



VOGE

Far & Beyond Quality

MOTORCYCLE OPERATION MANUAL

FR150



Welcome to VOGÉ

We say thanks and express our congratulations to your correct choosing on VOGÉ.

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

Important information about this book

This book includes the important information, issues need pay attention to, warning and cautions about the motorcycle, so please always keep it on the motorcycle even lend or sell to others, this is very important. The pictures or details in this book may be different with the actual motorcycle, but their description and principle are the same. This book is a part of the motorcycle, keep it always on the vehicle even sell or lend. VOGÉ improves its products all the time to make sure its high quality and safety performance, so the information in this book may not be complete same with your actual motorcycle, in this case, the VOGÉ dealers are glad to provide your correct suggestions.

This user manual meets the standards: GB/T 19678.1、GB/T 9969、GB/T 40494

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Content list

I. Issues need pay attention to	1	Side stand and main stand	25
II. Safe driving	2	Rear brake pedal.....	25
Loading, accessories and refit.....	2	Engine starting.....	26
Checking before driving	3	Fuel filling-up	27
Issues need pay attention to during driving	4	VI. Malfunctions	28
Driving on road.....	5	Insufficient oil pressure	28
Braking and parking.....	6	Too hot the coolant.....	29
III. Main parameters	7	The coolant is not enough	29
IV. structure of motorcycle	8	Malfunction in engine system.....	29
Identification for motorcycle	8	Engine starting failure.....	30
Head part	9	Difficult engine starting	30
Left side	10	Weak engine power	30
Right side.....	11	Malfunction inspection and repair.....	30
Lower side of seat	12	VII. Grinding-in	31
V. Operation	13	Grinding-in for new motorcycle	31
Ignition switch	13	Grinding-in for engine.....	31
Instrument and its indicating light.....	14	Grinding-in for tire	32
Steering set switch.....	20	Grinding-in for brake system	32
USB power supply socket	22	VIII. Adjustment	33
ABS system.....	23	Adjustment for back-view mirror.....	33
Gearshift device.....	24	Adjustment for throttle grip	33

Adjustment for clutch lever	34	Maintenance plan.....	59
Adjustment for gearshift pedal.....	34	Brake pad.....	56
Adjustment for rear brake pedal	35	Replacement for secondary fuel filter.....	57
Adjustment for headlight dimmer	36	Replacement for lighting signal.....	58
Adjustment for transmission chain.....	37	Maintenance plan.....	59
IX. Check, repair and maintenance	38	X. Maintenance for the motorcycle in long parking ..	62
The fuel.....	38	Storage for motorcycle.....	62
Tool box	39	Protection for motorcycle	63
Moving parts and their maintenance.....	39	Cleaning up for motorcycle.....	63
battery.....	39	XI. Electrical diagram.....	64
External power supply	41		
Maintenance for air filter	42		
Oil in engine	43		
Coolant.....	47		
Brake liquid.....	50		
Driving chain.....	51		
Tire	52		
Fuse chip	54		
Brake pad.....	56		
Replacement for secondary fuel filter.....	57		
Replacement for lighting signal.....	58		

I .Issues need pay attention to

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

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

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

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

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

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

II. Safe driving

Loading, accessories and refit

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

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

Caution

- The parts this model equipped have passed the test for safety, practicability, and matching performance, and we take responsibility for them, otherwise, we have no responsibility for the parts not from us or without our authorization. So we strongly suggest you adopt the parts and accessories from VOGÉ factory only.
- All your replacement for parts must obey local laws. Make sure your motorcycle won't break any laws and regulations

Danger

- Incorrect loading, refit, accessories and maintenance are all hidden risk, before driving, make sure there is not any overloading and obey the stipulations above.
- Refit the electrical or controlling parts at will may damage your motorcycle even lead to accident.

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

Checking before driving

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

•Steering system

- Handle bar turns freely without jamming.
- No run-out or flexibility on steering stem

•Throttle

- Correct clearance for throttle cable.
- Operate throttle smooth without jamming.

•Brake device

- Operate brake lever and pedal normal.
- Correct position of brake liquid in oil cup.
- Pressing point if clean during braking process.
- Not water or greasy dirt on brake plate or pads.

•Shock absorber

- Press it and get back smoothly.

•Transmission chain

- Without too much abrasion or damage.
- Tightness is correct.

•Tires

- Correct tire pressure.
- Without too much abrasion for depth of tire tread.
- No damage or crack on surface of tire.

•Oil in engine

- Correct oil level.

•Cooling system

- Correct coolant level.
- Without coolant leakage.

•Lighting

- Headlight/Front position light, tail light/brake light, turning signal light, rear registration plate light and instrument light could normally work.

•Indicating light

- Control high beam indicating light, neutral gear light, indicating light of

turning signal through switch assembly can normally work. Oil pressure alarm light, EFI malfunction light, water alarm light and oil level alarm light are without flashing or permanent on when engine started.

•Horn

- Normally works.

•Kill switch of engine

- Normally works.

•Side stand

- Normally pick up.

•Back-view mirror

- Sit on motorcycle and keep it upright, the material 10m to tail of motorcycle within width of 4m could be clearly seen from back-view mirror.
- In case failed, please adjust the angle of back-view mirror.

Issues need pay attention to during driving

- 1.Any driver must know well about the motorcycle, the incorrect sitting position or off set during driving may be bad for operation or control of motorcycle; When driving, the passenger need. stably sit on his seat without influence driver. Passenger is an animal is not allowed.
 - 2.Keep the luggage low to decrease the influence on focus, also the weight of luggage needs evenly spread on both sides, please avoid the luggage extend too long.
 - 3.The luggage must fix on the motorcycle firmly, make sure it could not move before driving, in case it is unstable in driving, please check its fixing once again, and adjust if it is necessary.
 - 4.Too heavy or big the luggage is not allowed, the overloading must be bad for driving and performance.
 - 5.The accessories or luggage may decrease motorcycle performance shall not be loaded, make sure all what you do may not be bad for lighting system, ground clearance, brake performance, side angle, operation, compression distance of tire, working travel for front shock absorber or other performance related to driving.
 - 6.More weight on handle bar or front fork may be and for turning, and lead to unsafe driving.
 - 7.Fairing cover, wind shield glass, backrest or other parts with big size may have influence on stability or operation during driving, they increased not only the weight, but also the size, which lower down the power. In case their design lack of test, they may lead to unsafe driving.
 - 8.Refit to tricycle with side car is not allowed, drawing for other vehicles is also not allowed, and we take no responsibility for refit without authorization.
- The maximum loading: 150kg, (including driver, luggage, and accessories).

Driving on road

- Get on the motorcycle from left side and ride on.
- Pick up the side stand.
- Get the motorcycle upright to the ground, get the handle bar face front, keep its wheel face forward.
- Tightly hold the clutch lever.
- Slowly turn the throttle grip to accelerate, while slowly releasing the clutch lever, clutch meshed, then motorcycle slowly start.
- Wear helmet, gloves, driving boots, protective wear and pans before driving even only for a short driving.
- In case you drive fast, please pay attention to the factors below which bad for your driving.
 - Loose cloths.
 - Incorrect adjustment for spring of shock absorber.
 - Overload or imbalance load may be bad for your driving and controlling.
 - Don't drive after drink wines, drugs even medicines, even a few alcohol or medicine is bad for your sense and reflection.

Warning

Start engine from high gear position is not allowed, otherwise it may damage engine, Please start engine from 1st gear.

Danger

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

Braking and parking

- Please decelerate first when braking to reduce the speed and use the front and rear brake at same time.
- When the driving speed is low enough, get into low gear position, and tightly hold clutch lever.
- Get the engine into neutral gear, the motorcycle brakes and completely stops.
- When braking, your body get front and press down the front shock absorber, so there is more weight suddenly focus on the front wheel, so the front brake is more reliable, so the front brake is more powerful than the rear one and more easily get motorcycle stop.
- When you are driving on maintain way, use the rear brake only is dangerous, under some limit conditions, the brake may overheat and damage, please use the front, rear brake sand engine coordinately to decelerate.
- Driving in water and rain, the brake plate may get wet and reduce its braking performance, be careful under this situation. Under this case, we suggest you dry it up and then continue the operation.

Warning

- After a long driving, when parking, because the engine is very hot at this moment, so keep it far away from kids to avoid hurt.
- Don't park the motorcycle on soft ground to avoid rollover even damage the motorcycle.
- in case parking on a gentle slope, get the engine into low gear position, let its head face to uphill to avoid the turning of side stand and rollover.
- Parking or running on combustibile materials such as dry grass is not allowed, because the three-way catalyzer is working under very high temperature which is very easy to light up the combustibile materials.

III. Main parameters

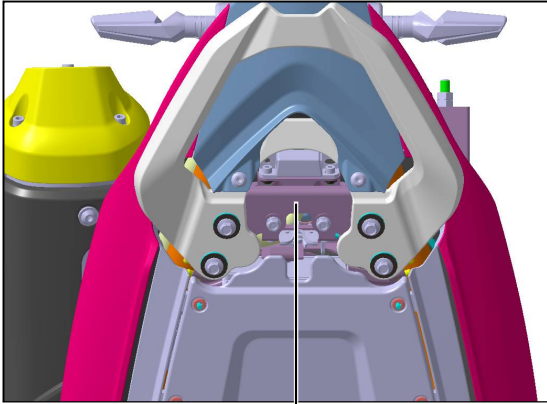
Motorcycle parameters	
LxWxH	1955mm×755mm×1120mm
Wheelbase	1290mm
Seat height	795mm
Ground clearance	145mm
Curb weight	123kg
Max. loading	150kg
Max. Weight	273kg
Front wheel loading	56.5kg
Rear wheel loading	66.5kg
Max. speed	110km/h
Gradeability	≥33°
Braking deceleration	Carry out according to ECE Reg.78.03
Fuel consumption	≤2.3L/100km (Carry out according to (EU) No.168/2013, (EU)No.134/2014)
Fuel tank capacity	5.8L
Coolant capacity	0.6L
Chain specification	428VO (124 links)
Suspension rack/Brake system	
Front shock absorber type	Shock absorber/Fork tube φ26mm with stroke of 83mm
Rear shock absorber type	Central shock absorber/Stroke of 27.5mm
Front wheel hub size	1.85×17
Rear wheel hub size	3.0×17
Front tire size	90/80-17 MC 46P
Rear tire size	120/70-17 MC 58P
Front brake type	Single plate, double pistons, floating caliper, fixed plate/plate diameter of 244mm
Rear brake type	Single plate, single piston, floating caliper, fixed plate/plate diameter of 203mm
ABS	ABS system with dual passages

