less harmful. Poor engine working may damage the catalyst, so please follow requirement below:

•Please make periodic maintenance according to "Quality guarantee and Service manual".

•When engine working is unstable, please contact for troubleshooting immediately.

•When fuel alarm light is on, please fill up with fuel immediately, too low the fuel level leads to irregular fuel supply.

•Start engine by pushing or dragging is not allowed.

•Please cut off ignition switch when motorcycle is under idling.

⚠ Warning

The three-way catalyst is fragile, please adopt unleaded gasoline, otherwise the one with lead in it may damage the catalyst, meanwhile may badly damage other important parts.

⚠ Danger

Parking or driving on combustible material such as dried grass is not allowed, the working temperature of three-way catalyst is very high, which is easy to catch fire.

Tool kit

The tool set is put under seat, which fixed by elastic band.

Turning parts maintenance

For driving safety, keep nice lubrication is important for longer working life of parts.

When used under bad conditions such as in rainy days or after washing, please make corresponding lubrication.

Daily inspection for lubrication points are as below:

•Shaft of brake lever

•Shaft for side stand and its spring hook

•Shaft for main footrest, pillion step and returning spring

⚠ Caution
If condition permitted, power charging before the first driving shall be 30 minutes, which effectively get working life of battery longer.

Battery

Battery maintenance

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

⚠ Warning
To keep service life of battery, add extra electrical parts with strong power is not allowed. If add electrical parts with weak power is necessary, please contact VOGE dealer for inquiry. Please make sure the power joint for extra electrical parts is the original one preserved by this model.

Battery power charging

When ignition lock is off, if voltage on battery end is lower than 12.6V, please make power charge for battery.

•Make power charge by DC supply with stable current or given charger, please strictly follow requirement of chargers.

•Charging current shall be DC (14.5±0.3)V, whose current shall not be over 1A.

•Charging time shall be 6-8hours.

•Overcharging may get working life of battery shorter, please don't overcharge.

•Before charging, please cut off its connection to circuit on board.

•Please usually check if the terminals and joints on battery is clean, if it is corroded or oxidized, please

clean it up immediately.

•When the motorcycle is under usual driving, the motorcycle may charge the battery.

If the driving is not so often or with short driving time, the power in battery may not be enough. The battery may discharge automatically, whose discharging speed depends on surrounding temperature. When it is in high temperature, the discharging may speed up. Example: The power discharging speeds up doubled each 15℃ rising.

•Under cold weather, improper power charging for battery is easy to lead electrolyte freezing up, the ice may lead to battery crack or distortion, fully charge the battery getting it stronger in anti-frozen ability.

•Long time without driving, please cut off negative wire of battery in advance, otherwise the power may be run out by electrical parts on circuit.

•Motorcycle without driving over one moth, please make power charging monthly, otherwise the battery may get failure if it is without charging for a long period.

•Please correctly dispose the abandoned battery and electrolyte to avoid environmental pollutions.

⚠ Danger

The battery may produce hydrogen, please keep the battery far away from heat source or spark.

Wipe the battery by dry cloth may produce static spark, so please wipe it by wet cloth to avoid the spark.

Disassembly and re-assembly for battery

Before disassembly and re-assembly for battery, please cut off ignition switch first to get motorcycle power off.

When disassembling the battery, remove negative terminal first, then remove the positive one.

When re-assembling, please assemble the positive terminal first, then the negative one.

When removing battery, before fetching it out, please turn the bolt of battery onto nut to prevent nut dropping off during removal of battery.

When battery was connected once again, the tire pressure saved previously would be erased, when driving speed is over 25km/h, it updates the tire pressure automatically; Please connect to APP of driving recorder to keep pace with its time; Please connect to meter's WIFI to get into navigation page for keeping pace with time of meter.

⚠ Warning
Please don't put battery upside down, which leads to internal electrolyte seeping out from breathing hole.

External power supply and its using

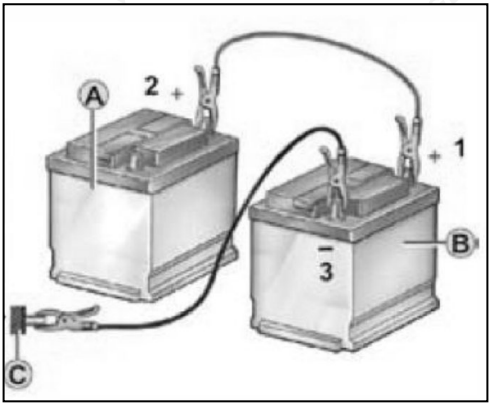
When power in battery fails to meet demands of engine starting, the external power supply could be adopted.

When using external power supply, the both ends shall be clamped by insulated spring clip to avoid circuit short and spark jump due to wires touching.

