MOTORCYCLE 200

.....

OWNER'S MANUAL



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PREFACE

The manual describes the basic operation and maintenance for the motorcycle, which should be read carefully before driving. Correctly use, service and maintenance can keep on a safe driving so as to minimize troubles of the motorcycle and keep it at an optimal performance, which can extend the period of usage . our service station can provide technical inquiry and after-sale service.

The data in the manual is the latest .we reserve the right to amend the data, instructions and specifications without advice. If this handbook is different from the actual motorcycle status ,please do as practical.

Thank you for your purchasing our motorcycle. May you enjoy the driving all the time.

IMPORTANT BULLETIN

Driver and passenger

The motorcycle can carry drivers and one passenger ,whose max loading is 150kg. the rear luggage carrier forbidden to overload 5kg. please read carefully the handbook.

DRIVING ROAD SURFACE

This motorcycle only apply to drive on the road.

CUSTOMERS MUST CAREFULLY READ THIS HANDBOOK

Especially take note of quoting contents as follows:

ADANGER: if anybody does not obey this instruction ,it will cause serious casualty accidents

 Δ WARNING: if anybody does not obey this instruction, it will lead to casualty injury and device damages

REMARKS: OFFERING HELPFUL INFORMATION

This manual forms a integral part of the motorcyclye, transferring with the manual attached

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WARNING:

To prevent casualty and device damages, driving the motorcycle while must take note of the traffic security.

Can not drive until the motorcycle check carefully

SAFE DRIVING RULES

- 1.before starting, must check the vehicle. Take note of checking all kinds of fasteners, connecting parts and adjusting parts whether be fit so that can prevent against accidents and avoiding device damages.
- motorcycle drivers must past traffic administration examination and gain driving license till can drive it. forbidding to borrow the motorcycle to have no license personnel driving.
- 3.to avoid causing casualty accidents to you and other people, specially keep an eye on several points given below:
- (1).wearing bright clothes
- (2).keep a certain distance with other vehicles, correctly use the lights and horn of the vehicle etc signal devices.
- (3).no pulling ahead
- (4) strictly obey traffic regulations all over the country.
- (5) forbidding to over-speed driving. speed never exceed the limitation scope.
- (6)when turning and diversion, correctly use winker so as to bring to other drivers attention.
- (7)taking special care of driving on the entry and exit of the crossroad and parking and on the road.
- (8) when driving ,drivers grap at the steeringbar and tread with feet on the footrest comp.
- (9) in the rainy weather driving must be remember: brake distance is two times of the cloudy weather. when driving, takespecial careof damp road surface with hole and oil spot. when no understanding traffic status, should slow down.

PROTECTIVE DEVICE

• to guarantee your security driving, you should put on a helmet, dust hood and face shield and gloves etc.protective tools.

• the silencer of the motorcycleis the part of the highertemperature, to avoid contacting burn, when driving, must wearboot so r the dress of covering leg. • no wearing loose clothes which may be easily hooked by the operation handlebar, kick rod, footrest comp and wheel.

CHANGING APPEARANCE OF THE VEHICLE

AWARNING: freely alter motorcycles or change original devices, which can not guarantee motorcycles driving security, is illegal, user must obey traffic administration regulations to use vehicles.

If you have a good suggestion, can send away from us.don 't approval of it until you can alter this vehicle, otherwise you have brought all consequences on yourself.

GOODS LOADING

REMARKS: the itemizing of the loading quality has certain demands: goods loading will not affect the performance and stability of the vehicle

• the gravitational core of goods should lie low-place alongside close to the core of the vehicle.loading weight is split in two sides which tries to keep balance. when the gravitational core is farther away, the gravitational core of the vehicle, which will have an effect on the vehicle'operation.