Engine parameters	
Engine type	Single cylinder/water cooling/4 valves
Bore x Stroke	57.3mm×58mm
Displacement	149.6ml
Compression ratio	11.3:1
Clearance of air inlet valve	(0.012-0.18) mm
Clearance of air exhaust valve	(0.22-0.28) mm
Clearance of spark plug	0.6mm-0.8mm
Specification of spark plug	CR9E
Max. net power output/Rotation speed	11.5kW/8500r/min
Max. torque/Rotation speed	13.5N·m/7500r/min
Idling speed	(1500±100) r/min
Gear box type	International 6 gearshift position
Clutch type	Wet multi slice
Oil capacity	1.3L (10W/40-SJ)
Fuel supply	EFI system
Power transmission system	
Primary transmission ratio	3.26
End transmission ratio	2.933
1st gear	3.083
2nd gear	1.941
3rd gear	1.5
4th gear	1.227
5th gear	1.041
6th gear	0.923

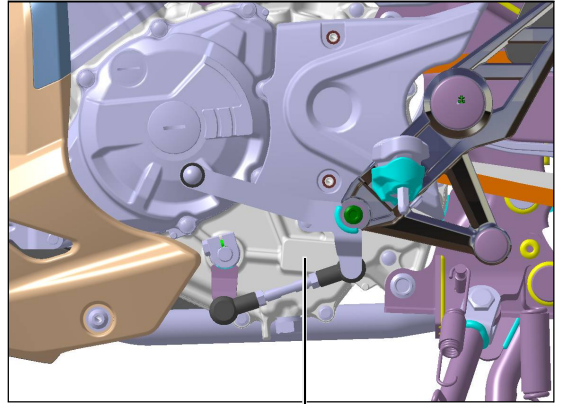
IV. structure of motorcycle

Identification for motorcycle

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



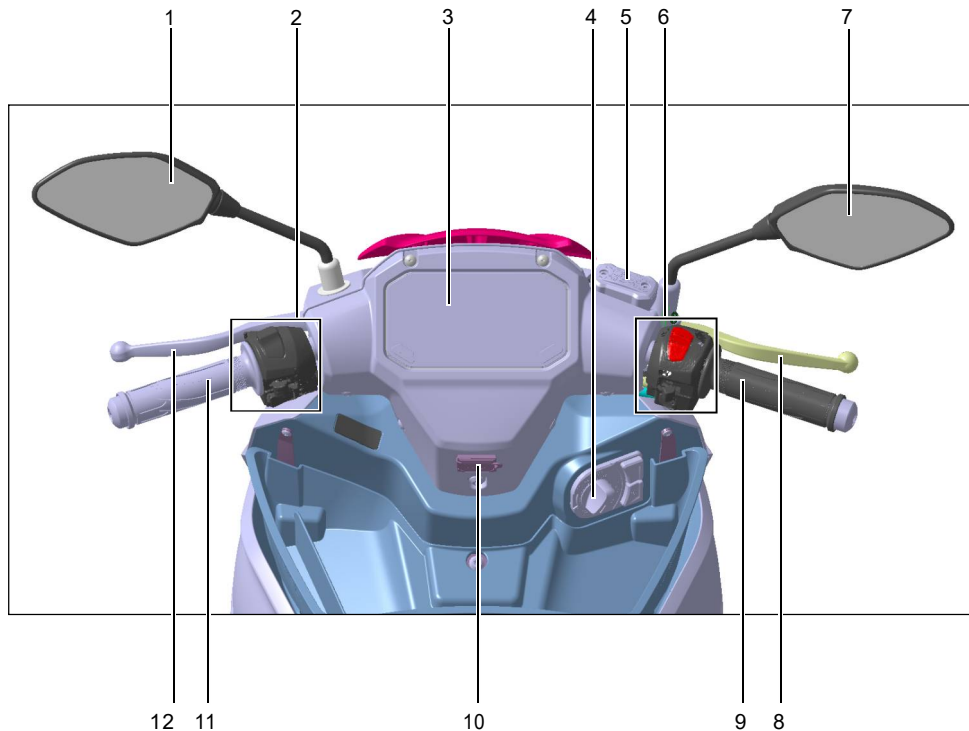
Vehicle Identification Number (VIN)



Engine type and Delivery number

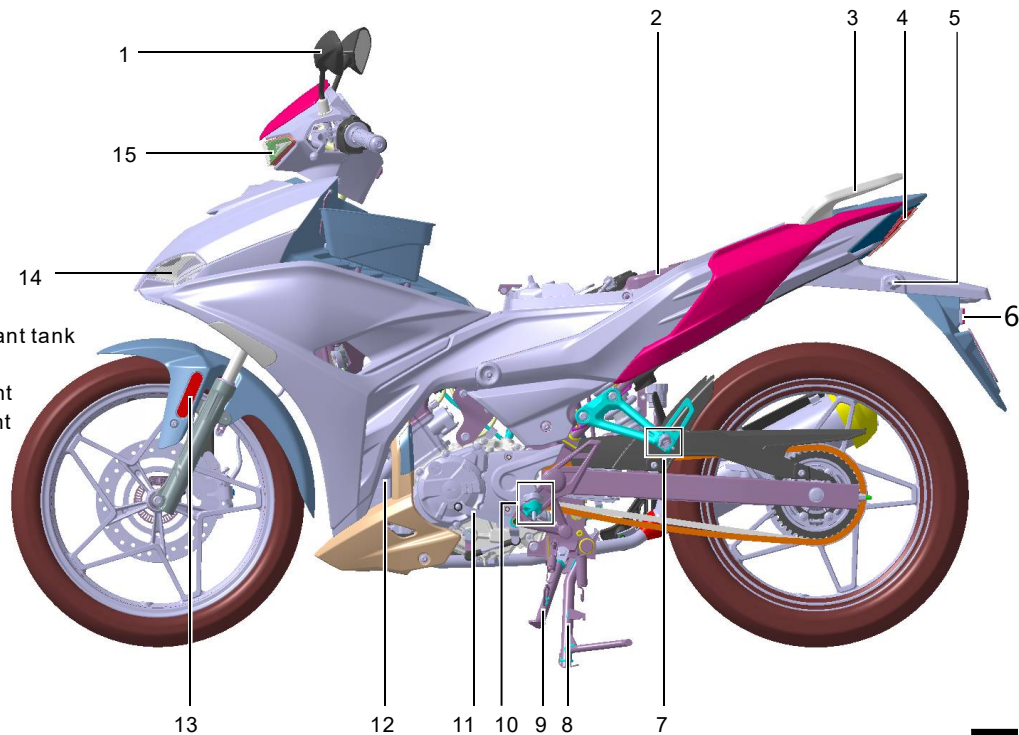
Head part

1. Left back-view mirror
2. Left switch
3. Meter
4. Ignition switch
5. Front brake oil cup
6. Right switch assy. and accelerator base
7. Right back-view mirror
8. Front brake lever
9. Accelerator
10. USB joint for power supply
11. Left grip
12. Clutch lever



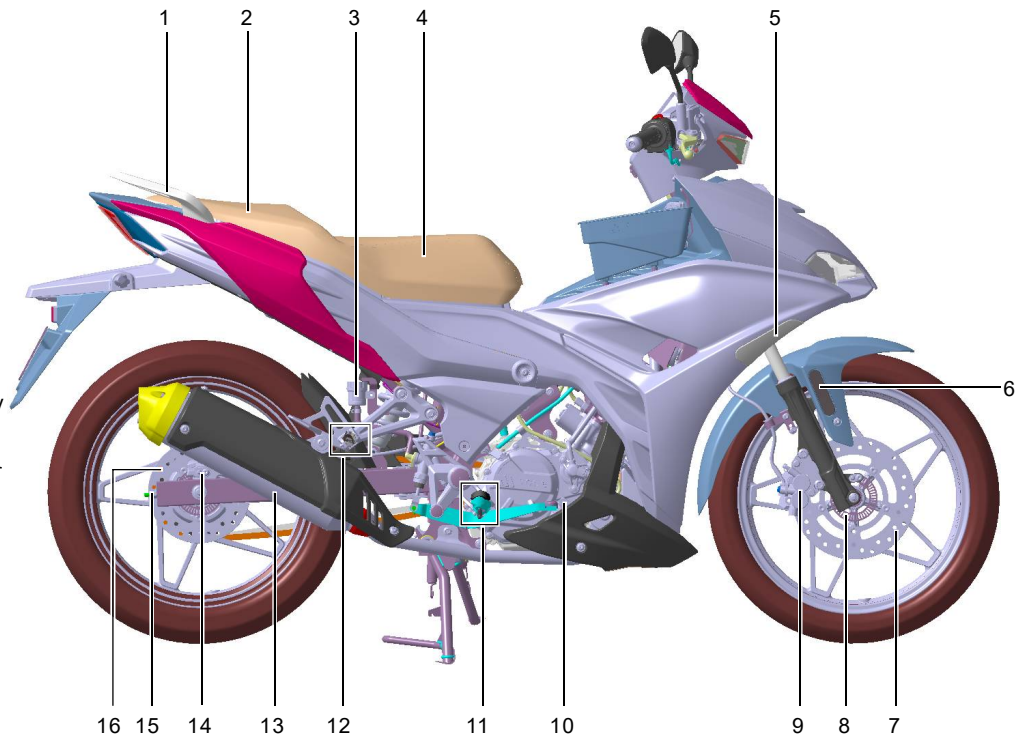
Left side

- 1. Mirror, rear view
- 2. Fuel tank
- 3. Left side armrest
- 4. Taillight
- 5. Rear turn signal
- 6. License plate lamp
- 7. Left pillion step body
- 8. Main stand
- 9. Side stand
- 10. Left footrest body
- 11. Gear change pedal
- 12. Filling-up port of coolant tank
- 13. Left side reflector
- 14. High beam of headlight
- 15. Low beam of headlight