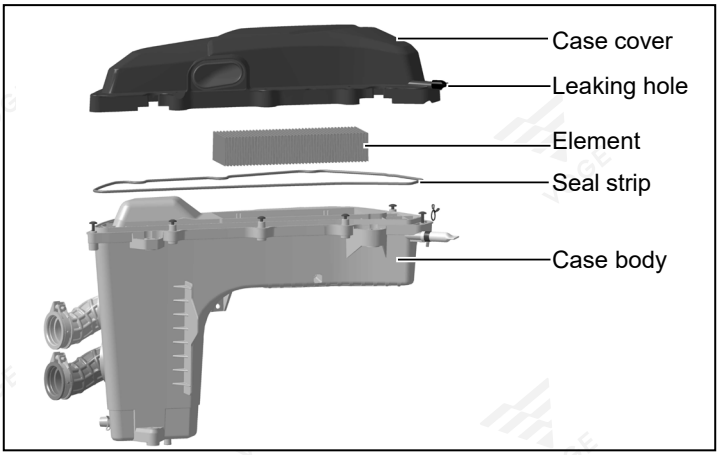
Battery A is power supply on board, battery B is the external one.

Positive terminal 1 of B connect to terminal 2 on A, the negative terminal 3 of B connects to metallic parts C of engine to touch ground. Start the engine, if starting failed, wait for minutes and then start once again to protect engine and battery.

Before removing starting wire of external power supply, let engine run for minutes, then cut off negative wire and ground wire first, then the positive wire.



Air filter maintenance



The air filter is under fuel tank. If air filter is blocked by dust, it may increase resistance for air intake, leads to power falling and fuel consumption rise.

If usually drive under dusty condition, the frequency for replacing or cleaning element shall be higher.

Cleaning-up and replacement for element:

•Remove seat

•Remove fuel tank

•Remove 13 pieces of self-tapping screw connecting case body and cover.

•Remove 8 pieces of self-tapping screw connecting element and case body.

•Carefully clean up or replace element of air filter.

•The cracked air filter or element may lead to more dust get into engine even get engine damaged, please replace if they were broken.

•If the assembling position for element is incorrect, the dust may get into engine bypassing the element and damage engine. Please confirm the correct assembling position of element.

•When cleaning up element, please blow from side of metallic net or slightly clap it for cleaning up the dust; Meanwhile clean up other dirt inside of case body.

•Please ensure smooth of water leaking hole on left lower side in the front of air filter.

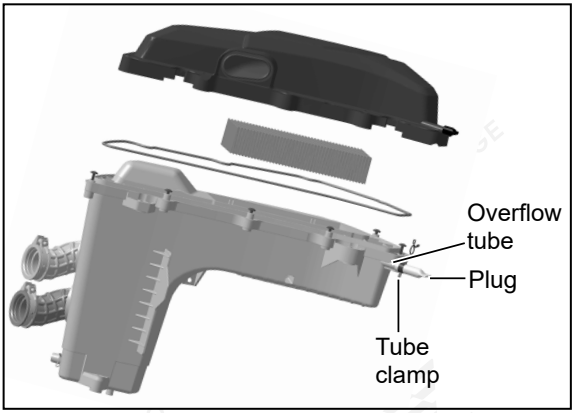
Maintenance for air filter outflow tube

Please irregularly check overflow tube on left lower side of air filter, then drain off the oil collected by the tube.

•Loosen tube clamp on lower end of overflow tube, then remove its plug.

•Drain off oil

•Re-assemble tube clamp and plug back to original place.



⚠ Caution

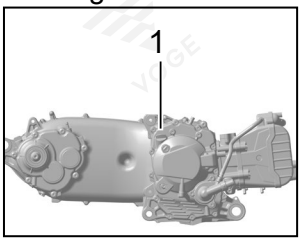
Every time when case cover or element of air filter was removed, please replace sealing strip for a new one. The broken case, cover and failed element may get dust, mud or water into engine and damage engine.

When making period maintenance, open the cover for inspection, make sure there is not any internal self-tapping screw or bolt loose, not any impurities and avoid damage on engine.

Engine oil

Inspection oil level in engine

The position for inspection and filling up for oil are both on right side cover of engine as figure 1 shows.



The way for inspection oil level:

•When engine is cold

•Keep motorcycle upright

Check oil level from oil view window.

The correct oil level shall be within upper and lower scale line on view window.

If the level is above upper line, please drain some oil off.

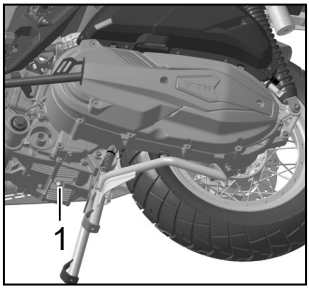
If the level is under lower line, please fill up with some oil.

No matter filling up or draining off, when operation finished, please check oil level once again according to steps above.

Maintenance for engine oil

The oil helps effective lubrication for internal parts of engine, except that, it also helps engine cooling down, in another hand, the oil also helps engine sealing, so the oil maintenance is crucial.

