Service Manual for

LX650GS-C

LXMT-WX-005



Loncin Motor. Co. ltd., Chongqing **February. 2025**

Foreword

The motorcycles on market are increasing with each passing day, while new structure and technology are adopting. For easy maintenance, adjustment and repair to Loncin users and service workers of model LX650GS-C, we made this Service Manual, which provides you convenience and guidance of technology for repair and maintenance.

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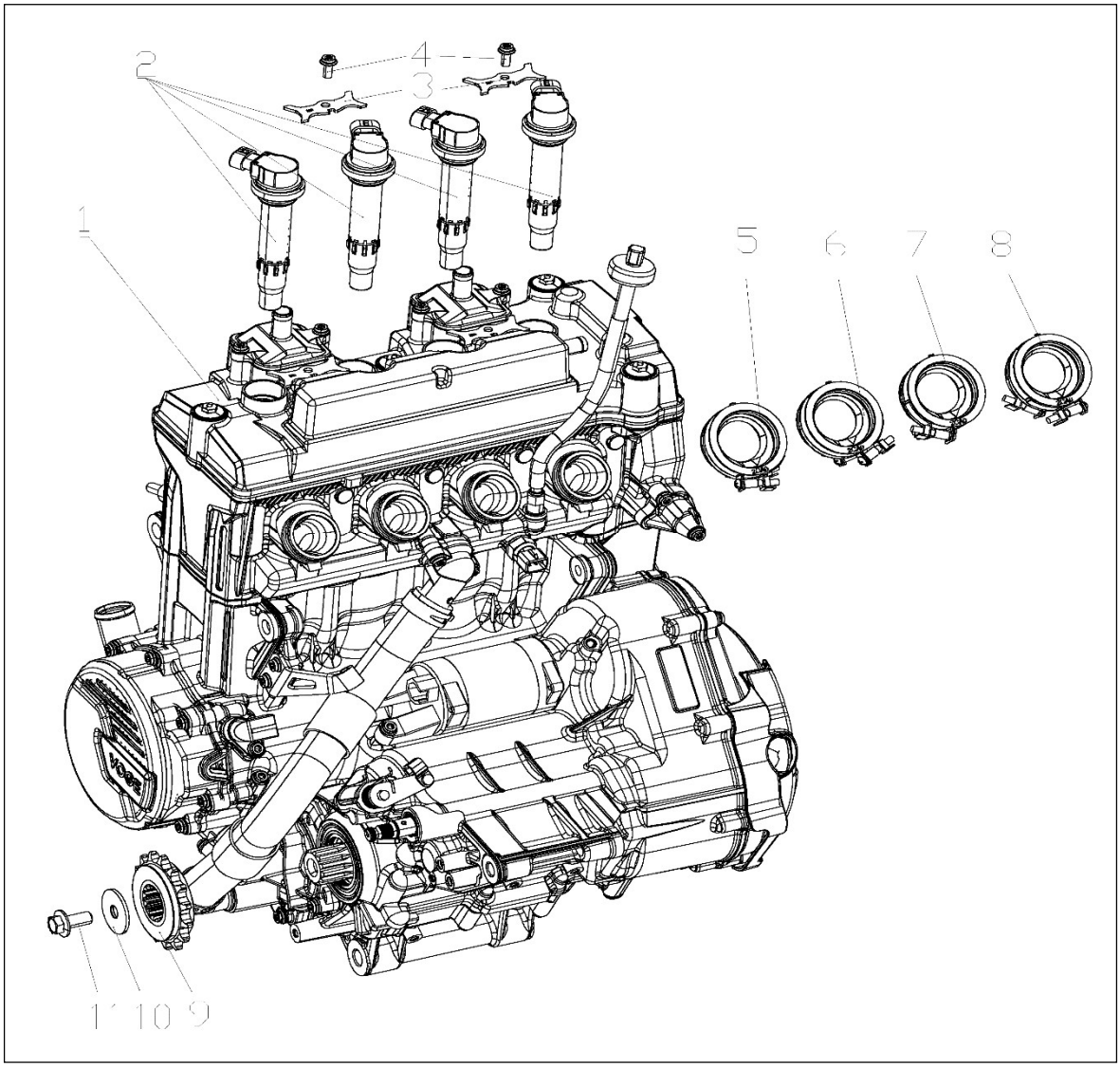
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1. Disassembly, re-assembly and maintenance for engine

Engine kit and its parts



1	engine comp.	SET	1
2	coil assy.,ignition	PCS	4
3	plate,clutch pressure	PCS	2
4	bolt,lobular socket countersunk head	PCS	2
5	tube comp.,air intake	PCS	1
6	tube comp.,air intake	PCS	1
7	tube comp.,air intake	PCS	1
8	tube comp.,air intake	PCS	1

9	driving sprocket, countershaft	PCS	1
10	washer,plain	PCS	1
11	bolt,hexagon flange	PCS	1

Disassembly and re-assembly for engine

Remove left and right windshield plate 1

Remove left and right plate 2 of windshield plate's bracket

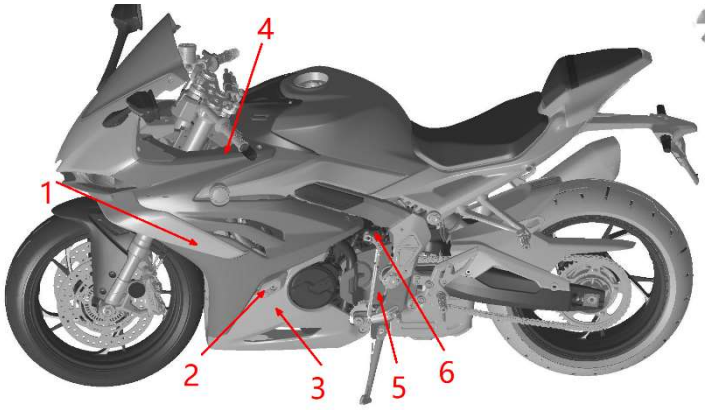
Remove lower fairing cover kit

Remove left and right connective piece 4 for meter case;

Remove fuel tank kit by referring is steps for disassembly and re-assembly.

Remove air filter kit by referring to its disassembly;

Remove throttle cable by referring to its disassembly;



Remove oil rail kit by referring to its disassembly.

Remove throttle kit by referring to its disassembly

Remove clutch cable by referring to its disassembly

Remove muffler kit by referring to its disassembly;

Loosen bolt, remove left rear cover 5;

Remove gearshift pedal kit, gearshift trend sensor and their accessories by referring to disassembly of gearshift pedal;

Remove chain by referring to disassembly of driving sprocket wheel

Remove front/upper/rear suspending bolt of engine and adjusting stud.

Disassemble and re-assembly engine by its lifting-up device.

The re-assembly is precisely opposite to disassembly.

Caution:

Use the tools for removing engine only when disassembling to avoid injury due to the heavy engine.

Important:

Please dispose the drained coolant in environment friendly way.

Please refer to corresponding chapter for coolant filling-up when re-assembling.。

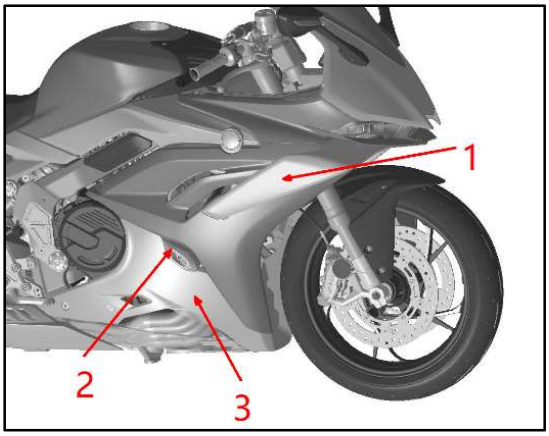
Recover the wire's binding-up to the status before disassembly, which fully take water proof, interference and harmful heat into consideration.

When re-assembling gearshift trend sensor, to ensure part performance, please replace damping sheet for a new one Parameters:

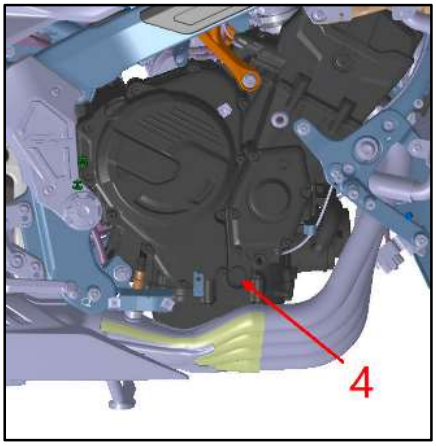
Installation bolts for exterior components	M5	N.m	4.5
Installation bolts for left and right windshield decorative covers	M6	N.m	6

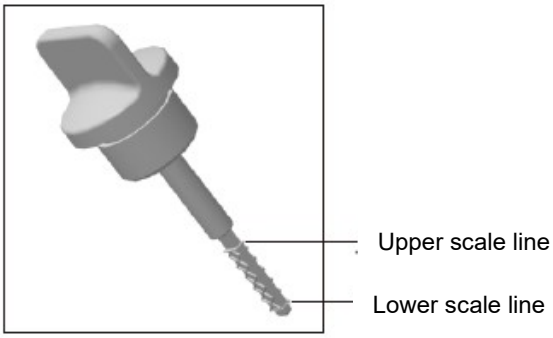
Installation bolts for the left and right plates of the windshield bracket	M8	N.m	18
Left rear cover installation bolt	M6	N.m	6

Oil filling-up for engine



Keep motorcycle upright by its parking stand.
Loosen bolt ,then remove left and right windshield kit 1.
Loosen bolt, then remove left and right plate 2 of windshield plate's bracket.
Loosen bolt, then remove lower fairing cover kit 3.
Remove oil gauge at right rear side.
Fill up oil.
Keep motorcycle upright by side stand.
Re-assemble oil gauge in place.
Check oil level by viewing its window 4.
Start engine , let it idly run until cooling fan works, then keep idling for a minute.。
Stop engine and wait for one minute to wait oil flowing back.
Turn and take out oil gauge and wipe it up then insert once again by turning one Round to check if the oil level is between upper and lower scale line.
In case the oil level is out of range, please repeat the steps above to add or reduce oil until oil level is within two scale lines.

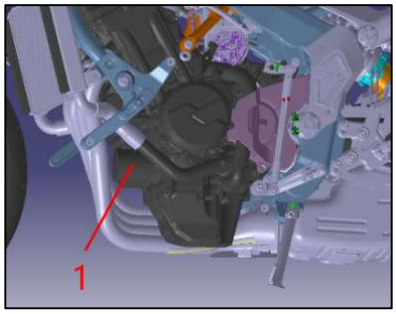




Caution:
In case the oil level is above upper scale line, please extract surplus oil by tools for it only from filling-up port.
Important:
When oil filled up, start engine and idly run for idly run for 1 minute then check the oil level once again.
When checking oil level, please keep motorcycle upright, otherwise the oil level could not be confirmed.
Parameters:

Mounting bolt for appearance parts	M5	N.m	4.5
Munting bolt for decorative cover of left and right windshield plate	M6	N.m	6
Mounting bolt for left and right plate of windshield plate's bracket	M8	N.m	18
Oil capacity in engine（Without replacing element）	L	2.6	
Oil capacity in engine（Replacing element）	L	2.9	
Oil capacity（Break up engine）	L	3.3	
Oil specification	Specification for suggested oil shall be ： Grade 10W/40 SL or above		

Replacement for oil filter



Replacement for oil filter shall be done when oil drained off.

Remove oil filter 1 by tool for it only (Picture below shows), remove the oil filter and drain off oil.

Assemble the new oil filter.

Assemble the o-ring onto cover of oil filter.

The re-assembly is precisely opposite to disassembly.

Caution:

When the work above finished, please clean up greasy dirt on surface of engine and muffler by cleanser, then dry them up by compressed air.

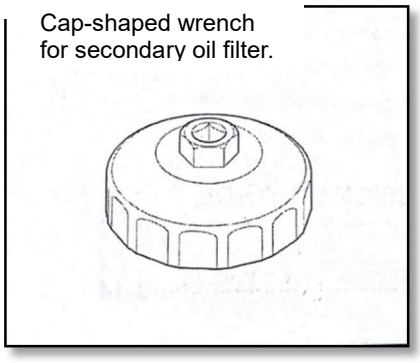
Important:

Please dispose the used oil and its filter by environment friendly way.

Check oil filter and o-ring, replace if it is necessary.

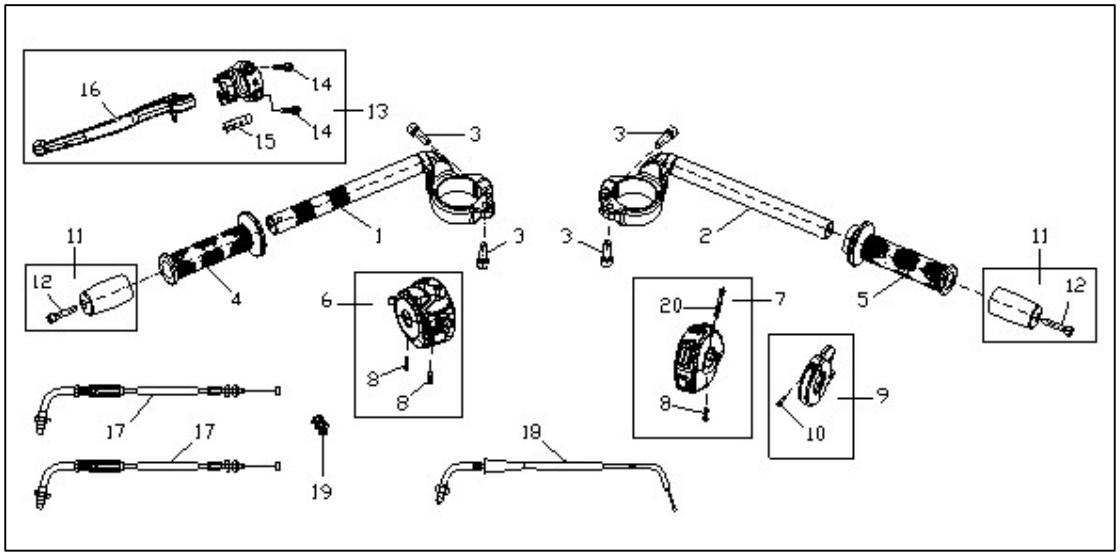
Parameters:

Engine oil drainage bolt (Hot condition)	N.m	25
Engine drainage bolt (Cold condition)	N.m	28
Oil filter	N.m	11



2. Disassembly, re-assembly and maintenance for handle bar kit

Handle bar kit and its parts



1	body,steering handle pipe left	PCS	1
2	body,steering handle pipe right	PCS	1
3	bolt,lobular socket countersunk head	PCS	4
4	grip set,handle	PCS	1
5	greaser comp.	PCS	1
6	switch assy.,left	SET	1
7	switch assy.,right	SET	1
8	screw,hexagon socket	PCS	4
9	seat ,greaser	SET	1
10	screw,hexagon socket	PCS	1
11	decorative weight, left	PCS	2
12	screw,hexagon socket	PCS	2
13	lever comp., left	SET	1
14	screw,hexagon socket	PCS	2
15	switch assy.,clutch	PCS	1
16	lever comp.,left steering handle	PCS	1
17	cable comp.,throttle	PCS	2
18	cable comp.,clutch	PCS	1
19	clamp,tube	PCS	1
20	screw,cross recessed pan	PCS	1

Disassembly and re-assembly for handle bar kit

Keep motorcycle upright by parking rack.

Cut off all connectors on handle bar kit for electrical parts

Remove left lever kit 1, then the upper pump 6 of front disc brake.

Remove bolt 4 on both sides and decorative piece 5.

Remove left switch assembly 2 and the right one 7.

Remove accelerator base 8 and the accelerator, meanwhile removing throttle cable.

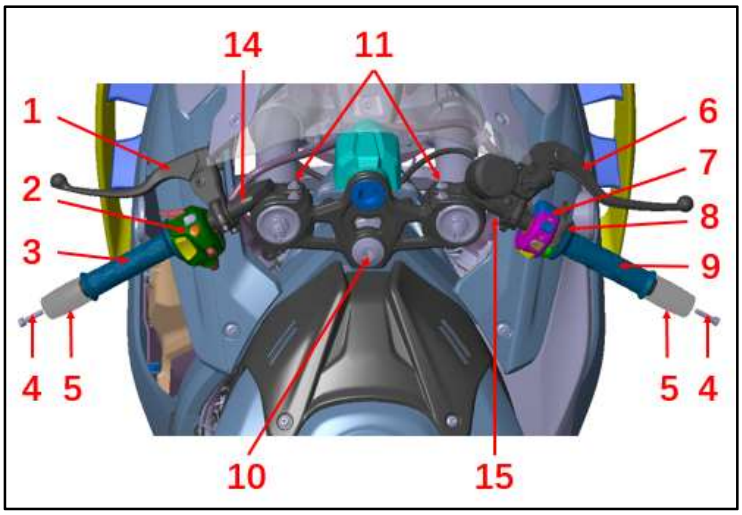
Remove grip 3.

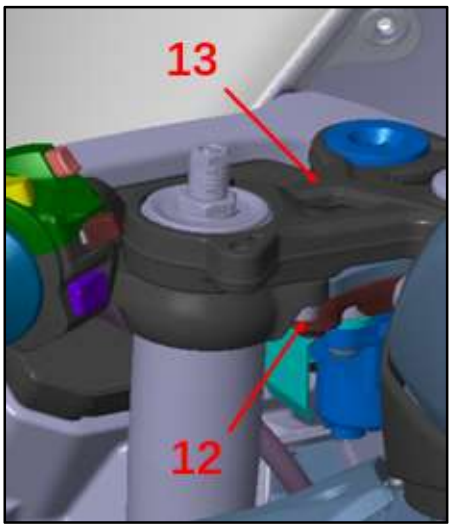
Remove locking bolt 10 for steering stem, then remove socket hex. screw 11 and 12.

Remove upper connective plate 13.

Remove left body 14 of handle bar and the right body 15.

The re-assembly is precisely opposite to disassembly.





Caution:

When re-assembling left and right switch assembly, please align the positioning pin on handle bar to its corresponding hole on handle bar, then fasten the bolt on switch assembly.

Important:

The re-assembly finished, please confirm the turning free play for clutch lever and accelerator.

When handle bar was re-assembled, please confirm if its angle is correct, turn the handle bar to the left and right limit to check if there is interference among handle bar, cable, fuel tank and surroundings, please adjust if it is necessary, otherwise there will be risk for safety.

When back-view mirror was re-assembled, adjust the angle of the mirror once again and confirm its viewing range is correct or safe.

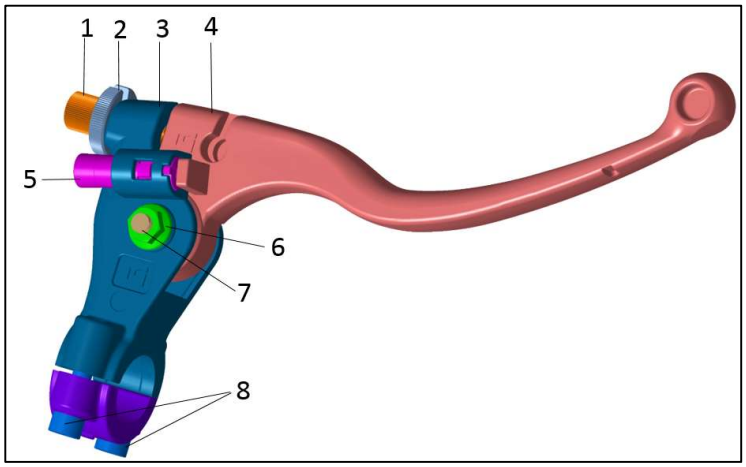
Make sure the free play of ball joint on clutch lever is within 10-15mm, otherwise the clutch

may not totally separate which leads to engine damage.

