ITALMOTO



Owner's Manual

Tiquattro 250

Preface

We highly appreciate you for choosing our model Tiquattro 250 electronic fuel injection motorcycle, it will offer you pleasant and safe driving.

Driving motorcycle is one of the most exciting sport. For safety reason, you should read this owner's manual carefully and following these instructions before you drive.

This manual introduces the regular maintenance and service, please follow these instructions, it will help you to keep your motorcycle in good condition and more durable.

Our company never stop improving our quality and performance,it may cause color or structure change, not as same as manual description. If it brings any inconvenience to you, we are very sorry about this.

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Important Notice

1.Driver and passenger

This motorcycle is designed only for one driver and one passenger.

2.Road condition for driving

This motorcycle is only suitable for driving on road.

3.Please read this manual carefully. The run-in time of engine is necessary, it will make motorcycle more durable and stable.

Please take notice of following words:

Warning: It means if you don't follow instruction, it may cause serious damage for driver and passenger.

Carefully: It means if you don't follow instruction, it may cause the person injured or damage of motorcycle.

Notice: Provide useful information.

This user manual is property of the motorcycle. If transfer this vehicle to others, you should pass this manual to new owner together with vehicle.

Without our company permission, it is not allowed to copy or translate any part of this manual.

The motorcycle use professional oil for lubrication.

Special Notice

Warning: The motorcycle must equip the right fuse for driving, it is not allowed to use other fuse or without fuse. Otherwise it may cause damage to the vehicle or fire.

Fuse position: Beside battery.

Fuse specification: The main cable fuse is 15A, others are 10A.

The fuse failure is normally by vehicle circuit problem, before change fuse, should check the situation of vehicle. If after change fuse, it breaks again, please send the vehicle to nearest shop for service.

Notice:

※First time mounting or change battery should be careful with Anode and Cathode. If make wrong connection, should check the fuse immediately. even fuse not broken, the vehicle should be sent to service centre to check deeply. The wrong connection for anode and cathode may cause some damage of electric part. If damage part continue working, it may bring some unpredicted risk.

※Before change fuse, should take off the key in case of short circuit.

※When change fuse, should be carefully not damage the fuse bottom,otherwise it may bring damage part or fire.

Forbidden Modify:

Please do not change original parts position, otherwise it will seriously affect the vehicle performance and safety, and even cause vehicle not driving properly. Such as modify electronic, emission and fuel system, it is not allowed legally. Our company will not take the responsibility for any change without our permission.

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Safety information

Safety Regulation:

1.Before driving must check vehicle, in case of accident or damage parts.

2.Driver must has legal driving license, and not allowed to borrow the vehicle to whom without driving license.

3.Avoid to have damage from other vehicle, driver should:

- Wear bright color clothes.
- Not to close other vehicle.

4.Strictly obey regulation, not allowed to cut in other line suddenly.

5.Most accident because of over speed,so speed should follow the speed limitation.

6.When making turns, should turn on indicator.

7.In the cross, parking or fast line, should be carefully driving.

8.Do not modify motorcycle or take off parts, it is illegal and not safe, and it will affect warranty.

9.Add accessories must not affect driving, specially not overload electronic parts.

Clothes:

1.For safety reason, driver must wear helmet, glass and boot,gloves and racing suit.Passenger should also wear helmet.

2.During driving, the muffler temperature is high, it is forbidden to touch muffler during driving or just after driving.

3.During driving, please do not wear too loose clothes.

Helmet:

It is most important to wear good quality helmet and wear glass.

Driving when raining:

Driving in the rain need special attention, the brake distance is two times more than dry weather.

Motorcycle series number

Vehicle Identification Number (VIN) and engine number is for motorcycle registration.Please record your number for future use.

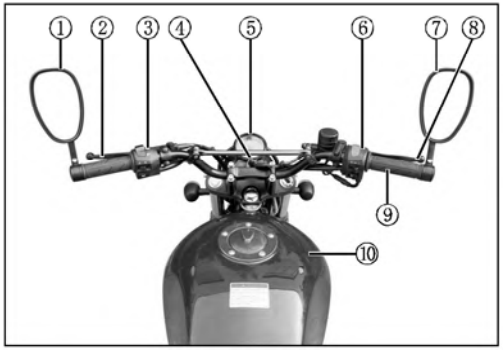
VIN number grave on the vehicle handle bar right side ①, Engine number grave on the engine crankcase left side②, Product information label on the vehicle handle bar right side ③.