Oil drainage:



•If the oil level is too high, please remove oil drainage bolt by socket wrench (Bolt position as figure 1 shows), the bolt is on the left lower side of engine.

•Suitably drain some oil off, then re-assemble the bolt and fasten. Too low the oil level may get engine damaged, also too high the oil level.

Please always keep oil at correct level.

⚠ Caution

The oil may expand along with temperature rising, also its level gets higher.

The hotter the higher level, the colder the lower, which are both normal.

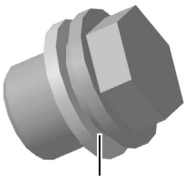
When checking oil level, please keep motorcycle upright, which means be vertical to ground.

⚠ Danger

Because the oil drainage bolt is near to muffler, so please drain off the oil when drainage bolt and muffler are basically cooled down, please make protection when draining oil to avoid scald.

Replacement for engine oil

When each maintenance period was reached, please replace oil in engine.



The oil replacement shall be done when engine is hot, in this way, the oil could be totally drained off.

The way for replacing oil:

•Keep motorcycle upright by parking stand.

•Turn the oil filling cap anti-clockwise.

•Lay an oil collection tray under oil drainage bolt, then remove the bolt by tools and drain the oil off.

•Fasten the drainage bolt before filling up with fresh oil.

⚠ Warning

When re-assembling oil drainage bolt, please replace the bolt and copper seal washer for a new one, otherwise it may lead to oil leakage.

⚠ Danger

Although drain off oil when engine is holt may be more thoroughly, the hot oil may get man injured, so before draining off, please wait for cooling down of bolt and muffler.

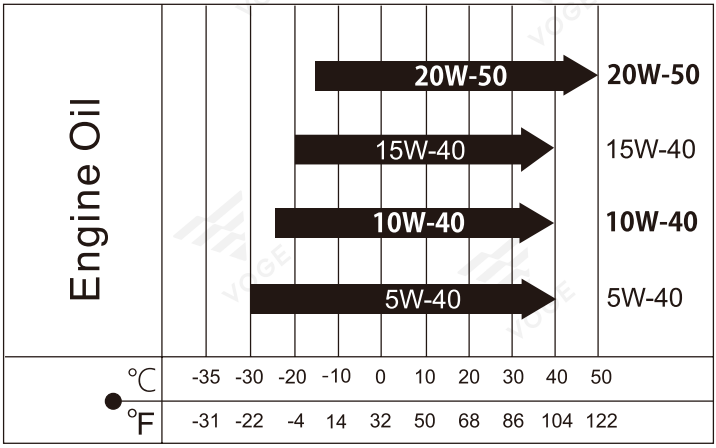
Filling-up of engine oil

Confirm the new oil element already replaced and its cover already assembled in place.

The oil drainage bolt and seal gasket already replaced and assembled in place.

•The first time please fill up with 1.7L of fresh oil into filling port with oil specification of “For VOGE EFI only”, check oil gauge, the oil level shall be within “MAX and MIN”, then turn and tighten the port cover. Let engine run for 5 minutes by different rotation, when engine is working, please check if there is oil leakage.

•Finally, please check oil level.



If you need to use them in winter,please exchange 5W-40 or 0W-40 low temperature resistant oil and you need to exchange 10W-40 or 20W-50 oil again in Summer.

⚠ Caution

Oil specification: SL 10W/40 or above for SAE 4 stroke gasoline engine.

Oil capacity: 1.7L (Element replaced, if element without replacement, the capacity shall be 1.6L).

Please dispose the replaced oil and element in environment friendly way.

Gear box: 80W/90-GL-4 or above with capacity of 0.21L.

Please dispose the replaced oil and element in environment friendly way.

⚠ Warning

Oil with wrong specification or bad quality may both damage the engine, EFI and its internal parts, get working life of spark plug and catalyst shorter, so please don't adopt them.

Oil element replacement

When every maintenance period was reached, please replace oil element for engine.

Replace oil element when oil in engine was drained off.

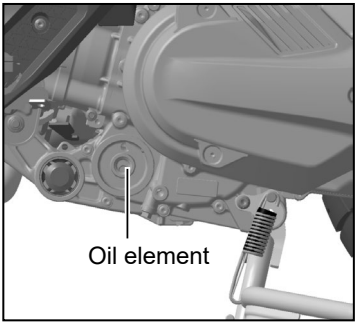
Lay a piece of oil absorbing paper or cotton fabric under cover of oil element to prevent oil overflow from the cover and touch surface of engine.

•Remove oil element on the front of engine by tool for this work only.

•Remove oil element and drain off the oil.

•Replace oil element for a new one.

•Re-assemble oil element, when re-assembling, correctly confirm the position of o-ring is important, otherwise it may lead to oil leakage.