Parameters:

Fastening torque of left lever kit	M6	N.m	9
Fastening torque of upper pump of front disc brake	M6	N.m	9
Fastening torque for decorative weight piece of handlebar	M6	N.m	9
Fastening torque for outer case of left and right switch assembly	ST2.5	N.m	0.3
Fastening torque of internal screw for right switch assembly	M4	N.m	1
Fastening torque for acclerator base	M4	N.m	1
Fastening torque for upper connective plate's top	M18	N.m	50
Fastening torque of left, right grip and upper connective plate	M8	N.m	22
Fastening torque for upper nut of throttle cable and valve body	M5	N.m	6

Disassembly and re-assembly for left lever kit



1	handle adjustment screw	PCS	1
2	nut,left lever adjust	PCS	1
3	holder,left lever	PCS	1
4	left joystick	PCS	1
5	switch assy.,clutch	PCS	1
6	nut,prevailing torque type hexagon with nonmetallic	PCS	1
7	connecting bolts	PCS	1
8	left hand handle clip	PCS	1

Remove locking nut 6 and connective bolt 7.

Remove left lever rod 4

Important:

Coat every turning set of left lever with lithium lubricant when re-assembling.

When re-assembled clutch switch, repeatedly confirm if it was assembled in place, while confirming on and off for clutch switch on motorcycle.

Disassembly and re-assembly for throttle cable

Remove fuel tank by referring to its disassembly.
Loosen nut, turn cable plate and remove lower end of 2 throttle cables.
Remove accelerator base on handle bar, then remove upper end of 2 throttle cables, then totally remove the cable.
Replace the throttle cable for a new one with same specification.
The re-assembly is completely opposite to disassembly.





Caution：
1.When re-assembling throttle cable, please pay attention to its wiring, please keep the same with that before removing, otherwise there may have fault in throttle returning.
2.When re-assembled, please confirm correct re-assembly through repeatedly turning accelerator, confirm if there is jamming or returning failure.

Disassembly and re-assembly for clutch cable

Remove bumper piece 1 on the left (Include left plate for windshield bracket and its mounting plate).
Remove left side cover 2 (Include left windshield plate, left wind guiding plate and its bracket)

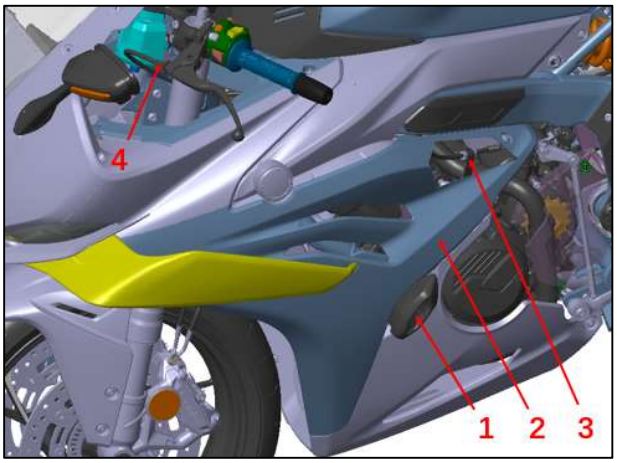
Remove the engine end connector 3 of the cable.

Remove connector 4 from the left handle end of the cable.

Finally pull out the cable.

Replace clutch cable for a new one with same specification.

The re-assembly is precisely opposite to disassembly.



Caution:

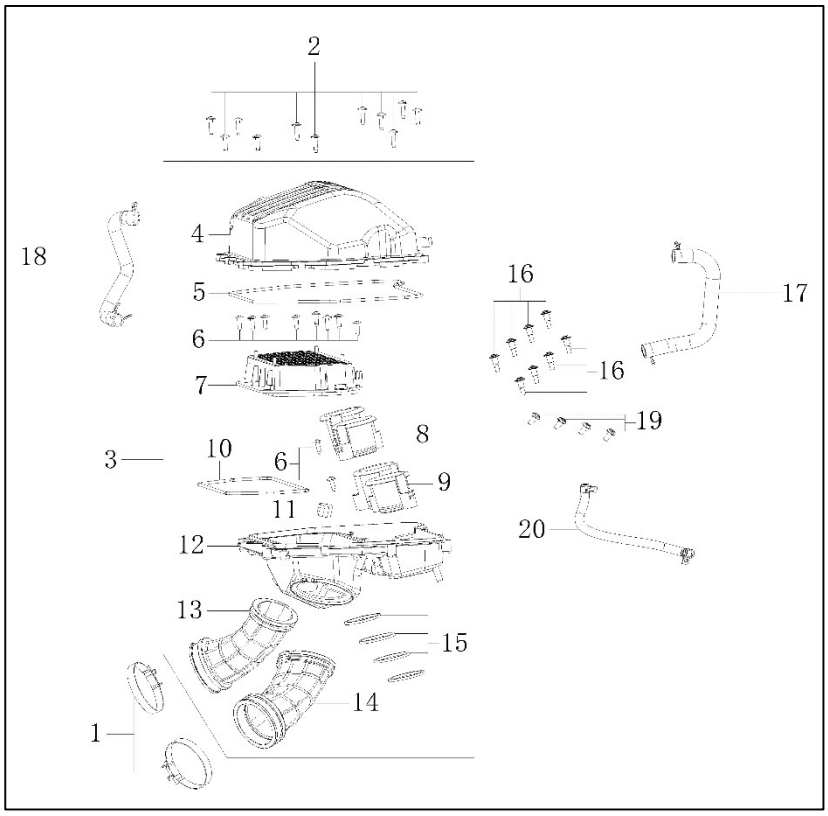
Coat turning joint of lever end with lithium lubricant, otherwise the working life of cable may get shorter.

When re-assembling clutch cable, please pay attention to its wiring, which shall be the same to that before disassembling, otherwise there will be problem for its returning.

When re-assembled, hold and release the clutch lever to confirm its correct assembly, which shall not be with jamming or returning failure.

3. Disassembly, re-assembly and maintenance for air filter kit

Air filter kit and its parts



1	clamp assy.	PCS	2
2	screw,cross recessed pan self-tapping	PCS	11
3	air cleaner comp.	PCS	2
4	case,right air cleaner	PCS	1
5	gland strip,air cleaner	PCS	1
6	screw,cross recessed pan self-tapping	PCS	10
7	element assy.,air cleaner	PCS	1
8	tube,air cleaner connecting right	PCS	1
9	tube,air cleaner connecting	PCS	1
10	gland strip,air cleaner	PCS	1
11	foam bearer	PCS	1
12	case,air cleaner	PCS	1
13	intake tube,air cleaner	PCS	1
14	intake tube,air cleaner	PCS	1
15	gland strip,air cleaner	PCS	4
16	bolt,lobular socket countersunk head	PCS	8

17	tube,breather	PCS	1
18	tube,breather	PCS	1
19	flange bolt	PCS	4
20	overflowing tube	PCS	1

Disassembly and re-assembly for element of air filter

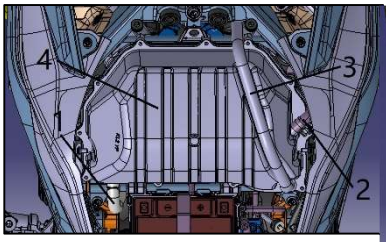
Keep motorcycle upright by parking rack.

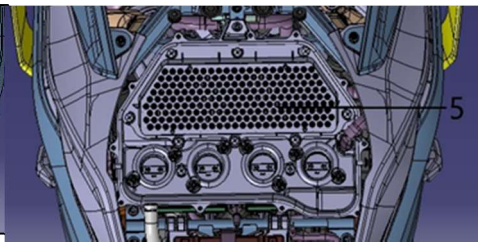
Refer to the disassembly steps of the fuel tank assembly and remove the fuel tank assembly.

Pull out waste gas tube 1 on air filter, then the tube 2 and secondary air tube 3.

Remove all screws around air filter, then remove its case 4.

Loosen self-tapping screw on element of air filter.





Remove element of air filter 5 and replace it for a new one.

The re-assembly is precisely opposite to disassembly.

Important:

Please repeatedly confirm if the re-assembled filter element is installed in place, otherwise it may lead to poor sealing for element, get dust into engine and let engine life shorter.

In case there is damage on filter element, please replace.

In case there is greasy dirt on filter element, please replace.

In case filter element is wet, please replace.

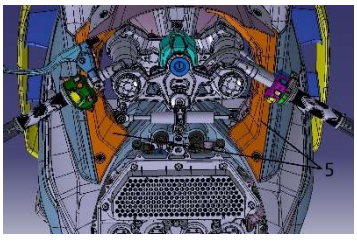
Dispose the replaced filter element in environment friendly way.

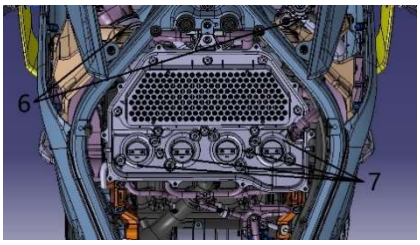
Parameters:

Installation screws for air filter housing	N.m	1.5

Disassembly and re-assembly for air filter kit

Keep motorcycle upright by parking rack.





Remove fuel tank and its related covering parts by referring their disassembly.

Pull out waste gas tube 1, tube 2 and secondary air tube 3.

Remove all screws around air filter, then remove upper case 4 of air filter.

Loosen bolt, then remove left and right connective piece 5 of meter.

Loosen clamp bolt 6 on air intake tube of air filter.

Loosen 8 pieces of bolt on connective tube 7 of air filter, then pull out air intake tube of air filter backwards.

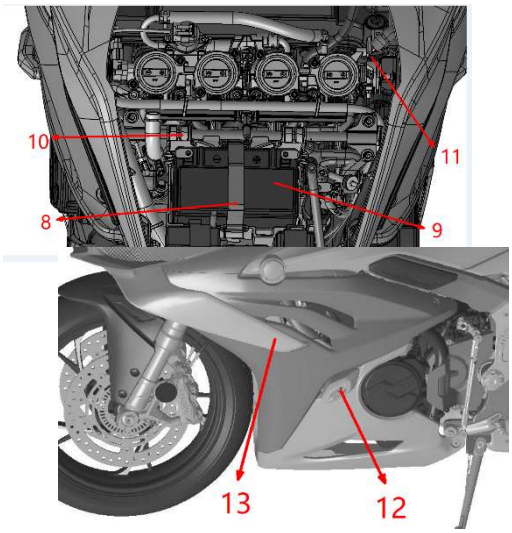
finally remove the air filter kit.

The re-assembly is precisely opposite to disassembly.

Parameters：

Mounting bolt between lower case of air filter and throttle valve kit	M5	N.m	6

Disassembly and re-assembly for throttle valve body



Remove clamping band 8 then remove battery 9.

Loosen bolt ,then remove battery bracket 10, then pull out breathing tube of carbon canister.

Emove 2 pieces of throttle cable 11 on throttle valve, then remove all connecting pieces on throttle valve.

12 Loosen bolt ,then remove left and right plate of windshield bracket.

13 Loosen bolt, then remove left and right windshield plate kit

Loosen clamp of throttle valve kit and air intake port of engine.

Powerfully pull out throttle valve kit.

The re-assembly is precisely opposite to disassembly.

Important:

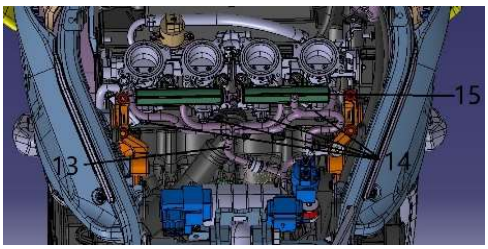
When throttle valve kit assembled, please repeatedly confirm the sealing pieces to air filter case are installed in place, otherwise the poor sealing may let dust get into engine and make engine damage.

Wash up by cleanser for the air intake tube and throttle valve kit only and dry them up before re-assembling to ensure engine performance.

Parameters:

Mounting bolt for upper suspension plate of engine and battery bracket	M8	Nm	18
Battery case and holder	M6	Nm	4.5
Mounting bolt for left and right plate of windshield bracket	M8	N.m	18
Mounting bolt for appearance parts	M5	N.m	4.5

Disassembly and re-assembly for oil rail



Loosen bolt, then remove oil rail.

The re-assembly is precisely opposite to disassembly.

Important:

Check if there is damage, distortion or wrong assembly for o-ring 1 on fuel injector when re-assembling the oil rail, please make correction or replacement in case it is necessary, otherwise it may lead to poor sealing even abnormal combustion.

Make sure the locating clip 2 between fuel injector and oil rail is in same condition with that before disassembly when re-assembling fuel injector and oil rail.

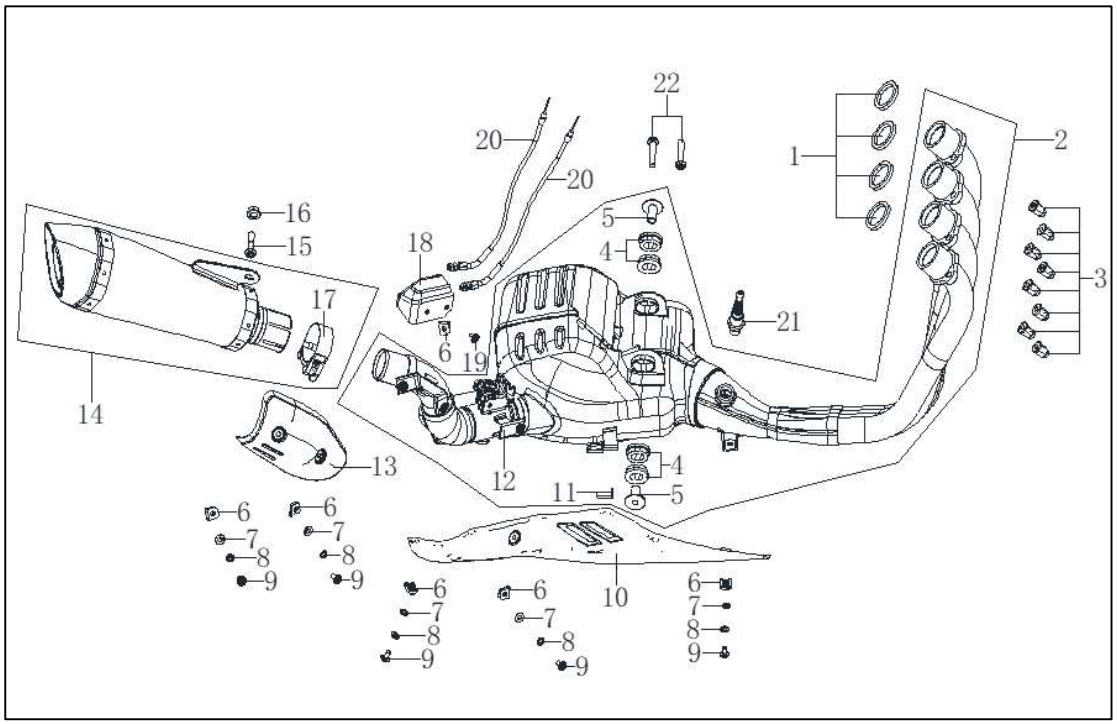
Wash fuel injector up by cleanser for it only before re-assembling and dry it up to ensure engine performance.

Parameters:

Fastening torque for bolt between oil rail and throttle valve kit	M6	Nm	6

4. Disassembly, re-assembly and maintenance for air exhaust kit

Air exhaust kit and its parts



1	gasket,air exhaust port	PCS	4
2	front part,muffler exhaust	PCS	1
3	cap nut	PCS	8
4	t-rubber	PCS	4
5	washer,flange	PCS	2
6	nut,clip	PCS	6
7	washer,elastic	PCS	5
8	washer,plain	PCS	5
9	flange bolt	PCS	5
10	shield,muffler	PCS	1
11	insulation blanket	PCS	1
12	welding assy.,exhaust pipe	PCS	2
13	shield,muffler	PCS	1
14	rear part,muffler	PCS	1
15	flange bolt	PCS	4
16	nut,prevailing torque type all-metal hexagon with	PCS	8
17	tube,muffler connecting	PCS	1
18	plate,decorative	PCS	1
19	bolt,lobular socket countersunk head	PCS	4
20	control lasso	PCS	1
21	oxygen sensor	PCS	4
22	flange bolt	PCS	4

Disassembly and re-assembly for muffler

Keep motorcycle upright by parking stand.

Remove bolt 1 ， Remove bumper ball joint, the left and right one are the same.

Remove bolt 2, 3 , 4, 5, 6, and 7 by tool, then pull outwards to remove left and right windshield plate, the left and right are the same.

Remove bolt 8, 9, 10, and 11 by tool, both the left and right one need be removed, then the lower fairing cover could be removed.

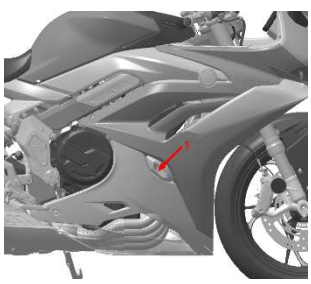
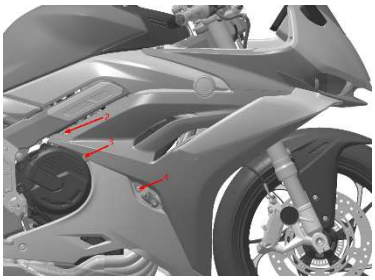
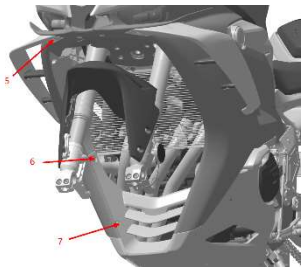
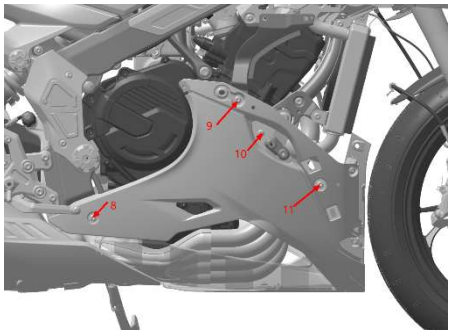
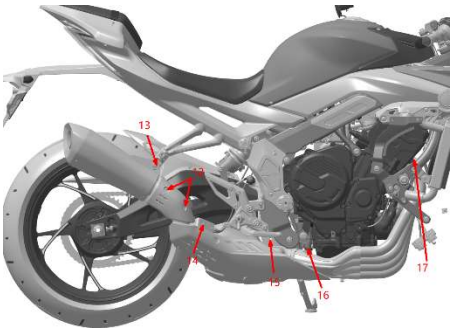
Remove bolt 12 by tool, then remove rear shield for rear part of muffler, then loosen the clamping bolt, then remove bolt 13, finally the rear part of muffler could be removed.

Remove bolt 14 by tool, remove decorative cover, then remove controlling cable for air exhaust by tool.

Remove oxygen sensor 16 by tool.

Remove bolt 17 by tool (8 pieces of cap-shaped nut in all), remove bolt 15 (Left and right 2 pieces each), then the front part of muffler could be removed.

The re-assembly is precisely opposite to disassembly.

Caution:

Please don't remove graphite ring for sealing at connecting place between front and rear part of muffler under normal conditions, otherwise it may damage.

Important:

Check if there is damage on graphite ring before re-assembling, the damage may get graphite ring in poor sealing, which needs be replaced.

Before re-assembling the front part of muffler, please replace the gasket of air exhaust port for a new one, otherwise the used gasket is with poor sealing and makes air leakage.

Remove muffler when the muffler is cooled down to avoid scald.

There is steel wire in graphite ring, please avoid injury to hands when replacing.