• in the light of the circumstances of loading weight and driving, and then properly adjust the air pressure of tyres and front shock absorber and rear shock absorber

all goods must fix stoutly on the vehicle for guaranteeing the operation stability.
no attaching bulk and over-weight items on the steering-bar and front fork and fenders, otherwise will cause driving unevenly or steering no sensitivity
no over-loading (max loading 150kg)

ACCESSORIES :

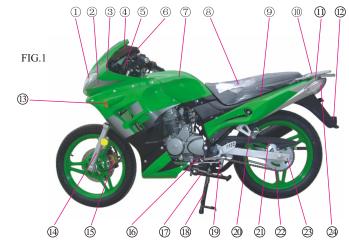
•our producing accessories went through special designing and passed testing on the motorcycle. being it is impossible for us to test all other factories products, and so if no selecting our components, resettling and using that you will allow for yourself. please you comply with "safe driving regulations" and obey the followings everalpoints:

• carefully check components, no hindering sight, lessening clearance ground and side leaning angle, limiting suspension and steering structure shifting, limiting and controlling operation

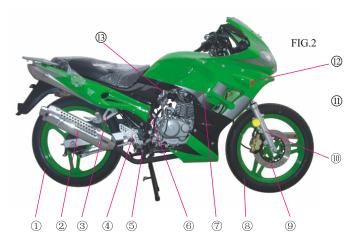
•no resettling the cooling device of the generator

• no adding electrical equipment, if do so, which will make your motorcycle electric volume over-loading so that could lead to circuit turning off, flashing system cut off or engine stalling.

LOCATION OF THE PARTS (FIG.1-3)



(1)headlight (2)headlight hood (3)left down guide hood (4)front guide hood (5)meter
(6)rear view mirror (7)fuel tank (8)seat cushion (9)left rear ring board (10)rear handlebar
(11)tail light guard plate (12)rear mudguard (13)front left sheering light
(14)front left shock absorber (15)flexiable shaft of the speedometer
(16)gearshift pedal (17)side stand (18) main stand (19)front footrest left
(20)rear footrest left (21)chain box (22)chain (23)rear fork (24)rear light



(1)rear wheel (2)silencer(3)rear footrest right(4)front footrest right
(5)rear brake pull rod(6)rear ring board right (7)rightdown guide hood
(8)front wheel (9)front disc brake (10)front shock absorber right
(11)front fender (12)front sheering light right (13)kick rod



"p<" position: headlight, rear light ,meterindicating light are on.

""," "position: position light ,rear light ,meter indicating light are on

"•" position: position light, headlight, rear light, meter indicating light are off

SWITCH OF ELECTRIC STARTING

press the button ,drive engine of starting motor starts . FUEL TANK, COVER OF THE FUELTANK , FUEL SWITCH (FIG11) COVER OF THE FUELTANK

insert the key of the ignition switch ,according to clockwise turning the key to 90° , open the cover of the fuel tank. When need close ,press the cover of the fueltank.

FUEL TANK

capacity of the fuel tank is 13L ,among spare fuel is2.0L.

AWARNING: only when the key insert the lock ,can close the cover of the fuel tank. If the cover don't correctly close ,can't take out the key .when injecting fuel ,should add the gauze for filtering & before injecting ,specially filtering. Gasoline is flammable material,should place it ventilated position ,and then powering . should not close the power station & the place of the stored gasoline .but no smoking and no placing flammable matter.

Fuel in the fuel tank should not over-fill .afterinjecting ,must tightly compact the cover of the fuel tank.

FUEL SWITCH(FIG 12, FIG 13, FIG 14)

there are there positions on the switch of the fuel ", "-", " \bullet ", " \cdot ".

" \bigcirc " On : rotate the handlebar of the fuel switch to " on", fuel passage opened, begin to supply normally.

"•"Off: rotate the handlebar of the fuel switch to "off", fuel passage cut off, stop to supply.

" \bigcup "Spare : during driving , if the fuel level is lower in the fuel tank , main fuel passage can't supply fuel, rotate the handlebar of the fuel switch to this place , use spare fuel , but inject fuel in the fuel tank as fast as possible.



AWARNING

Cover of the fuel tank

Fig.11

•AFTER INJECTING FUEL , NEVER CAN KEEP HANDLEBAR IN " \bigcup " , OTHERWISE THE FUEL RUNS OUT OF , NO SPARE FUEL SUPPLYING .