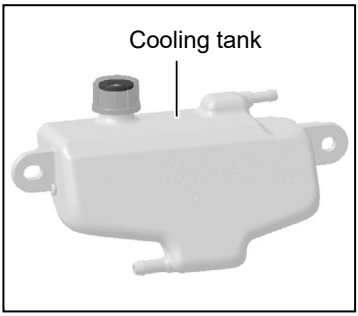
⚠ Warning

Check if there gasket on element cover is intact, please replace for a new one if it is necessary. The wrong oil element may damage engine, please adopt the one of VOGE certified.

Coolant

Check and maintenance for coolant

Coolant brings away heat from hot parts in engine and gets heat radiated, which keeps normal “Working temperature” of engine.



Inspection and filling up the coolant are both done at place of coolant tank.

The engine stopped.

Because the coolant expands along with temperature rising, so check coolant level when engine is cold.

Keep motorcycle upright.

Check coolant level in tank, whose level shall be within scale line UPPER and LOWER.

If the coolant level is under line LOWER, please fill up some from filling port.

Tool high the coolant level may lead to it spout due to coolant expand along with temperature rising, so overfilling is not allowed to avoid scald.

If coolant needs be frequently filled up, which means there is fault in cooling system, please contact VOGE dealer for troubleshooting.

⚠ Warning
If the coolant in tank was already dried up, please don't fill up by yourself, because under this case, there may have air got into coolant kit, please contact VOGE dealer for troubleshooting.

The replacement for coolant

Coolant drainage:

•Keep motorcycle upright by parking stand.

•Lay a liquid collective tray under engine.

•Remove drainage bolt, because all the cooling system are connected

•Most of the coolant would be drained off from this port.

•When all old coolant was drained off, please re-assemble the drainage bolt back.

Coolant filling up:

•Remove air exhaust plug as figure on the right shows.

Fill up with coolant from two places, one is filling port on heat radiator and another is the port on coolant tank:

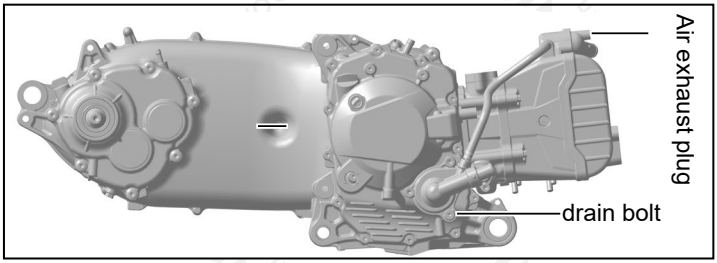
•Open the cap of heat radiator, then fill up with coolant.

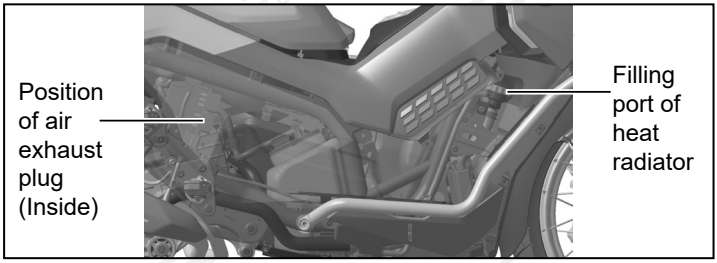
•Check if the coolant is full from port of heat radiator, check air outlet port of exhaust pipe when filing up (The place of removed plug), confirm if there is coolant flowing out, until the heat radiator is full of coolant and there is coolant keeping overflow from air outlet port, then re-assemble plug back and assemble cover of radiator port back.

•When re-assembled filling port cover of radiator in place, please start engine and run for 30 seconds to let coolant reach all the places need cooling.

•Stop the engine, when engine cooled down, open cover of filling port of radiator once again, check if the coolant is full, if the coolant level falls, please fill it up until it is full once again, re-assemble the cover in place, repeat the steps above until it is full, repeat the operation above if it is necessary.

•Finally remove the black rubber cap of coolant tank, then fill up with coolant until its level reached places within scale line LOWER and UPPER.





⚠ Warning

Fill up cooling kit with running water is forbidden, otherwise the cooling kit may damage.

Mixture between coolants with different specification is not allowed due to different formula.

If surrounding air is colder than it marked on label, please choose the coolant with better anti-freeze performance.

The coolant passed VOGE test is the one with ice point of -45℃ of glycol. Please contact VOGE dealer for purchasing and replacing.

⚠ Caution

•To keep the coolant performance, please replace it each two years.

•The specification of coolant: Ice point of -45℃ of glycol.

•Capacity of coolant: 1.3L.

•Please dispose the replaced coolant in environment friendly way.

⚠ Danger

During coolant filling up, when opened filling cover on radiator once again after engine worked and stopped, please get engine cooled down first, otherwise the hot coolant may spout when you opening the cover and lead to scald.

Brake liquid

The brake liquid is one of important media for braking force transmission in hydraulic brake kit, which needs high performance for both high and low temperature and nice flowing performance when it is under cold condition, meanwhile, it needs be with nice performance for anti-corrosive, so please adopt the correct brake liquid.