When re-assembled, please start the engine to check if there is air leakage at sealing position.

Please dispose the replaced graphite ring in environment friendly way.

The inserting position of oxygen sensor to wire harness shall be the same to that before disassembling, otherwise the wrong connection makes malfunction for engine even motorcycle.

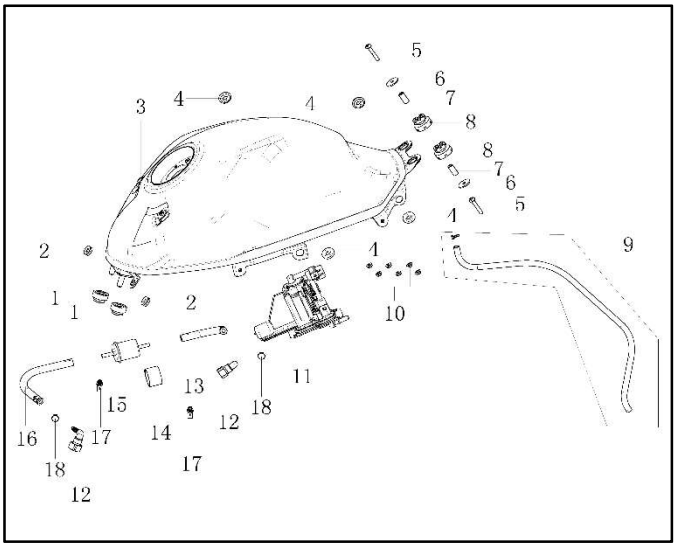
Parameters:

Connecting bolts for the rear section of the muffler	M8	Nm	22
Connective bolt for rear part of muffler	M10	Nm	30
Bolt between front part of muffler and frame	M8	Nm	22
Front exhaust nut of muffler	M8	Nm	22
Oxygen sensor fastening	/	Nm	40

Muffler shield	M6	Nm	6

5. Disassembly, re-assembly and maintenance for fuel tank kit

Fuel tank kit and its parts



1	pad, fuel tank damping	PCS	2
2	i-rubber	PCS	2
3	fuel tank comp.	PCS	1
4	i-rubber	PCS	4
5	flange bolt	PCS	2
6	washer,plain	PCS	2
7	collar	PCS	2
8	pad, fuel tank damping	PCS	2
9	tube,fuel	PCS	1
10	nut,hexagon flange	PCS	6
11	fuel pump,electric	PCS	1
12	joint, swift change	PCS	2
13	tube,fuel	PCS	1
14	rubber jacket,fuel filter	PCS	1
15	filter,fuel	PCS	2
16	tube,fuel	PCS	1
17	clamp assy.	PCS	2
18	clamp,tube	PCS	2

Removal for fuel tank kit

Keep motorcycle upright by parking stand.

Remove seat 1 by key

Loosen rear mounting bolt of fuel tank.

Dig out left and right body cover 2, loose bolt on decorative cover 3 of left and right protective plate of fuel tank, then dig out mushroom head for decorative cover 3 of left and right protective plate of fuel tank.

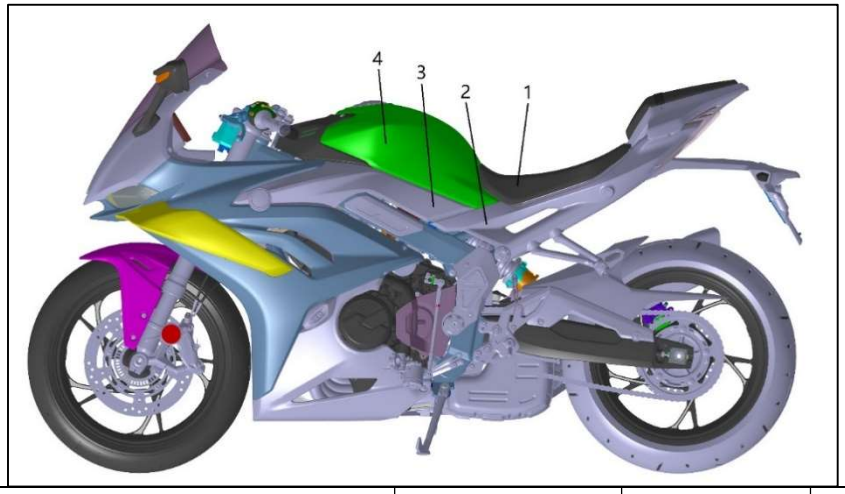
Lift the fuel tank off the vehicle appropriately, then remove the fuel evaporation hose, leakage pipe, fuel pump harness interface, oil pipe quick change connector, and fine filter at the bottom of the fuel tank, and finally remove the fuel tank assembly 4.

The reassembly process is completely opposite to the disassembly process.

Caution:

Because there are so many connectors at lower side of fuel tank, please install every part in place to avoid pipeline excessively getting bent or pressed.

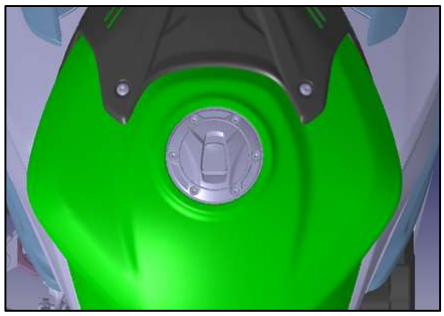
Parameters:



Mounting bolt for seat	M6	N.m	9
Installation bolts for exterior components	M6	N.m	4.5
Install bolts behind the fuel tank assembly	M6	N.m	9

Removal for fuel tank lock

Remove the 4 pieces of bolt for installing fuel tank lock.



Remove fuel tank lock.

The re-assembly is completely opposite to disassembly.

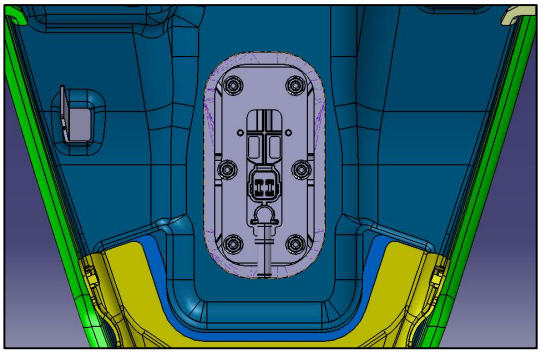
Caution:

Repeatedly confirm if the sealing rubber piece between fuel tank lock and port is installed in place when re-assembling fuel tank lock, otherwise the fuel may leak.

Parameter:

Fastening bolt for fuel tank lock	M5	N.m	6

Removal for fuel pump



Drain off residual fuel in fuel tank first.

Get the removed fuel tank upside down.

Remove the 6 pieces of bolt for installing fuel pump.

Remove fuel pump.

The re-assembly is completely opposite to disassembly.

Caution:

Confirm if the fuel filtering screen is clean when removing the fuel pump, please wash if it is necessary, the washing shall be done in clean fuel and repeatedly wash it.

Important:

Please replace gasket for fuel pump for a new one when re-assembling fuel pump, otherwise it may leak.

When fuel pump re-assembled, please check its sealing performance, which needs pressure measuring device for it only.

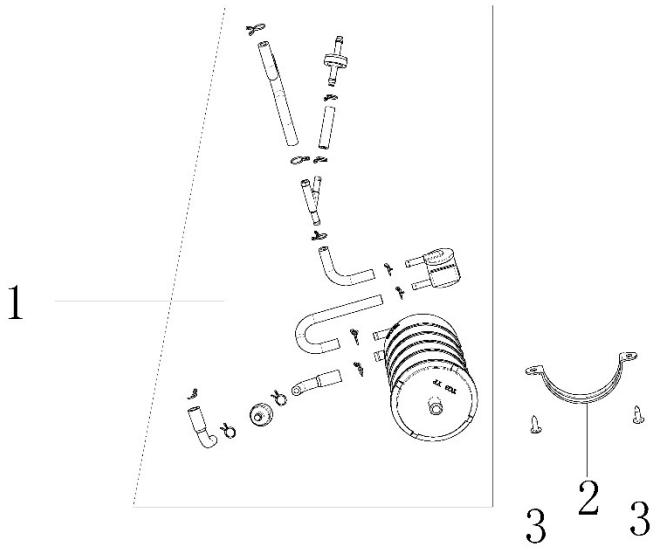
Dispose the replaced gasket for fuel pump in environment friendly way.

Parameters:

Installation torque for bolt of fuel pump	M5	N.m	6
Static pressure for fuel tank	/	kp	15

6. Disassembly, re-assembly and maintenance for fuel evaporation controller kit

Fuel evaporation controller kit and its parts



1	controller assy.,fuel evaporation	SET	1
2	bracket canister	SET	1
3	screw,cross recessed pan self-tapping	PCS	2

Disassembly for fuel evaporation controller kit

Remove fuel tank kit by referring its corresponding content.

Remove air filter by referring to its disassembly.

Remove battery bracket kit by referring to disassembly of oil rail.

Remove bolt 1 and pull out rubber jacket 2, then the controller kit of fuel evaporation could be removed.

The re-assembly is completely opposite to disassembly.

Caution:

Because the layout space for fuel evaporation controller kit is narrow while pipeline is many, so please take wiring and layout for pipeline into record before disassembling for a correct re-

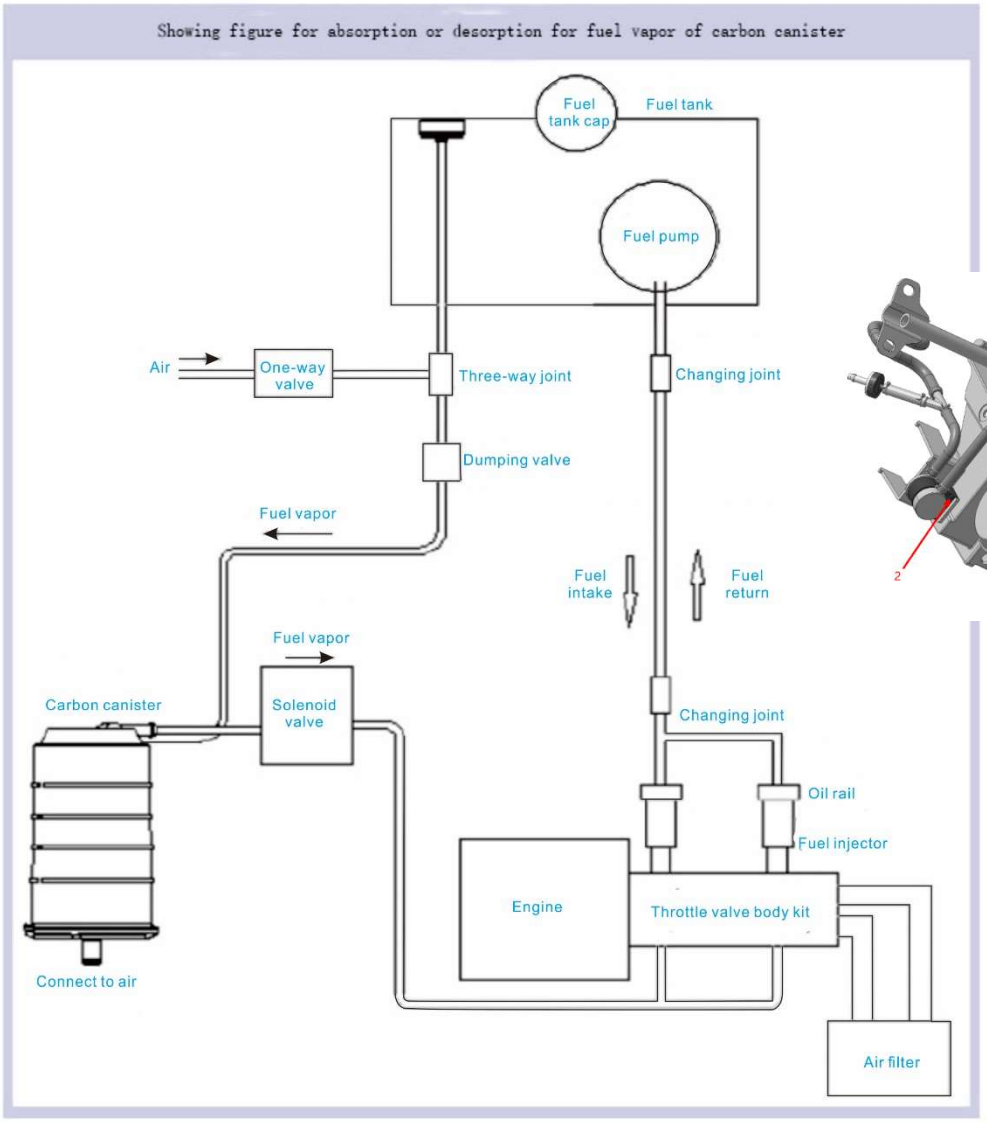
assembly.

Important:

Please pay attention to the layout of dumping valve when re-assembling fuel evaporation controller kit, make sure this part is horizontal to ground when re-assembled, otherwise the dumping function doesn't work.

Fastening torque for bracket of carbon canister	cross recessed self tapping screws	Nm	1

Figure of connection for fuel evaporation controller



Working principle for fuel evaporation controller system:

（1）When gasoline in fuel tank got heat, the fuel vapor runs out, reach end TANK of carbon canister through dumping valve, then absorbed by it.

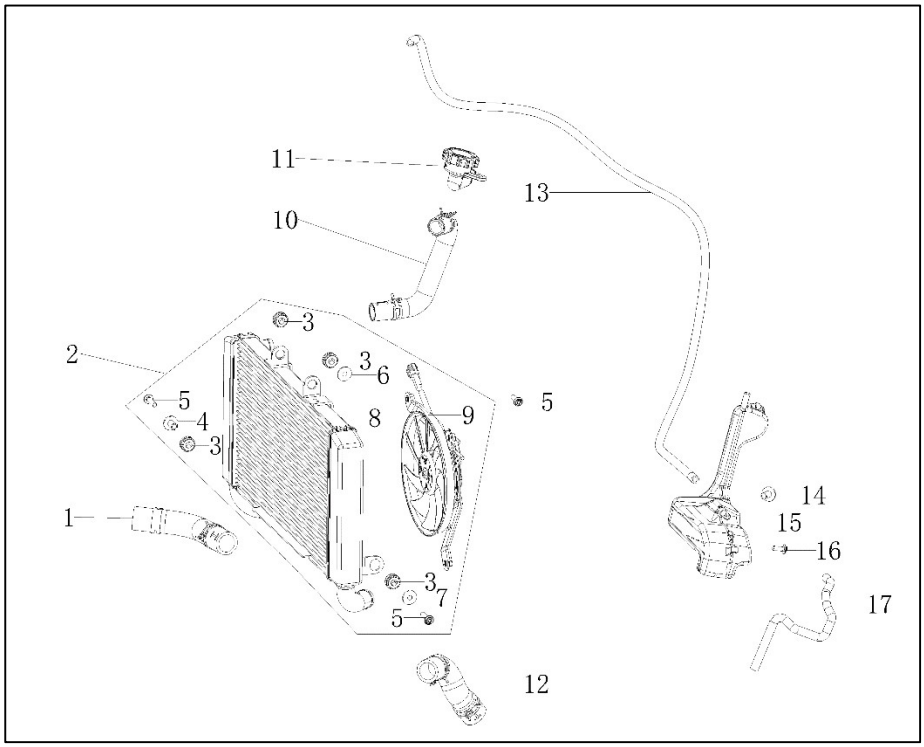
（2）When the inclining for motorcycle is over 60°, the dumping valve closed, the gasoline is unable flow to carbon canister through dumping valve.

（3）The fresh air get to end PURGE through end connects to air of carbon canister then brings fuel vapor to throttle valve, finally gets into engine and joins combustion.

（4）When fuel level in fuel tank fell down (The internal of fuel tank produced negative pressure), make up for air to fuel tank through one-way valve to keep normal air pressure on fuel level.

7. Disassembly, re-assembly and maintenance for heat radiation system

Heat radiation system and its parts



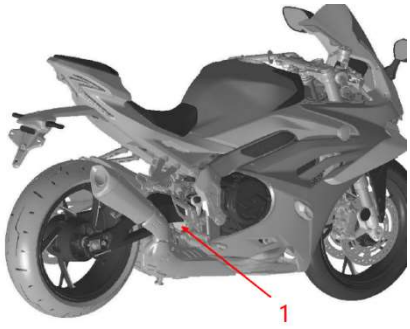
Ref. No.	Parts name	Unit	Qty.
1	tube,water	PCS	1
2	heat radiator comp.	PCS	1
3	i-rubber	PCS	4
4	collar	PCS	1
5	bolt,lobular socket countersunk	PCS	3

	head		
6	washer,flange	PCS	1
7	washer,flange	PCS	1
8	body set,radiator	PCS	1
9	fan assy.	PCS	1
10	tube,water	PCS	1
11	filler	PCS	1
12	tube,water	PCS	1
13	tube,water	PCS	1
14	washer,flange	PCS	1
15	water tank,cooling	PCS	1
16	bolt,lobular socket countersunk head	PCS	1
17	tube,water	PCS	1

Inspection for coolant

Keep motorcycle upright by Side bracket.

Check water supplement pot 1 on the rear of engine, the coolant level shall be within upper and lower scale line, in case it is below the lower scale line, please make up for coolant, but shall not be over the upper scale line.



Replacement for coolant

Keep motorcycle upright by side stand ,

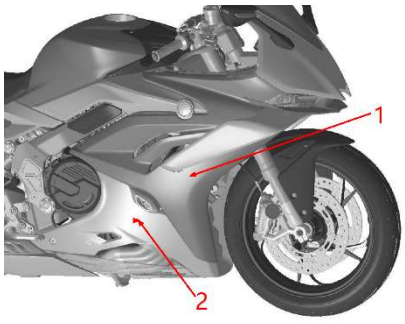
Remove lower fairing cover kit, left and right windshield plate by referring replacement for engine oil.

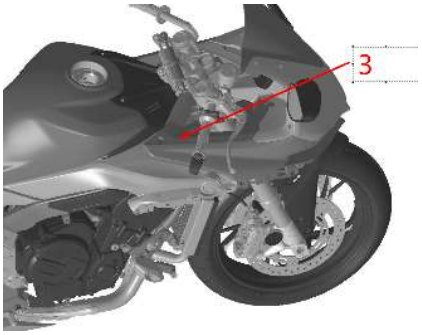
Loosen bolt, then remove connective piece 3 of meter case.

Lay a liquid collection tray under coolant drainage bolt of engine.

Remove coolant drainage bolt by tool, then drain off coolant in water passage of engine until it all drained.

Re-assemble coolant drainage bolt.





Fill up heat radiator with coolant by tools such as funnel, then pinch the water tube when filling up until it is full.

Pull out exhaust cap, until coolant kept flow out, then assemble the cap and filling cover,

Fill up compensation pot with coolant by tools such as funnel, confirm the liquid level is at place between upper and lower scale line.

Assemble rubber cap back to compensation pot.

The coolant filling-up achieved.

Important:

Collect drained coolant by suitable container and dispose it in environment friendly way.

Replace gasket of coolant drainage bolt for a new one when re-assembling.

Clean up installation surface for gasket of coolant drainage bolt to avoid impurity on it. When coolant drainage bolt assembled, wipe up residual coolant on parts such as muffler or engine.

