

# PREFACE

Thanks for your purchasing the motorcycle 150T—21, and sincerely welcome you to be our motorcycle user. To enjoy a more safe and pleasurable driving, at first please familiarity with the manual must carry on before driving. Your personal safety depends not only the vigilance and familiar operation skills, but also relates to whether you are familiar with the mechanical performance. Before driving, check-up and periodical maintenance are basic requirement. If maintenance and repair needed, go to our service center for help. If you know the mechanic knowledge and have the tools, the dealer can offer you help with the maintenance and repair, like providing the parts catalogue and the spare parts.

This manual explains in detail the correct operation and maintenance, together with the expectation for your long-time use. Modifications in specification could cause the discrepancy with some figures and content in the manual, we feel sorry for that and hold the final right of interpretation.

Have a good enjoyment and thanks again for your purchasing.

## The important points to attention:

### ●The driver and passenger

This motorcycle was limited to one driver and one passenger (except children younger than 12 years old). Never exceed the Max load capacity of motorcycle.

●For the safety, avoid driving the motorcycle in atrocious weather or cold weather (under  $-12^{\circ}\text{C}$ ).

### ●For the road condition

Only drive on the highroad.

The caution banners about the safety or environment protection stick to the sundries box cover, the rear carrier, and fuel tank cap. (Being visible before or during driving)

●Modifications in specification could cause the discrepancy with some figures and content in the manual, we feel sorry for that and hold the final right of interpretation.

●Please carefully read the user manual

You must attention to the warning sentence or paragraph.

### WARNING

Not following the operation instruction in this manual may cause great damage to you .

### ATTENTION

Not following the operation instruction in this manual may cause injury to both you and vehicle.

Regard this manual as a permanent parts, even when transfer the vehicle to a new owner, transfer the manual at the same time.

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# Motorcycle safe drive

## Rule for safe drive

1. Many traffic accidents are caused by the inability of car driver to notice the motorcyclist, so the motorcyclist should try his best to be noticed by other driver
  - Put on the coat in bright color
  - Drive with great caution in the place with dazzling light or in blind spot.
2. Particular care should be exercised at the intersection, entrance and exit of parking lot or on the automobile lane.
3. Don't overtake, otherwise accidents may cause.
4. You must get the driving license and familiar with motorcycle. Never lend motorcycle to the man without driving license or unfamiliar with motorcycle.
5. Avoid driving on the rough road. This can easily result in the operation failure and structural damage on the vehicle frame.

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4. Check up before driving. (Refer to page 8)
5. When driving, hold the handlebars and put feet on the footrest.

## The payload

### a) Admonition

Only put light goods in sundry box or other deposited place.

The goods weight conform to the following blank 1:

### Blank 1

Deposited	Weight (kg)
Rear shelf	5kg

- b) Refer to the payload ( Max load: 150kg), remember to count in the weight of driver, passenger and goods.
- c) If over-loaded, it can affect the stability and operation of the motorcycle.
- d) Tie all the goods on the motorcycle.
- e) On the rear shelf seat no children.

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# Subassembly and use instruction

