

PREFACE

Thanks for your purchasing the motorcycle CARPI-150 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 shows the correct operation and maintenance in detail for CARPI-150, 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.

ATTENTION POINTS

- 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°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, present the manual at the same time.

CONTENT

I: NOTICE ITEM FOR SAFELY DRIVING

The rules for safely riding.....	1
Load capacity.....	2

II VARIOUS PARTS NAME AND INSTRUCTION

Various parts name.....	3
Instrument and indicator.....	5
Ignition switch.....	5
Fuel indicator.....	6
Start switch.....	6
Front head light.....	7
Turn signal light.....	7
Horn switch.....	7
Steering lock.....	7
Seat lock.....	8

III. OPERATION INSTRUCTION

Check before riding.....	8
Start engine.....	13
Drive the motorcycles	14
Riding.....	16

Brake operation.....	16
Power off the engine.....	16
Stop operation.....	17

IV. MAINTENANCE AND SERVICE

Maintenance periodic table.....	18
Solution for troubles.....	21
Cleaning the air filter.....	23
Maintenance the battery.....	24
Idle speed adjust.....	24
Change oil ,cleaning the stainer.....	25
Change the gear oil.....	26
Spark plug.....	28
Fuse replacement.....	28

V. Storage of the vehicle

Storage.....	29
--------------	----

VI. Vehicle

identification.....	30
---------------------	----

VII. Tool set

VIII. Main technique Parameter

IX. Circuit diagram

I. Motorcycle safe driving

Rules for safe driving

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.
6. Check up before driving. (Refer to page 8)
7. Please hold the handlebars and put feet on the footrest. When driving.

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	1kg

b) Refer to the payload (Max load: 75kg), remember to count in the weight of driver 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.

- 2 -

II. Subassembly and use instruction

The parts & subassemblies (Fig1、 Fig2)