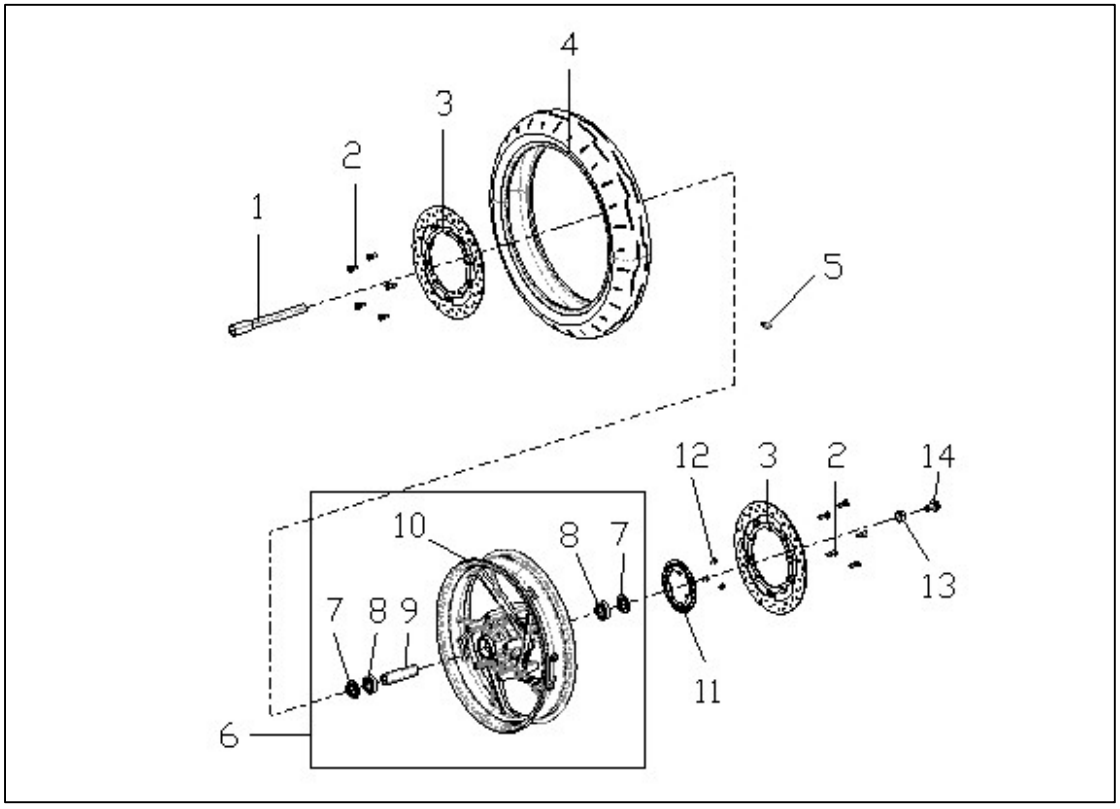
When replaced, please start engine and suitably run it in high speed to check if the coolant pipeline leaks.

Parameters:

Appearance parts bolt	M5	N.m	4.5
Coolant drainage bolt	M6	N.m	9
Coolant capacity		L	2.3
Coolant specification	Coolant with ethanol without silicate		G40

8. Disassembly, re-assembly and maintenance for front wheel

Front wheel and its parts



1	axis	PCS	1
2	fastening bolt,brake disk	PCS	10
3	disk comp.,left front brake	PCS	2
4	tyre assy.	PCS	1
5	core,valve	PCS	1
6	wheel,front	PCS	1
7	oil seal	PCS	2
8	bearing	PCS	2
9	lining comp.,hub	PCS	1
10	body set,front wheel	PCS	1
11	gear ring, abs	PCS	1
12	flange bolt	PCS	3
13	collar	PCS	1
14	bolt,hexagon flange	PCS	1

Removal for front wheel

Keep motorcycle upright by parking stand.

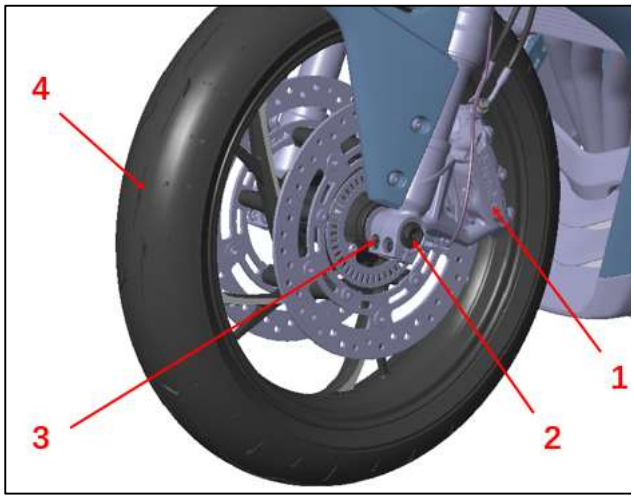
Remove caliper 1 of front disc brake by tool.

Loosen fastening bolt 2 on left and right bottom case of front shock absorber.

Remove front wheel axle and bolt 3.

Remove front wheel kit 4.

The re-assembly is completely opposite to disassembly.



Caution:

When caliper of front disc brake was removed, please don't operate the front lever to avoid piston moving of the front caliper which makes re-assembly difficult.

Important:

There shouldn't be any dirt on working surface between brake pad and disc brake plate.

Repeatedly hold and release front brake lever to confirm its normal work when replaced.

Confirm dynamic balance for front wheel when tire re-assembled.

Coat collar and oil seal with lithium lubricant when re-assembling front wheel.

Parameters

Front wheel	/	Aluminum alloy casting	3.5×17
Front tire	/	Radial ply tire of tubeless	120/70 ZR17
Run-out for end surface of front wheel shall not bigger than	/	mm	1
Radial run-out of front wheel shall not be bigger than	/	mm	1

Fastening bolt for upper axle of front wheel	M8	Nm	22
Fastening torque for front wheel axle	M14	Nm	55
Fastening torque for caliper of front disc brake	M10	Nm	45
Fastening torque for disc brake plate	M8	Nm	35
Loctite	Loctite 262	ml	10
Lubricant	/	g	10
Allowed maximum imbalance of front wheel	/	g	5
Air pressure in tire		Kp	2.4

Removal for disc brake plate

When front wheel removed, put it on working bench.

Remove fastening bolt of disc brake plate, then remove front disc brake plate and gear ring 5.

The re-assembly is completely opposite to disassembly.

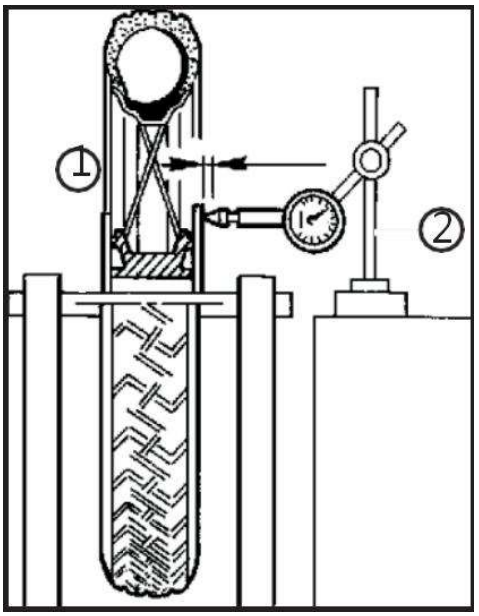
Caution:

There is Locatie on thread of screw for front brake plate, please adopt suitable tools for disassembly, otherwise it would be a difficult work.

Important:

There shouldn't be any dirt on working surface between brake pad and plate when re-assembling.

When re-assembling brake plate, whose fastening bolt shall be coated with Loctite on its thread.



When brake plate re-assembled, please confirm run-out on end surface of brake plate as picture shows:

Put the front wheel on balancing rack by balancing shaft ①.

Measure run-out for end surface of brake plate by measuring device ②.

Run-out for end surface shall not be bigger than	mm	0.3

Removal for front wheel

Remove front wheel first, then put it onto working bench.

Eject air valve core of tire pressure sensor inward by tool to discharge the air in tire.

Remove front tire 6 by tools for it only.

Remove tire pressure sensor.

The re-assembly is completely opposite to disassembly.

Caution:

The re-assembly for tire needs the equipment for it only, forcedly assemble by external power may permanently damage the tire.

Important:

When re-assembling tire, align the light point of tire to air valve core on wheel hub, this get following work easier

Removal for front wheel bearing and oil seal

Put front wheel onto working bench when it is removed.

Remove brake plate and tire.

Remove oil seal, bearing, collar and rubber jacket for front wheel by tools in turn.

Replace bearing and oil seal for a new one with same specification.

The re-assembly is completely opposite to disassembly.

Important:

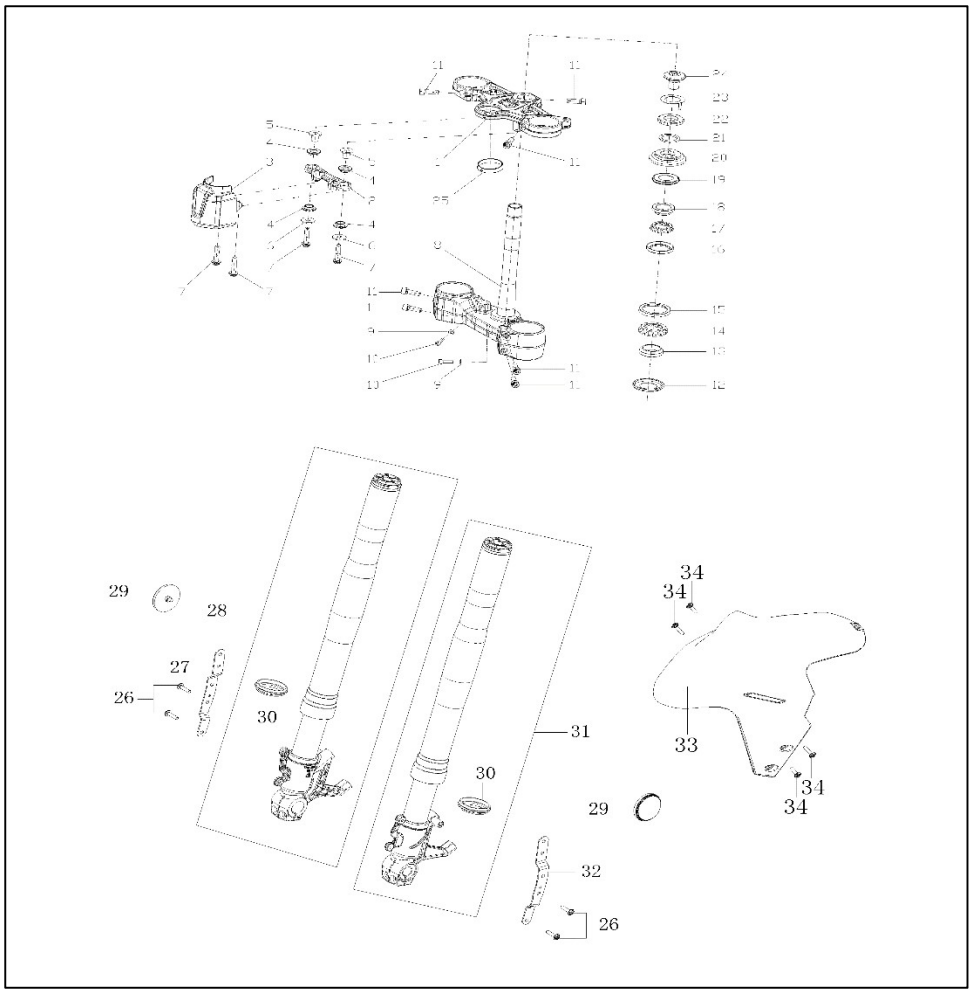
The oil seal on front wheel gets damaged when it is removed, so please replace it for a new one, otherwise its poor water-proof accelerates bearing wear-out.

The removal for front wheel bearing needs pulling tools for it only.

For easy re-assembly, heat the hole of front wheel bearing to 100℃, then press-fit the bearing.

9. Disassembly, re-assembly and maintenance for front fork

Front fork kit and its parts



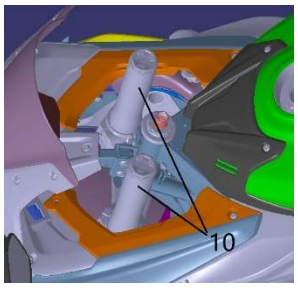
1	bridge,fork top	PCS	1
2	bracket,ignition switch	PCS	1
3	cover,ignition switch	PCS	1
4	t-rubber	PCS	4
5	washer,flange	PCS	2
6	washer,plain	PCS	2
7	flange bolt	PCS	4
8	body set,steering stem	PCS	1
9	washer,plain	PCS	2
10	screw,hexagon socket	PCS	2
11	bolt,lobular socket countersunk head	PCS	7
12	oil seal	PCS	1
13	circlip, steering bearing	PCS	1

14	retainer,steering bearing top	PCS	1
15	ring, steering base	PCS	1
16	ring, steering base	PCS	1
17	retainer,steering bearing top	PCS	1
18	circlip, steering bearing	PCS	1
19	oil seal	SET	1
20	lock nut,steering stem	PCS	1
21	plain washer,rubber	PCS	1
22	lock nut,steering stem	PCS	1
23	washer,locking	PCS	1
24	lock bolt,steering stem	PCS	1
25	rubber jacket,ignition switch	PCS	1
26	bolt,lobular socket countersunk head	PCS	4
27	bracket,front fender	PCS	1
28	shock absorber, right front	PCS	1
29	reflector,left side	PCS	2
30	front shock absorber oil seal	PCS	2
31	shock absorber, left front	PCS	1
32	bracket,front fender	PCS	1
33	fender comp.,front	PCS	1
34	bolt,lobular socket countersunk head	PCS	4

Disassembly and re-assembly for steering stem

Keep motorcycle upright by parking stand.

Remove locking bolt 1 for steering stem and mounting bolt for upper connective plate.



Remove upper connective plate kit 2.

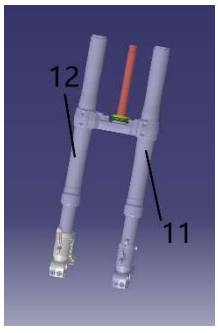
Loosen bolt, remove left handle bar kit 3 and the right one 4.

Remove bolt, then remove front fender 5.

Loosen bolt, then remove lower pump 6 of left and right front disc brake.

Loosen bolt, then remove wheel speed sensor 7.

Loosen bolt, then remove front wheel axle and the wheel kit 9.



Remove locking washer, locking nut for steering stem, rubber flat washer, oil seal and steering bearing.

Remove front shock absorber 10.

Remove steering bearing and oil seal.

Loosen bolt, remove left front shock absorber 11 and the right one 12.

The re-assembly is completely opposite to disassembly.

Caution:

Please bind up the wire package for wire harness when re-assembling, its condition shall be the same to that before disassembling, otherwise the water-proof performance may get bad.

When re-assembling front fender, please bind up the oil tube and wires of ABS to the same with that before disassembling, otherwise there will be interference between oil tube and front fender which makes noise.

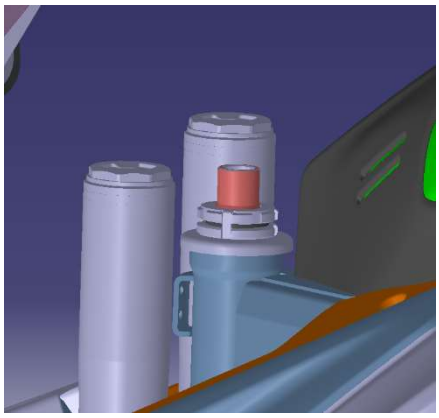
When re-assembling front shock absorber, please pre-fasten front wheel axle, then fasten locking bolt on upper connective plate and steering stem.

Important:

When re-assembling steering bearing, coat it with lithium lubricant to ensure its normal lubrication.

When re-assembling, please ensure correct clearance between detector of sensor ABS and gear ring of front wheel.

The re-assembly for 2 adjusting and locking nuts for steering stem shall strictly follow their requirements for installation, whose parameter refers to corresponding form list, otherwise their turning may be bad.

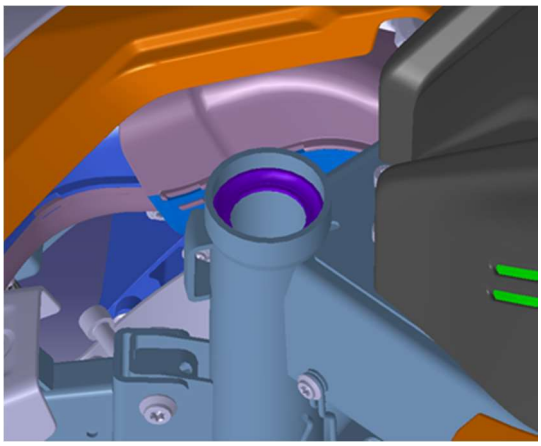


Parameters:

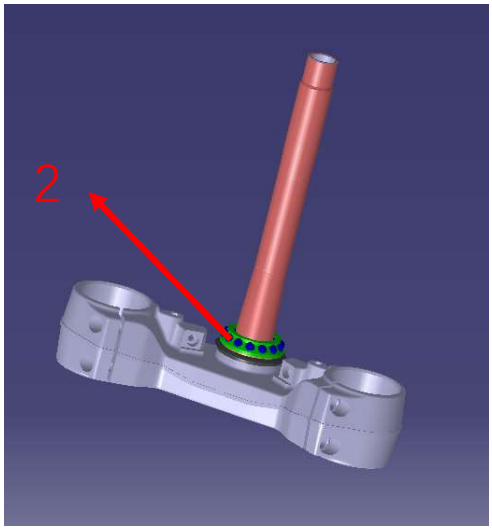
Locking bolt for steering stem	M18	N.m	50
Locking bolt for upper connective plate	M8	N.m	22
Locking bolt for left and right handle bar	M8	N.m	22
Mounting bolt for front fender	M6	N.m	6
Mounting bolt for lower pump of front disc brake	M10	N.m	45
Mounting bolt for speed sensor	M6	N.m	6
Bolt for front wheel axle	M14	N.m	55
Torque for locking nut (lower) of steering stem	M26	N.m	20N 50N, Loosen 160°, then 20N
Torque for locking nut (upper) steering stem	M26	N.m	Loctite under stress

Disassembly and re-assembly for steering bearing

Remove basing ring 1 for bearing in standing tube of frame by tools for it only.



Remove bearing circlip 2 on steering stem by pulling tools (As picture shows)





Replace steering bearing for a new one with same specification.

Remove oil seal under oil seal.

The re-assembly is completely opposite to disassembly.

Caution:

When removing the steering bearing, the irregular operation should not be adopted, please use the tools for it only, otherwise the steering stem body may permanently damage.

When re-assembling steering bearing, please pay attention to installation sequence of bearing, oil seal and flat washer.

Important:

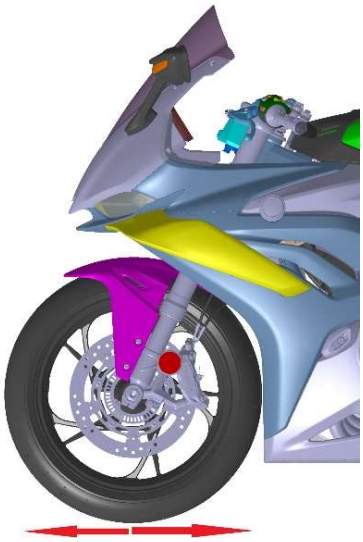
When press-fitting steering bearing, please suitably heat the bearing to 100℃, which is easier for bearing press-fitting.

Judge for clearance of steering bearing

When driving under low speed, please repeatedly and fast operate front brake lever to feel if there is flexibility of steering bearing.