## The parts & subassemblies (Fig1, Fig2)

Instrument and indicator

Front brake grip

Ignition switch

Luggage box

Sundries box

Battery

Main stand

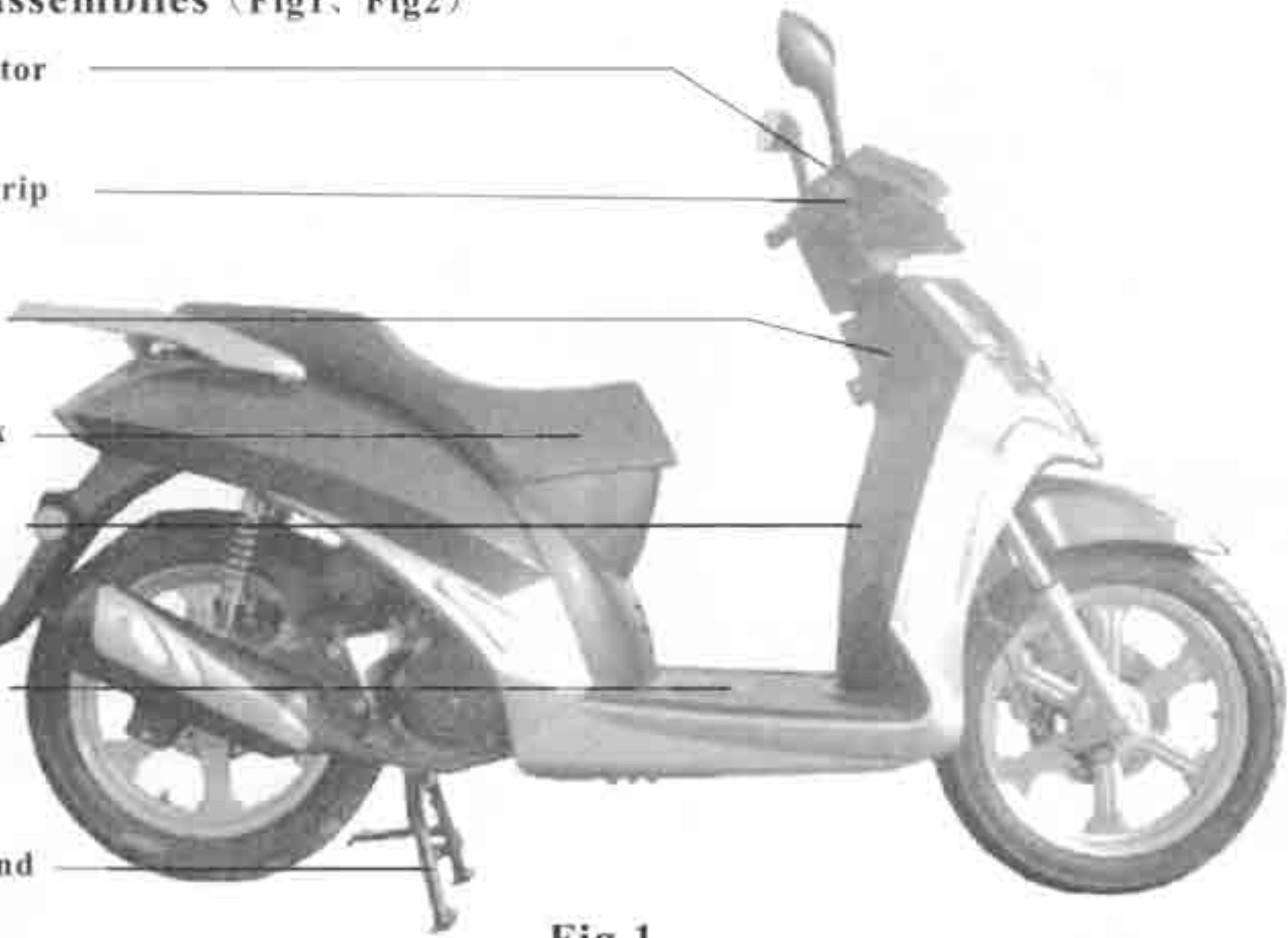


Fig.1

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Rear brake grip

Seat Lock

Carrier

Fuel Truck

Air filter

Footplate

Kick-start staff

Side stand



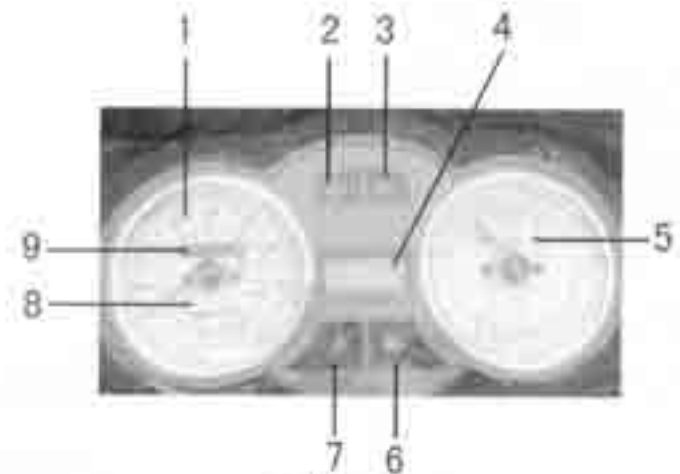
Fig.2

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BROKEN LINE ( ····· ) INDICATE THE INVISIBLE PARTS.

**Speedometer and indicator light (Fig 3)**

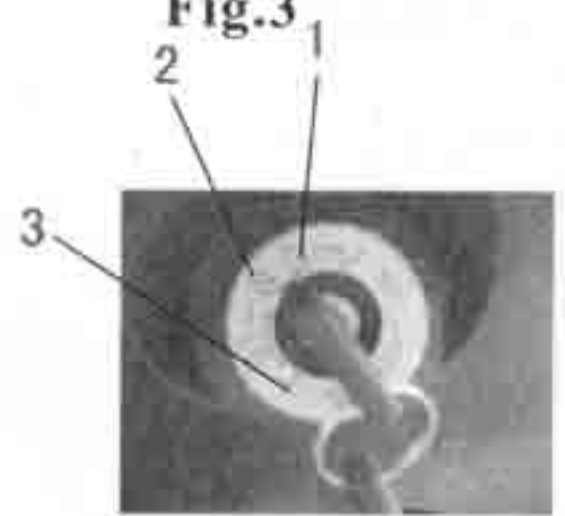
- (1) Speedometer
- (2) Turn left signal light
- (3) Turn right signal light
- (4) Time meter
- (5) Fuel meter
- (6) High beam signal light
- (7) Stop Signal indicator light
- (8) Rotate speedometer
- (9) Odometer



**Fig.3**

**Ignition switch(Fig.4)**

- (1) on (○)  
Engine starts and you cannot take off the key.
- (2) off (⊗)  
Engine turns off and you can take off the key.
- (3) lock (🔒)  
The steering handling is locked, and you can take off the key.



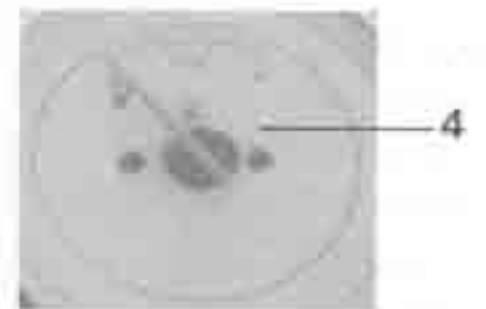
**Fig.4**

**Notice:**

When engine runs at idle speed for a long time in hot day, stop the engine in time to avoid over-heated.