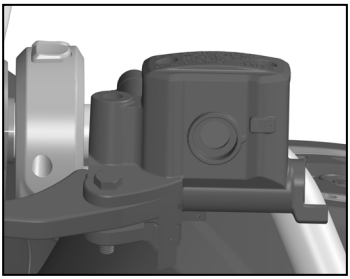
Inspection for brake liquid:

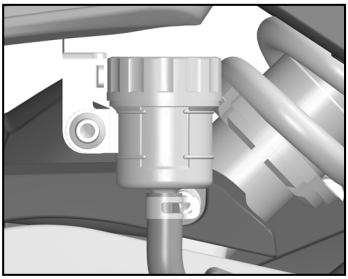
•Too low the level in brake oil cup may get air into brake system, which greatly reduces braking performance, so please make periodic inspection for liquid level.

•Inspection and filling up for brake liquid shall be done at oil cup of front and rear brake.

•The liquid level shall be neither higher than mark (UPPER or MAX) nor lower than mark (LOWER or MIN), please fill up with brake liquid on time.

•The brake liquid is corrosive, it may corrode painting surface or plastic surface if it flashes and touches them.





⚠ Warning

When it is necessary to fill up with brake liquid, open the oil cup cover by yourself may get air and moisture in, which may greatly reduce braking performance even lead to its failure, please contact VOGE dealer for filling up or replace.

Specification for brake liquid

When brake liquid absorbed moisture or impurities in, please replace or filter it on time, otherwise the insufficient braking force reduces braking performance, this point is especially important in wet areas.

The use of brake liquid above 2 years, it may get bad due to long time working, please replace it on time.

Liquid specification: DOT4.

Please dispose the replaced brake liquid in environment friendly way.

⚠ Caution

Mixture of brake liquid with different specifications and brands is not allowed, which greatly reduces braking performance due to different formula.

Tire

The tire connects motorcycle and ground, so it is very important. Incorrect tire condition and specification may badly reduce motorcycle performance.

Pressure in tire

Incorrect tire pressure may reduce working life of tire.

The low pressure in tire may lead to difficult steering and speed up tire abrasion.

Too high the pressure in tire may reduce contact area between tire and ground, which is easy to skid even bring motorcycle out of control.

Under high speed, the tire under centrifugal force and get valve core on wheel easy to be open. To prevent sudden air leakage, we added a rubber cap with metallic liner and connected it on valve core in threaded way.

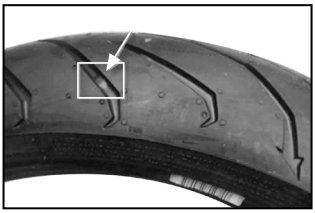
The air charging pressure gets higher along with temperature rising, so only when temperature of tire is basically the same to surrounding air, the correction for charging pressure under cold condition could be done. The tire specification is important to motorcycle performance.

⚠ Danger
Incorrect tire pressure is bad for motorcycle operation even leads to accident. Overloading leads to tire fault and brings motorcycle out of control. Check tire pressure monthly at least.

Under normal temperature, please check tire pressure as table below:

	Driver only	Driver & Passenger
Front tire	220kPa	240kPa
Rear tire	240kPa	260kPa

Inspection for tire wear-out limit



There is mark of abrasion on main surface of tire.

When the abrasion of tire reached the mark, which means the tire could not be used any longer.

There is mark for abrasion near edge mark TWI, the mark abrasion is inside water proof on tire tread, whose shape is a protrusion, when it is worn out, which means the abrasion reached limit, please replace the tire for a new one.

The wear-out of tire leads to penetration on tire and brings motorcycle out of control.

When the tire tread reached its minimum depth, its operation performance and ground grasping force is greatly reduced.

The repair of tire

Repair the tiny hole on tubeless tire, it needs to remove tire and patch up inside of tire, please don't repair it on its outer surface, because under high speed, the centrifugal force of tire may get repaired place flexible, when removing the tire, please pay attention to protection on tire sensor (Only some models equipped).

Within 24 hours after tire repairing, the highest speed could not be over 80km/h.

If the tire side was broken and the broken place was over 6mm, this tire could not be repaired.

When checking the tire, in case there are many damages such as broken, scratch or abrasion reached limit, the tire must be replaced.

Replacement for tire

When replacing tire, the tires with different brand, specification, newness or tire tread could not be adopted on the same motorcycle.

When tire was replaced, the wheel needs moving balance and correction, if the moving balance is poor, the operation performance of motorcycle may get lower, also lead to uneven abrasion on tire.

There is mark arrow to point rolling direction of tire. Please use tire according to the direction of mark arrow to prevent skidding in water, promote adhesive ability, reduce driving noise and get working life longer, which all optimize tire performance.

The tires with given specification are all strictly tested, which meets most demands of road.