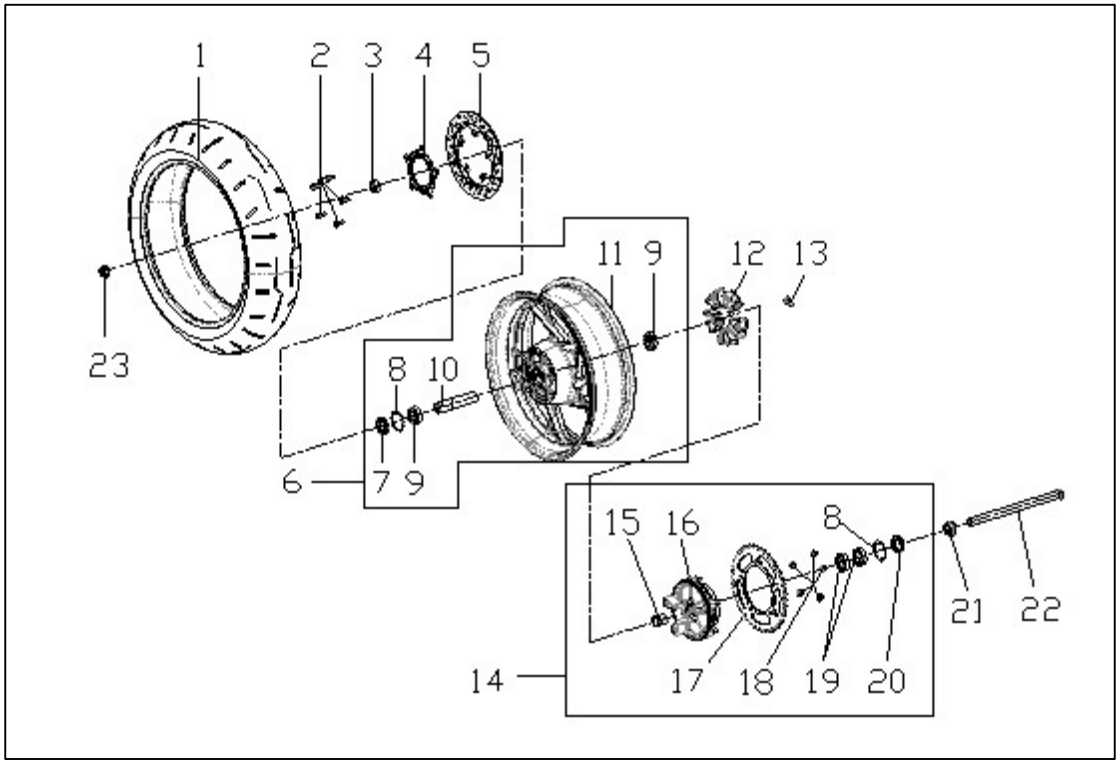
Keep motorcycle upright by parking stand.

Follow the direction in figure below, repeatedly pull the front wheel to feel if there is flexibility on steering bearing.



10. Disassembly, re-assembly and maintenance for rear wheel kit

Rear wheel kit and its parts



1	tyre assy.	PCS	1
2	fastening bolt,brake disk	PCS	5
3	collar	PCS	1

4	gear ring, abs	PCS	1
5	disk comp.,left rear brake	PCS	1
6	wheel,rear	PCS	1
7	oil seal	PCS	2
8	check ring,elastic	PCS	2
9	bearing	PCS	2
10	lining comp.,hub	PCS	1
11	body set,rear wheel	PCS	1
12	damping piece,rear wheel	PCS	5
13	core,valve	PCS	1
14	damper comp.	PCS	1
15	collar	PCS	1
16	seat,sprocket wheel	PCS	1
17	sprocket wheel	PCS	1
18	nut,prevailing torque type all-metal hexagon with flange	PCS	5
19	bearing	PCS	2
20	oil seal	PCS	1
21	collar	PCS	1
22	axis	PCS	1
23	tyre assy.	PCS	1

Removal for rear wheel

Keep motorcycle upright by parking stand.

Loosen nut 1 for chain adjustor.

Remove locking nut 2 of rear wheel axle, then remove the axle.

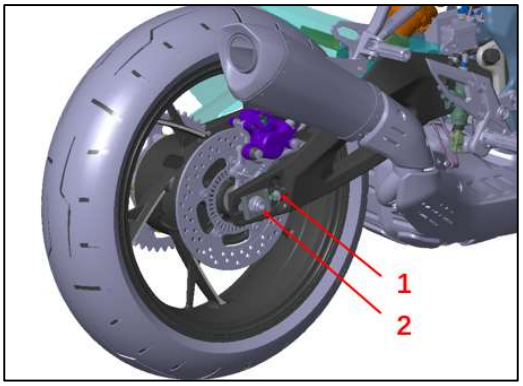
Get chain dropping off.

Remove rear wheel kit.

Remove collar of rear wheel.

Remove damper kit.

Remove damping rubber piece.



Re-assembly is completely opposite to disassembly.

Caution:

Please don’t operate rear brake pedal when caliper of rear brake was removed to avoid piston moving which makes installation of caliper difficult.

Important:

There should not be any dirt on working surface between brake pad and brake plate.

When replaced, please repeatedly step down the rear brake pedal to confirm its normal work.

When the tire replaced, please confirm dynamic balance on equipment once again.

When re-assembling collar or oil seal for rear wheel, please coat them with lithium lubricant.

Parameters:

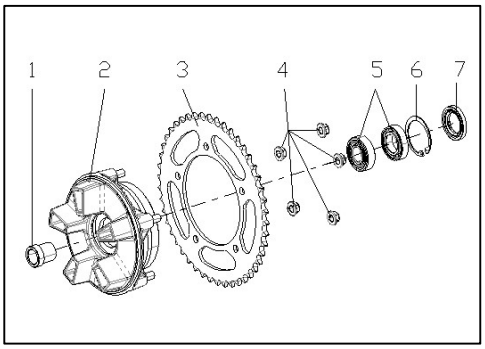
Rear wheel		Aluminium alloy die cast	5.5×17
Rear tire		Radial ply tire of tubeless	180/55 ZR17
Run-out for end surface of rear wheel shall not be bigger than		mm	1
Radial run-out of rear wheel shall not be bigger than		mm	1
Torque for nut on chain adjustor	M8		9
Fastening torque for rear wheel axle	M20		100
Fastening torque for brake plate	M8		35
Loctite	Loctite 262	ml	10
Lubricant		g	5
Allowed maximum imbalance for rear wheel		g	5
Air pressure in tire		bar	2.6

Removal for damper kit

Remove nut connects sprocket wheel first 4, then the sprocket wheel 3.

Remove oil seal 7, Elastic retaining ring 6, bearing 5, and liner 1 by tools.

The re-assembly is completely opposite to disassembly.



Important:

When re-assembling collar or oil seal for damper kit, please coat them with lithium lubricant.

The oil seal of damper gets damaged when it removed, please replace immediately.

The removal for bearing of damper needs the pulling tool for it only.

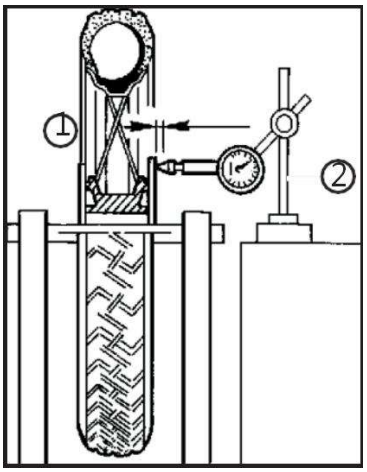
For easy re-assembly, please heat the hole of bearing for damper to 100℃ first, then press-fit the bearing.

Parameters:

Fastening torque for nut of sprocket wheel	M10	N.m	45

Loctite	Locitite 262	ml	10
Lubricant	/	g	5

Removal for brake plate



Remove rear wheel kit and put it onto working bench.

Remove fastening bolt for disc brake plate, then remove rear disc brake plate and ring gear.

The re-assembly is completely opposite to disassembly.

Caution:

The screw of rear brake plate is coated with Loctite, please adopt tools meet demands when removing, otherwise it will be a difficult work.

Important:

There shouldn't be any dirt on working surface between brake pad and brake plate when re-assembling.

Please coat fastening bolt of brake plate with Loctite when re-assembling brake plate.

Confirm run-out of end surface for brake plate when it was assembled, whose method is show as figure:

Put rear wheel on balancing rack by balancing shaft (1).

Measure run-out of end surface by measuring gauge (2).

Run-out for end surface shall not be bigger than	mm	0.3

Removal for rear tire

Remove rear wheel kit and put it on working bench.

Remove air valve core to discharge the air in tire.

Remove rear tire by tools for it only.

Remove air valve core.

The re-assembly is completely opposite to disassembly.

Caution:

The re-assembly for tire please adopt equipment for it only, forcedly assemble by external power may get tire permanently damage.

Important:

When re-assembling tire, please align the light point of tire to air valve core on wheel hub, which makes following works easier.

Removal for bearing and oil seal on rear wheel

Remove rear wheel and put it on working bench.

Remove brake plate and tire.

Remove oil seal, elastic circlip, bearing and inner liner of wheel hub by tools such as circlip pliers.

Replace parts for new ones with same specification.

The re-assembly is completely opposite to disassembly.

Important:

The oil seal on of rear wheel gets damaged when it removed, please replace.

The removal for rear wheel bearing needs pulling tools for it only.

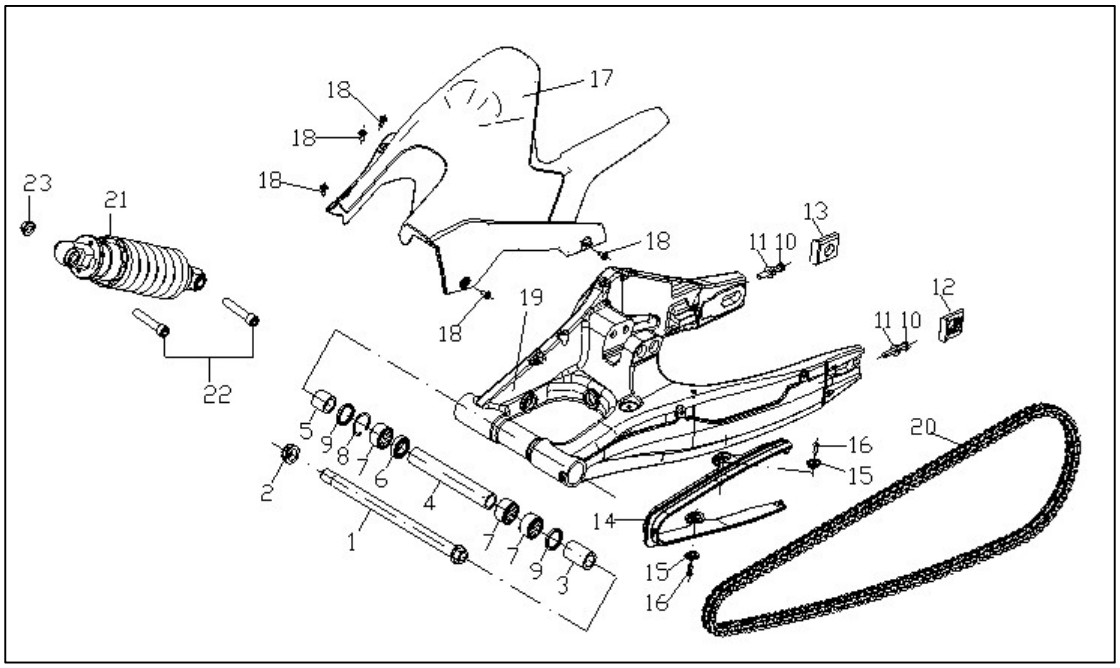
For easy re-assembly, heat the hole of bearing to 100℃, then press-fit the bearing.

One side of bearing is with locating circlip, missing assembly is forbidden.

When press-fitting the bearing, it needs the press-fitting equipment for it only, press-fit the side with elastic circlip (Right side) to the bottom, then the other side of bearing.

11. Disassembly, re-assembly and maintenance for rear suspension kit

Rear suspension kit and its parts



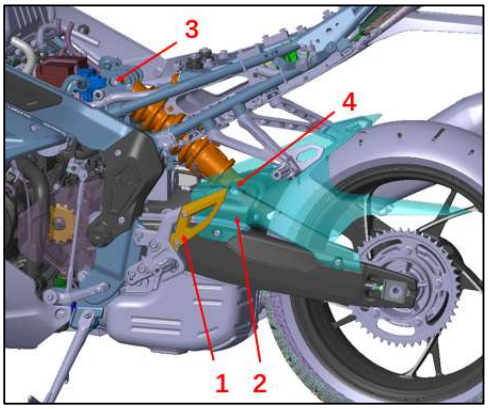
1	axis	PCS	1
2	non metallic hexagonal flange locking	PCS	1

	nut		
3	collar	PCS	1
4	collar	PCS	1
5	collar	PCS	1
6	bearing	PCS	1
7	bearing	PCS	3
8	check ring,steel cable baffle	PCS	1
9	oil seal	PCS	2
10	bolt,hexagon	PCS	2
11	nut,hexagon head	PCS	2
12	adjuster,drive chain right	PCS	1
13	adjustor,drive chain left	PCS	1
14	slider,drive chain	PCS	1
15	plate,chain slider mounting pressure	PCS	2
16	screw,hexagon socket	PCS	2
17	case, chain	PCS	1
18	screw,hexagon socket	PCS	1
19	rear fork assy.	PCS	1
20	chain	PCS	1
21	axis	PCS	1
22	non metallic hexagonal flange locking nut	PCS	2
23	collar	PCS	1

Disassembly and re-assembly for rear shock absorber

Keep the motorcycle upright through the parking space.

Remove fuel tank by referring to corresponding content for its disassembly.



Remove the seat cushion and fuel tank.

Remove the left main footrest decorative panel 1..

Remove chain case 2.

Remove installation bolt and nut 3 on rear shock absorber by tool.

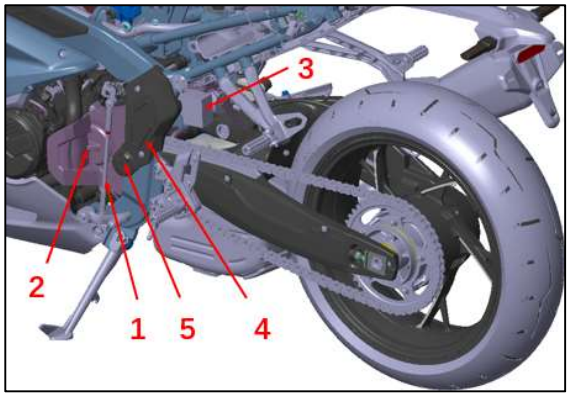
Remove lower installation bolt 4 on rear shock absorber by tool and finally remove the rear shock absorber.

The re-assembly is completely opposite to disassembly.

Parameters:

install bolts on the upper and lower parts of the rear shock absorber	M12	N.m	60
chain box installation bolt	M6	N.m	6
main footrest decorative panel installation bolts	M6	N.m	9

Disassembly and re-assembly for rear fork and chain



Hang up the motorcycle by lifting device.
Remove rear shock absorber
Remove rear wheel kit by referring to its disassembly and re-assembly.
Remove gearshift pedal 1 and spline base on upper end.
Remove left rear cover 2 of engine.
Remove ABS bracket 3, oil tube clamp and mounting bolt of rear fork.
Remove left and right decorative cover 4 of frame.
Remove rear fork shaft 5, then remove rear fork and chain case kit.

The re-assembly is completely opposite to disassembly.

Caution:

Adjust the left and right chain adjustor first when re-assembling, then fasten the nut of rear wheel axle, then fasten the left and right chain adjustor.

Important:

Confirm if the left and right chain adjustors are on the same scale line when re-assembling.

Inspection for tensioning force of cha

in must be under 0 loading of motorcycle.

Parameters:

Torque for nut on chain adjustor	M8	N.m	22
Torque for nut on rear wheel axle	M20	N.m	120
Torque for left and right cover of engine	M6	N.m	6
Bolt on spline base of gearshifrt pedal’s upper end	M6	N.m	9
Torque for ABS bracket and oil tube clamp	M6	N.m	9
Torque for nut of rear fork shaft	M20	N.m	120
Torque for decorative cover of appearance parts	M6	N.m	6
Deflection for chain		N.m	35-45

Disassembly and re-assembly for bearing of rear fork

Put the removed rear fork on working bench.

Use specialized tools to sequentially remove the liner, oil seal, fork liner, elastic retaining ring, bearing (deep groove ball), and bearing (needle roller) from the position of the fork shaft tube.

The re-assembly is completely opposite to disassembly.

Caution:

The removal for bearing needs tools for it only, forcedly remove may damage the parts.

Caution:

Coat the collar and bearing with lithium lubricant when re-assembling.

Disassembly and re-assembly for chain slider

Keep motorcycle upright by parking stand.

Remove spline base on upper end of gearshift pedal 1.

Remove left rear cover 2 of engine.

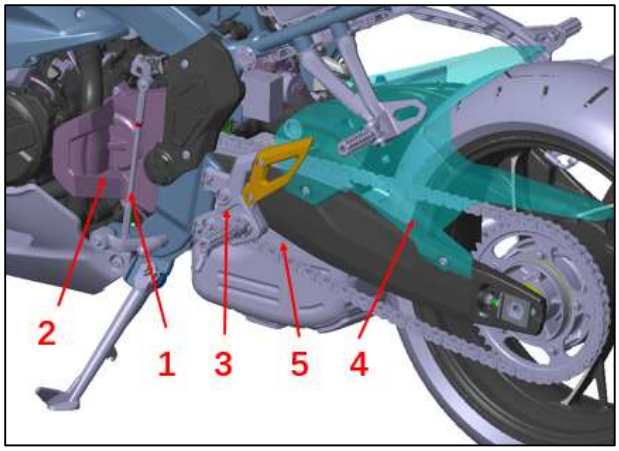
Remove left main footrest kit 3.

Remove chain case 4.

Remove chain slider 5 on rear fork.

Replace chain slider for a new one with same specification.

The re-assembly is completely opposite to disassembly.



Caution:

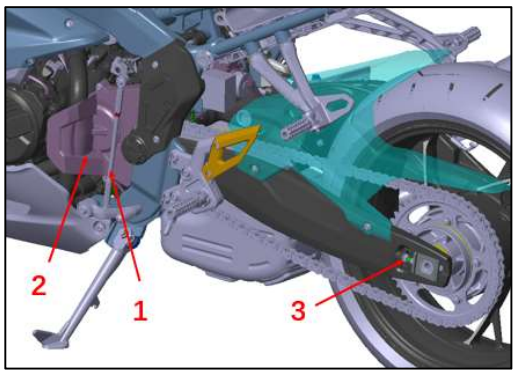
When re-assembling chain slider 3, please clip the limit pillar 3 into limit hole on rear fork.

Parameters:

Engine left rear cover torque	M6	N.m	6
Spline seat bolt on the upper end of the transmission pedal	M6	N.m	9
Torque for bolt between chain slider and rear fork	M6	N.m	4.5
Fastening torque for left main footrest	M8	N.m	22
Installation bolt for chain case	M6	Nm	6

Disassembly and re-assembly for driving sprocket wheel

Keep motorcycle upright by parking stand



Loosen nut 3 on chain adjustor, then loosen rear wheel axle, then move rear wheel forward to get chain loosened.

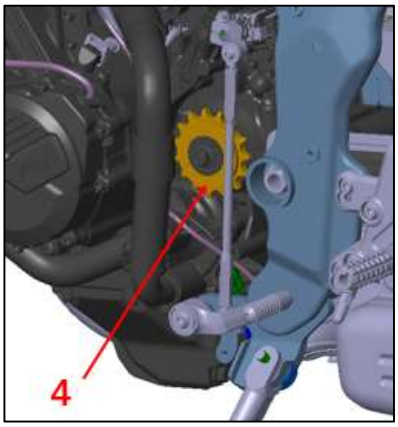
Remove spline base on upper end of gearshift pedal 1.

Remove left rear cover 2 of engine.

Remove the assembly bolts of the drive sprocket, and then remove drive sprocket 4.

Replace the driving sprocket wheel for a new one with same specification.

The re-assembly is completely opposite to disassembly.