**Fuel meter(Fig.5)**

Fuel meter (4) indicates the approx remainder of fuel. When the pointer points to (F), it indicates full fuel volume 6.8L.  
When the pointer gets close to the red section, it indicates that the remainder volume is 1.2L.



**Fig.5**

**Powering off switch (1)(Fig6)**

Press “⊗” and the engine flames out, restart the engine, please press “○”.

**Starter switch button (3) (Fig 6)**

Press this button, and the engine starts (See p11)

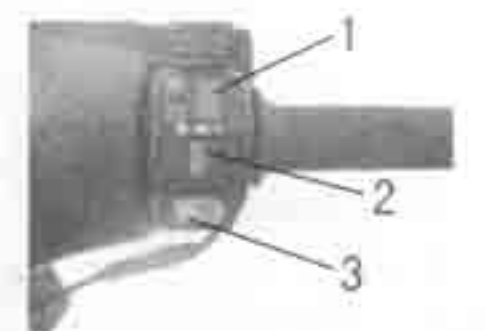
**Light switchth (2) (Fig.6)**

Three positions of light switch: “☼”, “DE” and “•”

☼ : Headlight, position lights, tail lights and instrument lights all turn on.

DE : Position lights, taillights and instrument lights turn on.

• : Headlight, position lights, tail lights and instrument lights all extinguish.



**Fig.6**

**Dimmer switch (1) (Fig.7)**

“☐” High beam. “▣” Low beam.

**Turn signal light switch (2) (Fig. 7)**

“←” means turn left

“→” mean turn right

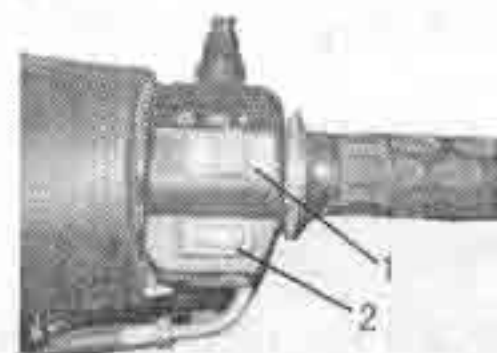
Press it down and signal light turns off

**Horn switch (3) (Fig 7)**

Press the button and the horn sounds.

**Steering lock (Fig. 8,9)**

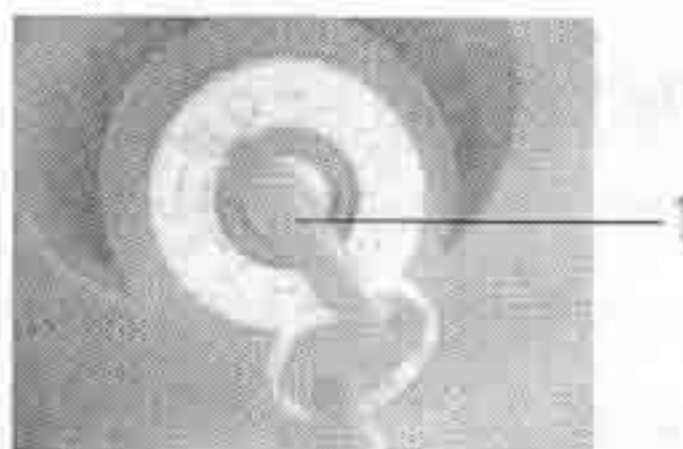
Turn handle left to end ,press down ignition key1 to (⏏), the steering decice are locked  
Do the above opposite it opened.



**Fig.7**



**Fig.8**



**Fig.9**

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**Seat lock(Fig.10)**

Put the key into seat lock hole and then clock-wise open the lock.

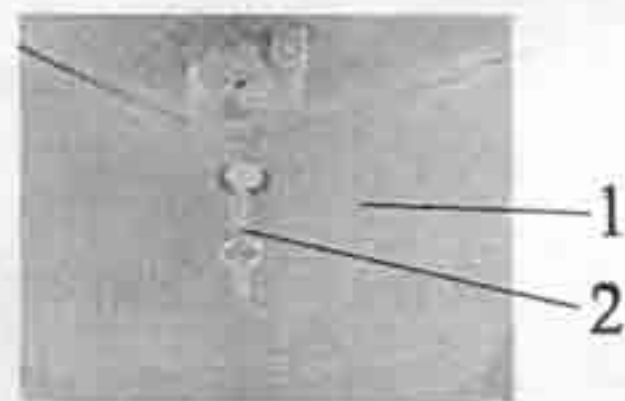
Press down the multi-purpose until it make sound of locked, then push the back of seat to confirm it has been locked and take out the key.



**Fig.10**

**Sundries box (Fig.11)**

Put the key into sundries box and then clock-wise 90° It will open it.Put the key into sundries box and clock-wise 90° then push the back of sundries box to confirm it has been locked and take out the key.



**Fig.11**

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# Operation instruction

## Check before drive

Make routine check-up before riding to insure the vehicle perform well and safe driving.

## Gasoline volume

Turn on the ignition switch and check the fuel meter, replenish gasoline when the pointer is close to red section, moreover, check

the fuel tank and oil filter if leakage.