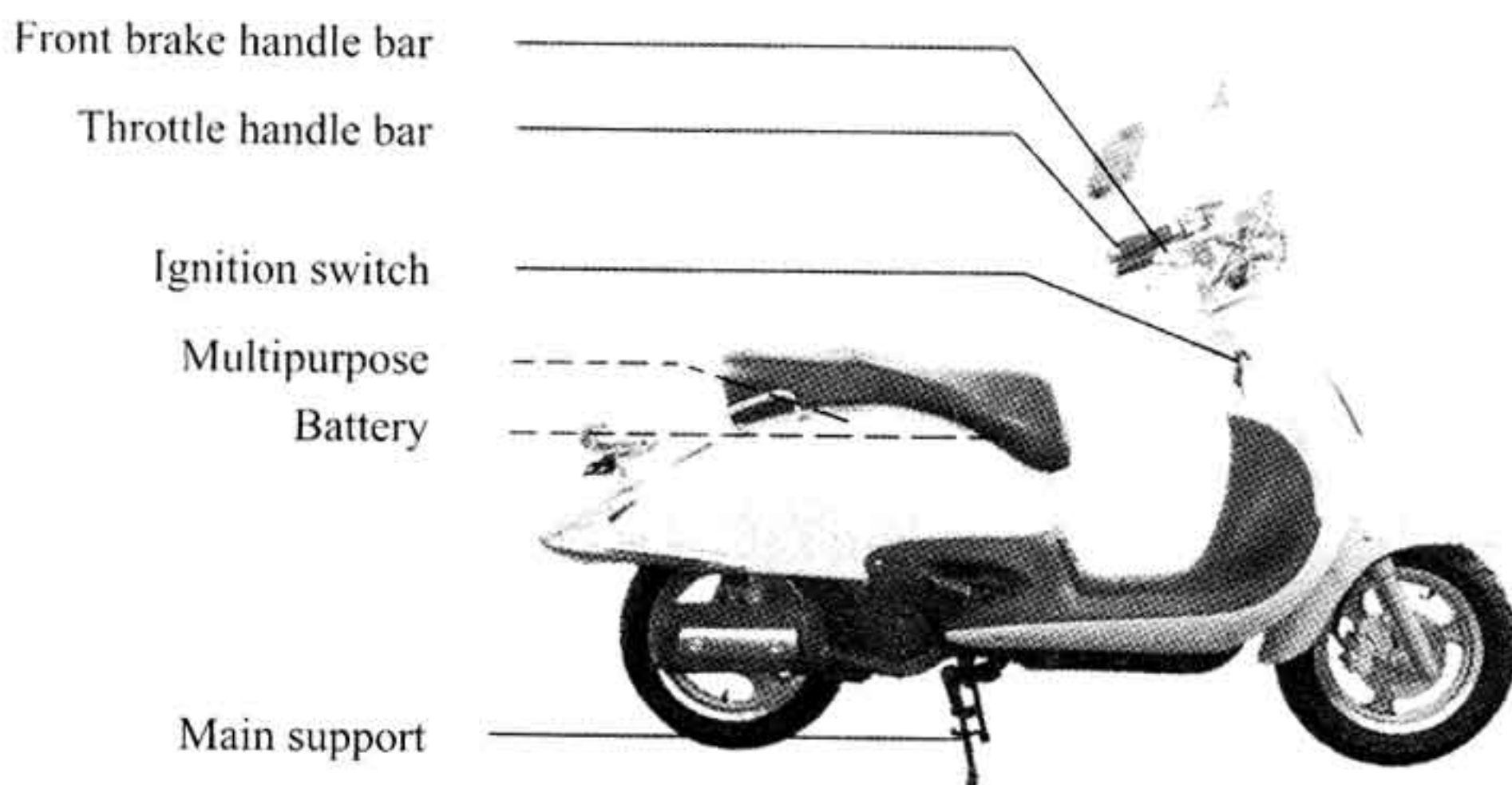


Fig 1

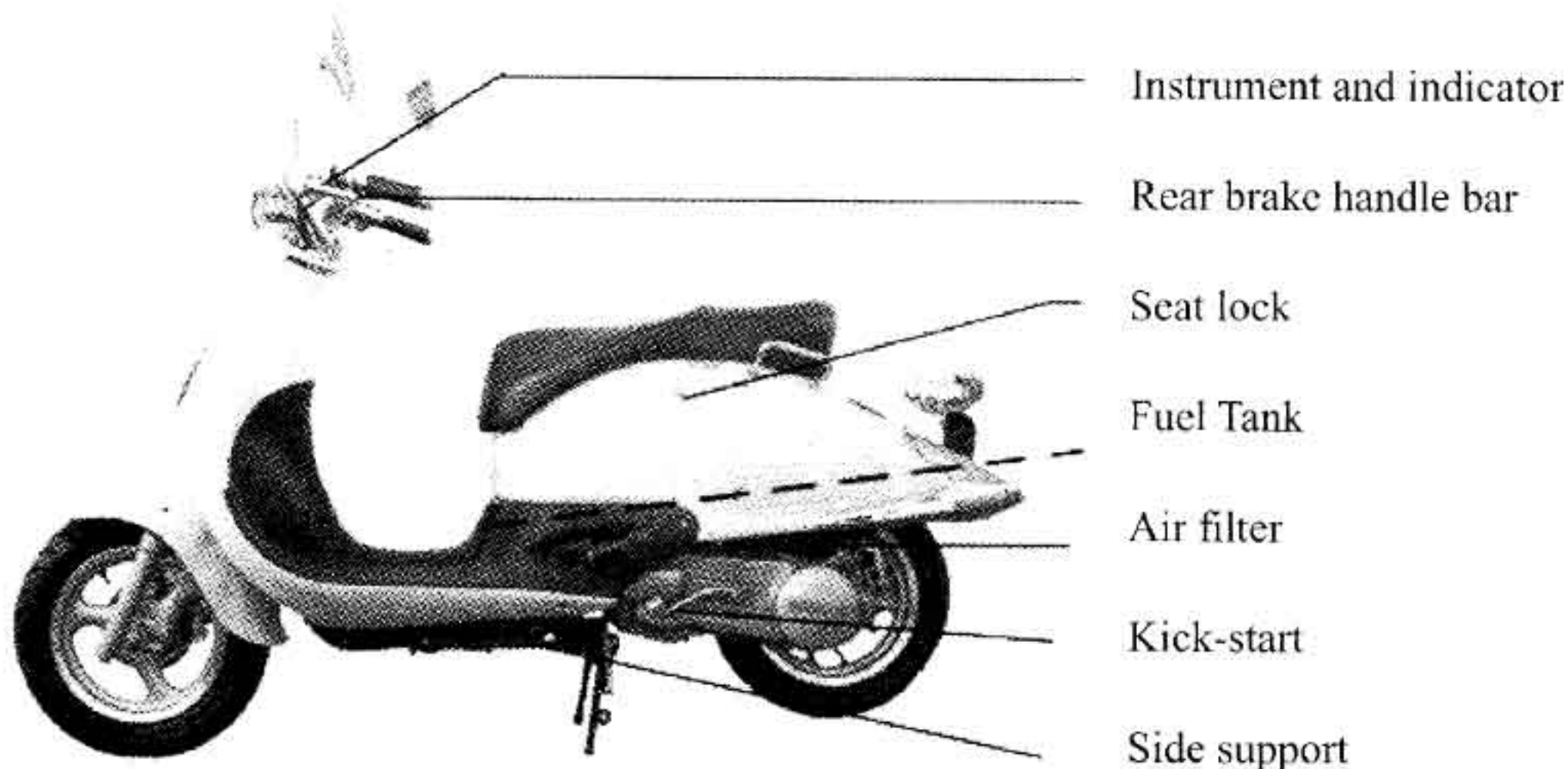


Fig 2

Broken Line (·····) indicate the invisible parts.

- 4 -

Speedometer and indicator light (Fig 3)

- (1) voltmeter
- (2) odometer
- (3) speedometer
- (4) fuel meter

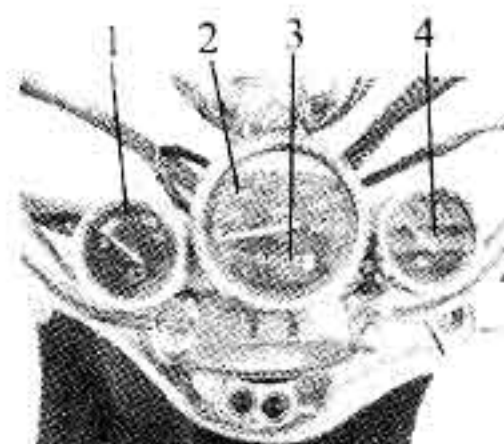




Fig 3


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 () - 4 -

The steering handling is locked, and you can take off the key.