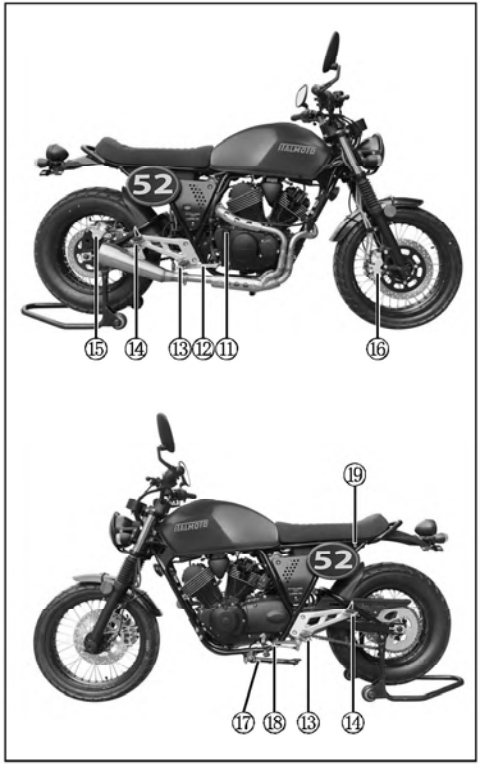
VIN number:_____

Engine number:_____



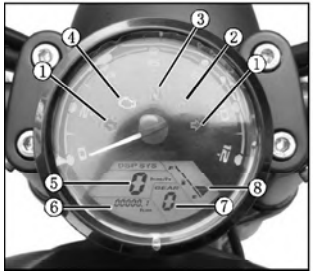
Parts description



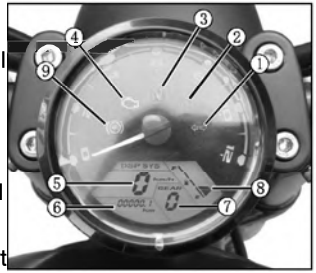


(1)Left mirror (2)Clutch lever (3)Left side switch
(4)Ignition switch (5)Speedometer (6)Right side switch
(7)Right mirror (8)Front brake lever (9)Throttle grip
(10)Fuel tank (11)Oil cover (12)Rear brake pedal
(13)Front footrest (14)Rear footrest (15)Rear brake
(16)Front brake (17)Side stand (18)Shift gear pedal
(19)Seat locker

Speedometer



Without ABS



with ABS

(1)**Turning light indicator**

When the left turning light on, the indicator will be flash.When the right turning light on, the indicator will be flash.

(2)**Neutral indicator**

When the gear on neutral, the neutral indicator will be on.

(3)**High beam indicator**

When the high beam headlight on, the High beam indicator will be on.

(4)**FI Indicator**

When the key on, the fuel injection indicator on. Oil pump will work 3 seconds, then engine will start. When the engine start the indicator will be off. If indicator still on, it means has some problem. In the same way, during normal driving, the indicator should be off. If indicator on, it must stop driving and check immediately.

(5)**Speedo**

This is to show your driving speed.

(6)**Odometer**

This is to record the distance of all driving.

(7)Gear position indicators

Indicate the engine's gear position.

(8)Low fuel level warning light

Indicate the fuel level in the fuel tank. If the fuel is sufficient, the light will be off. When the fuel is not sufficient, the light will be on. Please fill up with fuel in time.

(9)**ABS instruction light(for ABS version only)**

Turn on the bike, the ABS instruction light on the speedometer is on, this is normal. When the speed reach 5Km/H, the ABS instruction light will be off, ABS works properly. If the ABS system is wrong, the ABS instruction light will be on during ride. Then stop and check the ABS, contact your dealers for service.

(10)**Speedometer adjustment button**



In the bottom of speedometer, there's a small round projecting button.

Button function:

Short press: switch between total mileage and trip mileage.

Long press: when the speedometer shows total mileage, long press this button, switch between kilometers and miles. When the speedometer shows trip mileage, long press this button, the trip mileage turns to zero.

Operation of parts

●Key



This vehicle has two keys, it's used to start motorcycle and open all the locks. Please keep key in safe place. If you want to have more keys, please contact closest dealer of your area.

●Electric power locker

Warning:

Please don' t try to turn the key during driving, otherwise the vehicle will lose control.



" ⊠ " logo……when the key on " ⊠ " position, it is no power and can not start engine, the key can be taken out.

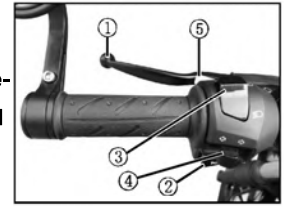
" ↷ " logo……when the key on " ↷ " position, it has electric power and start engine, the key can not be taken out.

" 🔒 " position: In case of thieves, when you parking, please use this function. Turn the handle bar to left, press key down and release, then turn the key to " 🔒 " position, it will lock handlebar. Then you can take out the key.

Notice:

when you parking, please lock turning and take out the key in case of thieves. Please park the vehicle in a proper place.

●Left grip



①Clutch lever

When start the engine or shift gear, please grip clutch lever, it will stop rear wheel driving.

②Horn button

When you press horn button, the horn will work.

③The switch of low and high beam

when the switch on " ≡D " position, the high beam on, and the speedometer high beam indicator will be on as well. When switch on " D " position, the low beam on. Normally, use low beam when driving in city area or meeting others.

④Turning light switch

Turn the switch to left "⇦" ,the left side turning light will be flash. Turn the switch to right "⇨" ,the right side turning light will be flash. Dismiss the turning signal, please press the switch down.

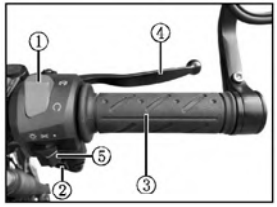
Warning:

when you change line or turning, please turn on turning light on time. After turning, please turn off the turning light immediately.

⑤Passing

When you fast press this button several times, the headlight will be flash. It is only for pass or warning.

●Right side grip



①Engine off switch

When the switch on " ⟳ " position, it has electric power, the engine can be start.

When the switch on " ⊠ " position, it is not power, the engine can not be start.

Warning:

The engine off switch only use for emergency case. When the vehicle still slide, please don't stop engine, otherwise it has air with gas together enter muffler, burning catalyst may damage muffler.

②Start

When you press this button, the engine will be start.

③Throttle grip

Throttle grip control the speed of motorcycle. when you want to accelerate speed, please turn the grip to the direction close to driver.

④Front brake lever

When brake, please grip the right side lever gradually.

⑤Light switch

Turn the switch to "≡D⇐" position, front position light, rear position light and license light are on. Turn to " ☼ ",headlight, front position light, rear position light and license light are on. Turn to " ● ", drive daytime only.

●Fuel tank

When the speedometer's low fuel lever warning light is on please add gasoline immediately. First open the anti-dusty cover as ① , then enter the key and turn as clockwise, pull out the fuel tank cap with key. After fill in gasoline,close the fuel tank cap, please align the right point, press down cap then it will be close.



Warning:

please do not fill in too much gasoline. Do not splash gasoline on the hot engine, it is very dangerous.

Flame is prohibited when filling gasoline

If the gasoline go inside the carbon box, please go to the local dealer to clean or replace the carbon box. Because gasoline will make the activated carbon expire earlier.