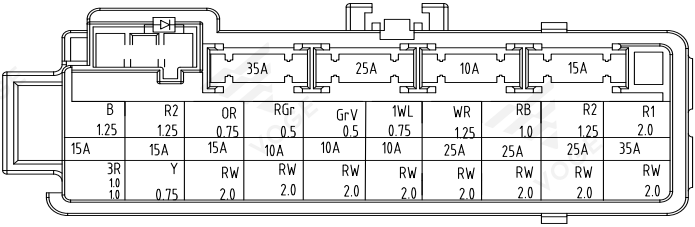
The tires haven’t certified falling short of ensuring adaptability and safety.

Please seal the contact place between wheel rim and tire lip for tubeless tire.

To avoid air leakage, the removal and re-assembly for tubeless tire needs the machine for this work only. When removing the tire, please pay attention to protection for tire pressure sensor (Only some of models equipped).

Please contact VOGE dealer for tire replacement, where equipped necessary tools and experiences.

Fuse chip



Before replacing fuse chip, please know well about root case of fault and make troubleshooting.

All specification and usage for fuse chips are all marked up.

Fuse chip for motorcycle power supply (35A): Control circuit of power supply for EFI kit and other electrical loading (Meter or light). Spare fuse chip: 35A (1 piece – Green – Inside of fuse box).

Fuse chip for power supply of ignition switch (25A): Control power supply for meter, horn, USB charger and starting relay. Spare fuse chip: 25A (1 piece – Blue – Inside of fuse box).

Fuse chip for power supply of BCM signal kit (15A): Control power supply for lights and horn. Spare fuse chip: 15A (1 piece – Blue – Inside of fuse box).

Fuse chip for power supply of ABS motor (25A): Control power supply for ABS kit.

Fuse chip for power supply of solenoid valve of ABS (15A): Control power supply of solenoid valve of ABS.

Fuse chip for EFI kit (15A): Control power supply for ECU of EFI, oxygen sensor, ECU joint,solenoid valve of carbon canister, fuel injector, ignition coil and

EFI kit.

Fuse chip for power supply of cooling fan (10A): Control power supply of cooling fan. Spare fuse chip: 10A (1 piece – Blue – Inside of fuse box).

Fuse chip for power supply of fuel pump (10A): Control power supply of fuel pump.

Fuse chip for power supply of windshield (10): Control power supply for windshield controller.

Fuse chip for power supply of charger (15A): Control power supply for external power loading Or cigarette lighter.

⚠ Caution

If fuse chip usually melted in short time, which indicates there is fault in electrical kit, please contact VOGE dealer for troubleshooting.

⚠ Danger

Please adopt fuse chip with given specification, the one for substitution is not allowed such as aluminum foil or iron wire.

Please don't adopt fuse chip out of given range and avoid direct connection of other fuse chip, otherwise they are bad for all circuits even leading to catch fire or burn out.

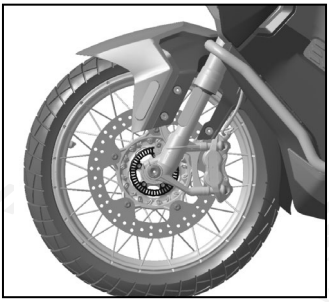
Brake pad

The pad abrasion passed minimum allowed thickness may reduce braking performance. Under some cases, it even lead to brake kit damage. For the reliability of brake kit, abrasion passed minimum allowed thickness is forbidden.

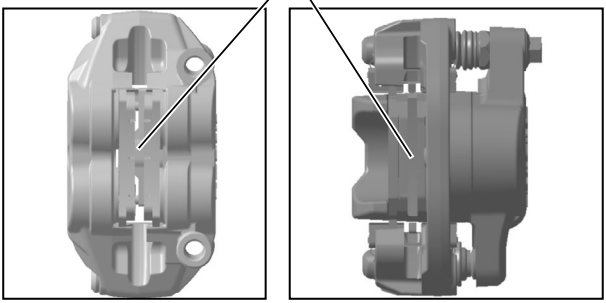
Replacement of brake pad

The correct way for replacing brake pad needs to remove front and rear wheel, so please contact VOGE dealer for this kind of work.

No matter front or rear brake pads, please replace them in pairs, if only replace one in an pair, it may lead to unbalanced braking even accident.



The bottom of the groove is the limit for abrasion for front and rear brake pads.



When brake pads removed, please don't operate brake lever, otherwise the piston will be

difficult to return back, meanwhile there would be risk of brake liquid leakage.

When replacing brake pads, please don't let oil or other dirt adhered on brake pads or plate,

please clean them up, otherwise it leads to skidding and reduces braking performance.

⚠ Danger
When brake pads replaced for new ones, please repeatedly confirm brake lever, confirm if the brake pads effectively and tightly pressed on brake plate, meanwhile confirm the correct free play of brake lever.