- (4) lock ()—turn the key to () position, pull out the key. This time, you can not do the turning operation, and you can not start the engine and lights.

Notice:

The engine should be stopped in time when it runs at idle speed for a long

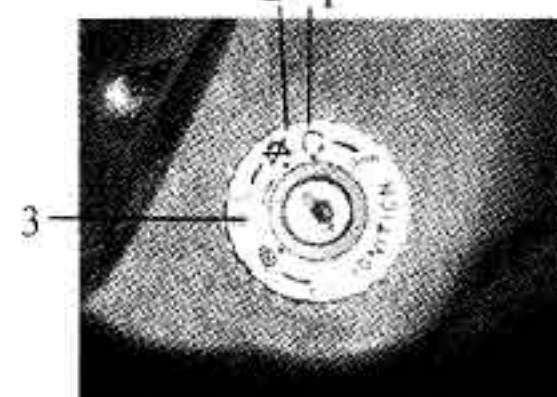


Fig 4

Fuel meter(Fig.5)

- Fuel meter 4 indicates the approx remainder of fuel.

When the pointer points to (F), it indicates full fuel volume 4.5L.

- When the pointer gets close to the red section, it indicates that the remainder volume is 1.8L

Starter switch button 2 (Fig 6)

Press this button, and start the engine (See p14).

Powering off switch (3)(Fig6)

Press "⊗" to engine flames out, and press "⊙" to restart the engine



Fig 6

- 6 -

Dimmer switch (1) (Fig.7)

"≡D"High beam.

"≡D"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 handle lock (Fig 8 and Fig 9)

Turn steering handle to full left and turn the key in counter clock-wise direction to lock. To open the lock, turn the key in clock-wise direction.

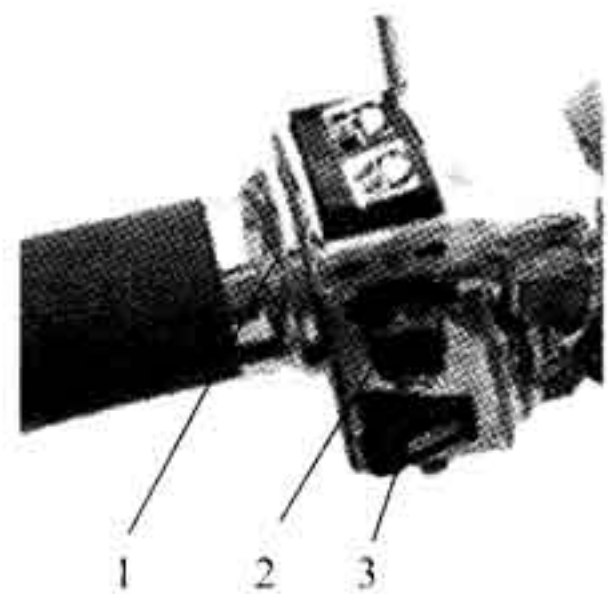


Fig 7



Fig 8



Fig 9

Seat lock (Fig 10)

- Put the key (1) into the keyhole (2) and turn clock-wise to open the lock.
- Press down the saddle until it clicks, make sure it is locked and then take off the key.

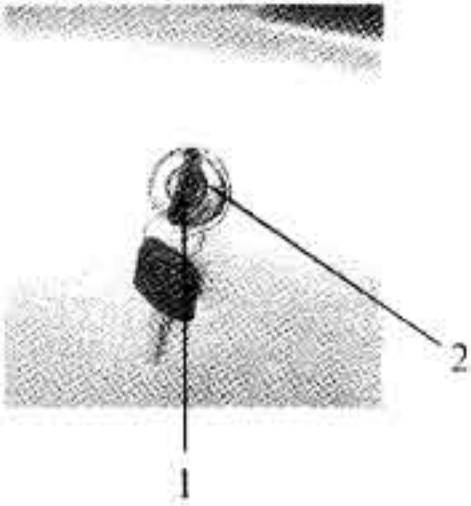


Fig 10

III. Operation instruction

Check before driving.

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.

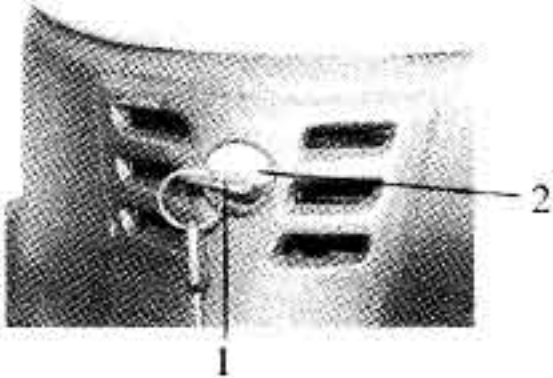


Fig 11

- 8 -

- Gasoline tank:4.5L.
- Putting the key to the fuel tank cover and clockwise to open the fuel tank, (fig 11)
- 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.