Check the water leaking hole around the fuel tank cap, make sure it work properly and no water go inside the fuel tank.

●Shift gear pedal

This vehicle is international 5 gear engine. Neutral gear between first gear and second gear. When you change gear, please follow the rules.



Caution:

When it is neutral gear, the indicator will be on. Please loose clutch gradually to make sure it is really in the neutral gear. When change gear, hold the clutch lever, change gear when clutch loose completely.

●Rear brake pedal



Press down rear brake pedal (as picture). When the brake pedal working, the taillight will be on.

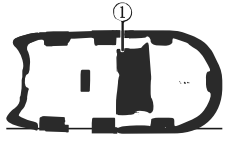
●Side stand

Side stand is on the left side, when park motorcycle, please make sure side stand in the right position. This motorcycle is equipped with a side stand switch. If the side stand is folded up, the engine can be started. otherwise, the engine is shut off and won't start.

Caution:

Please don't park the vehicle in the slope place, otherwise the vehicle may fall down.

●Toolbox



Toolbox ① under the seat. Toolbox including screwdriver, sleeve, wrench.

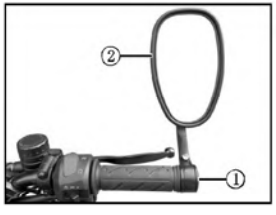
●Rear shock absorber



This vehicle shock absorber main component including spring and liquid damp, this shock absorber is adjustable according different road condition.

Upper side of shock absorber has two adjustable screws ① and ②, adjust screws ① and ② turn up or turn down, it will change the spring pressure.

●Adjustable mirror



Loosen the bolt ①, rotate the mirrors ②, adjust the front and rear angle of the mirrors.To adjust the left and right angle of the mirrors, just turn the mirrors to left or right. Adjust the glasses inside the mirrors until the objects displayed clearly in the mirrors.

Gasoline and oil information

Gasoline

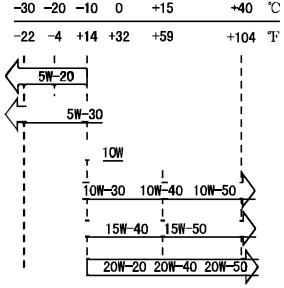
Please use lead-free gasoline. Please use the octane rating above 93#.

Caution:

use lead-free gasoline, spark plug will have longer life.

Oil

Please use SG or above SG grade engine oil which match SAE standard. Please buy oil from dealer according to the local weather , please check the follow chart to choose suitable oil.



Engine running in

Top speed

All the new motorcycle, during the first 1500 km driving, not to make engine run too high speed or accelerate too much. It should avoid the rpm to beyond 80% of maximum.

Engine speed change

Speed should not always keep the same, it should change frequently, it help the parts running smoothly.

Avoid running long time in low speed

It is damage to the parts if always keep engine in a low speed, it should always change to different gear to drive.

The chart show the max rpm during engine run-in period

First 800 km	Under 5000 rpm
First 1500 km	Under 6000 rpm
Over 1500 km	Under 8500 rpm

Before driving, please let oil lubricate sufficiently

Before driving, please keep engine in idle situation for a while, in order to have enough lubrication of engine.

First maintenance

The first 1,000 km maintenance is the most important work. Please tighten all the screw and change oil.

Caution:

1,000km maintenance should follow this manual.

Please pay more attention on "Caution" and "Warning" part.

▲Special Notice

The first engine running at 300km, please ask dealer to change oil and clean oil filter and air filter. Then follow the maintenance schedule to maintain the motorcycle.

Before driving

Before driving, it is necessary to check the following items.

Checking item	Points
Handle bar	1)Stable 2)Turning flexible 3)No loosing
Brake	1)Brake level and pedal has right feeling 2)No oil leaking
Tire	1)Air pressure correct 2)Pattern of tire correct 3)No crack on tire
Fuel	Have enough gasoline for driving
Light	Turn on/off all the lights
Indicator	Checking high-beam, gear, turning indicator
Horn	Correct
Oil	The level of oil correct
Throttle	1)The throttle grip work correct 2)Acceleration and deceleration correct
Clutch	Correct
Drive chain	1)Correct setting 2)Lubrication

Driving motorcycle

Engine start

Please turn the key to " ⟳ " position, and the engine switch on right handle bar on " ⟳ " position, put gear in the neutral gear, the gear indicator should be on. Press start switch, engine turn on.

Caution:

Start engine when hold the clutch lever and put gear in neutral position .

When start by electric starter, ECU will check the environment temperature and engine condition to supply necessary fuel to engine.

Warning:

Not to start engine indoor without good air ventilation. don't leave motorcycle on without monitor.

Caution:

When not driving motorcycle, don't make the engine run over speed, otherwise, engine will be over heated and damage the parts inside.

Using gear shift

Gear shift system will make engine driving smoothly. Driver should change gear according to the driving speed.

Slope driving

When driving in the slope place, motorcycle speed will decrease and show the power is not enough. In this case, it should reduce gear to get more torque.

When go downhill, put the gear in low position, it help engine brake. Please don't make the engine run at overhigh speed.

Using brake and parking

It should completely loose throttle and gradually brake front and rear. Before completely stop motorcycle, hold clutch and change gear to neutral and check the gear indicator on or not.

Caution:

The new driver always want to use rear brake,it will make brake abased very fast and brake distance too long.

Warning:

Only using front brake or rear brake is dangerous, it may slip down or lose control. Especially in wet road condition or corner, should be very carefully use brake. Suddenly brake hard is very dangerous.

Motorcycle should parking in flat ground. If motorcycle must park in slope place, please put motorcycle in first gear in case of motorcycle slip away.