Gasoline tank: 6.8L

Turn the tank cap 1 anticlockwise open.(Fig 12)

Recommended gasoline: low lead content, common oil with octane number 90

Do not replenish oil together with dirt, water or other contamination.

## Warning:

Replenish oil in a well-ventilated place.

Do not replenish over-full, and remember to fasten the cap of fuel tank.

If carelessly swallow the oil, go to the doctor immediately.



Fig.12

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## Check the oil mass of the engine (Fig 13, Fig 14)

Use the jiffy stand to support the vehicle on smooth road, then screw out the cover of oil hole / oil dip rod (1) and clean the oil dip rod with a wash cloth, then, just insert the rod back ( do not screw it in) and check the oil stain.

If the oil mass is near to the lower limit mark (2), you should replenish standard oil , but don't exceed the mark of upper limit(3) .Then reinsert the cover of oil hole / oil dip rod , screw it down and check it if leakage.



Fig.13

## Advice you use the oil of this octane number

SAE-15W/40



Fig.14

## Disc Brake (Fig.15、 Fig.16、 Fig.17)

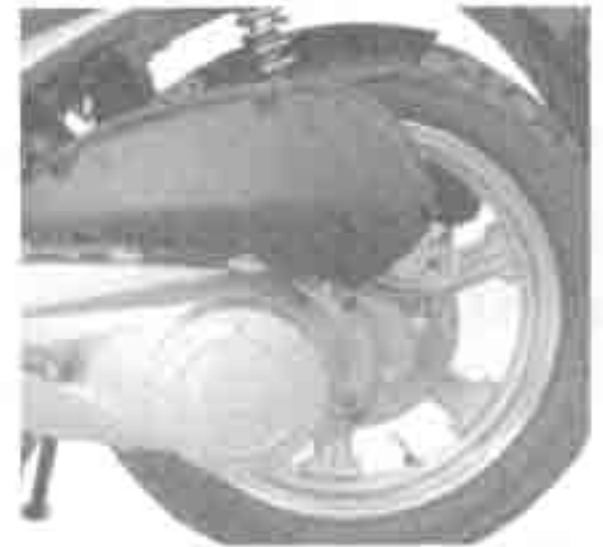
When the Disc Brake not work, pls put the disc oil in when you didn't see any oil at the observe orifice. (Fig.16、 Fig.17)



**Fig.15**



**Fig.16**



**Fig.17**

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## Tire

Check the tire pressure regularly and adjust.

- Check before the tire cooled
- Check if there any metal trash or gravel in the groove of tires
- Inspect whether there is nick, embed nail or other tartness object on the tread or not. Inspect whether there is impress, dent or distortion for rim or not. If find any damaged, should invite service department to inspect for you.
- When the tire pattern wear and tear to the wear sign, must change the new tire.

## WARNING:

- If the tire pressure dose not accord with the standard, it will properly cause the traffic accident. If the tire pressure is too low, the tire will fetch away or take of rim.

It is dangerous that use the worn tire; It will have effect to friction between tire and rode.

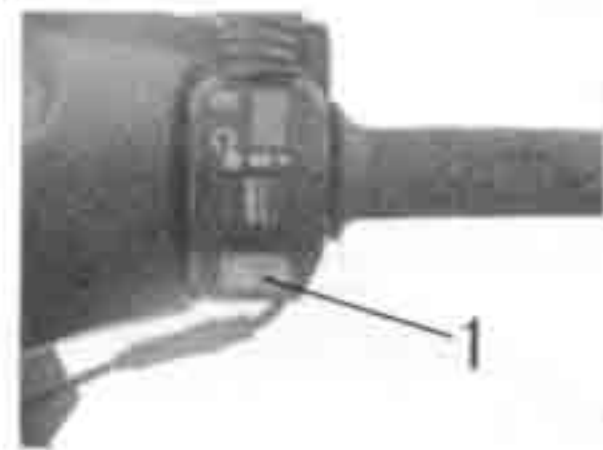
Maybe difficult to drive or accident.

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## Engine Starting (Fig 18)

**Preparation:** release the vehicle main stand,  
Put the key into ignition switch and turn to “○” position.  
**Electric-start:** press start button (1) while applying the throttle slowly, and the engine starts in less than 5 seconds.



**Fig.18**

### Notice:

Carry on the electric starting operation only when clenching the brake handle bar.

If electric starting fails, try again after 30 seconds, if still fails, please try the kick-starter.

**Kick-start:** Turn ignition switch on and apply the throttle slowly, step kick-starter pedal down quickly with strength.

**Notice:** After starting the engine, do pull the pedal back to original position.

To use the vehicle after a long time, it is better to kick the pedal several times at first with ignition switch off, so the engine can start easier.

If cold start the engine, warm up engine for 2-3 minutes before driving.

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### Riding motor:

#### **WARNING:**

**Wear the trousers to avoid touching with exhaust pipe and was burnt.**

**The entire device must be installed according to requirement of the traffic rule.**

**Take the license to riding.**

#### **NOTICE:**

**Control the speed and load during 1000kmof running in period.**

**Load should be within 150kg(including driver)**

### Speed according to (Blank 2)

Blank 2

Log (km)	0~200	200~500	500~1000
Speed (km/h)	≤30	≤45	≤55

### Riding operation

- Release rear brake level, add gasoline slowly with throttle grip, then motorcycle will move forward smoothly.
- Slowly to run the throttle when it start, take your left leg to a good position to the good speed, then close the throttle when the speed cut down.