Check the engine oil volume (fig13 、 fig14)



Fig 12

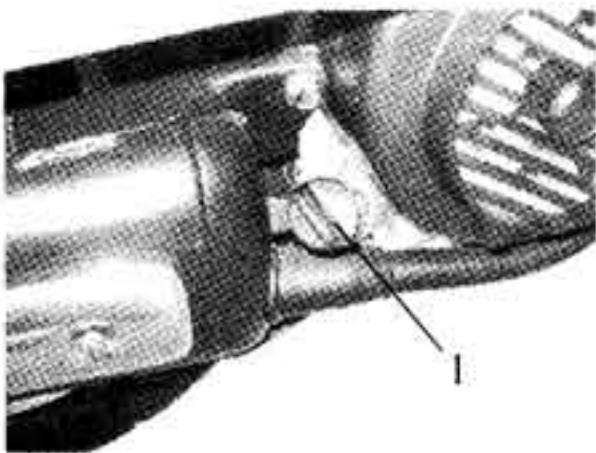


Fig 13



Fig 14

1. 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.
2. 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.

Suggesting oil of octane number

SAE-15W/40 engine oil

Free path of rear brake handle (Fig 15, Fig 16)

Measure the free path of rear brake before it works. The free path range is 10–20mm measuring from the end of the brake handle.

- 10 -

- Adjust nut: (A) increase the distance of free path.
(B) Decrease the distance of free path.

The axle pin2 should touch closely with nut (1) groove after adjustment.

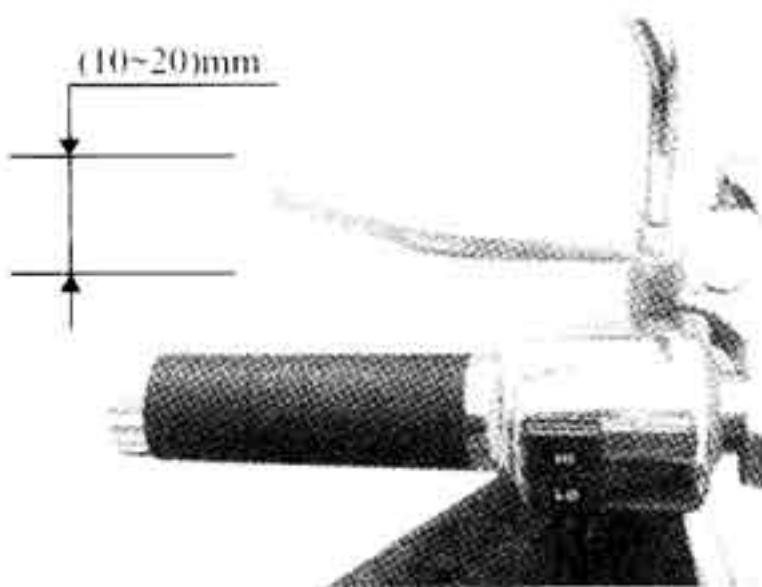


Fig 15

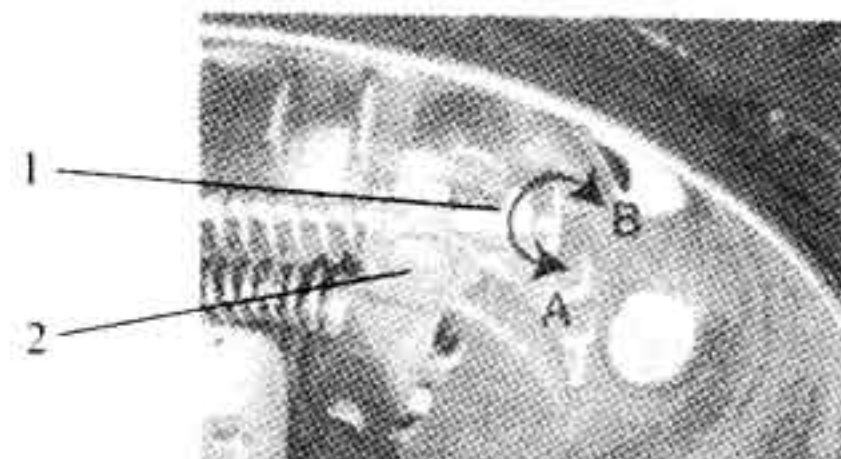


Fig 16

Abrasion mark of the brake (Fig 17)

- (1). Reference marks.
- (2). Indicative marks.

Replace the brake shoe when reference marks and Indicative marks are in line under thorough braking.

Notice: Once the brake needs to replace for a new one, please go for the nearest maintenance service where there are technicians trained by formal training to check. Spare parts of our company only can be used for replacement.



Fig 17

Tire

Check the tire pressure periodically and adjust it if necessary.

- 12 -

Check the tire only when it is cooled.

Check if puncture on the tire, and also the air leakage.

Check if any metal trash or gravel in the groove of tires.

Replace the tire when it wears to the abrasion mark.

WARNING:

If the tire pressure is not normal, it will probably cause a traffic accident.

It is dangerous to use over-worn tires, for it affects the adherence force between the tires and ground.

Engine Starting (Fig 18)

Preparation: release the vehicle main stand,

- Put the key into ignition switch and turn to "⌚" position.