ABS maintain instruction

Turn on the bike every time, the ABS instruction light on the speedometer is on, this is normal. When the speed reach 5 Km/H, the ABS instruction light will be off, ABS works properly. If the ABS system is wrong, the ABS instruction light will be on during ride. Then check the ABS, like if the ABS plug-in to wire harness is loose, is the gap between ABS wheel speed sensors and gear rings 0.5mm and 1.5mm, if the surface of wheel speed sensors adsorb small metal pieces. After fixation of ABS faults, the instruction light on speedometer will be off when speed is 5Km/H and up. If the problem still exists, contact your dealers for service.

Checking and maintenance

The follow chart show the kilometers for maintenance. When reach the kilometer, it must follow the instruction to check and make maintenance. Turning system, engine, electronic system, side stand and wheels are key important parts. It is necessary to have a professional technician to handle.

The symbol means: I: checking, clean, adjust C: clean R: change A: adjust L: lubrication T: tight

Maintenance period / Maintenance content	Odometer (KM)(Remark 2)																
	300	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000	13000	14000	15000	Everyday check before riding
Oil for crankcase	R		Every 2000km R														I
Oil filter and oil net	C		Every 2000km C														
Air filter(Remark 1)	Every 4000km clean filter if necessary please change																
Spark plug		I			I				I				I				
Valve clearance		I			I				I				I				
Gasoline filter					C				C				C				
Brake pedal		I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Brake oil																	I
Driving chain	Every 1000km: I、A																I
Screw	T					T					T					T	

Maintenance period / Maintenance content	Odometer (KM)(Remark 2)																
	300	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000	13000	14000	15000	Everyday check before riding
Driving chain(Remark 3)		Every1000km：I、L、A															
Friction disc					I				I				I				
Brake system		I、A			I、A				I、A				I、A				
Brake					I				I				I				
Front headlight beam adjustment					I				I				I				
Clutch		I			I				I				I				
Stand					I				I				I				
Suspension					I				I				I				
Screw/bolt/fasteners (Remark 3)		I							I								
Wheel(Remark 3)		I			I				I				I				
Turning system		I											I				

* When the mileage is over the highest on the table, please perform according to the period set on the table.
* Driving on dusty place, it is recommended to clean it frequently.
* Often drive on bad road condition, make the maintenance and service more frequently.

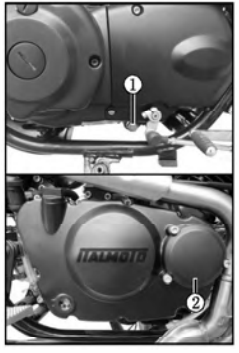
●Oil level and change oil



Before start engine, it need to check the oil level.When check the oil level, it should park the vehicle in flat ground, through oil window to check oil between the scale L and H. when the oil level lower than the scale L position, it should open the oil cover ①, add oil until the scale H position.

Caution:

When the engine is not completely cold down, it is the best time to change oil. The body should support by supporter and keep vehicle in vertical position and fast leaking all the oil.



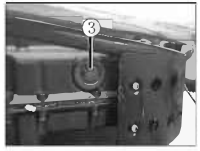
The engine oil capacity is 1.7 liter, it should change 1.7 liter oil.

1. When leaking oil, please put a container under the oil leaking position, and take off leaking screw ①. When completely leading out the oil, put on the leaking screw. The fix torque is 20-25 Nm.

(1).Remove oil filter cap ②, take off the oil filter.

(2). Clear up the oil filter cap and the engine surface.

(3). Remove the oil filter screen cap ③, clean the oil filter screen ④ or change a new oil filter.







(4). Assemble them back.

Caution:

Please do not take off oil filter O ring seal, because it will make O ring seal not in right position. It will bring leaking or damage engine.

2. Fill the qualified oil.The capacity is 1.7 liter.Check the oil level gauge accordingly. Don't fill more than upper level.

3. Close the oil cover.

4. Start engine and keep engine in the idle for few minutes and turn off engine.

5. Check oil level. Again make sure the oil level in the right position and no leaking of engine.

●Spark plug



Using small metal brush or spark plug cleaner to clean carbon on the spark plug in the first 1000 km driving, and do it after every 4000 km driving.

Every 8000 km driving, spark plug should change immediately.

Caution:

Spark plug should not tighten too much in order not to damage cylinder header thread.

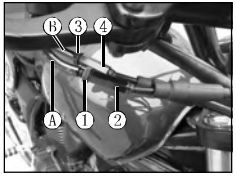
●Throttle cable adjust

1. Turn both side of throttle grip to check if it's reaction is fast or not.

2. Check the throttle cable to measure its travel degree, it should be10°～15° degree.



This vehicle is steel cable for throttle. Ⓐ speed-up cable Ⓑde-acceleration cable. Please follow the steps to adjust throttle grip travel distance.



(1)Move away the throttle cable cover.

(2)Loose the screw ③.

(3)Completely tighten the adjusting screw ④.

(4)Loose the tight screw ①.

(5)Turn adjusting screw ② make the grip travel degree between10°～15° degree.

(6)Tighten screw ①.

(7)Adjust screw ④make the grip flexible.

(8)Tighten screw ③.

●Clutch adjust

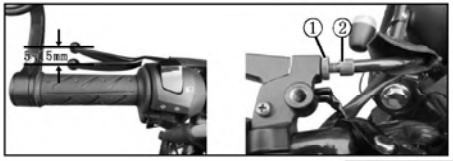
Clutch travel distance should be around 5-15mm, if found this distance is not correct. Please follow the steps to adjust:

(1)Move clutch cable cover.

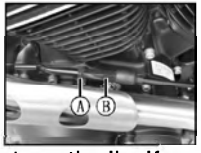
(2)Loose screw ①.

(3)Loose or tighten the adjust screw ②, make the correct clutch travel distance.

(4)Tighten screw ①.



If clutch cable lever adjust to maximum and still not correct, please adjust again cable and the screw Ⓐ and Ⓑ.



●Engine idle adjustment

This vehicle motor will adjust the idle automatically. If you need to change, please contact professional dealer.