### Warning:

- Do not add much gasoline suddenly with throttle grip to prevent motorcycle rush out. Maybe lose control.
- Before drive, must take the stand. Pole well.

### Brake operation:

#### 1. Control throttle grip

If you want to reduce speed, Must control the throttle grip, at that time use the two-brake system, this point is very important.

**Notice:** if the drive will be done in this situation, for example: damp or loosely roads, raining .no matter brake, add speed or turn must take care.

#### 2. Operate front and rear brake,

**Notice:** Must totally close the flue when drive on a descent, and use two-brake system for reduce speed. Don't use brake continuously, other wise it will reduce the effect of brake because of too hot.

**Warning:** Don't use single brake when drive with high speed, special crooked and slippery road. Must use two-brake system for avoiding accident.

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### Close engine ( Fig.19、 Fig.20 )

- Close oil: revolve to the lowest place according to picture. (Normal situation is loose the throttle grip, and the engine is idling speed) Put the Ignition Switch on ( ⌘ ) .



Fig.19



Fig.20

### Stop operation:

When the motorcycle stop, put the key to “ ⌘ ” position .put down stand and lock handle. (Page 7)

### Alarm points:

- 1 Locking the handle and do not left key in the switch
- 2 Put the motor into the garage
- 3 Use the excellent guard against theft device

## Maintenance and service

### Maintenance periodic form

The maintenance is important to motorcycle, If drive with high speed in bad situation for a long time, must add the times of maintenance, If motorcycle have a big repaired or a accident, Must take it to check for mainly spare parts. For example: frame, indicator parts and so on. Repair or change the worn parts. Make sure safety.

#### Notice:

Don't change motorcycle make sure it's safety, Must use good quality spare parts if replace spare parts .if use bad quality spare parts, it will influence the safety of motorcycle.

**Warning:** Must close engine when make maintenance .it make sure the repairer's safety.

And put down the stand on the smooth ground.

**Notice:** Must make a good maintenance if the motorcycle don't use over a month, or don't use in all the winter. Make flue, tire and battery avoiding corrode.

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### Maintenance periodic table (Black 3)

#### Check before time based maintenance

I: check and adjust when necessary

C: clean

R: change

Blank 3

Item	Cycle	Every month	speedometer (x1000km)				Ref page
			1	4	8	12	
*	Fuel pipe line		I	I	I	I	
*	Throttle operation		I	I	I	I	15
*	Air filter	Note1	C/1000km, if need: R				22
*	Spark Plug		C/2000km,If need: R				26
*	Gap of air valve		I	I	I	I	
*	Gear oil	(300km) R	R	C/3000km, If need: R			24
*	engine oil fliter		C/ Change oil, If need: R				24
*	Idle speed		I	I	I	I	23

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Item	Cycle	speedometer (x1000km)					Ref page	
		Every month		1	4	8		12
					6	12		18
*	Drive strap			C/1000km, if need: R				
*	Gear oil	Note 3	(300km) R			1	25	
	Brake system			1	1	1	11	
	Brake switch				1	1	1	
*	High-low light				1	1	1	
*	Suspension				1	1	1	
*	Screw, bolt	Note2		1		1		
*	Ring, tyre				1	1	12	
*	Turning bear			1			1	

If you have all of tool and maintenance document, you are a mechanic person, or else must let special person maintenance and repair.

\*\*For safety, we claim all of items have done by mechanic person.

**Note:** 1 if this area is very damp or have a lot of dirty .you had better make a short time for maintenance, when it take more oil quantity or not strength, it must change.

2 if it was used every day, must make maintenance.

3 according to season to change in a cold area.

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### Simple trouble solution

Blank 4

Trouble phenomenon	Trouble reason		Solution
THE ENGINE CAN NOT START	Spark plug no spark	Spark plug wear	Change
		Ignition wire wear	Change
		CDI wear	Change
		Ignition switch wear	Change
		Ignition Come off or become flexible	Connect well or firm and tight
	The spark is weak	Spark plug gap too small or big	Adjust
		Spark plug pole burn	Change
		The spark plug accumulates carbons	Clear out
		No spark to consult the spark plug	
	no mixed air in cylinde	No fuel	Replenish
		oil mouth stop up	dredge
		fuel tank pressed the switch to damage	Change
		The oil passage stops up	dredge
		air filter stop up	clear
		Take in system leak	Check and clear out
	The cylinder compresses strength low	Spark plug seat leak	Screw up spark
		Cylinder cover leak	Change spacer
		Air noiile bracket worn	polish
The piston-ring or the cylinder block worn seriously		change them	
The piston-ring is broken or stored up the carbon to hinder very much		change piston-ring or clear carbon	

Trouble phenomenon	Trouble reason	Solution
The vehicle is unable to accelerate performance badly	The octane value of the fuel is too low	Change flue
	Oil path stop up	Clean oil path
	Ignition time is too early or too late	Check wire and change CDI
	Spark too weak or flameout	Check ignition and clear out
	Mixed air too dense or race	Clean adjust carburetor
	Engine leak	Check and clear out
	Muffler stop up	Dredge
	Belt wear	Change
	The automatic clutch roller wearing	Change
	Consult engine can not start	
The electricity is started and does not work	Exceed clutch worn	Change
	Start the relay wear	Change
	Lack of Electric consumption	Discharge
Riding unsteady	Turning axletree gap too wide	Adjust
	Lack of tire pressure	Pump
	Front rear shaft flexible	Screw up nut

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### HOW TO CLEAN THE AIR FLITER (Fig21)

- Take out rear protecting bar left protecting bar.
- Take apart air filter cover and screw up bolt.
- Take out filter element.
- Compress air or use dry brush to clean filter element.
- Do the above opposite to reinstall the air filter.
- Reassemble the Oil filter following the reverse operation.