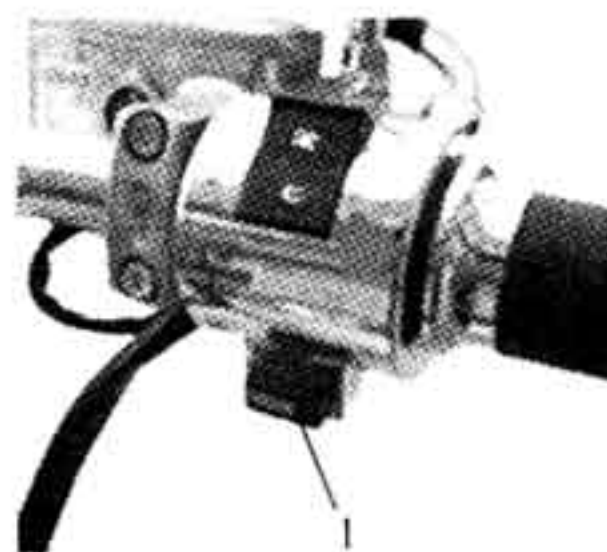


Fig 18

- 13 -

Electric-start: press start button (1) while applying the throttle slowly, and the engine starts in less than 5 seconds.

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.

Drive the motorcycle
Warning

When riding the motor, the temperature of the exhaust pipe and muffler is very high, so you'd better wear long pants to avoid touching with the hot parts of the exhaustion system.

- 14 -

It is necessary to wear helmet, goggles and gloves while riding the vehicle, When driving, do not wear loosen or unsuitable clothes. Otherwise the clothes may hook with the handle bar, start pedal or the stand.

Each equipment of the motorcycle should accord with the traffic law of local government
Notice

Control the speed and payload during the first1000km
Payload among100kg is appropriate (including driver)
Overtaking and overloading will shorten the life of engine, so change the crankcase oil after 300km.
Speed Reference table 2

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

Driving operation
Release the main stand, and sit on the saddle with left foot on the ground to make the vehicle straight.
Apply the throttle slowly and pull back the left foot to gain proper speed.
Notice:
Do not apply the throttle abruptly, or the vehicle will rush forward.
Remember to put away the main stand before running forward.

Brake operation:

1 Control throttle grip

To reduce speed, control the throttle grip and apply front–rear brakes at the same time.

Warning : when driving in rain, or on watery road, pay close attention with braking, speeding–up, or turning

2 Operate front and rear brake simultaneously.


Notice: when riding down the slope, totally release the throttle and use two–brake system to reduce speed. Avoid continuous operating the brake, otherwise the brake may be overheated and decrease the braking efficiency

Warning:

Riding at mid–high speed in slippery road or at the crook, do apply the front and rear brake at the same time, or the vehicle may slip aside and cause accident.

Stopping the engine (Fig19, Fig20)

Close the throttle: turn throttle to the end in direction as the picture, (normally when release the throttle grip, the engine runs at idle speed.)

Turn the ignition switch to ()

- 16 -




Fig 19



Fig 20

Stopping the motorcycle

When stopping the motorcycle, turn the ignition switch to () first, then step down stand and lock the steering handle.

Warning: stop the motorcycle on flinty and smooth ground, otherwise may cause people being injured or vehicle falling on one side.

Protect from theft:

Lock the steering handle, and never leave the key in the keyhole.

If possible, park the vehicle in the garage locked.

Use the high quality anti–theft devices.

- 17 -

IV. Maintenance and service

Maintenance periodic form

The maintenance is taken on the base of mileage, If drive at high speed in bad situation for a long time, it is necessary to increase the times of maintenance. If motorcycle ever collided, send it to the professional person for check-up and repair.

Notice:

To maintain the stability of the vehicle, never reassemble it and always use the exclusive spare parts for replacement.

Warning:

To be safe, before making any kinds of maintenance, do stop the engine at first, and place the vehicle on the plain ground.

Notice:

Maintenance is needed if being have not used the vehicle for over a month or in winter, in case of corrosion of the fuel, tire and battery.

- 18 -

Maintenance periodic table (Form 3):

Check before the vehicle maintenance

I: Check-up and adjustment needed.

Form 3

Cycle Item				odometer (x1000km)				
				1	4	8	12	Ref page
		Every month			6	12	18	
*	Fuel pipe			I	I	I	I	
*	Operation of the Throttle			I	I	I	I	16
*	Air Cleaner Filter		N.1	C/1000km, if need: R				23
*	Spark Plug			C/2000km,If need: R				28
*	Valve Gap			I	I	I	I	
*	Oil		(300km) R	R	R/(3000km)			25
*	Oil Filter Net				When change oil: C If necessary:R			25
*	Idle Speed of Carburetor			I	I	I	I	24

- 19 -

Item	Cycle			odometer (x1000km)				Ref page
				1	4	8	12	
		Every month			6	12	18	
*	Belt			I/1000km, if necessary: R				
*	Oil, Gearbox	N.3	(300km)R			I		26
	Brake System			I	I	I	I	11
	Brake Switch				I	I	I	
*	Headlight				I	I	I	
*	Suspension system				I	I	I	
*	Nut , Bolt	N.2		I		I		
*	Wheel , Tire				I	I	I	
*	Steering Bearing			I			I	

*Ask professional person to do the maintenance and repair unless you are qualified mechanic with set of tools and maintenance information.