●Throttle valve

The vehicle engine idle may be down because the pollution of throttle valve.It need to clean the throttle valve every 5000 km driving .

When clean the throttle valve, disconnect anode and cathode of battery, stop the sensor of throttle valve, take away rubber pipe which connect the throttle cable and air filter. Then take away the throttle valve.

Open the valve bottom cover, and spray the cleanser inside the valve and using brush to clean dust and carbon.

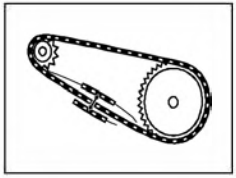
After clean, mount the valve and all other parts as original and try to start engine.

●Driving chain

The life of driving chain depending on your maintenance. Not properly maintenance will cause its life shorter.

Driving chain adjustment:

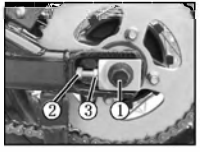
Every drive 1000 km, please adjust driving chain to make the degree of chain droop as10-20mm. according to your driving condition, it may need to adjust chain frequently.



Warning:

All the above suggestion is the maximum adjustment period, actually it need to check chain every time before you drive. If the chain is too loose, it may cause the chain fall off or make big damage to the engine.

Please adjust chain according to following way :



(1)Please use supporter to support vehicle.

(2)Loose the rear axle screw ①.

(3)Loose the locker screw ②.

(4)Turn left or turn right to adjust screw ③, to adjust the chain properly. When adjust the chain, it must keep the front chain wheel and rear chain wheel in the middle and in the

same line. To help you doing this adjustment, there's basic scale on the swing arm and every chain adjustment, they can match and as reference from beginning to end. After match and set the degree of chain droop to 10-20mm, tighten the rear axle screw and do final check.

Caution:
When you change to the new chain, please check if the chain wheel is ok or not. If necessary, please change it.

Checking chain, it should check the followings points:
(1)Pin is tight or not.
(2)Chain wheel situation.
(3)Single chain is rusty and dry or not.
(4)Single chain damage or not.
(5)Adjust chain if too loose.
(6)Adjust the loose chain.

If the chain have above problem, it may come from chain wheel. It must to check following items of chain:
(1)Chain wheel tooth may already abrase too much.
(2)Broken or damage chain tooth.
(3)The chain wheel screw may loose.

Lubrication of chain wheel

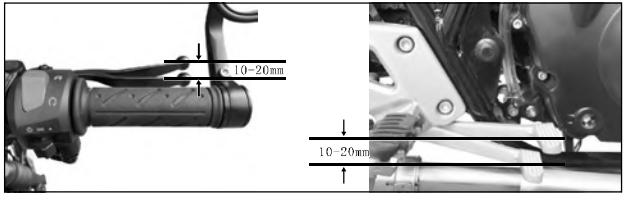
It is priority to buy professional chain oil for lubrication. And also it could use engine oil or other lubrication oil for lubrication.

●Brake

This vehicle front and rear brake are all disc brake. Correct operation for brake is very important of safe driving. It should check brake system in professional store.

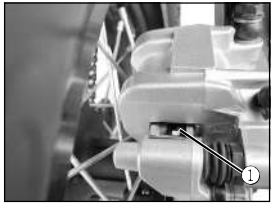
Adjust brake

(1)The front brake level travel distance is 10-20mm.
(2)The rear brake pedal travel distance is 10-20mm.



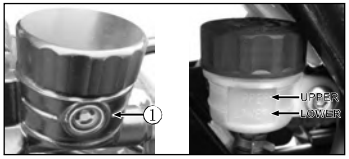
Brake pad

Please check the front brake pad if it has been abrased mark until the scale ①. If already reach to point ①, it should change brake pad.



Brake oil level

When the brake pad already have been abrased, the brake cylinder oil will going to the oil pipe automatically, so the brake cylinder oil level will be decreased. Front brake cylinder on the right side of handle bar. If the oil level under the cylinder minimum scale ①,please add brake oil. The rear brake oil tank is in the middle of vehicle, please make sure the oil level between Lower to Upper scale. If the level under lower scale, please add brake oil. Please check brake oil level frequently.



Caution:

This vehicle is using DOT 4 brake oil. Do not use the second hand oil or the remaining oil from last maintenance. Because the oil exposed in the air will absorb water. Please do not spray oil to any painting surface, it will corrode the surface.

Brake system

Please check the brake system every day as followings:

(1)If have any oil leaking from front and rear brake.

(2)Try brake lever and pedal, it should have certain bounce.

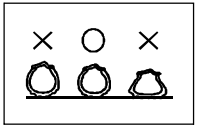
(3)Check brake pad condition.

Warning:

If brake system or brake pad need to change, please go to professional dealer. When finish this change, please grasp several times brake lever and press down brake pedal.

●Tire

The correct air pressure of tire will provide stable, comfortable and durable driving feeling.



Front tire pressure	250±5 kpa
Rear tire pressure	250±5 kpa

Caution:

Please check tire condition when the tire is “cold”.

When the middle patter of tire already reach to the certain degree, please change to new tire. Please follow the chart:

Min pattern deepth of tire	
Front tire	1.6mm
Rear tire	2.0mm

Warning:

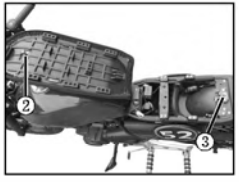
Please do not try to repair any damage tire. It may affect the wheel balance and stable. Not correct air pressure will damage tire surface quickly. The air pressure not enough will cause wheel slip or fall off and even damage rim, it may cause the vehicle out of control.

●Seat assembly and dis-assembly

Put the key inside①locker which under the seat left side,and turn the key to clockwise direction, it will open the seat. Then pull the seat to rear and take out the seat completely.



When assemble the seat, please push the seat from rear to front, and the hook ② to the point ③, slightly press down seat to fix it.