Light signal replacement

The missing of lighting signal makes you in danger, because it helps other find out you motorcycle in dark, please replace the broken light in time.

The headlight, position light, turning signal light, rear position light/brake light and rear registration light are all sealed LED light, if damaged, please contact service station for replacing as a kit. The replacement for lighting signal please strictly follow the description and specification in table below.

The dirt or grease on surface is a disturbance for heat radiation, which leads to overheat and shorter working life of the light.

Electrical system	
Battery specification	12V 10Ah
Headlight (High/Low beam)	12V 30W/12V 15W
Front position light	12V 6.7W×2
Rear position light	12V 1.2W
Rear brake light	12V 6W
Front turning signal light	12V 1W(Single)
Rear turning signal light	12V 1W (Single)
Rear registration plate light	12V 0.34W
Fuse chip specification	35A、25A、15A、10A

⚠ Warning

When signal light damaged, please choose the one with same rated power and specification for replacement, otherwise it leads to circuit overloading and earlier bulb failure.

Shock absorber inspection

Make periodic inspection for all parts of shock absorbers, which ensures the best performance of shock absorber:

•Before driving, please check if there is mud or sand adhered on fork tube, if there is, please wash it in time, otherwise it leads to oil leakage from oil seal.

•Check if there is grease stain on front and rear shock absorber, if there is trace of oil leakage,please contact VOGE dealer for troubleshooting.

•Tightly hold brake lever, press down for times to check and confirm smooth bounce up of front shock absorber.

•Keep motorcycle upright, press down seat for times to check smooth working of rear shock absorber.

Maintenance plan

The form list below shows you what inspection needs be done in each periodic maintenance,whose interval shall be the one in driving hours and mileage which reached first and set it asstandard.

Every time the inspection shall be done according to form list below.

Periodic maintenance table										
	Items	Interval	km x 1000							
			1	7	13	19	25	31	37
Powertrain part	Lubricant		First maintenance is the first 1000km, then replace each 6000km or half year, with oil specification of 10W/40-SL or above .						
	Lubrication element		R	R	R	R	R	R	R
	Check lubricant level		I	I	I	I	I	I	I
	Check sealing of fuel tube		I	I	I	I	I	I	I
	Check fuel pump element		\	\	I	\	I	\	I
	Fuel filter		\	R	R	R	R	R	R
	Throttle valve body		\	C	C	C	C	C	C
	Check coolant level		I	I	I	I	I	I	I
	Coolant	2 years	\	\	\	\	R	\	\
	Cooling system		\	I	I	I	I	I	I
	Check sealing of air intake kit		I	I	I	I	I	I	I
	Valve gap		I	I	I	I	I	I	I
	Crankcase breathing tube		\	C	C	C	C	C	C
	Spark plug		\	I	R	I	R	I	R
	Oil injector		\	\	\	\	\	\	I
	Air filter element		I	C	R	C	R	C	R
	Throttle operation kit		A	A	A	A	A	A	R
	Roller of counterweight		\	I	I	I	I	I	I
	Driving belt		\	\	R	\	R	\	R
	Driving and driven belt wheel kit		\	C	C	C	I	C	C
	CVT chamber		\	C	C	C	C	C	C
	Sloping plate edge		\	\	R	\	R	\	R
	Breathing groove screen		\	C	C	C	I	C	C
Lubrication part	Check steering lubrication and fastening		I	\	L	I	L	I	L
	Check lubrication for front and rear wheel bearings		\	L	L	L	L	L	L
	Check lubrication for turning shaft of main footrest and pillion step		\	L	L	L	L	L	L
	Check lubrication for shaft of main and side stand		\	L	L	L	L	L	L
	Check lubrication for shaft of front brake lever		\	L	L	L	L	L	L
	Check lubrication for bearing of rear fork		\	L	L	L	L	L	L
Others	Battery voltage		\	I	I	I	I	I	I
	Seal performance of brake oil tubes		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 pads		I	I	R	I	R	I	R
	Front and rear brake switch		I	I	I	I	I	I	I
	Check fuel evaporation kit		I	I	I	I	I	I	I
	Check fastening parts		I	I	I	I	I	I	I
	Check leakage on shock absorbers		I	I	I	I	I	I	I
	The meaning of each sign in table: I: Inspect C: Clean R: Replace A: Adjust L: Lubricate								

Routine Inspection for fastening torque of crucial parts				
Ref. No.	**Fastening position**	**Thread**	**Qty.**	**Torque(N•m)**
1	Fastening of front wheel shaft	M14	1	60
2	Caliper of front brake and front shock absorber	M10	4	32
3	Rear fork shaft	M16	1	115
4	Engine and frame	M12	4	60
5	Fastening of rear suspension (Rear shock absorber and swinging rack, frame, swinging rack and rear fork, frame)	M10	5	40
6	Rear wheel shaft	M16	1	115
7	Front shock absorber and steering stem, upper connective plate and handle bar	M8	9	20
8	Fastening bolt of muffler shield	M6	5	6

Please confirm if every time the maintenance is strictly following requirement in this book.