**For safety, let mechanic in charge of the maintenance and repair.

Note: 1. If driving in damp or dirty area, you had better shorten the time for maintenance.

2.If used every day, do make the maintenance.

3. Replacement with the season in a cold area.

- 20 -

Obviation of the simple trouble (Form4)

Form 4

Trouble	Trouble reason		Solution
Engine not start	Spark plug no spark	Spark plug wear out	Change
		Ignition wire wear out	Change
		CDI wear out	Change
		Ignition switch wear out	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 seriously	Clear out
		No spark to consult the spark plug	
	No mixed air in cylinder	No fuel	Replenish
		Oil mouth stop up	Dredge
		Fuel tank pressed the switch to damage	Change
		The oil passage stops up	Dredge
		Air cleaner stop up	Clear
		Take in system leak	Check and clear out
	The cylinder compresses strength low	Spark plug seat leak	Screw up spark
		Joint of cylinder and cover air-leaked	Change washer
		Valve cushion worn	Polish
		The piston-ring or the cylinder block worn seriously	Change them
		Piston-ring broke or stopped by the accumulated carbon	Replace piston-ring or clear carbon

- 21 -

Trouble	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 tie 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 out	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	Charge
Riding unsteady	Turning axletree gap too wide	Adjust
	Lack of tyre pressure	Pump
	Front and rear shaft flexible	Screw up nut
Apply the brake and does not work	The brake block is worn and torn to limit	Change
	Apply brake to enclose wear	Change
	The guy cable is worn to apply the brake	Change
	Free path too big	Adjust

- 22 -

Cleaning of air cleaner (Fig 21)

Screw out the bolt on the cover of the cleaner.

Take out filter from the cleaner case.

Clean the filter with compressed air or dry brush, or replace it with a new one.

Follow the opposite procedure to reinstall the air cleaner.



Fig 21

Warning

Never use gasoline or solvent with low burning point to clean the filter.

When dismounting the rear protecting strip and left protecting strip for the first time, please under the guide of technician.

Maintenance of Battery (Fig 22)

Please add a little water when using this vehicle for the first time.

Notice:

Never take apart upper cover of the electrolyte.

If the motorcycle don't use for a long time, put it in a dry and well-ventilated place after charge.

Once the head of battery was corroded, take the battery off and clean. (Use boiled water)

Notice: Turn off the ignition switch before taking apart the battery. Taking negative terminal first and positive terminal next, when installing, just opposite to above procedure.

Adjustment of idle speed (Fig 23 , Fig 24)

The carburetor has adjusted to the best situation before selling out.

If it is not well adjusted, ask professional to adjust it as the following instruction.



Fig 22

- 24 -

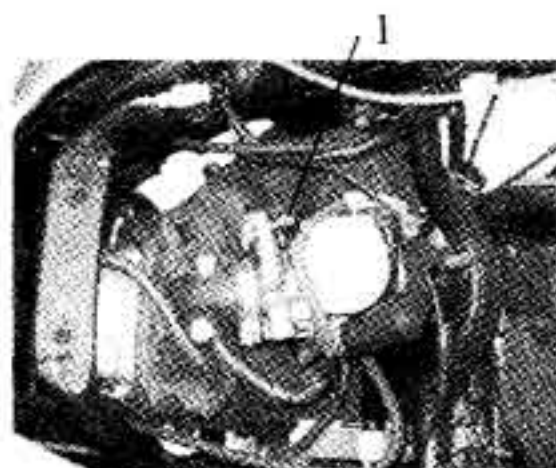


Fig 23

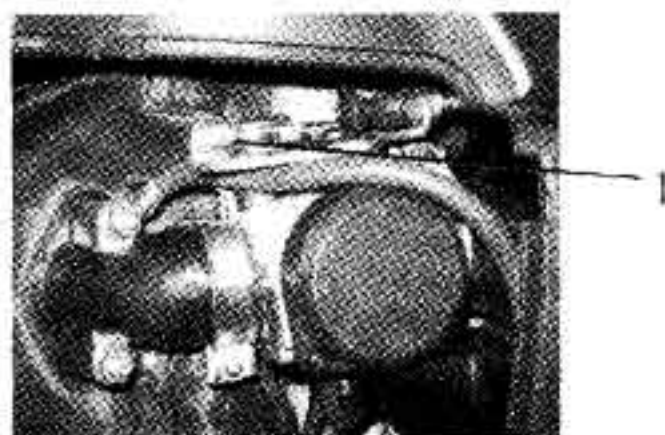


Fig 24

Warm up several minutes after engine starts.

Screw the bolt 1 in slightly to increase the idle speed,

then screw in the mix ratio bole first and next out from the idle speed adjustment screw to gain the minimum torque.

◆ After adjusting the idle speed, adjust the throttle free path to 2–4mm.

◆ After well adjusted, the engine speed can transit steadily when suddenly apply the throttle instead of turning off.

Oil change and cleaning of oil filter net(Fig 25)

Change the oil only when the engine is not cool and the vehicle is supporting by jiffy

Stand, to pour out all the oil completely and quickly.