●Air filter maintenance

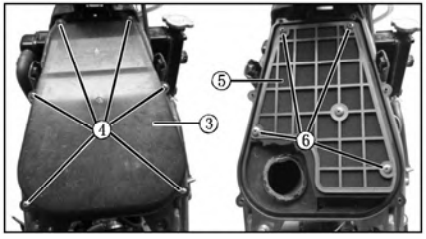
The air filter should have maintenance regularly. If the driving condition is not good, it should check more for air filter.

(1)Take off seat ①、gasoline tank②, then you will see the air box③.



(2)Take off 6 screws of air box④, then open the air box cover.

(3)Take off 5 screws of air filter ⑤ ⑥then take off air filter .



(4)Put the filter inside clean gear oil to absorb oil completely, then squeeze oil out.

(5)Assemble back all the parts.

Caution:

Gasoline or other flammability oil is not recommended for clean air filter.

●Catalyst

In order to reach homologation standard, this vehicle muffler has catalyst.

Catalyst contains rare metal, it will clean the harmful exhausting air which include Co, oxycarbide and oxynitride. After chemical treatment, those will change to Co_2 and oxygen. It is very important for catalyst, the faulted catalyst will make more pollution to the air or damage engine. If change is necessary , please contact your dealer.

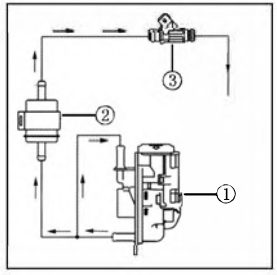
Caution:

Catalyst area is high temperature area, please do not touch.

●Fuel injection and oil path

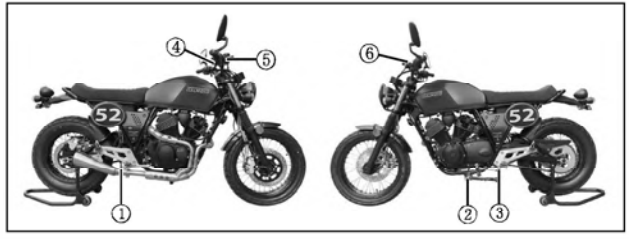
Fuel pump ① has two connectors, fuel through one connector of fuel pump to gasoline filter ② to the injector ③, finally spray the fuel and air inside engine. If the pressure is too much, fuel will go back to fuel pump through one connector.

Connecting fuel pipes, please follow the drawing.



●Parts lubrication

Proper lubrication will keep your motorcycle every single part running smoothly and increase durability. after long driving or raining, we suggest you make lubrication maintenance. The main points as followings:



Y lubrication oil
Z lubrication grease
①rear brake pedal axle Z
② side stand connector and spring hook Z
③gear shift pedal axle Z
④throttle cable
⑤front brake lever axle Z
⑥clutch lever axle Z

●Battery

Battery under the seat.This vehicle battery is electrolyte maintain-free type. First time use, please ask dealer to add electrolyte, in future it doesn't need to add anymore. Take out battery, please follow the steps:



a、Turn off motorcycle.

b、Take off seat.

c、Take off screw and battery plate.

d、First dis-connect negative pole(-) and dis-connect positive pole(+).

e、Take out battery carefully. Put the battery back in opposite sequence.

Caution:

When mount the battery, it must connect cable correct. If any wrong, it will damage battery and wire harness. The red cable must connect to positive pole(+),and black pole connect to negative pole(-). Check or change battery please turn off motorcycle.

First time using, please follow the steps:

Take off the seal paper on the top of battery, and add special electrolyte into battery and close the cover to wait for 30 minutes.

After add the electrolyte into new battery, charging battery will increase durability.

When add the electrolyte, please follow the steps:

a、Put the battery on the flat ground, and take off the seal paper.

b、Take out the container which contain the electrolyte, and remove battery cover stripe as plug. Caution: please do not break the stripe, it will be as cover for battery.

c、Put the electrolyte into the 6 holes and fill in.

Caution:

It must put battery in the flat ground, otherwise electrolyte can not fill in completely.

d、Please check the left and right side, it must have bubble come out from side pillar and wait for at least 20 minutes.

If both side (left and right side) not bubble come out, please pat slightly to the battery bottom 2 or 3 times, and check if any bubble come out again.

e、After electrolyte completely fill in and pat slightly to the battery bottom several times, and take out the vessel.

f、Put the strip into the battery 6 holes separately, and press down the strip until it flat with the surface.

After fill in electrolyte, please do not take out strip or add any water or electrolyte.

Change battery, please take note as following:

Change battery should check the type is correct or not. If battery type not correctit will damage vehicle and bring problem for circuitry.If don't ride motorcycle for long time, please remove battery from motorcycle and charge1time every month.

Warning:

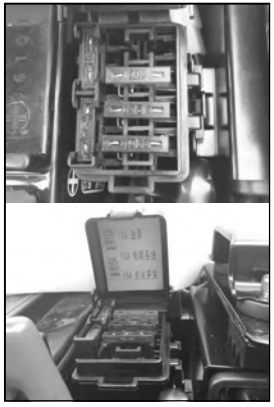
Battery will make exposure air, be careful with spark, flame.Battery including vitriol, it is not allowed to contact electrolyte.It will hurt skin or eye. Battery is dangerous poison material. Not allow kids touch.

●Fuse change

The fuse box under the seat of driver, on the side of battery.

The fuse box spec as drawing:

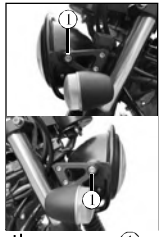
If fuse break many times, it —eans short circuitry or overload of electric. Please ask your dealer to check.



Warning:

When checking or change fuse, please turn off the power. Please do not use the fuse which not match this vehicle spec, otherwise it will bring serious problem to electric circuitry, and even will burn the vehicle or lose engine power.