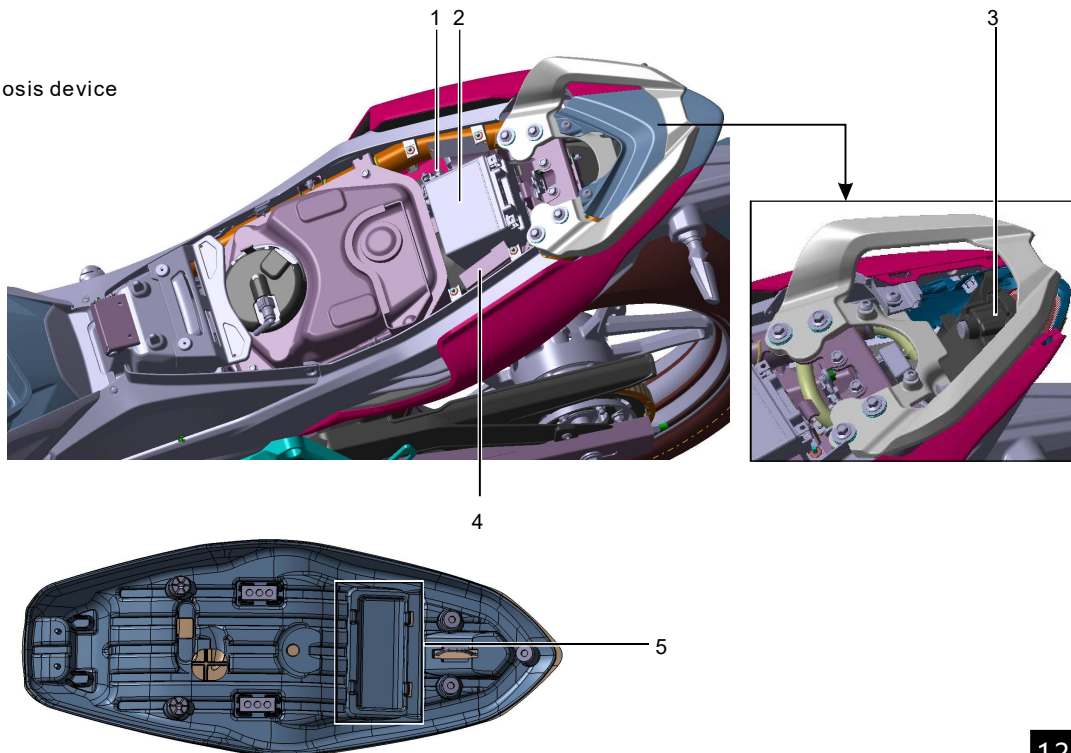
Right side

- 1.Right side armrest
- 2.Passenger seat
- 3.Rear disc-brake oil cup
- 4.Driver seat
- 5.Front turn light
- 6.Right side reflector
- 7.Front brake disk
- 8.ABS gear ring
- 9.Front brake caliper
- 10.Oil filling-up port and oil gauge
- 11.Right footrest body
- 12.Right pillion step body
- 13.Muffler
- 14.Rear disc-brake lower pump
- 15.Chain adjuster
- 16.Rear brake disk



Lower side of seat

- 1.Starting relay
- 2.Battery
- 3.Interface of diagnosis device
- 4.Fuse case
- 5.Accessories tool



V.Operation

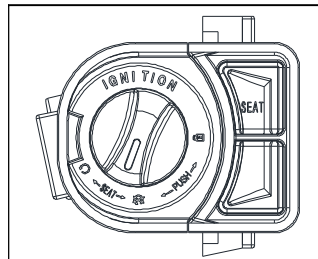
Ignition switch

The ignition switch locates at the right front of middle plate, which in the same piece with steering lock.

This model equipped electric and mechanical keys 2 pieces each, in which one is for spare using, please well keep it in place.

The ignition lock/steering lock/seat lock are all could be opened by electric key, the mechanical key is for the seat lock on the tail part of left body.

There are 4 positions for ignition switch: When the electric key got closing to the vehicle, press down the button first, the blue light is flashing, then it gets unlocked, when button bounced back, turn the button to position "⌚", the ignition circuit got on, then the vehicle could be started, all its circuits are connected. Turn it to position "⊗", the ignition circuit gets off, the vehicle could not be started. Position "🔒" means steering stem locked up, please turn the handle bar to left limit first, then turn the button to position "⊗", the ignition circuit gets off, the vehicle could not be started, the steering stem locked up and could not be turned.



⚠ Caution

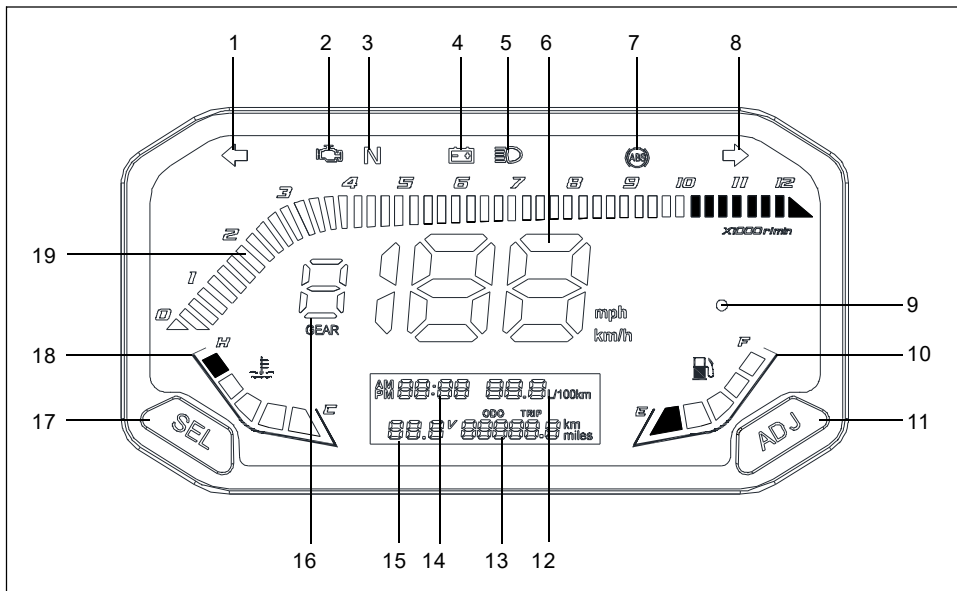
This model equipped both main and side stand for holding, turn the handle bar to left or right limit could both lock up steering lock, but we suggest usually turn the handle bar to left limit rather than right one.

⚠ Danger

Please don't turn the ignition key to position "⊗" during driving, otherwise you may bring the vehicle out of control.

Instrument and its indicating light

- 1.Left turning indicator
- 2.Engine malfunction alarm
- 3.Neutral indicator
- 4.Voltage malfunction alarm light
- 5.High beam indicator light
- 6.Speed indicator
- 7.ABS malfunction alarm light
- 8.Right turning indicator
- 9.Photoelectric sensor
- 10.Fuel meter and low level alarm
- 11.Metric/Imperial shift button
12. Fuel consumption
- 13.Total/Sub mileage
- 14.Clock display
15. Voltage
16. Gear position display
- 17.Mileage shift button
- 18.Coolant thermometer and alarm light
- 19.Engine rotation meter



Turn the ignition button to position “”, the meter starts its self-inspection

The display screen lights up and starts self-inspection, then show you the current status of vehicle.

Alarm light “” for engine malfunction got on and that “” for oil pressure also got on; The alarm light “” for malfunction in ABS is slowly blinking.

Warning

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

Left turning light “”

When push the left switch to “”, the indicator “” is on.

Caution

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

Neutral indicating light “N”

When engine is at neutral gear position, whose indicating light “N” gets on.

Alarm light “” for malfunction in engine

When there is malfunction on management system of engine, its alarm light “”, then turn the ignition button to position “”, the indicator light “”; When engine started, the indicator light “” gets off.

Warning

After the engine started, the indicating light “” goes on or flashing, at this moment, the motorcycle may not be normally stated, and the fuel system may not work.

In motorcycle driving, in case the indicating light “” goes on or flashing, please stop using, then contact the VOGÉ dealers.

Alarm light “” for malfunction in ABS

When there was malfunction in ABS system, its indicator light “” got on.

When turned ignition button to position “”, the indicator light “” is slowly flashing, when the vehicle is in normal driving, the indicator light “” got off.

Danger

In motorcycle driving, in case the indicating light “” gets permanently on, please stop using immediately, then contact the VOGÉ dealers.

Right turning indicating light “”

When pushed the right turning signal switch of right switch assy. to “”, the light “” gets on.

Caution

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

High beam indicator light “”

When pushed headlight switch on left switch assembly up, the indicator light “” got on.

When pressed overtaking switch on left switch assembly, the indicator light “” got on until you released the switch.

Oil pressure alarm light “”

When oil pressure is lower than normal range, whose indicating light “” gets on.

When turn the ignition key to position “”, while indicating light “” gets on; When engine started, the indicating light “” goes off immediately.

Caution

Oil pressure indicating light “” is not for showing oil level, it reminds you the abnormal oil pressure.

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

Warning

In case the indicating light “” gets permanently on when engine started or during driving, at this moment, keep driving may damage engine due to too low the oil pressure who makes poor lubrication. Under this case, stop driving and engine immediately, then check the oil level.

Negative display meter

Rotation speed: The rotation speed of engine. (r/min-rotation speed/minute – The current turning circles per minute for crankshaft)

Gear position: The current gear position of engine (Not neutral gear position).

Driving speed: The current running speed of vehicle. (km/h – kilometers/hour, or mph – miles/hour).

Water temperature: The current coolant temperature. (When it is $>120^{\circ}\text{C}$, the alarm light for water temperature gets red, meanwhile the red zone for water temperature is flashing).

Fuel level: Show you the current residual fuel.

When residual fuel in tank is about running out, the alarm light for fuel level may gets yellow, the yellow light is flashing together with red zone for fuel level, which reminds you a prompt fuel filling up is necessary.

Function for button:

1.Button ADJ (Right)

Short press: Under normal display, shift between Metric and Imperial; Under clock mode, shift between hour and minute place.

Long press: Under normal display, shift to clock mode; Under clock mode, shift to normal display.

2.Button SEL (Left)

Short press: Under normal display, shift between total and sub mileage.

Long press: Clear STRP to 0 under STRIP mode.



Caution

Short press is 1 second while long pressing is 3.

 Caution

During driving, the fuel in its tank is easy to get waving, when the residual fuel is not much, it may cause the indicating bar flashing, which is normal, please don't worry. When you found the alarm light for fuel got yellow, which means the residual fuel in tank is about 1.5L.

 Danger

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

Steering set switch

- 1.Clutch lever
- 2.Overtaking switch
- 3.High beam switch
- 4.Emergency kill switch
- 5.Front brake lever
- 6.Electrical kill switch
- 7.Emergency button
- 8.Horn switch
- 9.Turning signal switch



High beam switch

When pushed high beam switch forward to position “”, the high beam got on, mean while its indicator light “” also got on.