#### Notice:

- Do not take apart the airtight battery upper cover

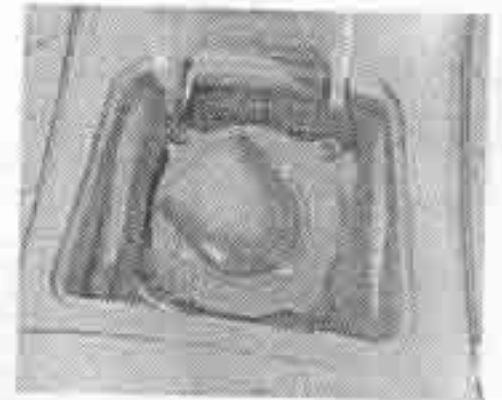


Fig.21

### battery: (Chart 22)-

If the motorcycle have not been used for a long time. Taking off the battery and putting it into a dry and place. The head of battery was corroded, please take it off and clean. (Can't use boil water)

**NOTICE:** turn off the ignition switch, take apart negative pole ⊖ first, but install positive pole ⊕ when you are installing.



Fig.22

### Idling adjust ( Fig23、 Fig24 )

The carburetor is in the best situation before sold, if the carburetor is still influence riding  
Please adjust it under the instruction of professional man.  
Warm up few minutes before start.  
Idle to adjust screw (1) is it is it improve idle speed slightly to enter to fasten, is it withdraw it than screw slowly after sto cking to fasten to mix  
and then rapidly, to stabilizing the position at most, then withdraw slowly, getand stabilize the position the most low .



Fig.23

After adjust idle, then adjust accelerograph handle to free path for 2-4mm,  
then use adjustor (2) to adjust, screw down nuts, and then screw up it after adjust.

Adjusting the good idle speed, when should be able to suddenly strengthen the throttle, the rotational speed of the engine should be excessively steady, no flash back and can't go out, stop working or arrange organ not to blow out at being last throttle.

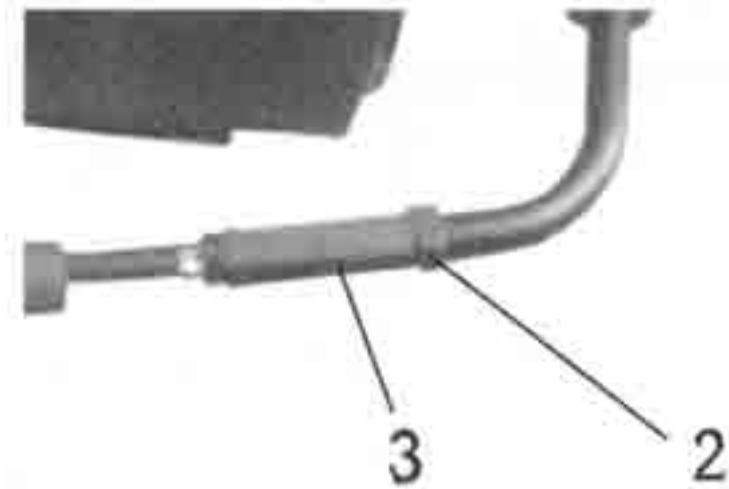


Fig.24

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### Change engine oil and clean strainer of oil filter

#### •Change engine oil ( Fig25 )

•Change the engine oil before engine cold, and under the condition of steady of motor.

#### Clean the strainer.

•Take out oil hole cover and oil filter 1 then take strainer 2 and spring 3!

•Using liquor clean the strainer.

•Install oil filter then take strainer and spring!

•Replenish the standard engine oil to upper limit line of the oil hole cover.

•Install the cover of hole and liter.

•Start engine and keep for few minute then flameout.

•Measure the lever of engine oil again, makes sure it is not leak.

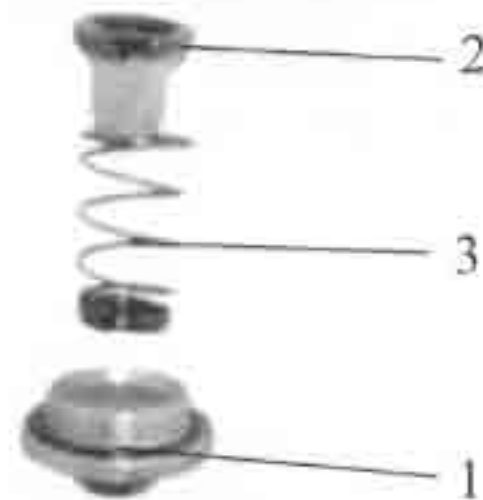


Fig.25

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## Change gear oil (Fig26)

### Suggestion engine oil No:

SAE 80W/90 (The cold place can use the Unfreezing oil)

Oil Capable

Resolving capacity: 0.11Kilolitre

Changing capacity : 0.10Kilolitre

Parking the bikes by the main stand

- Take apart the immixing bolt (2), and the spilling bolt (1).