Caution:

Adjust left and right chain adjustor when re-assembling, then fasten nut on rear wheel axe, then fasten the left and right chain adjustor.

Important:

Check and confirm if the left and right chain adjustors are on the same scale line.

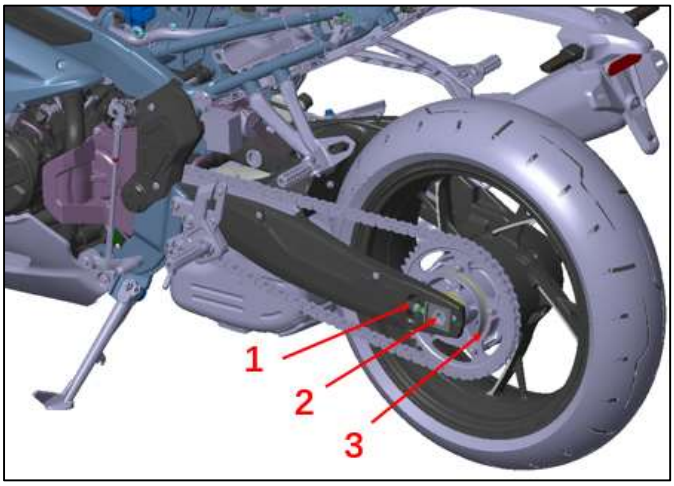
Inspection and adjustment for tensioning force of chain must be under 0 loading of motorcycle.

When re-assembling the driving sprocket wheel, please coat thread of bolt with Loctite, the inner ring of butterfly-shaped washer is a protrusion outwards, insert the flanging side of collar into inner hole of elastic butterfly-shaped washer.

Parameters:

Torque for nut of chain adjustor	M8	N.m	22
Torque for nut on reart wheel axle	M20	N.m	120
Torque for left rear cover of engine	M6	N.m	6
Spline base bolt on upper end of gearshift pedal	M6	N.m	9
Installation torque for driving sprocket wheel	M10	N.m	54
Specification of Loctite	Loctite 262	ml	10
Chain deflection	\	mm	35-45

Disassembly and re-assembly for damper kit



Keep motorcycle upright by parking stand.

Loosen the nut on chain adjustor.

When nut on rear wheel axle loosened, powerfully push rear wheel forward to remove the rear wheel axle.

Remove damper kit.

Replace damper and its damping rubber for new ones with same specification.

The re-assembly is completely opposite to disassembly.

Caution:

Adjust left and right chain adjustor when re-assembling, then fasten nut on rear wheel axle, then fasten the left and right chain adjustor.

Important:

Check and confirm if the left and right chain adjustor are on the scale line when re-assembling.

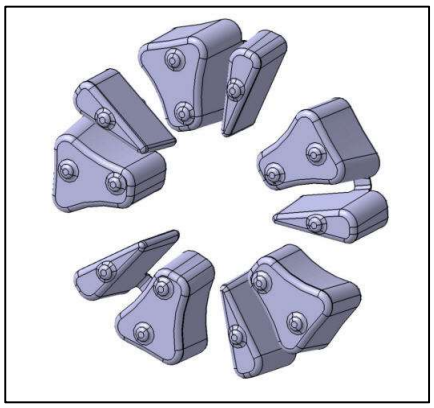
The inspection and adjustment for tensioning force of chain must be under 0 loading of motorcycle.

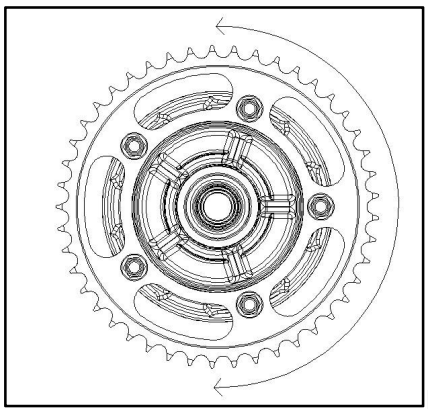
When replacing the damper kit please coat the position of oil seal with lithium lubricant.

Parameters:

Torque for nut on chain adjustor	M8	N.m	22
Torque for nut on rear wheel axle	M20	N.m	120
Chain deflection		mm	35-45

Disassembly and re-assembly for damper piece of rear wheel





Keep motorcycle upright by parking stand.

Remove rubber damping piece by referring to content of removal for damper kit.

Check if there is wear-out or crack on damper piece, in case it is, please replace.

In addition, it could be judged on motorcycle, when it is parking, lift up the rear wheel, lay stress on sprocket wheel along the direction of figure showing, in case obvious radial run-out could be felt, which indicates the rubber damper piece was worn out, it needs be replaced.

Caution:

Excessive acceleration or deceleration makes continuous impact on damper rubber, which produce heat, while the damper rubber is sealed in its chamber with poor heat radiation, it accelerates the wear-out of damper rubber piece.

Conditions for replacement for chain

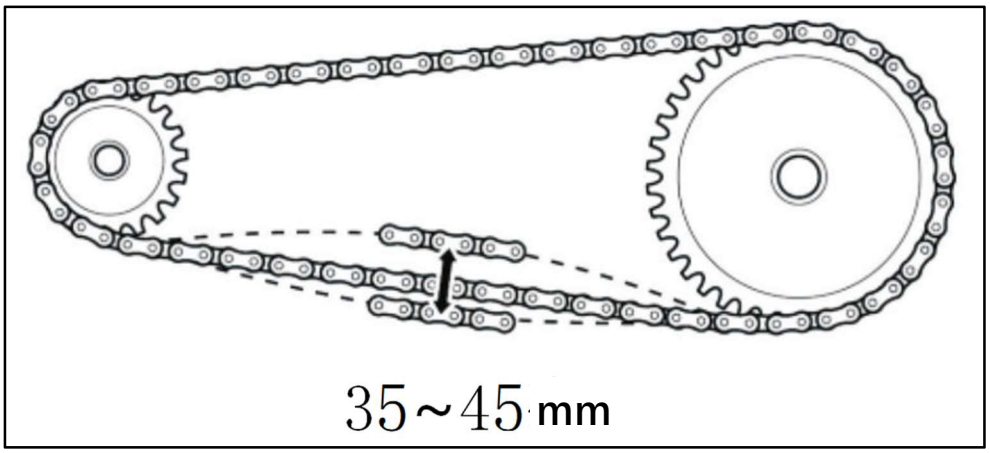
There are several places of dead-lock on chain.

There is crack on roller of chain.

There are missing on seal ring of chain.

The distance between links got to be 2 times of new one.

In case adjust to limit but still fail to meet conditions below, whose data are bigger than it.

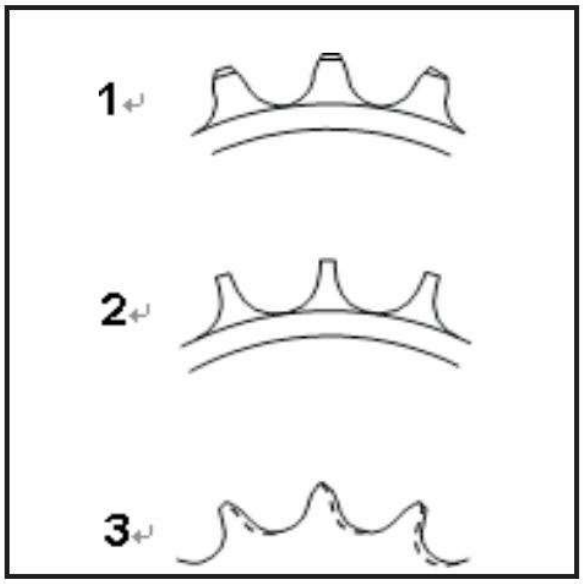


Conditions for replacement of sprocket wheel

There is buckling on surface of sprocket wheel.

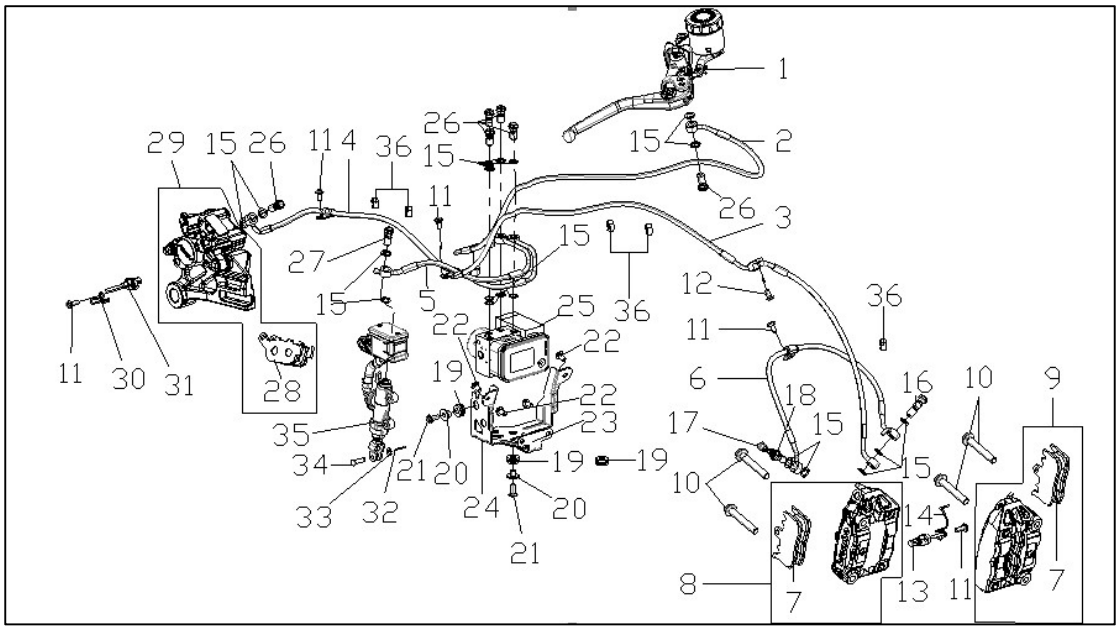
Teeth of sprocket wheel break off or damaged.

In figure below, in which 1 is qualified, 2 and 3 need be replaced.



12. Disassembly, re-assembly and maintenance for brake system

Brake system and its parts

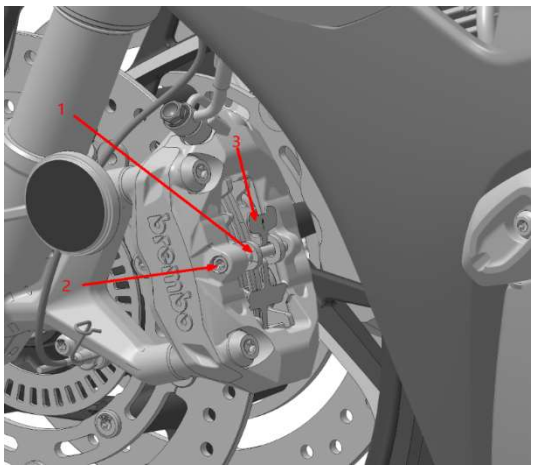


1	cylinder assy.,master	PCS	1
2	abs connective oil tube	PCS	1
3	abs connective oil tube	PCS	1
4	abs connective oil tube	PCS	1
5	abs connective oil tube	PCS	1
6	hose comp.,front disc-brake	SET	1
7	pad comp.,front disc-brake	PCS	2
8	caliper assy.,left	PCS	1
9	caliper assy.,right	PCS	1
10	axis	PCS	4
11	flange bolt	PCS	1
12	flange bolt	PCS	1
13	speed sensor	PCS	1
14	clamp,wire	PCS	1
15	washer,plain	PCS	19
16	bolt,disc-brake hose	PCS	1
17	protecting cap,bleeder screw	PCS	1
18	bolt,disc-brake hose	PCS	1
19	i-rubber	PCS	3
20	collar	PCS	2
21	bolt,lobular socket countersunk head	PCS	2

22	flange bolt	PCS	4
23	abs installation ears	PCS	1
24	installation bracket, abs	PCS	1
25	abs.anti-locking up system	PCS	1
26	bolt,disc-brake hose	PCS	4
27	bolt,disc-brake hose	PCS	3
28	pad comp.,rear disc-brake left	PCS	1
29	pump, rear disc-brake lower	PCS	1
30	clamp,wire	PCS	1
31	speed sensor	PCS	1
32	pin,cotter	PCS	1
33	washer,plain	PCS	1
34	pin,clevis	PCS	1
35	pump, rear disc-brake upper	PCS	1
36	clamp,wire	PCS	5

Replace the front disc brake friction plate

Keep motorcycle upright by parking stand.



Before replacing left font brake pad, please turn handle bar right, while before replacing the right pad please turn handle bar left, left and right side are opposite.

Pull out split pin 1 outwards.

Remove mounting bolt 2 of fixing by tool.

When bolt 2 removed, pressing plate 3 ejected up and remove it.

Finally remove brake pad 4.

Replace front brake pads for new ones. (The removal for left and right lower pump of front disc brake is symmetrical in same way).

The re-assembly is completely opposite to disassembly.

Important:

When re-assembling, missing assembly for shim between end surface of brake pad and limit groove of front caliper is not allowed, please assemble it in place.

Please don’t operate front brake lever when brake pads are removed to avoid piston moving and make difficult re-assembly for brake pad.

Replace the outer and inner brake pad as a kit when replacing them.

There should not be dirt on working surface between brake pad and brake plate.

When replaced, repeatedly and tightly hold brake lever to confirm its normal work.

Dispose the replaced front brake pads in environment friendly way.

Replacement for rear disc brake pad

Hold the motorcycle by side stand.

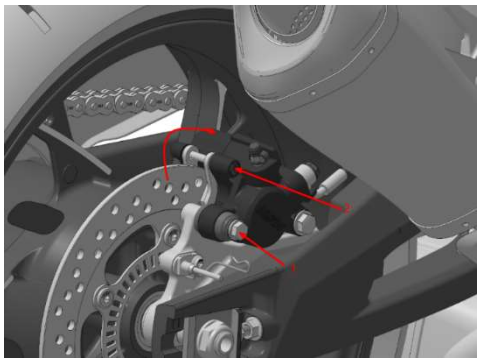
Remove bolt 1 by tool, then turn the brake pump upwards completely.

Remove bolt (pin shaft) 2 by tool.

Finally remove brake pad 3.

Replace rear brake pads for new ones.

The re-assembly is completely opposite to disassembly.



Important:

When re-assembling, missing assembly for shim between end surface of brake pad and limit groove of rear caliper is not allowed, please assemble it in place.

Please don't operate rear brake pedal when brake pads are removed to avoid piston moving and make difficult re-assembly for brake pad.

Replace the outer and inner brake pad as a kit when replacing them.

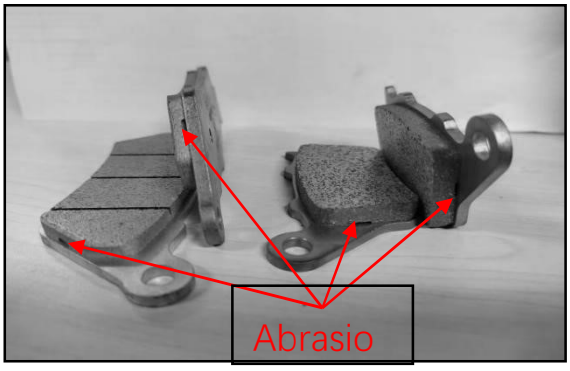
There should not be dirt on working surface between brake pad and brake plate.

When replaced, repeatedly step down brake pedal to confirm its normal work.

Dispose the replaced rear brake pads in environment friendly way.

Inspection for brake pad

The abrasion mark on brake pad must clearly be seen as figure below shows, whose minimum thickness is 1mm.



Inspection for liquid level in front and rear brake system

Keep motorcycle upright by parking stand.

Turn the grip to get oil pump of front brake horizontal.

The liquid level in front and rear brake system must be between scale mark UPPER and

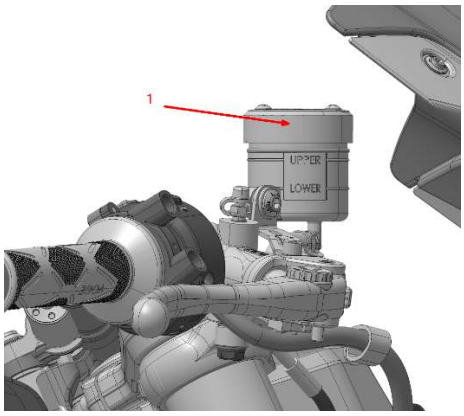
LOWER on upper pump of front and rear disc brake.

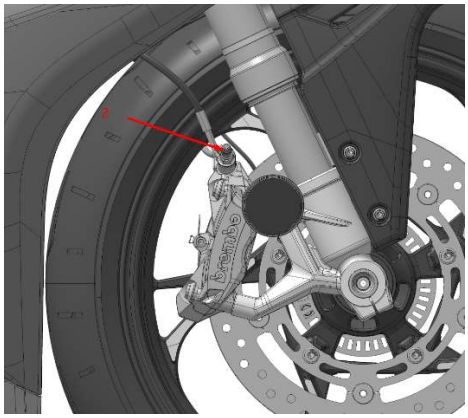
Caution:

During the consumption from brand new to limit, the (Min./Max.) capacity for brake liquid both meet demands, usually needn't fill up due to consumption of brake pads.

In case the brake liquid level is lower than the minimum limit, which indicates there may have other malfunctions.

Replacement for brake liquid in front disc brake





Keep motorcycle upright by Side stand

Turn the grip to get oil cup cap 1 horizontal.

Remove oil cup cap with its rubber cover by tool.

Connect the extraction device for brake liquid to air exhaust screw 2 on brake caliper.

Open air exhaust screw by turning half round by tools.

Start brake liquid extraction device to drain off the brake liquid.

Fill up with fresh brake liquid from oil cup, meanwhile starting extraction device until the liquid fulfill the brake pipeline.

Fasten air exhaust screw.

Check if the liquid level is between scale mark UPPER and LOWER.

Connect diagnosis device of ABS into its controller to check if there is malfunction code, in case there is please make troubleshooting.

The re-assembly is completely opposite to disassembly.

Caution:

When brake liquid filled up, please clean up greasy dirt around oil cup and air exhaust screw of lower caliper.

Important:

Please don't let brake liquid touch any painting part of motorcycle, because the brake liquid is corrosive.

When extracting brake liquid, please don't get the liquid level under scale mark LOWER, otherwise the air bubble may get into brake system, under this case, the extraction needs be

done once again.

When filled up, lay stress on brake lever and keep for a while to check if there is liquid leakage on brake pipeline.

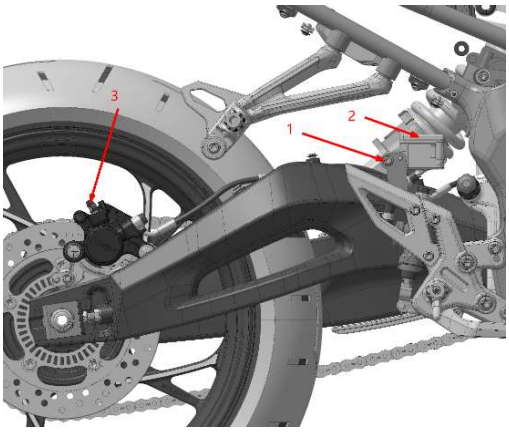
In case there is problem on disc brake hose kit or connection of threaded part, please replace immediately.

Mixture of brake liquid of two brands or specification even above is not allowed.

Parameters:

Torque for oil cup cap	M6	N.m	2~3
Torque for air exhaust screw	M8	N.m	4~7
Capacity for liquid of front brake system		mL	150
Specification for brake liquid		Great wall	DOT4

Replacement for rear brake liquid



Keep motorcycle upright by parking stand.

Remove the fixing bolt 1 on oil cup of disc brake by socket hex. tool of T30

Remove oil cup cap 2 with its rubber cover.