When pulled back high beam switch backwards to position “”, meanwhile its indicator light “” on meter also got off.

Overtaking switch

When pressed overtaking button, the high beam got on, meanwhile the indicator light “” for high beam on meter also got on, when released, it gets recovered.

Warning

Before engine started, the headlight could not be on, when engine got off, the headlight won't be off automatically, the headlight works depending on power supply from battery. Please don't keep ignition lock on for a long time when engine got off.

Button “” for horn

When pressing “”, the horn rings.

Turning signal light switch

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

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

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

Emergency light button “”

When pushed the emergency light button “”, all the turning signal lights and their indicator lights on meter are all blinking. When there is emergency parking or accident on your vehicle, please remind other vehicles pay attention to you by this alarm light.

Kill switch for electrical starting

With turn kill switch to position “”, the starting circuit for engine cut off, under this case, engine could not be started.

When engine is working, when kill switch turned to “”, the engine stops immediately.

Kill switch for electrical starting is the easiest and fastest way to let engine stop.

Front brake lever

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

Danger

In case shift kill switch to position “” during driving, it may lead to rear wheel lock up even accident. Please don't operate kill switch during driving.
Electrical starting button “”, when pressed down button “”, the circuit of engine gets connected, then start engine.

Warning

The design for this model includes interlocking switch between ignition and starting circuit, the engine could be started under conditions only as below:
The engine is at neutral gear “N”, and the ignition and kill switches are at position “”.
The engine is not at neutral gear, and the ignition and kill switch are at position “”, then tightly hold the clutch lever.

USB power supply socket “”

The specification of output for this model's USB power supply socket is: 5V 1.A

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

Warning

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

ABS system

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

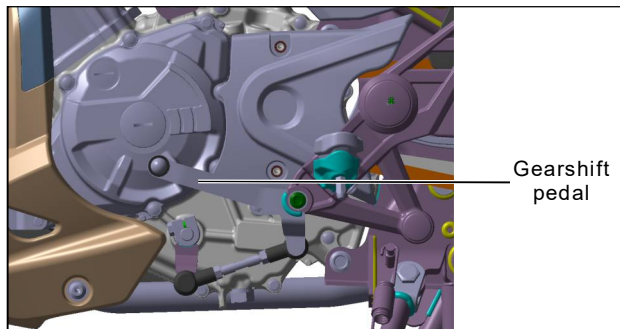
Caution

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

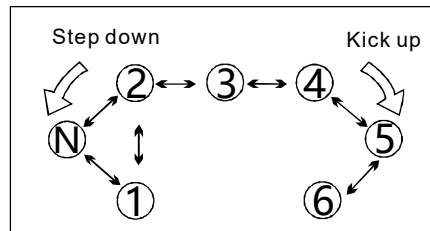
Danger

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

Gearshift device



This model equipped gearshift device with 6 gear positions, whose gearshift details are shown as below:



- The gearshift device makes engine stale work within normal rotation speed.
- Gearshift ratio is carefully designed according to engine performance, the driver shall select the most suitable gear position, please don't drive in high speed while in low gear position.
- To ensure smooth gearshift and reduce impact on rear wheel, use clutch in cooperation, before shift to low gear position, reduce driving speed and rise up rotation speed of engine.
- To ensure smooth gearshift and reduce impact on rear wheel, use clutch in cooperation, before shift to high gear position, rise up driving speed and reduce rotation speed of engine.

Warning

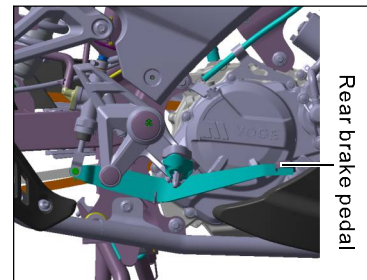
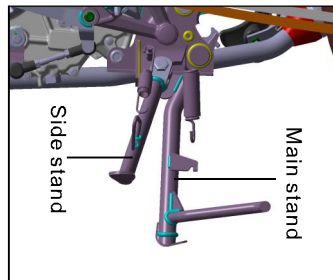
Any time, please don't control driving speed in semi-clutch way. Any gear position, sliding while tightly holding clutch is not allowed.

Side stand and main stand

The design for this model includes main and side stand, please choose the correct one according to actual conditions.

Rear brake pedal

Step down rear brake pedal, the rear wheel brakes, while its indicating light gets on.



⚠ Caution

When the side stand is working and holding the vehicle, the engine could be started only when it is in neutral gear; In case the engine is in any gear position (Not neutral gear), the engine could not be started before holding clutch lever.

⚠ Warning

1. In case the parking ground is soft or uneven, the vehicle may fail to park. So the parking needs be on solid and flat ground.
2. In case parking on slope is necessary, please get the head of vehicle to direction of uphill, then get engine into the 1st gear, which could reduce side stand turning and lead to side rolling; Otherwise please choose the main stand, but the head of vehicle must be got to uphill side to prevent skidding.
3. The main and side stand take weight of vehicle itself into consideration, so please don't lean on the parking vehicle, otherwise the main or side stand may get distorted due to overweight.

Engine starting

Check if the kill switch for engine is at position “”.

Insert the key into ignition switch and turn to position “”.

Confirm if the engine is in neutral gear, whose indicator light “N” on meter will get on.

When all conditions above got ready, tightly hold clutch lever by left hand for ensuring safety, the right hand could press electric starting button “”, at this moment the throttle lever needn't be turned.

When engine started, please release electric starting button immediately.

Start engine, get it idly run for sufficiently heat it up/

The design for this model includes interlocking switch between ignition and starting circuit, whose engine could be started only under conditions below.

-The engine is in neutral gear, the ignition and kill switches are at position “”, then tightly hold clutch lever for ensuring safety.

-The engine is not in neutral gear, the ignition and kill switches are at position “”, meanwhile tightly holding clutch lever.

Warning

Enough pre-heating makes better lubrication, to decrease engine abrasion, the colder the weather the more pre-heating minutes are needed. Long time idling working of engine is not allowed, because the poor heat radiation lead to engine overheated and damage the inner parts.

Under cold conditions, suitably turn the throttle grip while pressing the starting button to easier start.

The lubrication works only when the engine is running, so don't push the motorcycle forward for a long way when the engine is stopping. After the engine started, check the flashing or abnormal power on of indicating lights on instrument, in case it is, please top the engine and make corresponding inspection.

Danger

The exhasut gas of motorcycle has carbon monoxide, which is without color, smell, but poisonous.
In the place without smooth ventilation or indoors, start engine for idling too long is not allowed, to avoid poisoning.

Fuel filling-up

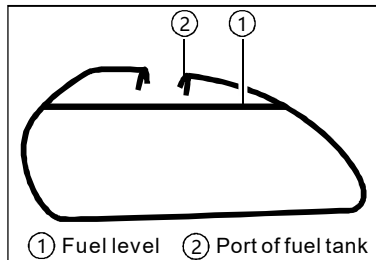
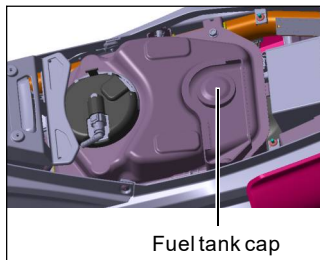


This alarm light reminds you fuel filling-up

Caution: In case the fuel is not enough, it leads to engine starting failure, or abnormal power output, under this case, keep driving will damage fuel pump.

Don't run out the fuel in the tank, make fuel filling-up before the alarm light gets yellow.

Turn the ignition switch to position "SEAT", press the button "SEAT" on the right, then open the seat and the fuel tank lock could be seen, turn it anticlockwise, the fuel tank cap could be opened. When the fuel filled up, get the fuel tank cap back in its place, then powerfully press it down and turn it clockwise. Please don't wash the fuel tank lock by water of high pressure to avoid water getting into fuel tank. Please adopt unleaded gasoline or with low lead above 95#.



Fuel tank capacity:5.8L

Warning

- The fuel is corrosive to painting surface, get its color fading and ugly. In case there is fuel on the painting surface, please wipe it up.
- The fuel may expand when it is hot, fully fill up may lead to overflow due to too strong the internal pressure makes fuel tank distort.
- When filling up the fuel, don't make it too full, let the fuel reach the bottom of anti-surge ring on fuel tank's port is enough.

Danger

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

VI. Malfunctions

Insufficient oil pressure



This alarm light indicates too low the pressure in lubrication system, at this moment, please stop the motorcycle and engine immediately.

The only way for check oil level is confirm by oil gauge.

The alarm light for oil gets on, one cause is too low the oil level. Check the oil level in engine, in case too low the oil level, please fill up.

In case alarm light for oil gets on, while oil level is correct, that means there may have some other causes. In case keep driving, these causes may damage engine. In case you confirm the light is on while oil level is correct, please don't drive any more and stop.

Please contact VOGÉ dealer immediately.

Too hot the coolant



This alarm light on means too high the coolant temperature.

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

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

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

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

The coolant is not enough

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

–Reduce the loading to decrease the engine heat.

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

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

Malfunction in engine system



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

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

Engine starting failure

When engine is at neutral gear, if the kill switch is working.

When engine is at gear position not neutral, if the kill switch is working, tightly hold clutch lever, the side stand was picked up.

If the fuel is enough.

Difficult engine starting

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

Battery power loss.

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

Weak engine power

Check if the element of air filter is clean.

If the motorcycle is at high altitude.

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

Malfunction inspection and repair

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

VII. Grinding-in

Grinding-in for new motorcycle

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

Grinding-in for engine

- No matter the engine is hot or cold, before starting, idly start the engine for enough time, to let oil spread to all positions need lubrication.
- During this time, the rotation seed of engine in the first 500km should not be over 5000r/min, 50km/h, the second 500km without over 7000/min.
- During grind-in, the gear position and rotation speed of engine shall change usually, don't let motorcycle work in a same gear position or rotation speed for a long time.
- During this time, in case the engine works under fixed low speed with light loading, this may lead to bad matching for parts and greater wear-out, so please don't drive under even speed with light loading for long time.
- During grind-in, except emergency, avoid sudden acceleration or braking as possible.
No dragging for gear, get into lower gear before deceleration, let engine always works under comfortable situation.
- During this period, don't drive for a long journey, let engine have enough rest.

Grinding-in for tire

- The surface of new tire is smooth, so it is dangerous to driving too fast or at turning. To get the strongest gripping force, the grinding-in is important.
- In the first 200km, you can drive at turning in low speed until all angles of tire tread completely grinded-in.
- The protrusion on tire tread is dangerous, the grinding is a good way for avoid protrusion on tire tread.