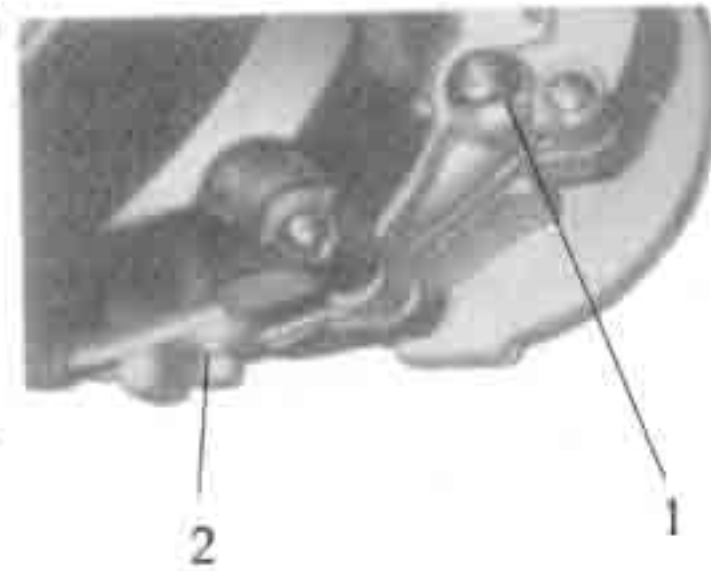


Fig.26

**NOTICE:** THE ENGINE MUST BE WARMER.  
WHEN SPILLING, AND THE VEHICLE MUST  
BE STEADY BY MAIN STAND!

- Reinstall the spilling bolt after clean. And screw up.
- Inject 100ml to engine through immit bolt
- Using the injector to immit the oil to the bolt, till full.
- Install immit bolt and screw up.

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## Spark plug(Fig 27)

### The specification of spark plug

Standard:C7HSA (NGK) 、A7T and A7RT

- Take apart the spark plug; Take it of with special tool.
- Examine if there is dirty on poles and the porcelain head in center .If it has corroded, must change it .It is the best way to clean with the liquor of spark plug Use wire brush if no cleaner
- Normally the gap between side electrode (1) and Center electrode (2) is 0.6-0.7.
- Don't use other spare plug

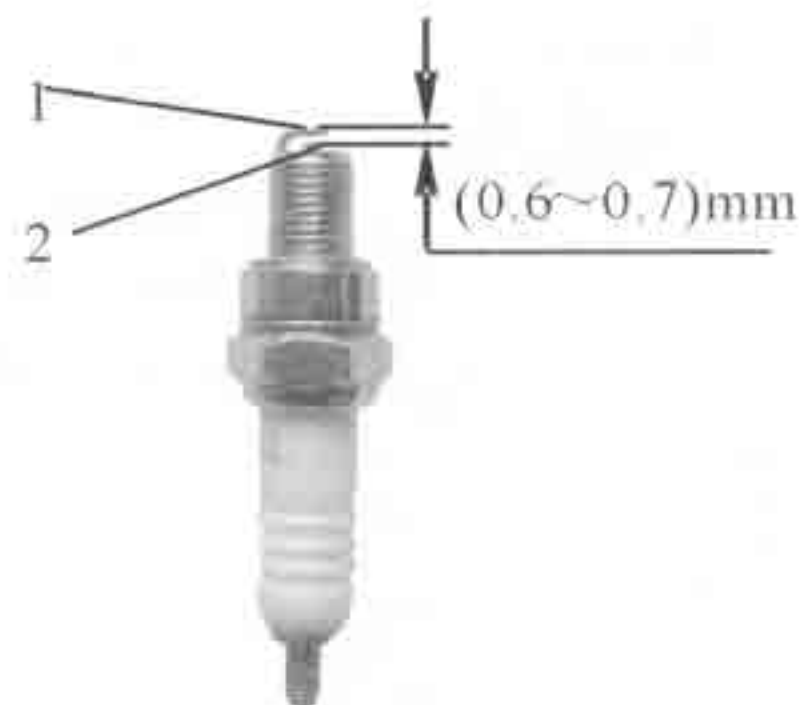


Fig.27

### Fuse replacement

The specified electric current of the total fuse is 15 A

If the connection is not good, the fuse will overheat and breakdown.

Do not use any fuse whose specification is different from assigned. It is the same  
Main reason for wiring burning.

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## Vehicle Storage

### Storage

For the motorcycle not to be used for a long period of time, for example, in wintertime, some steps should be taken to prevent malfunction of and damage to its components, which might be caused by long storage. Besides, before the long storage, proper maintenance has to be carried out for fear that it might be forgotten when vehicle is put back into use after storage.

- Change engine oil and oil filter.
- Drain off fuel from the fuel tank and carburetor, spray atomized anti-rust oil onto the inside wall of the tank and then close the tank.

### Warning:

Gasoline is inflammable and may cause fire and even explosion under certain conditions. Therefore, do not smoke, make fire or have any fire left behind on draining off fuel.