●Front headlight adjustment



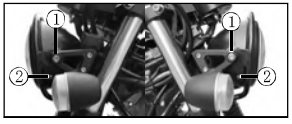
Front headlight beam can be adjusted in vertical direction. The beam adjust screw ① locate in the both side of front headlight. Please use 13# wrench separately loose front headlight left and right side screw ①, adjust the beam to suitable position and lock the screw ①.

Caution:
When adjust the beam, driver should be on the seat and keep the vehicle in the vertical position.

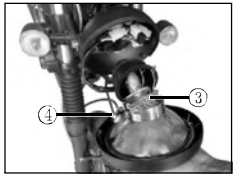
●Bulb change

When change broken bulb,please use the same specification bulb. If the specification not the same, it will bring problem for circuitry. Suggest you change bulb in your dealer's shop.

Front headlight, position light change



(1)Loosen the bolt ①, remove the screw ②, remove the front cover of headlight, remove the socket of the headlight bulb, remove the pressure spring, take out the headlight bulb ③. Change to new bulb with same technical specification.



(2)Take out the position light ④, change to 12V W5W bulb.

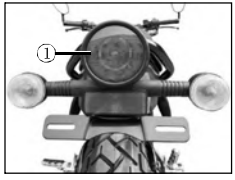
(3)Assemble back light.

Headlight bulb: 12V 35W/35W(HS1)

Front position light bulb: 12V W5W

Rear light(brake and rear position light) change

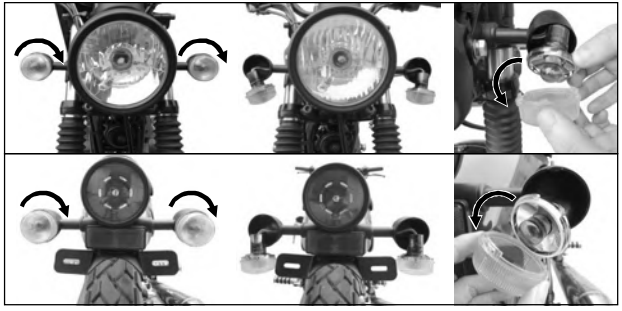
Brake light, rear light ① are all LED light, if need to change, please contact your dealer.



Front, rear turning light bulb change

(1)Turn the lamp cover in clockwise direction, take out bulb to change R 10W, 12V 10W bulb.

(2)Assemble back.



Store information

Store

If need to store vehicle in long period,please take certain maintenance to protect vehicle:

1. Change engine oil.
2. Lubricate driving chain.
3. Make the fuel tank and injection system as empty as possible.

Caution:

Gasoline stored in long time may go bad, it will be very difficult to start.

Warning:

Gasoline is very flammable, when you empty the gasoline, please keep away spark or firework.

4. Take off spark plug and fill in 15-20 cm^3 oil into cylinder, then start engine several times. It make oil spray to every part of cylinder, then mount spark plug again.
5. Take out battery, put it separately in somewhere. But not too cold and avoid exposure under sunshine.
6. Clean and dry motorcycle.
7. Make the tire air pressure properly.
8. Cover motorcycle and store it in the place where temperature not change too big. Don't put the motorcycle under sunshine.

End of store and using

If store over 4 months, please change oil.

Check battery and all other parts and test bike first.

Specification

Size&Weight

Length……Upper license plate 2040mm
Lower license plate 2090mm
Width……760mm
Height……1040mm
Wheel base……1430mm
Weight……151kg
Front wheel axle load……73kg
Rear wheel axle load……78kg

Engine

Engine type……2V49FMM-R
Bore×Stroke……49×66(mm)
Displacement……249cm³(Calculated 248.9cm³)
Max power……12.5kw/8500r/min r/min
Max torque……17N · m /5500r/min
Ignition……ECU
Compression rate……10:1
Start……Electric start

Transmission

Clutch……Wet multi disc clutch
Gear shift……Five gears
Frist reduction gear……3.13
Final reduction gear……3.000
First gear ratio……2.642
Second gear ratio……1.684
Third gear ratio……1.260
Fourth gear ratio……1.000
Fifth gear ratio……0.821
Intake valve clearance……0.08mm
Exhaust valve clearance……0.08mm

Frame

Front suspension……Hydraulic shock
Rear shock absorber……Hydraulic monoshock
Front brake……Disc
Rear brake……Disc
Front tire……110/80-17
Rear tire……130/90-15

Electric system

Battery……12V 9AH
Magneto……Permanent magnet
Front headlight……12V 35W/35W
Rear light……1W LED/12V 5W
Turning light……12V 10W
Fuel injetion……12V
ECU……12V