Grinding-in for brake system

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

Danger

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

VIII. Adjustment

Adjustment for back-view mirror

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

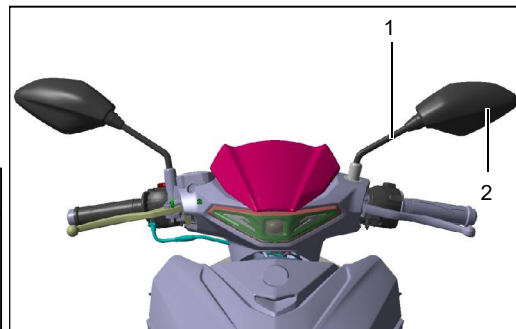
The mirror body 1 and case 2 could adjust by hand directly.

Warning

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

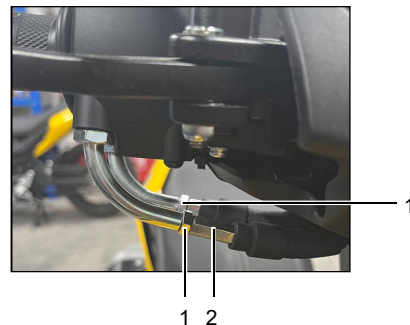
Danger

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



Adjustment for throttle grip

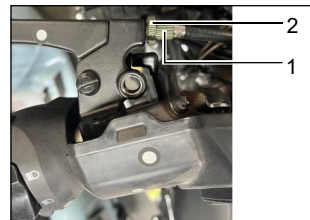
- The throttle lever is for controlling engine rotation.
- Turn to your own direction is acceleration, the opposite direction is deceleration.
- The adjustment for clearance of throttle cable.
 - Loosen locking nut 1
 - Turn the adjustor 2, then adjust the clearance of throttle cable between 2-4mm.
 - Lock up nut 1



Free play for throttle cable shall be 2-4mm

Adjustment for clutch lever

- When engine started, in case need braking or gear shift, tightly hold clutch lever to let friction plates of clutch separate to cut off the power transmission from engine.
- The free play at end of clutch lever shall be within 5-8mm, in case it is incorrect, please adjust as below:
 - Remove low beam kit.
 - Loosen locking nut 1.
 - Turn adjustor 2 to get the free play between 5-8mm.
 - Lock up nut 1.
 - Re-assemble low beam kit.



Free play for end of clutch lever shall be: 5-8mm

Warning

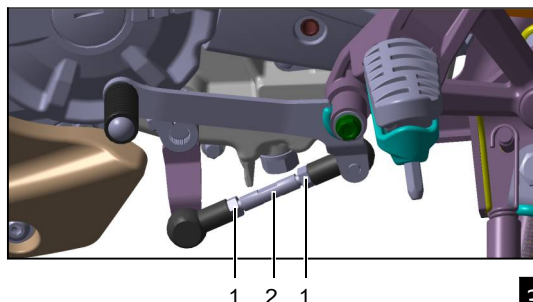
Too wide the free play of clutch lever is easy to produce abrasion and malfunction on clutch and gearshift device.

Caution

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

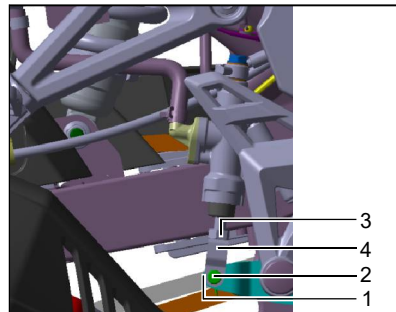
Adjustment for gearshift pedal

- During driving, the road conditions are various, gearshift pedal can change speed and traction force.
- The rod for gearshift pedal is adjustable to suit your driving habit.
 - Loosen 2 pieces of hex. nut 1 for locking up connective rod for gearshift.
 - Turn the connective rod 2 of gearshift, to adjust the gearshift pedal to the position make you comfortable during driving.
 - Finally lock up the hex. nut.



Adjustment for rear brake pedal

- Keep the height of rear brake pedal at a suitable position, in case too high, it is easy to be stepped during driving, which lead to brake pads and plate usually touch makes friction even damage.
- For ensure reliable braking, the free play of rear brake pedal shall be within 15-25mm, in case its free play is incorrect, please adjust as below:
 - Remove split pin 1
 - Remove pin axis 2
 - Loosen nut 3 on adjusting stud
 - Turn connective piece 4 of adjusting stud clockwise or anti-clockwise
 - Turn clockwise the pedal gets up, anticlockwise it gets down.
 - When the height of brake pedal adjusted to suitable position, lock up the nut on adjusting stud.
 - Re-assembly is precisely opposite to disassembly.



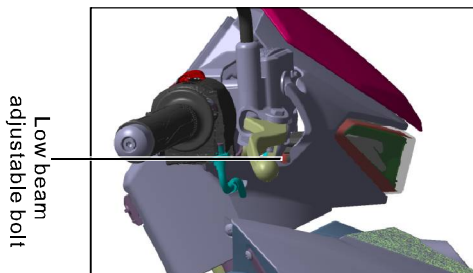
Free play for rear brake pedal shall be 15-25mm
Fastening torque for nut of adjusting stud shall be 18 N.m

Danger

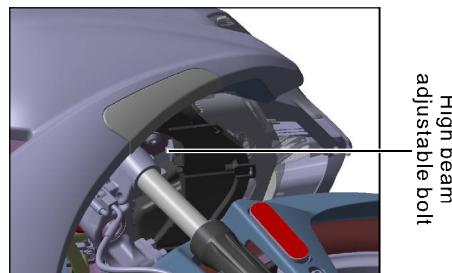
- When re-assembling, please replace split pin for a new one.
- When re-assembled, repeatedly press and release brake pedal, while confirming you can clearly feel the pressing point.
- In case pressing point failed to be felt, please contact VOGÉ dealer.
- In case adjustment is not correct, the brake pad and plate are always under stress, which may lead to their damage.

Adjustment for headlight dimmer

- The headlight shall keep a correct height when shock absorbers are under different loading.
- For ensuring safe driving at night, adjust the angle of lighting beam from headlight to meet demands for different lighting height under various loadings.
- The adjustable screw is behind headlight, please align the screw by cross head screwdriver by referring to its adjusting view figure.
- Turn clockwise the low beam, the lighting gets lower, anticlockwise is getting higher.
- Turn clockwise the high beam, the lighting gets higher, anticlockwise is getting lower.



Low beam adjusting view figure



High beam adjusting view figure

Danger

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

Adjustment for transmission chain

- Too tight or loose the chain are both incorrect.
- Too loose the chain, is easy to lead to it dropping off and accident.
- Too tight the chain is bad for its working life, meanwhile getting resistance force stronger.

The correct tightness for chain is shown as picture:

In case the tightness of chain on your vehicle fails to meet the requirements above, please adjust it, and whose method is show as below:

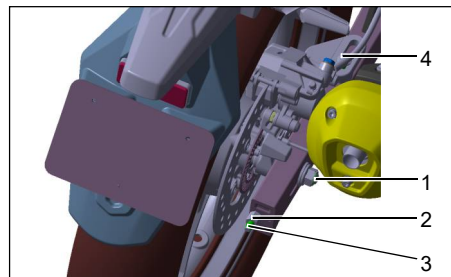
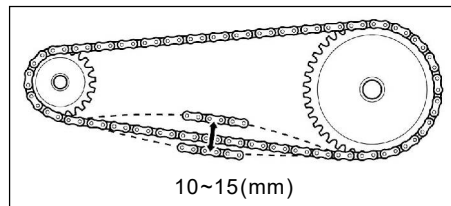
- Keep motorcycle upright by the parking rack for it only.
- Loosen locating bolt 1 on lower pump of rear brake, then loosen nut 2 for rear wheel axle and adjustable bolt 3, adjust the locking nut 4 for bolt, adjust the bolt according to tightness of chain.
- In case too loose the chain, turn the bolt anticlockwise.
- In case too tight, please turn the bolt clockwise, then powerfully push the rear wheel to get chain looser.
- When the tightness for chain got suitable, turn the bolt on left and right for fine tuning, get the scale marks on adjustable ejecting piece and rear fork aligned.

- Lock up nut 2 for rear wheel axle, then the locking nut 3 and 4 for adjustable bolt on left and right side, also lock up locating bolt 1 on lower pump of rear brake.

The specification for driving chain:

Specification: 428VD Numbers for links 124

Oil seal Chain Locking ring for link without opening



Fastening torque for nut on rear wheel axle shall be $75 \pm 7.5 \text{ N.m}$

Danger

This kind of driving chain is without opening, the one with opening could not be adopted, otherwise it leads to accident. Replace this kind of driving chain need tools for it only, poor riveting for links without opening will also leads to chain break up even accident.

IX. Check, repair and maintenance

The fuel

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

- The operations below may decrease the fuel consumption under correct driving:
 - The driving shall be gentle, stable and without sudden braking as possible, the re-start and acceleration may use more fuel.
 - Driving in the city is bad for fuel consumption, the frequent stop and move means frequent start of engine.
 - Motorcycle shall drive under economic speed first, whose economic speed is 50km/h, the faster the bigger fuel consumption.
 - Avoid driving for short distance. The fuel consumption in the first km after started is double times to normal situation due to the motorcycle hasn't reached the best working temperature.
 - In case the air pressure in tire is not enough may increase the rolling resistance of wheel, and then increase the fuel consumption.
 - Strictly follow the Period Maintenance table is important to save fuel.
- Except the causes above, you may become more skillful with the mileage rise, for more driving fun, you may usually make sudden acceleration or deceleration, at this moment, the fuel consumption uprises compare to your former stable and gentle driving, which actually because of your change of driving style.

Tool box

The tool kit is put in its bag under seat, open the seat first, at its bottom, the tool bag could be seen. When used under bad conditions such as driving in rainy day or washed vehicle, please make corresponding lubrications.

Moving parts and their maintenance

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

- Clutch lever's shaft.
- Brake lever's shaft.
- Bearing for brake pedal.
- Shaft for side stand and spring hook for side stand.
- Shaft for main footrest, pillion step, and returning spring.

Caution

Except the chain needs lubricant for it only, other lubrication point we suggest adopt lubricant of lithium.

battery

Maintenance for battery

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

Caution

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

The power charge for battery

In case the ignition lock is off, while the voltage of battery is lower than 12.6V, we suggest charge the battery.