- Take out the spark plug, pour about 15~20ml clean engine oil into the cylinder, step down engine and finally fit the spark back on.
- Put the vehicle in a shady and cool place free from humidity and direct sunshine and cover it properly (but not with plastic or other painted materials).
- After washing and dry it, all the painting face with one Pre-rust oil.
- Wash the motor, wipe it dry and apply an even coat of wax to the painted surface. Chromate treatment can prevent the surfaces from rusting.

### Using the bike again from the storage

- Take out the coat, if the storing time is more than 4 months, you should change the oil.
- If need, after you charge then assemble the battery.

Please checking all the item(page8), please keep a low speed driving in the free road.

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## Vehicle identify Number

Vehicle type, Code and trademark of the bikes (Fig28)

When the bikes are registered or getting the license from the transport department, the owners should be send the VIN number and engine number. The maintain people change the parts, need the numbers too. The products brand should be added at the right side plate of the Main stand (page 3)

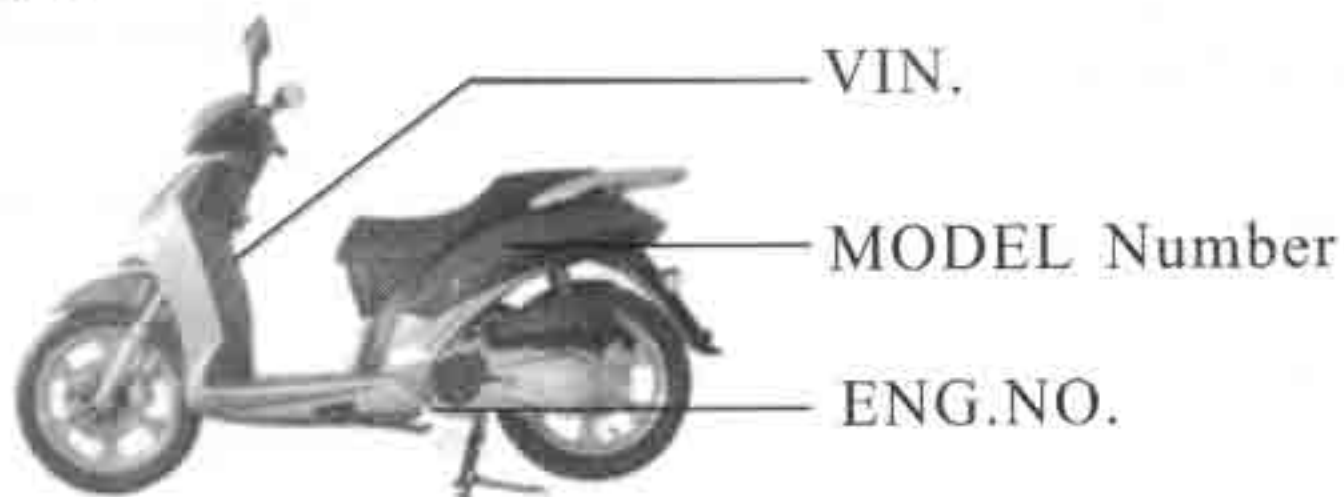


Fig.28

### The tool set

The tools bag in the boot of seat (Fig29) . It including the something of the following:

- |              |                        |
|--------------|------------------------|
| 8*10 spanner | 12*14 spanner          |
| Screwdriver  | hexagon spanner        |
| Wrench bar   | 18.5*17 wrench spanner |



Fig.29



## Main technique Parameter

Blank 5

Items	Parameter	Items	Parameter
L×W×H (mm)	2101×684×1168	Front Tire	100/80-16
Wheel Base (mm)	1418	Rear Tire	110/80-16
Ground Clearance (mm)	70	Pressure Of Front Tire(kPa)	200
Dry Weight (kg)	120	Pressure Of Rear Tire(kPa)	250
Max Load (kg)	150	Derailleur	Auto Stepless
Turning Angle of Steering Handle (°)	≤48	Speed Ratio of Derailleur	8.56~ 24.17
Brake Distance (m)	≤7m(30km/h)	Engine Type	157QMJ Single Cylinder, four stroke, Air cooled
Max Speed (km/h)	≥85	Bore/stroke (mm)	57.4×57.8
Economic Oil Consumption /100km	≤2.9L/100km	Displacement (ml)	149.6
Climbing Performance	≥16	Clutch Type	Auto centrifugal Block
Start Model	Electric/kick	Bore/stroke (L)	6.8
		Battery	12V 7Ah

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Blank 5

Items	Parameter	Items	Parameter
Lubricating Way	Pressure, Splash	Fuse	15 A
Rated Power kW/r/min	5.9kW/7000 r/min	Headlight	12V35W/35W×2
Max Torque (N.m/r/min)	8.3N.m/6000r/min	Tail light/Braking light	12V 21W/5W
Compression Ratio	9.2: 1	License Plate Light	12V 3W
Specification of Spark Plug	C7HSA(NGK) A7T、A7RT	Turning light	12V 10W×4
Spark Plug Gap (mm)	0.6~0.7	Fuel Brand	RQ90
Idling Speed (r/min)	(1700±170)r/min	Oil Capacity, Gearbox (L)	0.11L
Lubrication Capacity of Crankshaft (L)	0.9L	Gear Oil Brand	SAE 80W/90
Ignition	CDI	Gap of air valve mm	0.03~0.05
The oil with crankcase trademark	SAE 15W/40		

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