The maintenance in this book is only the least one needs be done, if you usually drive in bad conditions, the maintenance shall be more frequent.

After the driving in sandy weather or mud road, please make maintenance after the journey finished.

The waste materials produced from maintenance such as cleanser or replaced oil shall be disposed in environment friendly way without pollutions.

Correct maintenance is crucial factor for normal driving, please adopt correct spare parts for maintenance.

This kind of work shall be done by VOGE dealer.

10.Maintenance in parking time

Motorcycle storage

If your motorcycle would be parking without driving for a period of time, please operate as below:

•Replace oil for fresh.

•Block up air intake port of air filter and air exhaust port of muffler by wiping cloth dipped with fresh oil to avoid air with moisture getting into engine.

•Totally drain off fuel from fuel tank.

•Remove battery, wash battery surface by neutral soap water, meanwhile cleaning up oxide on positive and negative terminals.

•Storage of battery must be indoors with temperature above 0℃。

•Adjust air pressure in tire to given data.

•Spray protective agent to surface of rubber parts.

•Coat all the out-looking parts with protective wax for automobile.

•Finally cover the motorcycle by dry cloth and get it parking in dry place with sound ventilation.

⚠ Caution
Please make power charge for battery monthly.

Motorcycle protection

Please usually wash the motorcycle according to its driving situation and try to keep it clean and dry,

Please wash and clean up dirt adhered on surface of motorcycle such as bird's droppings, asphalt and salt.

Please adopt cover for motorcycle to avoid exposure under sunshine of noon, which gets covering plastic parts aged and color faded.

Motorcycle cleaning-up

Please wash motorcycle by cool water.

Totally clean up motorcycle by soft cloth and neutral cleanser.

Please don't wash motorcycle by water with high pressure.

In rainy days or after washing, there may be some water mist inside lens of headlight and turning signal, please turn on light for a while, the mist would disappear, because all the design for lights are with ventilation hole, which is normal.

⚠ Danger
The wet brake kit may reduce its braking performance, after washed the motorcycle, please repeatedly test brake kit under low speed to get it dried as soon as possible.

Motorcycle working life and disposal

Validity period

Please strictly follow local laws or regulations published by traffic administration department.

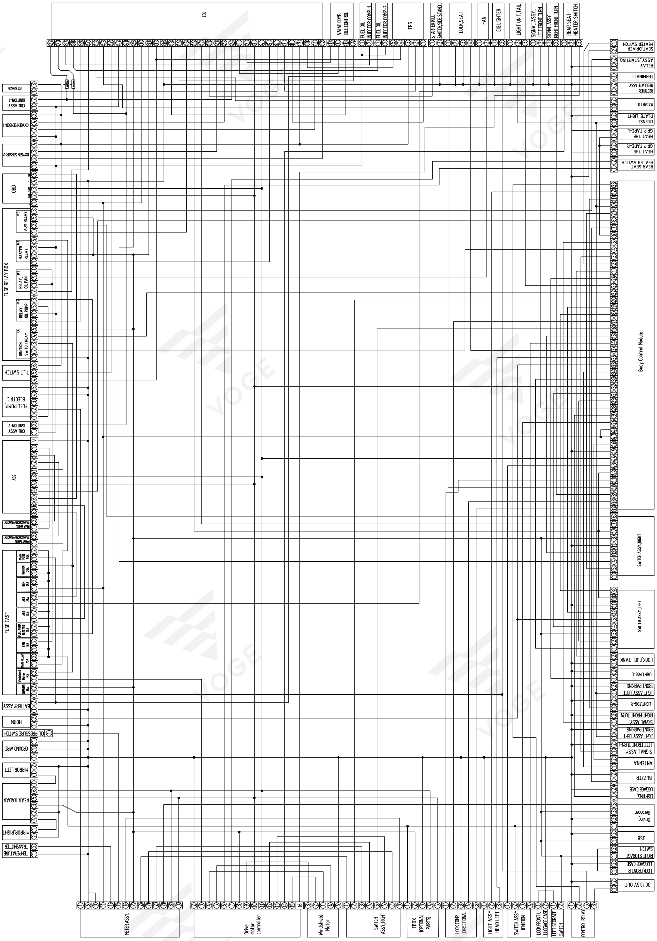
Disposal

Disposal for waste oil: Please put the replaced old oil into plastic barrel to get it back to company. Discard waste oil may get ground, soil, water source and environment polluted.

The wasted battery, bulb, plastic covering parts, oil element, tire, iron and aluminum parts need classification and recycling treatment, which could not be discarded at will, please don’t discard thin sulfuric acid to anywhere else at will, otherwise it may hurt man and get environment polluted.

When motorcycle scrapped, please dispose the scrapped motorcycle according to laws and regulations made by local traffic or vehicle administration department.

11.Electrical diagram



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