- Charge the battery by stable DC power source or use the suitable power charger and strictly follow its instruction.
- The DC charging voltage shall be DC (14.5 ± 0.3)V with stable current no more than 1A;
- The charging hours is 6 to 8, don't let the current than the maximum limit.
- The overcharging may shorten the batter working life, so don't adopt this way.
- Cut off the power circuit with motorcycle before charging.
- Usually check the cleanliness of terminal or wire joint, in case already corroded or oxidized, please clean it up.
- In case the motorcycle is usually in driving, the motorcycle may charge the battery automatically. In case just a few times or driving for short time, the power in battery may not be enough. The battery may discharge by itself, whose speed depends on the battery specification or surrounding temperature. When the surrounding temperature gets rise, the discharge speeds up, for example, the discharge speeds up by 100% with each temperature rise by 15°C.
- In case the battery is without suitable charge in cold weather, the electrolyte may get frozen, then makes the battery damage or terminal distort, make the battery full of power can let it stronger in low temperature.
- Parking for a long time without driving need to cut off the negative terminal of battery first, otherwise the electrical parts on the circuit may gradually make power run out.
- Parking without driving more than 1 month need to charge the battery monthly. In case the battery is without charging for a long time may lead to natural failure.
- Correctly dispose the abandoned battery or electrolyte, don't let it be the pollution to the environment.

Danger

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

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

Disassembly and re-assembly for battery

- Before the disassembly and re-assembly, turn off the ignition switch first.
- Remove the negative terminal first when disassembling the battery, then the positive one.
- Install the positive terminal first when re-assembling, then the negative one.
- Every time when re-assembled the battery, turn on the ignition switch for 1 minute and then turn off to let the electrical equipment initialize.

Warning

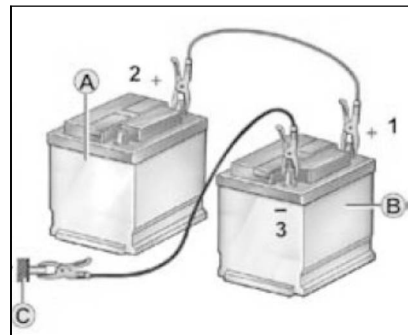
Don't put the battery up side down, otherwise the electrolyte may flow out from the breathing hole.

External power supply

- When the power in battery fail to start engine, the outpower source could be adopted for engine starting.
- When the outer power source is adopted, use the wire clip for spring only of completely insulated to avoid short cut or non-jump spark between guiding wires.

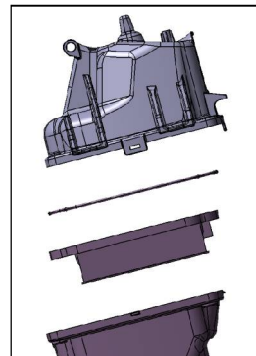
The battery A is the power source on motorcycle while the battery B is an outer one.

The positive terminal 1 on outer power source B connect to positive terminal 2 on power source A on motorcycle, while the negative terminal 3 connect to the metallic part C on engine to connect the ground. Start the engine, in case failed, wait for minutes and then start once again to protect the engine and battery. Before removing the guiding wire of outer power source, let engine run for minutes, then cut off the negative wire and ground wire first, then the positive wire.



Maintenance for air filter

- The air filter locates under fuel tank, if it is blocked by dust, the air inlet may get harder, which reduce power output and increase fuel consumption.
- In case driving under dusty condition, clean up and replace the element more frequent.
- The cleaning up and replacement for air filter element:
 - Remove the seat
 - Remove the 8 pieces of screw on the cover of air filter case, pull it out as a complete kit.
 - Remove the element connecting air filter.
 - The cracked air filter or its element may get dust into engine and damage it, In case it is broken, please replace
 - In case the installation for element of air filter is incorrect, the dust may get into engine bypassing the element and get engine damaged, please make sure the installation for element is correct.



Caution

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

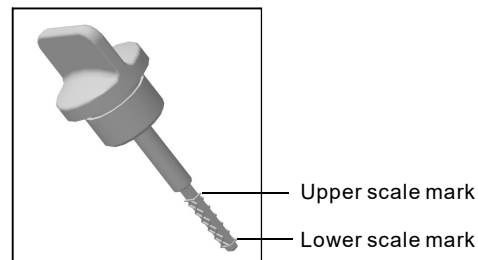
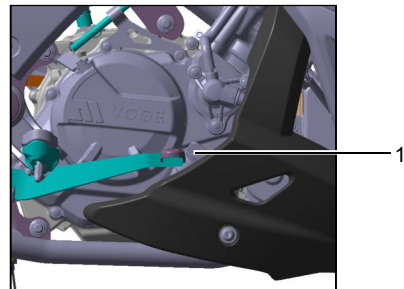
Oil in engine

Check the oil level

- The inspection for oil level and oil filling-up are both on the right side cover of engine as picture on the right shows.
- The checking for oil level:
 - Do this work when the engine is cold.
 - Keep the motorcycle upright.
 - Remove the oil gauge 1 to check the oil level.
 - The correct level shall be within the upper and lower scale lines of oil gauge 1.
- In case the oil level is higher than upper line, outlet some oil.
- In case the oil level is lower than the lower line, inlet some oil.
- No matter inlet or outlet, check the oil level once again when the operation finished.

The maintenance for oil in engine

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

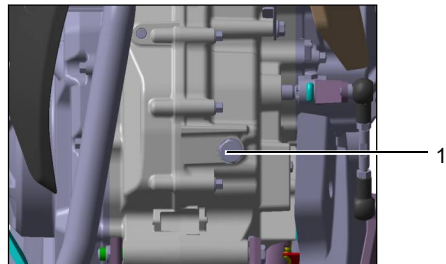


•Outlet the oil:

–In case too high the oil level, please remove the oil drainage bolt by socket wrench(The oil drainage bolt is shown as picture 1), in the middle at bottom of engine.

–After releasing an appropriate amount of engine oil, please reset and lock the engine oil bolts. Outlet some oil then re-assemble the oil drainage bolt. Too high or low the oil level may both damage the engine.

Please make sure the oil is at a correct level.



⚠ Caution

The oil may expand with temperature rise, so its level also changes.

The hotter the engine the higher the oil level, while the colder engine with lower oil level, which both are normal.

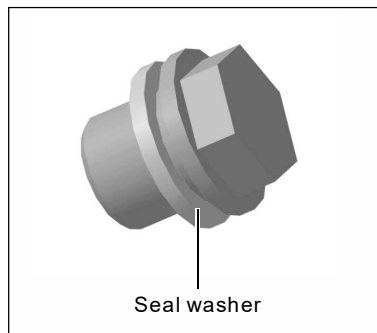
Keep the motorcycle upright when checking the oil level, in another word is vertical to the ground.

⚠ Danger

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

Replacement for engine oil

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



Warning

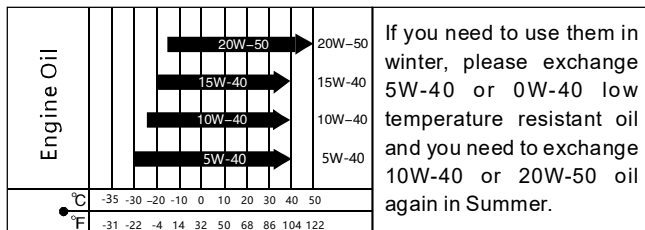
Replace the oil drainage bolt and its seal ring for a new one when re-assembling, in case still use the old one, it is easy to make oil leakage.

Danger

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

Oil filling up for engine

- The oil drainage bolt and gasket are replaced and assembled.
- Fill up with fresh oil from oil filling port, whose amount shall be 1300mL.
- Start engine and idly run it for minutes.
- Stop engine and wait for a minute, remove oil gauge and check oil level, when checking oil level, the vehicle must be kept horizontal to ground vertically, in case the oil level is under lower scale mark, please fill up with fresh oil to middle place between lower and upper scale line.



⚠ Caution

The replacement for oil shall be done when engine was still hot.

Specification for oil: 10W/40-SJ or above.

Amount for oil filling-up: 1.3L

Please dispose the replaced and used oil in environmental friendly way.

Warning

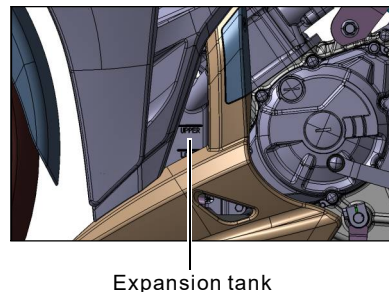
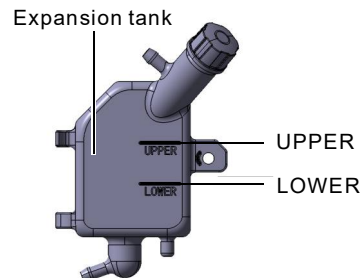
Wrong oil specification or bad oil may damage the engine, EFI system and shorten the working life of spark plug and catalyst in muffler, don't use them.

Coolant

Check and maintenance for coolant

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

- The check and filling-up of coolant are all done in sub tank.
- Stop the engine.
- Check when the engine is cold , because the coolant may expand when it got hot.
- Keep the motorcycle upright.
- Check the coolant level through expansion tank, whose level shall be between the scale line LOWER and UPPER.
- In case the coolant level is under scale mark LOWER, fill up from the port of expansion tank.
- In case the coolant level is higher than scale mark UPPER, the coolant may overflow from tube when it got hot and expand in working, for avoid hurting by hot coolant, fill up too much is not allowed.
- In case the motorcycle need fill up the coolant frequently, which means there is malfunction in the cooling system, under this case, please contact the VOGÉ dealer.



Warning

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

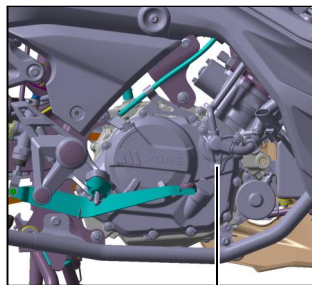
The replacement for coolant

- The coolant drainage:

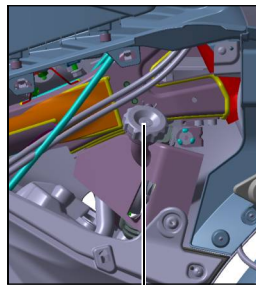
- Keep the motorcycle upright by standing rack.
- Lay a liquid tray under the engine.
- Remove the water drainage bolt, because all the heat radiation system is connected, so all the coolant may flow out from this port.
- After the old coolant drained off, install and fasten the water drainage bolt in place.