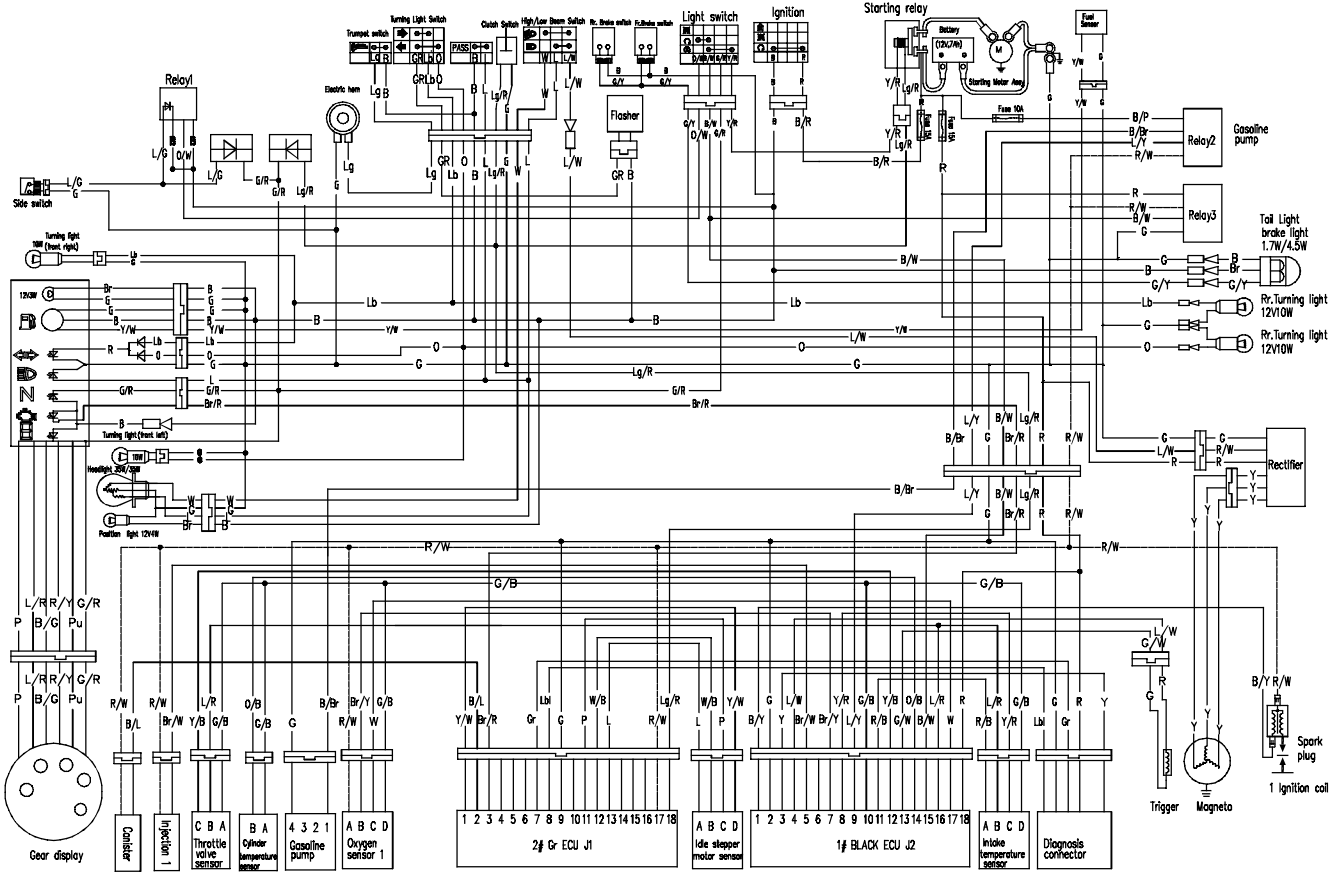
Capacity

Fuel tank……13L
Oil tank……1.7L

Performance

Max speed……115km/h
Climb ability……≥20°
Brake distance……≤7m(30km/h)
Fuel consumption……≤3.2L/100km
CO_2 emissions:…… 72g/km
Loading……One passenager&driver
Gasoline type……Euro IV version: E5
Other version: Unleaded fuel min. 95 Octane

Circuit diagram



Customer Copy

WARRANTY

Frame no.

Engine no.

Date of Delivery

Address

Postalcode | **City**

Telephone

Date of birth | **Profession**

We hereby certify that this vehicle has been manufactured in compliance with the assembly instruction and inspected according to the predelivery checklist. The customers states that he or she has taken note of this, and has also received the delivery instructions.

Client Signature

Stamp and Signature of the Dealer

Dealer Copy

WARRANTY

Frame no.

Engine no.

Date of Delivery

Address

Postalcode | **City**

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Client Signature

Stamp and Signature of the Dealer

Customer copy

DELIVERY CERTIFICATE

Frame no.

Engine no.

Model

CUSTOMER

Name	**Surname**
Address	**City**
Postalcode	**Telephone**

I declare that I have received today the above-mentioned motorcycle complete and in conformance with my expectations.

Customer Signature

The motorcycle has been prepared for delivery carrying out all the pre-delivery checks and operations envisaged by the Italmoto S.r.l., and complete with all the eventual optional accessories requested by the Client.

Stamp and Signature of the Dealer

Dealer copy

DELIVERY CERTIFICATE

Frame no.

Engine no.

Model

CUSTOMER

Name

Surname

Address

City

Postalcode

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PRE-DELIVERY INSPECTION

Dealer

Date

Model

Note

- ☐ Engine Oil
- ☐ Trasmission
- ☐ Gear Oil
- ☐ Break Liquid
- ☐ Front Break
- ☐ Rear Break
- ☐ Air Cleaner
- ☐ Trasmission Bels
- ☐ Spark
- ☐ Other

Maintenance Service
1000km/600mi or 6 month

STAMP

Km/mi _____

Date _____

_____
SIGNATURE

Note _____
_____
_____
_____

Maintenance Service
4000km/2500mi or 12 month

STAMP

Km/mi _____

Date _____

_____
SIGNATURE

Note _____
_____
_____
_____

Maintenance Service
8000km/5000mi or 24 month

STAMP

Km/mi _____

Date _____

_____
SIGNATURE

Note _____
_____
_____
_____

Maintenance Service
10000km/6000mi

STAMP

Km/mi _____

Date _____

_____
SIGNATURE

Note _____
_____
_____
_____

Maintenance Service
12000km/8000mi

STAMP

Km/mi _____

Date _____

_____
SIGNATURE

Note _____
_____
_____
_____

Maintenance Service
16000km/10000mi

STAMP

Km/mi _____

Date _____

_____
SIGNATURE

Note _____
_____
_____
_____

Maintenance Service
20000km/12000mi

STAMP

Km/mi _____

Date _____

_____
SIGNATURE

Note _____
_____
_____
_____

Maintenance Service
22000km/14000mi

STAMP

Km/mi _____

Date _____

_____
SIGNATURE

Note _____
_____
_____
_____

Maintenance Service
25000km/16000mi

STAMP

Km/mi _____

Date _____

_____
SIGNATURE

Note _____
_____
_____
_____



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