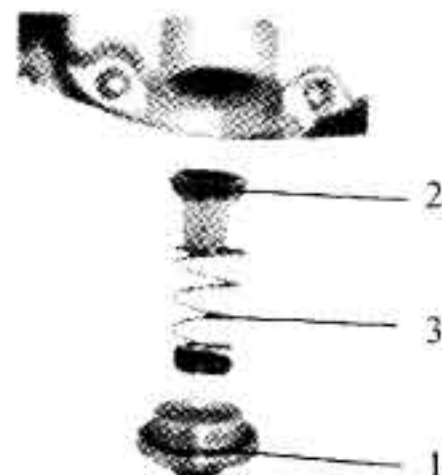


Fig 25

Cleaning of oil filter net

Screw out the the cover of oil hole /oil dip rod and the cover of oil filter screen,then unbolt the oil filter(1),Net(2) and the spring (3)

Clean the oil filter net with the impregnant

Fill in the oil filter net,spring and the cover of oil filter screen

Immit oil meeting the specification to the engine, do not let the oil mass exceed the mark of upper limit of the cover of oil hole / oil dip rod. When measuring the oil level, do not screw down the cover of oil hole / oil dip rod.

Fill in the cover of oil hole / oil dip rod

Let the engine work at the idle speed for several minutes and stop it .then start the engine.

Remeasure the oil mass. Make sure the oil mass is near to or in the mark of upper limit without leakage.

Gear oil change (Fig26)

Suggested oil octane number

SAE 80W/90 (you can use prevent frostbite oil in very cold area)

Oil capacity

Resolving capacity: 0.11L

Changing capacity: 0.10L

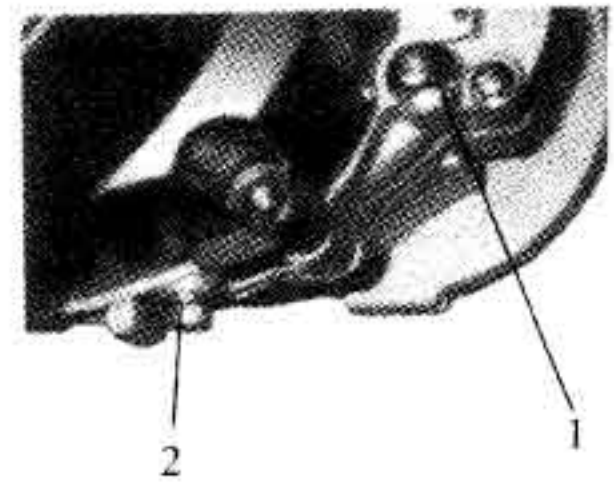


Fig 26

- 26 -

◆ Place the vehicle by the main stand.

Screw out the immision bolt 1 and oil–drain bolt 2.

Notice: The engine must be warmed when changing the oil, stop the vehicle by parking rack, and insure that pour out all the oil completely and quickly.

◆ Screw out the immision bolt 1 and oil–drain bolt 2.

(when draining the oil, engine should keep certain temperature)

◆ Clean the drain bolt and then re–install it.

◆ Inject the oil into hole of the immision bolt till the oil spill.

◆ Fix the immision bolt and screw it tight.

Spark plug (Fig 26)

Spark plug specification

Standard: C7HSA(NGK) or A7T, or A7RT

Disconnect the joint of the spark plug cover and take apart the spark plug with special tool.

Check if any accumulated carbon or dirt, clean them in cleanser or brusher. Replace the spark plug if badly corroded.

Normally the gap between side electrode (1) and Center electrode (2) is 0.6–0.7 mm

Don't use other spark plug.

Fuse replacement

The rated electric current of the fuse is 15 A

If the fuse often burns down, it indicates the short circuit or overload in the electric system. Ask the serviceman to repair it, and never use the brass wires to replace the fuse.

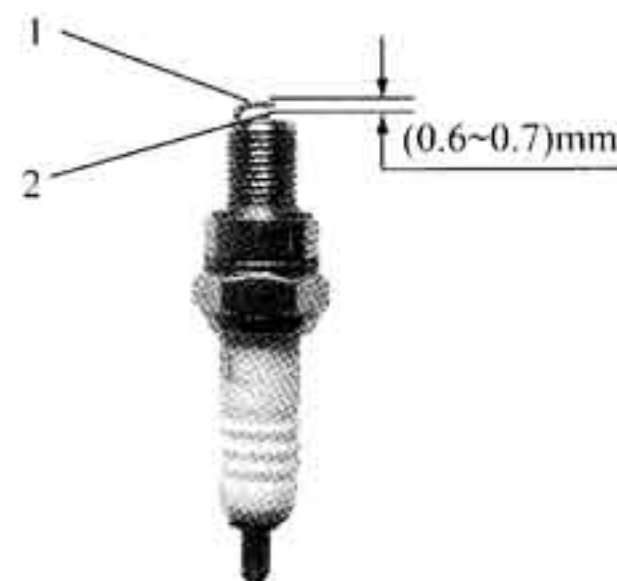


Fig 26

- 28 -

V Vehicle Storage

For the motorcycle not to be used for a long time, some steps should be taken to prevent malfunction and damage to the parts. Besides, before the long-time storage, proper repairs should also be done.

◆ Change the engine oil.

◆ Drain out the fuel in the fuel tank and carburetor.

Warning: Gasoline is inflammable and may cause fire and even explosion under certain conditions. Therefore, do not smoke or make fire.