- The coolant filling-up:

- The coolant need be filled up from the heat radiator and expansion tank the two positions:
- Open the tank cap of heat radiator and fill up with the coolant
Check the full filling-up of coolant from the tank cap of heat radiator, pinch the water tube when filling up to exhaust until it is full, then well cover the tank cap.
- After the tank's cap of heat radiator covered, start and run the engine for 30 seconds to make the coolant fully reach every position need it.
- Make the engine stop, after the engine cooled down, open once again the tank's cap of heat radiator, check if the coolant already was full, in case the level fell down, please fill up once again until it is full, then well cover the tank's cover of heat radiator, repeat this action until it gets full, in case it is necessary, it may need to repeat two times or more.
- Remove the black rubber cap of expansion tank, then fill up with coolant to the level between scale mark UPPER and LOWER.



Drainage bolt



Filling-up port

Warning

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

- In case the air temperature is lower than the one marked up on the label, please adopt the coolant fits for lower temperature.
- The VOGÉ coolant is with ice point of -45°C of glycol so we suggest purchase or replace by Made in VOGÉ.

 Caution

To keep the coolant performance, replace each two years.
Coolant specification: ice point of -45°C of glycol
The filling-up volume: 0.6L
Dispose the replaced old coolant in environment friendly way.

 Danger

When filling up the coolant, in case open the tank's cap of heat radiator after engine started, please let the engine cool down first, otherwise the hot coolant may inject out and make you hurt when you opening the cap of heat radiator.

Brake liquid

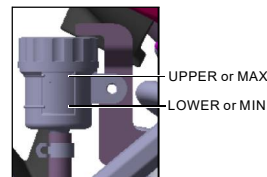
The brake liquid is an important part in hydraulic system for power transmission, so it need be reliable under high, low temperature or flowing performance at low temperature and good in anti-corrosive, so please adopt the correct one.

Check the brake liquid

- Too low the liquid level in brake oil cup may let air get into brake system to reduce the braking performance. So please periodically check the liquid level.
- Check and fill up the brake liquid shall conduct at the front and rear oil cup.
- The liquid level shall not be higher than mark (UPPER or MAX), when it lower than mark (LOWER or MIN), please fill up immediately.
- The brake liquid is corrosive, which is bad for the surface of plastic or paint.

Warning

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



The specification of brake liquid

- When there is impurity or moisture in the brake liquid, please filter or replace, otherwise it may reduce the pressure for braking and make bad braking performance, especially in wet weather or place.
- The brake liquid works more than 2 years, it may get bad due to the long work, please replace immediately.

The specification for brake liquid is DOT4.

Please dispose the replaced old liquid in environment friendly way.

Caution

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

Driving chain

The driving chain for this model is the one with oil seal, the place of chain's pin has a special oil seal for sealing lubricant, this chain is the one without opening, so in case replacement is needed, please contact VOGÉ dealer.

Before driving every time, please check and confirm problems below:

—Flexible pin of chain. —Roller damaged. —Rusty or corrosive plate of chain.

—Jamming in turning of chain links.

—Any problems above were found, please contact VOGÉ dealer.

Wear-out on chain may also lead to abrasion on sprocket wheel, please confirm problems below:

—Wear-out on sprocket wheel. —Damage or crack on tooth of sprocket wheel.

—Any problems above were found, please contact VOGÉ dealer.

Maintenance for driving chain

Dirt or dust on chain is bad for its working life, please clean it up and lubricate periodically, because there is o-ring and lubricant at place of chain's pin, so incorrect washing and lubrication may damage rubber o-ring and lubricant, which decrease chain's working life.

- Wash driving chain by steel brush is not allowed.
- When washed up, wipe up water or neutral cleanser immediately, then dry the chain up in air for preparing to lubricate.
- The chain with oil seal needs the oil for it only, evenly coat the inner and outer plate of chain with oil, when finished, wipe up the surplus oil.
- Some lubricant for chain have solvent or additive may damage seal ring of chain, so please adopt the one for this kind of chain only.

Caution

When replacing driving chain, please check the abrasion on driving and driven sprocket wheel, replace sprocket wheel at same time in case it is necessary.
In case there is not any oil for chain with oil seal, please adopt gear oil of SAE90 as substitution.

Warning

Please wash up chain by water or neutral cleanser.
Adopt solvent with volatility such as painting thinner or gasoline is not allowed.
Adopt washer with high pressure for chain washing is not allowed.

Tire

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

The tire pressure in tire

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

Check the limit of tire wear-out

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

Danger

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

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

	Pressure in tire
Front tire	225KPa
Rear tire	225KPa



The repair for tire

- Repair the small hole on tubeless tire, please remove the tire first, patch up inside of tire without outside, because the high speed driving may lead the outside patch outside flexible under centrifugal force.
- Within 24 hours after patched up, the max speed shall not be higher than 80km/h.
- In case the side of tire get broken while the breaking size is bigger than 6mm, the tire could not be used any more.
- In case many damages such as damage, scratch or wear-out were found on the tire, the tire need be replaced.

The replacement for tire

- When replacing the tire, two tires on one motorcycle with different brand, specification, tire tread or 1 new while another is old are all not allowed.
- After the tire replaced, the motorcycle needs to make dynamic balance and alignment, in case the dynamic balance is poor, the operation performance of motorcycle may fall down, also makes uneven wear-out on tire.
- The rolling direction of tire has the mark arrow, turn the tire along this direction only, which make sure water & skidding proof, improve gripping force, reduce noise and make working life longer, get the tire performance better.
- The tires with given specification are all strictly tested, who meet the demands of most road conditions, while the ones without test can't make sure the safety and suitability.
- Seal the contact position between the wheel rim and tire lip of tubeless tire.
- To avoid air leakage, the tubeless tire needs special tool and machine for disassembly and re-assembly.
- The tire replacement need be done by VOGEL dealer, they are skillful and with necessary tools or machine.

Fuse chip

Before replacing fuse chip, please know well the root cause and make troubleshooting.

.This model adopt fuse case (1 piece)

.All the specification and usage of fuse chip are marked up.

-Fuse chip for power charging (25A): Control power supply when the vehicle is charging. Spare fuse chip: 25A (1 piece – White - In fuse case).

-Fuse chip for ignition lock (15A): Control power supply for ignition lock. Spare fuse chip: 15A (1 piece – Red – In fuse case).

-Fuse chip for electric fan (15A): Control power supply for heat radiation fan. Spare fuse chip: 15A (1 piece – Blue – In fuse case).

-Fuse chip for ABS 1 (15A): Control power supply for motor of ABS system. Spare fuse chip: 25A (1 piece – White – In fuse case).

-Fuse chip for ABS 2 (10A): Control power supply for solenoid valve of ABS system. Spare fuse chip: 15A (1 piece – Red – In fuse case).

-Fuse chip for oil pump relay (10A): Control power supply for fuel pump. Spare fuse chip: 10A (2 pieces – Red – In electrical case).

Fuse case

F1 fuse chip for power charging 25A	
F2 fuse chip for ignition lock 15A	
F3 fuse chip for power supply of heat radiation fan 15A	
F4 fuse chip of BCM 15A	
F5 fuse chip for ABS1 15A	
F6 Fuse chip for ABS2 10A	
F7 fuse chip for fuel pump relay 10A	
F11 spare fuse chip 10A	F12 spare fuse chip 15A
F13 spare fuse chip 25A	

- When the fuse chip was checked or replaced, please well cover the cap of fuse box to avoid water getting in in rainy day or after motorcycle washed, which is easy to lead to electrical malfunctions.

 Caution

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

 Danger

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

Brake pad

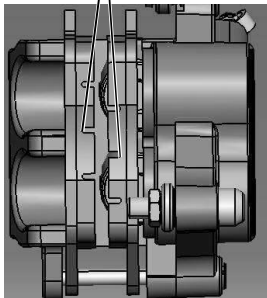
The abrasion of brake pad passed the min. thickness limit may lead to poor braking performance, under some cases, it may lead to brake system damage. For the reliability for braking, the abrasion passed Min. thickness limit is not allowed.

Replacement for brake pad

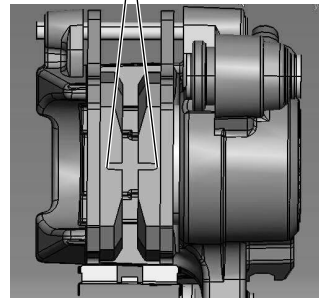
The correct replacement needs to remove the wheels, so this work shall be done by VOGÉ dealer.

- No matter the front or rear brake pads, replace them in pairs as a set, in case only replace one piece of them, it may make imbalance brake even accident.
- After the brake pads removed, don't operate the brake lever or pedal, otherwise the brake piston may return hardly, meanwhile making leakage of brake liquid.
- The oil or other dirt touches brake pad and plate when replacing is not allowed, in case if there is, please clean it up, otherwise it may make poor braking performance.

Limit for front pad:



Limit for rear pad:



Danger

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

Replacement for secondary fuel filter

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

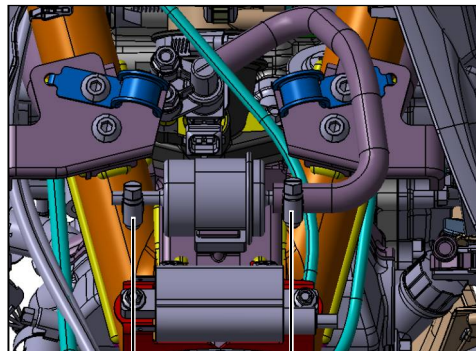
Please replace the secondary fuel filter on time.

- Remove the fuel tank, the front side of air filter could be seen.
- Remove the clamp which tightly hold secondary fuel filter by screwdriver.
- Wrap the both ends of secondary fuel filter by cotton cloth to avoid the fuel splashing when removing the clamps on both ends, because there is residual fuel and pressure in the tube, the internal pressure makes the residual fuel splash out of the tube.
- Replace the secondary fuel filter for a new one.
- The re-assembly is precisely opposite to disassembly.
- When removing the secondary fuel filter, absorb the splashing fuel from tube inside by cotton cloth.

Caution

Replace the secondary fuel filter each 6000km.

Dispose the replaced secondary fuel filter in environment friendly way.



Clamp

Clamp

Replacement for lighting signal

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

Please replace the broken lights.

The headlight, front position light, turning signal light, rear position light, brake light and registration plate light are all LED and sealed, in case broken, go to the service station for replacement. The replacement for lights please follow the description and specification below.

The dirt especially the grease on light's surface may be bad for heat radiation, which lead to light overheat even reduce its working life.