Connect the extraction device for brake liquid to air exhaust screw 3 on brake caliper.

Open air exhaust screw by turning half round by tools

Start brake liquid extraction device to drain off the brake liquid.

Fill up with fresh brake liquid from oil cup, meanwhile starting extraction device until the liquid fulfill the brake pipeline.

Fasten air exhaust screw.

Check if the liquid level is between scale mark UPPER and LOWER.

Connect diagnosis device of ABS into its controller to check if there is malfunction code, in case there is please make troubleshooting.

The re-assembly is completely opposite to disassembly

Caution:

When brake liquid filled up, please clean up greasy dirt around oil cup and air exhaust screw of rear caliper.

Important:

Please don't let brake liquid touch any painting part of motorcycle, because the brake liquid is corrosive.

When extracting brake liquid, please don't get the liquid level under scale mark LOWER, otherwise the air bubble may get into brake system, under this case, the extraction needs be done once again.

When filled up, lay stress on brake pedal and keep for a while to check if there is liquid leakage on brake pipeline.

In case there is problem on disc brake hose kit or connection of threaded part, please replace immediately.

Mixture of brake liquid of two brands or specification even above is not allowed.

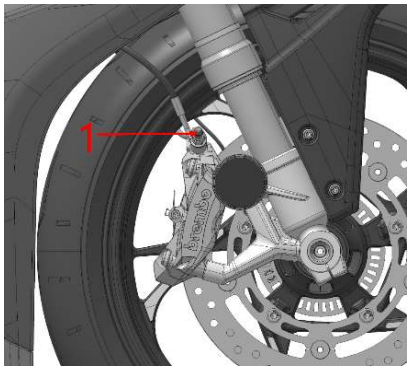
Parameters:

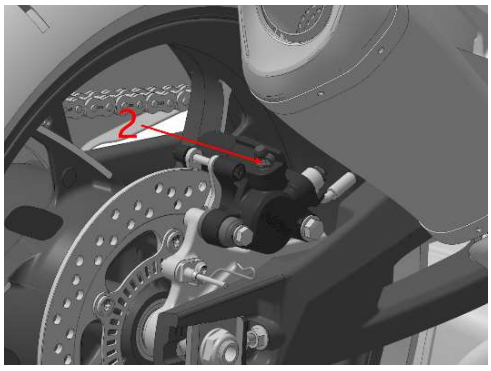
Torque for air exhaust screw	M8	N.m	4~7
Capacity for liquid of rear brake system		mL	150
Specification for brake liquid		Great wall	DOT4

Replacement for ABS and parts in front and rear brake pipeline

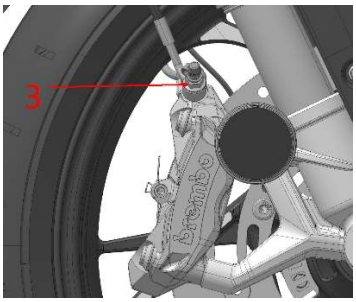
Remove rear shock absorber by referring disassembling, re-assembling and maintenance for rear suspension kit, because there is not anything holding up the rear part of motorcycle when rear shock absorber removed, so please lift up the rear part of motorcycle.

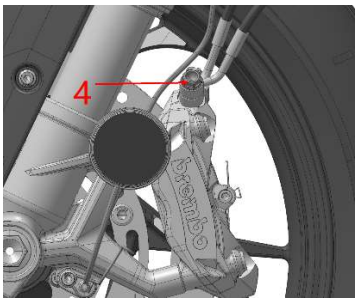
Loosen air exhaust screw 1、2, then connect the air exhaust screw to vacuum device, drain off liquid in pipeline. Replace the brake liquid according to procedure above.

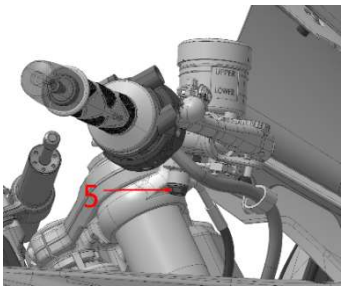


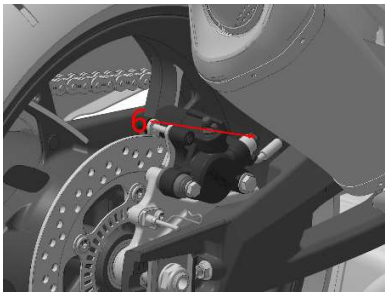


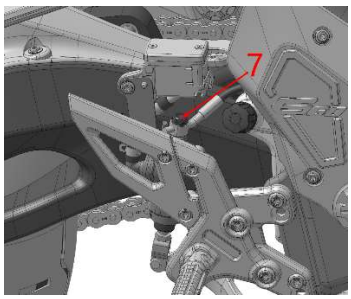
Remove bolt 3 of right front lower pump, bolt 4 of left front lower pump, bolt 5 for mounting oil tube of front upper pump, bolt for rear lower pump, bolt 7 for rear upper pump and all related seal washer



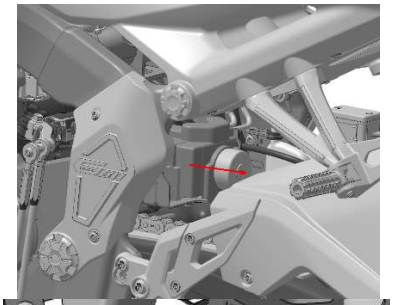


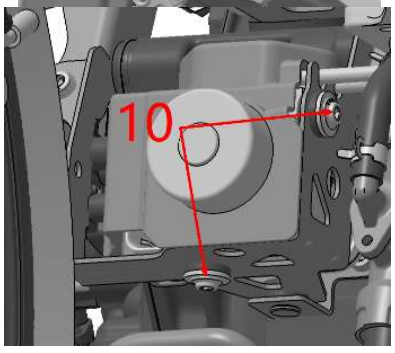


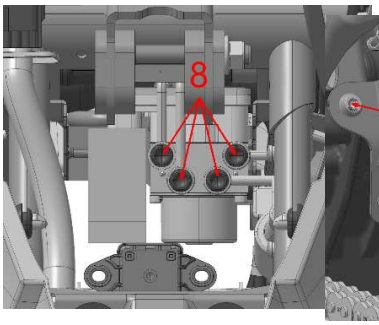


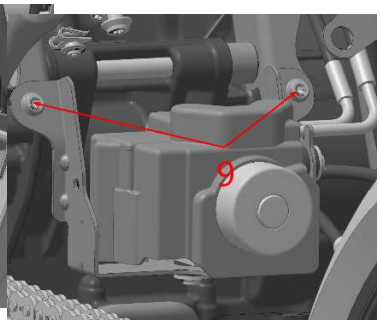


Connect the ABS waterproof valve directly to the foreign country for disassembly. Remove the connection hole 8 and sealing ring between the oil pipe and the ABS controller. This is because remove the two bolts 9 connecting the ABS safety bracket to the vehicle, remove the ABS control wire mesh, and remove the two screws 10 connecting the ABS safety bracket to the ABS controller.









When works above finished, remove controller of ABS and oil tube of brake.

The re-assembly is completely opposite to disassembly.

Finally fill up with brake liquid according to procedure for its replacement above, then check.

Important:

The brake liquid is corrosive, please don't touch it to skin or cloths when draining off or filling up.

The gasket at place of punching bolt needs be replaced for a new one when re-assembling, otherwise the oil may leak.

Every adjacent sealing surface needs install a gasket.

Parameters:

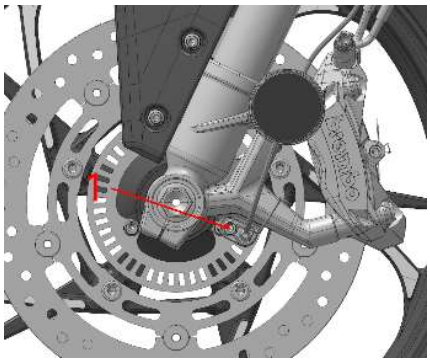
controller for ABS and punching bolt	M8	N.m	24
Torque for drill bolt and brake pump	M8	N.m	35
Torque for air exhaust screw	M6	N.m	4~7

Removal for speed sensor on front wheel

Keep motorcycle upright by parking stand.

Remove bolt 1 and speed sensor on front wheel.

The re-assembly is completely opposite to disassembly.



Important:

When speed sensor of front wheel re-assembled, let front wheel suspend, check clearance change between speed sensor and gear ring of ABS,

Parameters:

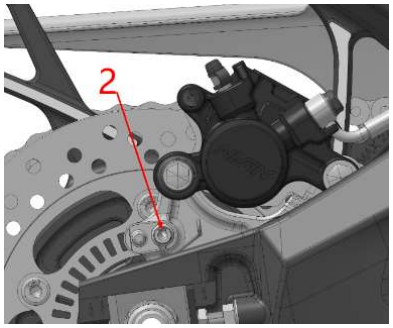
Torque for fastening bolt of sensor	M6	Nm	6
Clearance between sensor and gear ring		mm	0.8~1.5

Removal for speed sensor of rear wheel

Keep motorcycle upright by parking stand.

Remove bolt 2 then remove speed sensor of rear wheel.

The re-assembly is completely opposite to disassembly.



Important:

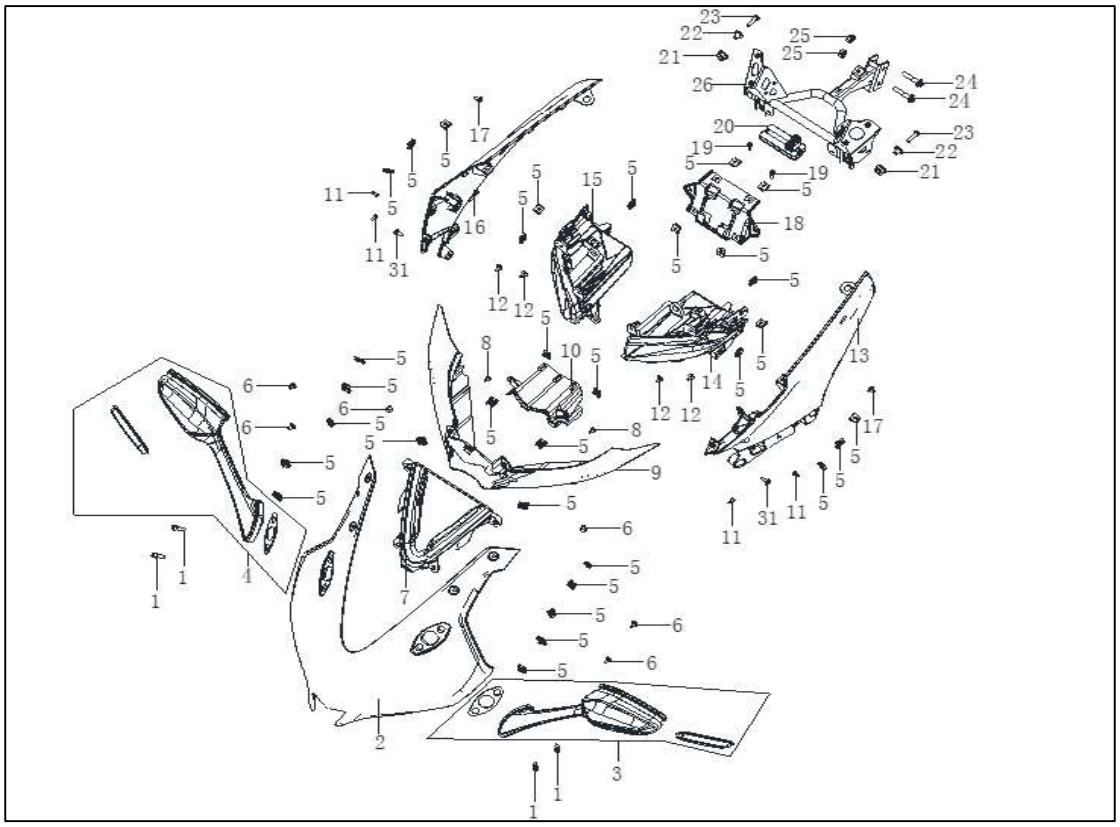
When speed sensor of rear wheel re-assembled, let rear wheel suspend, check clearance change between speed sensor and gear ring of ABS.

Parameters:

Torque for fastening bolt of sensor	M6	Nm	6
Clearance between sensor and gear ring		mm	0.8~1.5

13. Disassembly, re-assembly and maintenance for lights set on motorcycle

Headlight kit and its parts



1	bolt,lobular socket countersunk head	PCS	4
2	panel,front	PCS	1

3	panel,front	PCS	1
4	panel,front	PCS	1
5	mirror,left back-view	PCS	1
6	mirror,right back-view	PCS	1
7	nut,clip	PCS	34
8	bolt,lobular socket countersunk head	PCS	8
9	bracket,front panel left	PCS	1
10	screw,cross recessed pan self-tapping	PCS	2
11	rear wing	PCS	1
12	rear wing	PCS	1
13	rear wing	PCS	1
14	fense,air guide sleeve	PCS	1
15	screw,cross recessed pan self-tapping	PCS	4
16	bolt,lobular socket countersunk head	PCS	4
17	left decorative piece of headlight	PCS	1
18	left decorative piece of headlight	PCS	1
19	left decorative piece of headlight	PCS	1
20	headlight assy.	PCS	1
21	headlight assy.	PCS	1
22	right decorative piece of headlight	PCS	1
23	right decorative piece of headlight	PCS	1
24	right decorative piece of headlight	PCS	1
25	bolt,lobular socket countersunk head	PCS	2
26	brace,electrical parts	PCS	1
27	screw,hexagon socket	PCS	2
28	telematics box	PCS	1
29	t-rubber	PCS	2
30	washer,flange	PCS	2
31	flange bolt	PCS	2

Removal for headlight kit

Keep motorcycle upright by parking stand.

Remove left and right windshield plate by referring to disassembly, re-assembly and maintenance for air exhaust kit.

Remove bolt 1 and 2 by tool, then remove connective piece between meter and fuel tank.

Remove bolt 3 by tool, and the left and right are the same.

Remove bolt 4 by tool, lift meter and its case upwards, pull out connective wire of meter, then

remove meter and its case, please take wiring under meter into record to avoid re-assembly failure.

Turn back-view mirror to side of windshield glass by 90°, then remove bolt 5 by tool, cut off connective wire, remove back-view mirror, the left and right mirror are the same.

Remove nut 6 by tool, pull out bolt, then cut off clamping band at head of wire by cutter, then pull out corresponding connectors on wires, then the head part could be removed.

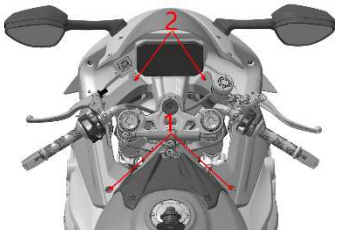
Remove bolt 7 by tool, then remove this shield plate.

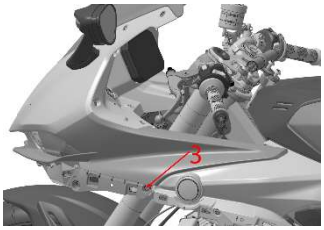
Remove bolt 8 by tool, then remove connective tube of air intake.

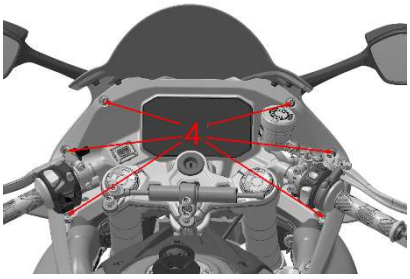
Remove bolt 9 by tool, then the headlight bracket.

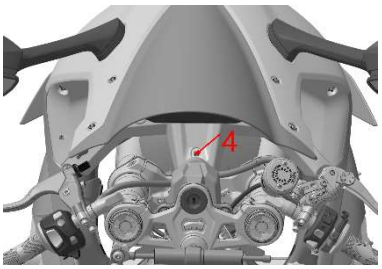
Remove bolt 10 by tool, finally remove headlight kit.

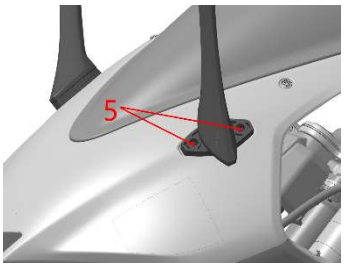
The re-assembly is completely opposite to disassembly.

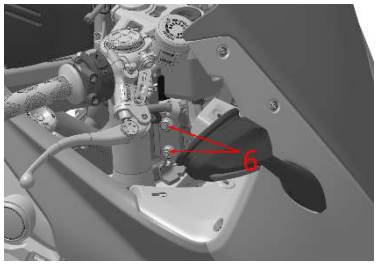


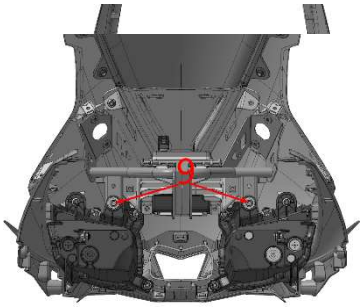


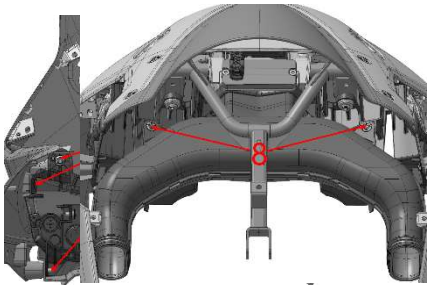




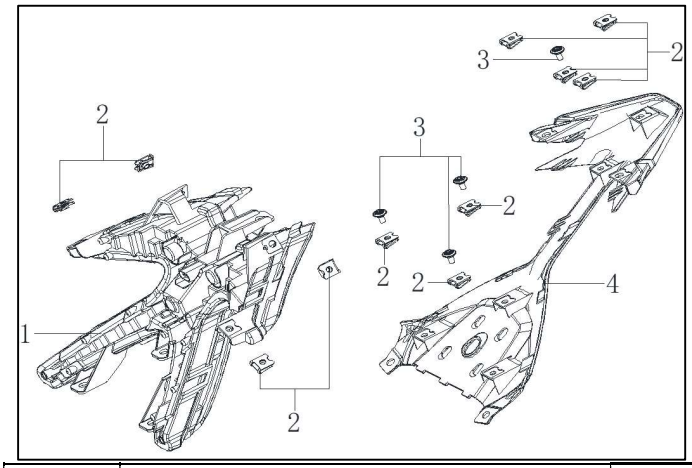








Tail light kit and its parts



1	Tail light	PCS	1
2	Clipping nut	PCS	11
3	Socket spline bolt	PCS	4
4	Tail cover	PCS	1

Removal for taillight kit

Keep motorcycle upright by parking stand.

Remove bolt 1 by tool, then remove driver seat.

Insert key into its hole 2 and remove passenger seat.

Remove bolt 3 by tool, then loosen tail cover.

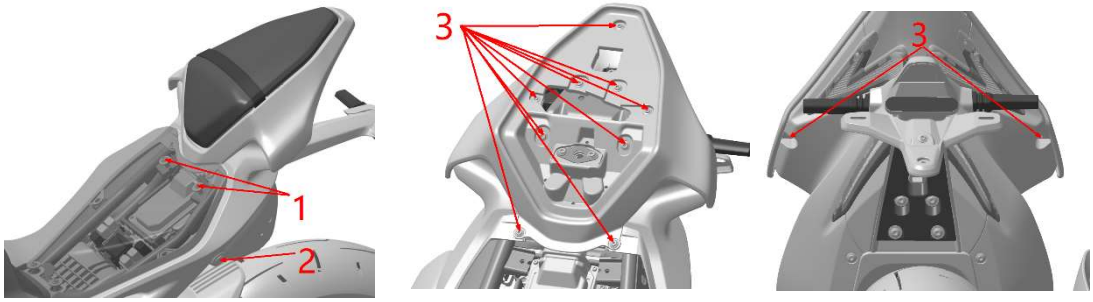
Remove bolt 4 by tool, cut connection between lock body and tail cover, finally remove the tail cover.