Take apart the spark plug, inject about 15~20ml oil into the cylinder, step down the kick pedal several times and then fix the spark back on.

◆ Take apart the battery and place it in a place without strong light or frozen ice, charge it every month.

◆ Clean the vehicle and wipe it dry, coat the wax on the surface of the paint, and anti-rust oil on other metal parts.

◆ Cover the vehicle and put it in a cool place.

◆ Use the vehicle after long-time storage

◆ Take off the cover and clean the vehicle. You should change the oil after 4 months above storage.

◆ Charge the battery if necessary, and fix it on.

◆ Check all the parts before driving.

- 29 -

VI Vehicle identification

Position of the model No, reference No and scutcheon.(Fig 27)

Provide the above No when register, get the license, yearly inspection, and also enjoy the after-service clause.

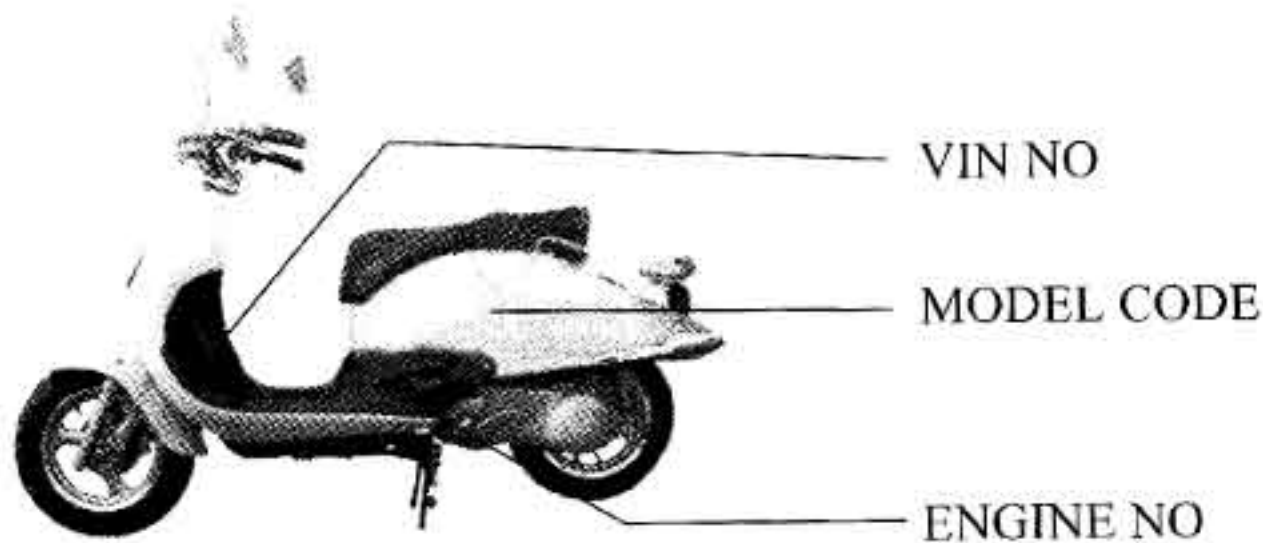


Fig 27

VII Tool Set

Toolbox is placed in the luggage box under the saddle, and toolbox contains the following tools:

Wrench 8x10mm Wrench 12x14mm
Screwdriver Hexagonal wrench
Handle of screwdriver Sleeve wrench 18.5x17



Fig 28

- 30 -

VIII Main Technique Data

TABLE 5

Item	Parameter	Item	Parameter
L × W × H (mm) mm	1952 × 8895 × 1113	Front Tire	130/70-12
Wheel Base (mm)	1302	Rear Tire	130/70-12
Ground Clearance	120	Pressure Of Front Tire (kpa)	200
Dry Weigh t(kg)	96.5	Pressure Of Rear Tire (kpa)	250
Max Payload (kg)	150	Transmission type	Automatic
Turning Angle of	≤48	Transmission rate	6.89 ~ 22.39
Brake distance m	≤7(30km/h)	Engine type	157QJSingle/4stroke.air-cooling -forced
Max speed km/h	≥90	Bore/stroke (mm) mm	57.4 × 57.8
Economic oil consumption L/100km	≤2.9	Displacement ml	149.6
Climbing performance °	≥16	Clutch	Centrifugal
Gradient of low beam	-1.3%	Oil capacity	4.5
Starting model	Electric and kick	Battery	12V 7Ah

Item	Parameter	Item	Parameter
Lubricating style	Oil Pump	Ignition Model	CDI
Rated Power	7.0kW/7500 (r/min)	Fuse	15 A
Max Torque N.m/r/min	8.3N.m/6000 (r/min)	Headlight	12V 35W/35W
Rated Power	9.2:1	Tail light/Brake light	12V 5W/21W
Specification of Spark Plug	C7HSA(NGK)A7T or A7RT	License Plate Light	12V 5W
Spark Plug Gap mm mm	0.6 ~ 0.7	Turning light	12V 10W × 4
Idling Speed r/min	(1700 ± 170)r/min	Fuel Brand	Above RQ90
Lubrication Capacity of Crankshaft Case LL	0.9L	Oil capacity of gear box L	0.11L
Lubrication brand	SAE 10W/40	Gear Oil Brand	SAE 80W/90