Parameters for electrical system	
Battery specification	12V 6Ah
Headlight (High beam)	12V 7W
Headlight (Low beam)	12V 7.8W
Front position light	12V 2.8W
Rear position light	12V 2W
Rear brake light	12V 3W
Front turning signal light	12V 1.5W
Rear turning signal light	12V 0.48W
Rear registration plate light	12V 0.257W
Specification for fuse chip	25A、15A、10A

Warning

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

Maintenance plan

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

Periodic maintenance table									
Items		Interval	km×1000						
Power transmission system	Lubricant		I	7	13	19	25	31	37
	Lubrication element		R	R	R	R	R	R	R
	Check lubricant level		\	\	C	\	C	\	C
	Check seal performance for fuel tube		I	I	I	I	I	I	I
	Check the fuel pump element		I	I	I	I	I	I	I
	Fuel filter		\	\	I	\	I	\	I
	Throttle valve body/Carburetor		\	R	R	R	R	R	R
	Check coolant level		\	\	\	C	\	\	C
	Coolant	2 years	I	I	I	I	I	I	I
	Check seal performance of air inlet system		\	\	\	\	\	\	R
	Valve clearance		I	I	I	I	I	I	I
	Spark plug clearance		\	\	\	I	\	\	I
	Air filter element		\	I	I	R	I	I	R
	Throttle operation system		I	C	R	C	R	C	R
	Clutch operation system		A	A	A	A	A	A	R
Lubrication system	Check lubrication and tightness for steering bearing		A	A	A	A	A	R	A
	Check lubrication for Fr. & Rr. Wheel and sprocket base bearing		I	A	A	A	A	A	R
	Check lubrication for tuning shaft of main and pillion steps		\	\	L	I	L	I	L
	Check lubrication for side stand shaft		\	L	L	L	L	L	L
	Check lubricant for brake and clutch lever shaft		\	L	L	L	L	L	L
	Check lubrication for bearing on rocker rack of rear shock absorber		\	L	L	L	L	L	L
	Check lubrication for bearing of rear fork shaft		\	L	L	L	L	L	L
	Check lubrication for driving chain		A	A	A	R	A	A	R
Others	Battery voltage		\	I	I	I	I	I	I
	Seal performance for brake oil tube		I	I	I	I	I	I	I
	Brake liquid	2 years	I	I	I	I	I	I	I
	Brake liquid level		I	I	I	I	I	I	I
	Fr. & Rr. Brake pads		I	I	I	R	I	I	R
	Fr. & Rr. Brake switch		I	I	I	I	I	I	I
	Check tightness of fastening parts on body		I	I	I	I	I	I	I
	Check leakage for Fr. & Rr. shock absorbers		I	I	I	I	I	I	I
Aluminium alloy wheel/Spoke wheel			I	I	I	I	I	I	I

Meaning of symbols: I: I: Inspection, adjust if necessary C: Clean R: Replacement A: Adjustment L: Lubrication

Routine inspection for torque of key fastening parts				
Ref. No.	Fastening position	Thread	Qty.	Torque (N.m)
1	Front wheel axle	M10	1	40±5N.m
2	Lower pump of front disc brake and front shock absorbers	M10	2	40±5N.m
3	Lower pump of rear disc brake and rear fork	M8	2	26±4N.m
4	Engine and frame (Rear lower suspension)	M10	1	40±5N.m
5	Engine and frame (Rear upper suspension)	M10	1	40±5N.m
6	Engine and frame (Front suspension)	M10	1	45±6.8N.m
7	Engine upper suspension and its plate	M10	1	40±5N.m
8	Rear suspension fastening (Rear shock absorber and frame and rear fork)	M12	2	40±5N.m
9	Rear wheel axle	M16	1	75±7.5
10	Pillion step and frame	M8	4	26±4
11	Left main footrest and rear fork	M12	1	60±6N.m
12	Right main footrest and rear fork (Fastening for rear fork axle)	M12	1	60±6N.m
13	Pre-fasten rear wheel and then fasten	M14	1	75±7.5N.m
14	Locking nut and steering stem	M10	1	60±6N.m
15	Adjustable nut and steering stem	M26	1	Fasten by torque of 80N.m first, then turn it left and right twice each side, then turn back by 1/2 round, finally fasten by torque of
16	Handle bar and steering stem	M10	1	60±6N.m
17	Assembly for front shock absorbers and steering stem body	M10	4	40±4N.m
18	Assembly for gear ring (Front/rear) and front wheel kit	M5	6	6±0.9N.m
19	Assembly for side stand	M10	1	Hex. head shoulder bolt of 20±2N.m; Hex. nut of 40±5N.m
20	Engine upper suspension and frame (Pre-fasten first then fasten)	M8	4	26±4N.m
21	Connection between ABS kit and soft hose of disc brake	M10	4	24±3.6N.m
22	Bracket for electric fuel pump and bolt of fuel tank, pre-fasten first then fasten	M6	6	6±0.9N.m
23	Assembly for front/rear disc brake plate and front/rear wheel kit	M8	10	35±3.5N.m

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

- The maintenance in the table only the least user needs to do. In case your motorcycle is usually driving under bad conditions, the maintenance shall be more frequent than the table
- After a long driving in sandy weather or muddy road, the special maintenance is necessary.
- We suggest this kind of work shall be done by VOGÉ dealer.
- Correctly dispose the abandoned materials such as cleanser or waste oil, don't let them to be pollutions.
- The key for correct maintenance is the spare parts, in case you fail to confirm who made the parts, this kind of parts may lead to accident.
- We suggest this kind of work shall be done by VOGÉ dealer.

X. Maintenance for the motorcycle in long parking

Storage for motorcycle

- In case the motorcycle needs to park for a period without driving, the special maintenance is necessary, which need some special tools, equipment or technologies, because of this, we suggest these works shall be done by VOGÉ dealers.
- If you prefer to do these works by yourself, please do as below:
 - Totally replace for new oil.
 - Block the air inlet port of air filter and exhaust port of muffler by cloth with new oil, to avoid moisture get into engine,
 - Totally drain off the fuel in the fuel tank.
 - Remove the battery, then wash its surface by neutral soap water, meanwhile cleaning up the oxidizing material on its terminals.
 - Store the battery in a room with temperature above 0°C.
 - Adjust the tire pressure to stipulated one.
 - Totally wash up the motorcycle.
 - Spray the protective agent on rubber parts' surface.
 - Spread the protective wax for auto on the covering parts of this motorcycle.
 - Finally well cover the motorcycle by dry cloth and park the place with fine air ventilation.

The re-use

- Totally clean up the motorcycle.
- Remove the cloth blocked the air inlet port of air filter and exhaust port of muffler.
- Totally replace the oil in engine and oil element.
- Re-install the battery.
- Start the motorcycle.



Caution

Charge the battery monthly.

Protection for motorcycle

- According to the daily driving, usually wash the motorcycle and keep it clean and dry.
- Wash up the dirt, bird shit, asphalt or salt on motorcycle surface as quick as possible.
- Try best to cover the motorcycle by dry cloth, long time exposed under sunshine may make covering parts get aged or color fading.

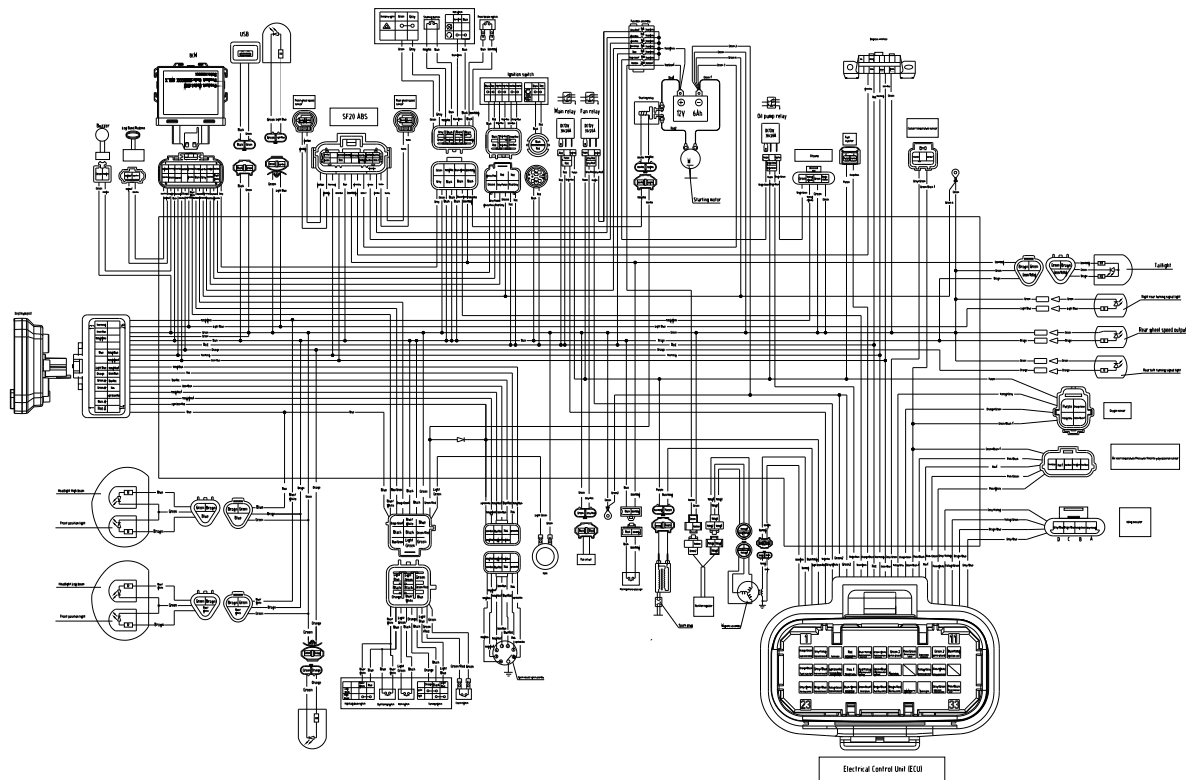
Cleaning up for motorcycle

- Wash the motorcycle by cold water.
- Totally wash up the motorcycle by soft cloth and neutral cleanser.
- Don't wash the motorcycle by spray.
- Don't wash the motorcycle by high pressure water.
- When driving motorcycle in low temperature, high moisture, rain or after washed, there may be some moisture in the lights, turn on the light for a while the moisture may disappear, because there is design of ventilation hole, which are normal.

Danger

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

XI. Electrical diagram





Maintenance download



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