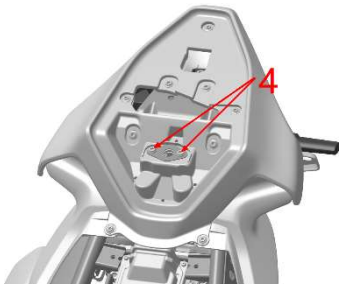
Remove bolt 5 by tool, then remove covering parts of body, then left and right side are the same, the left body cover and seat lock could be removed together.

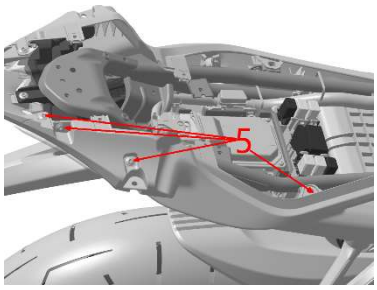
Remove bolt 6 by tool, cut off connective wire, then remove rear fender kit, then the tail light and cover kit could be removed.

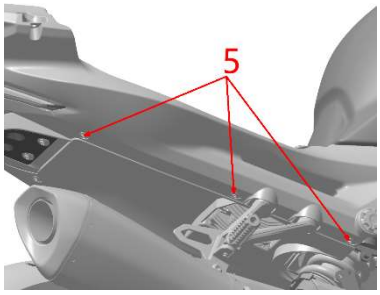
Loosen bolt and remove taillight.

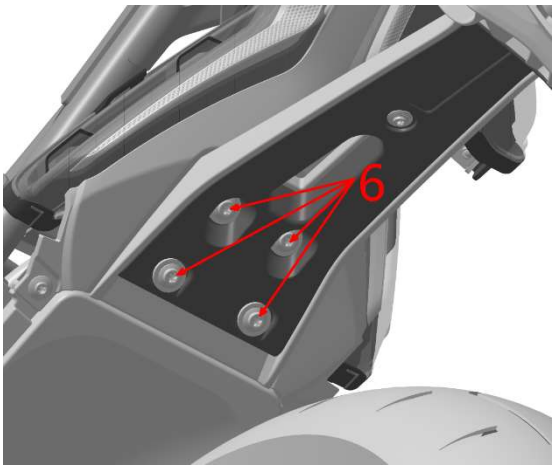
The re-assembly is completely opposite to disassembly.











Caution:

Before removing taillight, please cut off wires for taillight and connectors for wire harness.

Removal for rear turning signal light and rear registration plate light

Keep motorcycle upright by parking stand.

The removal way is the same with taillight, then remove rear fender kit.

Loosen bolt 1 and remove Rear mudguard inner lining panel.

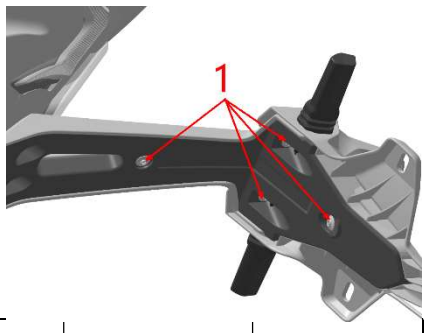
Remove rear registration plate light and turning signal light.

The re-assembly is completely opposite to disassembly.

Caution:

When re-assembling rear turning signal light and rear registration light, please straighten up wires between inner and outer plate of rear fender to avoid pressed.

Parameters:

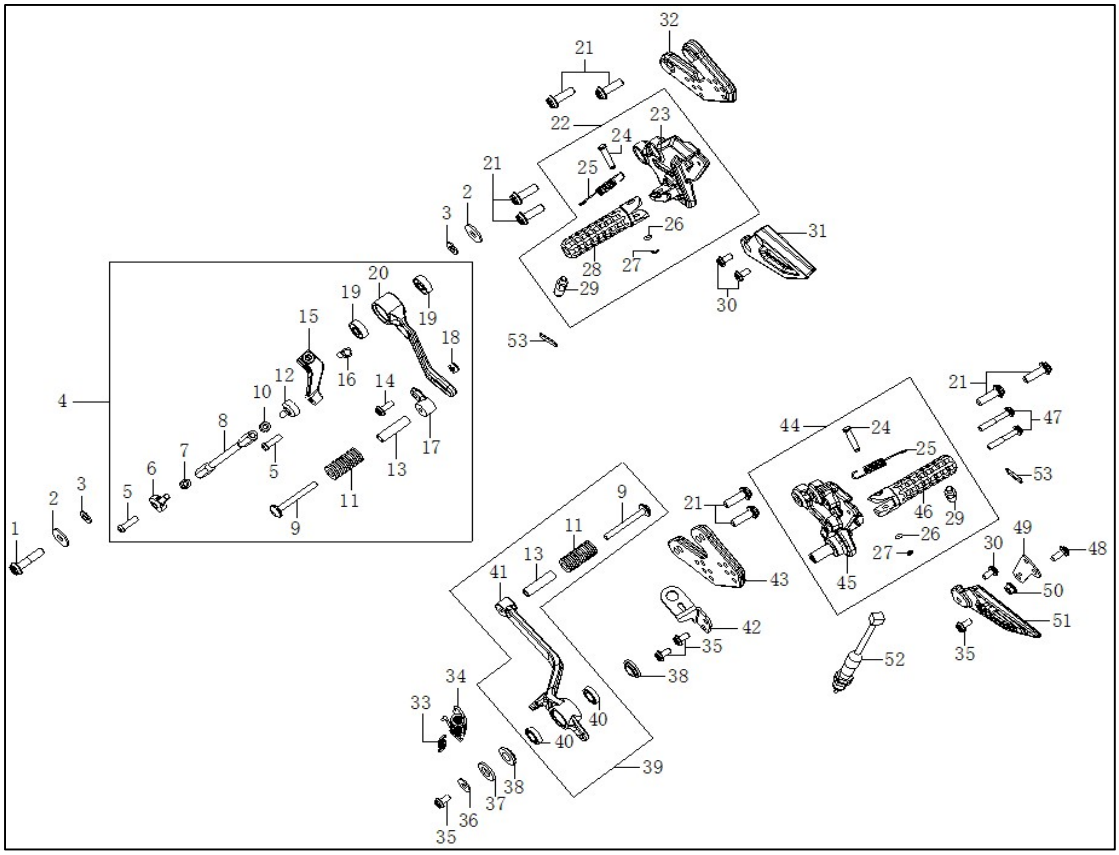


Torque for self-tapping screw for appearance parts	ST4.2	Nm	1
Hex. flange nut	M5	Nm	4.5

Socket spline head bolt for appearance part	M5	Nm	4.5
	M6	Nm	6
Bolt for headlight and taillight	M6	Nm	6
Bolt for turning signal light	M6	Nm	4.5

14. Disassembly, assembly, and maintenance of the main and auxiliary footrest assemblies, transmission pedal, and rear brake pedal

Main footrest, transmission pedal, rear brake pedal assembly and parts

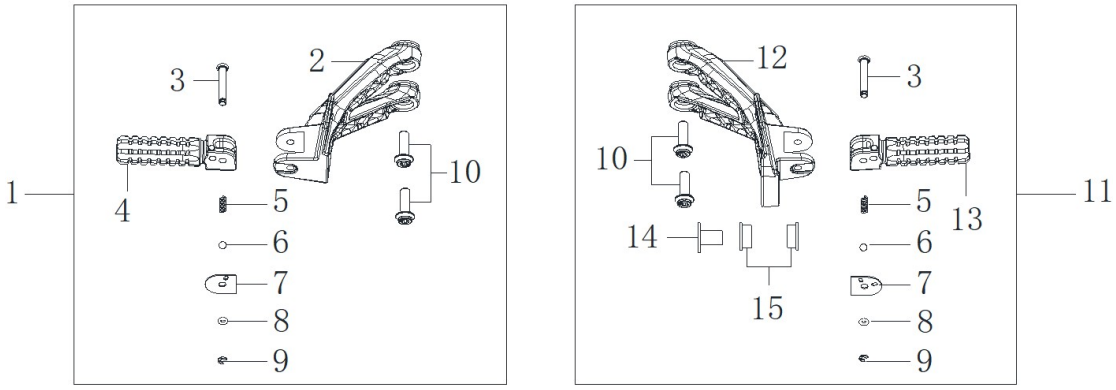


1	flange bolt	PCS	1
2	washer,plain	PCS	2
3	washer,plain	PCS	2
4	gearshift pedal assy.	SET	1
5	screw,hexagon socket	PCS	2
6	joint ball, connecting rod	PCS	1

7	nut,hexagon head	PCS	1
8	connecting rod,gear shift	PCS	1
9	screw,hexagon socket	PCS	2
10	nut,hexagon head	PCS	1
11	rubber jacket,gear change pedal	PCS	2
12	joint ball, connecting rod	PCS	1
13	collar	PCS	2
14	flange bolt	PCS	1
15	base,spline fitting	PCS	1
16	bolt,hexagon	PCS	1
17	pedal lever,gear shift front	PCS	1
18	nut,hexagon head	PCS	1
19	bearing	PCS	2
20	body,gear change pedal	PCS	1
21	flange bolt	PCS	8
22	footrest assy., left	SET	1
23	bracket, left footrest	PCS	1
24	pin,clevis	PCS	2
25	spring, drawing	PCS	2
26	ring,seal	PCS	2
27	split washer	PCS	2
28	body,left footrest	PCS	1
29	screw,probing	PCS	2
30	flange bolt	PCS	3
31	plate,step decorative	PCS	1
32	mounting deck,step	PCS	1
33	extension spring,rear brake switch	PCS	1
34	return spring,rear brake pedal	PCS	1
35	flange bolt	PCS	4
36	washer,plain	PCS	1
37	washer,plain	PCS	1
38	washer,flange	PCS	2
39	pedal comp.,rear brake	SET	1
40	bearing	PCS	2
41	body set,rear brake pedal stopper arm	PCS	1
42	lug,rear brake return spring	PCS	1
43	mounting deck,step	PCS	1
44	footrest assy., right	SET	1
45	bracket, right footrest	PCS	1
46	body,right footrest	PCS	1
47	flange bolt	PCS	2

48	bolt,lobular socket countersunk head	PCS	1
49	bracket, disc-brake oil cup	PCS	1
50	nut,hexagon flange	PCS	1
51	plate,step decorative	PCS	1
52	switch assy.,rear brake	PCS	1
53	scutcheon,typeface	PCS	2

Pillion step kit and its parts



1	step assy.,left pillion	SET	1
2	hold comp.,left pillion step	PCS	1
3	pin,clevis	PCS	2
4	body set,left pillion step	PCS	1
5	spring,compression	PCS	2
6	ball,steel	PCS	2
7	sheet,step limit	PCS	2
8	ring,seal	PCS	2
9	split washer	PCS	2
10	flange bolt	PCS	4
11	step assy.,right pillion	SET	1
12	hold comp.,right pillion step	PCS	1
13	body set,right pillion step	PCS	1
14	flanged lining	PCS	1
15	t-rubber	PCS	2

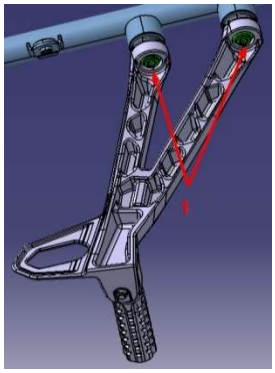
Removal for left and right footrest and pillion step

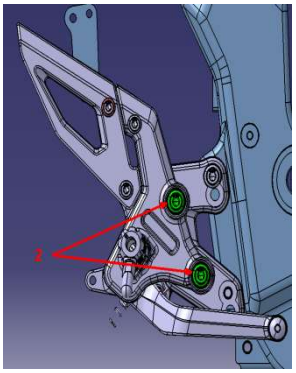
Keep motorcycle upright by parking stand.

Remove bolt 1 by tool and finally remove left and right pillions step.

Remove bolt 2 by tool, finally remove left and right main footrest.

The re-assembly is completely opposite to disassembly.



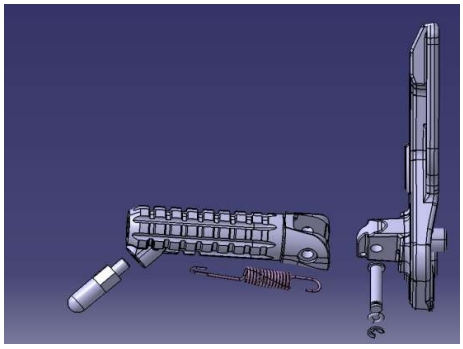


Parameters:

Installation torque for pillion step	M8	N.m	30
Installation torque of main footrest components	M8	N.m	18

Removal for left and right main footrest

Break down left and right footrest according to picture below.



Caution:

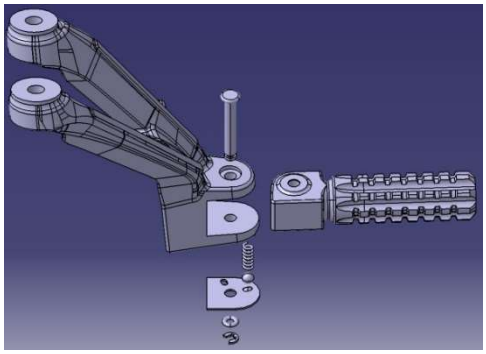
When re-assembling the footrest, please coat the turning place with lithium lubricant.

parameter：

Lithium lubricant	g	10

Removal for left and right pillion step

Break down right pillion step according to figure below.



Caution:

When re-assembling pillion step, please coat turning place with lithium lubricant.

When re-assembling limit piece, spring and steel ball for pillion step, coat the surface of limit piece and spring place with lithium lubricant.

Lithium lubricant	g	10

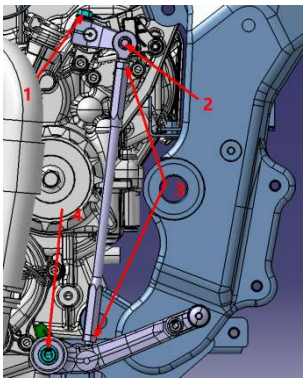
Disassembly and re-assembly for gearshift pedal

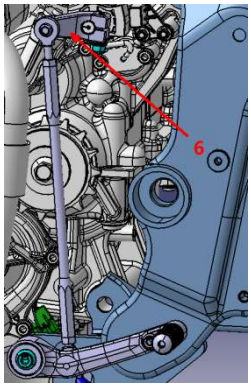
Keep motorcycle upright by parking stand.

Remove bolt 2 by tool and separate gearshift pedal and spline base

Remove bolt 4 by tool and then remove gearshift pedal.

The re-assembly is completely opposite to disassembly.





Reversing gear adjustment

Keep motorcycle upright by parking stand.

Remove bolt 1 by tool, separate 6 apart from gearshift spindle on engine, then adjust it in place as figure shows.

Caution:

Adjust the length of connective bar of gearshift through loosening nut 3, when adjusted to suitable position, then fasten nut 3

Important:

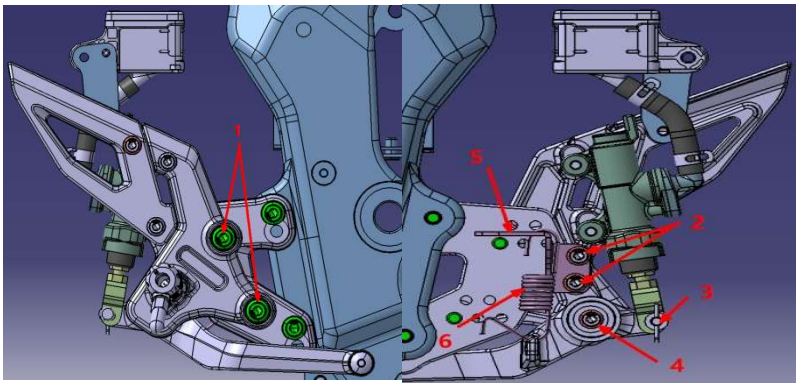
Coat fixing place 2, 4 with Loctite when re-assembling gearshift pedal.

Coat turning place 3 with lithium lubricant when re-assembling gearshift pedal.

Parameters:

Fastening torque for ball joint of gearshift pedal	M6	Nm	9
Fastening torque for gearshift pedal	M8	Nm	18
Spline base fastening	M6	Nm	9
Loctite	/	/	Evenly coat ontothreaded part

Disassembly and re-assembly for rear brake pedal



Keep motorcycle upright by parking stand.

Remove mounting bolt 1 of right main footrest, then remove the footrest.

Remove bolt 2 for returning spring lug of rear brake, remove mounting bracket 5 of rear brake switch, meanwhile removing returning spring 6 of rear brake pedalRemove split pin connects rear brake pedal and main oil cylinder of rear brake, then remove washer and pin shaft 3.

Remove bolt 4 of rear brake pedal ， Then move right main footrest and rear brake pedal kit to right side out of operational distance.The re-assembly is completely opposite to disassembly.

Caution:

The height of rear brake pedal is adjustable by loosening nut 1.

Important:

When re-assembling rear brake pedal, please coat turning position with lithium lubricant, when it re-assembled, coat the fixing position 4 for rear brake pedal with Loctite.

When the height of rear brake pedal was adjusted, please fasten its nut, otherwise it may get brake failure even accident.

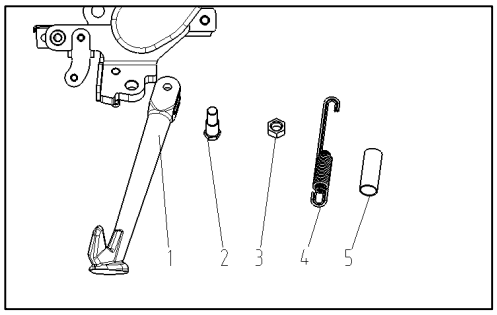
When re-assembling the split pin connects rear brake pedal and main oil cylinder, please replace the split pin for a new one, the used split pin may crack and lead to accident.

Parameters:

Tightening of the right main footrest component	M8	Nm	18
Returning spring lug of rear brake	M6	Nm	9
Fastening torque for rear brake pedal	M6	Nm	9

15. Disassembly and maintenance of side bracket

Side bracket and components



1	bar assy.,side stand	PCS	1
2	flange bolt	PCS	1
3	nut,hexagon head	PCS	1
4	spring, drawing	PCS	1
5	sheath,rubber	PCS	1

Disassembly and assembly of side bracket

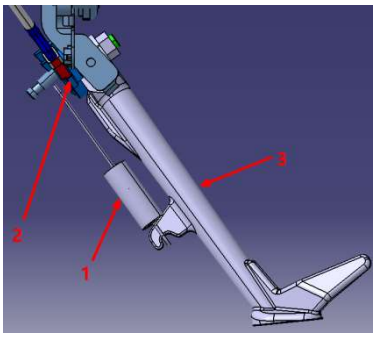
Keep the entire vehicle in an upright position using the lifting device.

Removing tension spring 1 for side stand by tool.

Remove kill switch 2 of side stand when bolt removed.

Remove side stand 3.

The re-assembly is completely opposite to disassembly.



Important:

When re-assembling main and side stand, coat its turning place with lithium lubricant.

The re-assembly for tension spring of main and side stand needs tools for it only for avoid damage when re-assembling.

Parameter:

Fastening torque for hex. shoulder bolt of side stand	M10	Nm	20
Fastening torque for nut of side stand	M10	Nm	20
Fastening torque for kill switch of side stand	M6	Nm	6
Lithium lubricant		g	5