• IF YOU DON' T USE MOTORCYCLE IN AL ONGTIME, SHOULD KEEP HANDLEBAR IN"•" CLOSED POSITION PREVENT ABAIN ST LEAKING FUEL. **OPTION OF THE FUELAND LUBRICATION**

OPTION OF THE FUEL

quality of the fuel is the important factor influencing on the level of the emission, option of the fuel must according to the rules of this handbook.

fuel should use no "pb" & containing lower "pb", octine figure is RQ-93 or RQ-93 above petrol.

If don't properly select fuel, which will make the engine explode and shock & have difficulty in starting so that influence on the using life of the engine ,power and oilconsumption.

WARNING:

• no overfill the fuel ,otherwise , fuel will overflow and erode the surface of the paint and plastic parts ,at thesame time , may give rise fire destruction .after filling in fuel ,must cover the cover of the fuel.

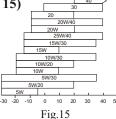
• gasoline is flammable ,under the certain circumstance , which easily give rise to burn and explode . when opening the cover of the fueltank ,check engine whether stalls , injecting fuel in the ventilated place .when injecting fuel .no smoking ,no closing the flammable materials.

• when injecting fuel ,should add the gauze to distil & can specially distil before

injecting.

OPTION OF THE LUBRICATION (FIG 15)

It is the main factor that the lubrication influences on the performance of the engine and life ,at the same time , influences on the emission of the motorcycle . And so ,must according to the rules forselection and lubrication of the changing . no using general engine oil ,gear oil ,vegetable oil ,etc replacement .



When the motorcycles ex-factory with the engine oil

of the gasoline engine of 15w/40-SE grade ,whose optimal temperature is- $10\Box e+40\Box e$. without purchasing, can make use of SE,SF &SC grade engine of the gasoline engine of API(USA petrol organization). if need change other lubrications ,whose the grade of the quality should come to SE grade ,adhensive degree should select the reference caption according to the circumstances of the various regions and weather changing . when change the lubrication ,please release the original lubrication of the camshaft till finishing.after cleaning , according to the rules injecting the new lubrication.

If can not buy the engine oil of the gasoline engine of 15W/40-SE grade, can make use of RQB-10 #(temperature is below -10 are regions using HQB-6#) engine oil instead .forbidding to use general engine oil &vegetable oil.

REMARKS:

FORBIDDING TO USE THE LUBRICATION OF OTHER BRANDS, OTHERWISE WILL DAMAGE TO ENGINE .

TYRES

Right tyre pressure will keep the optimal driving stability ,and driving comfortable , the durability of the tyres .

REMARKS;

No proper tyre pressure will give rise to the aberrant arasion of the tyre thread so that cause security accidents . insufficient tyre pressure will cause tyres damaging & wheel rim detached .

The standard of the air pressure of the tyre under the cooling state (TABLE1)

table 1				
s/driving	front wheel:175kpa	rear wheel:200kpa		
d/driving	front wheel:225kpa	rear wheel:225kpa		
tyre specs	front wheel:80/100-18-47p	rear wheel:90/100-18-56p		

before driving , when "cooling tyre", inspect the tyre pressure .inspecting tyre pressure whether has cutting print , nails & other acute matter breaking in . inspecting wheel rim whether has dent print & reduction .iffind any status of the breakage , please go and come to maintenance station (point) repairing & changing.

when tyre thread of in the middle of the tyre come to the following figure ,please change tyres(TABLE 2) table 2

min limitation of the tyre thread depth(mm)				
front wheel	1.5	rear wheel	2	

BEFORE DRIVING, INSPECTING ITEMS

Before driving ,must inspect the motorcycle . the following items only need a few minutes , can save the time of the maintenance failure during driving ,can guarantee the driving security too.

2.check the oil level of the fuel — in the light of the requirement ,inject the fuel , but inspect whether leak oil .

3.before inspecting, the performance of rear brake —— before inspecting, the situation of the movement of rear brake, free stroke is big & small, which should be adjusted.

4.check the tyre — before inspecting, the situation of airpressure of rear wheel and arasion and impairing.

5.check battery electrolyte —— check the liquid level of the electrolyte

6.check the movement of the throttle —— inspect the movement of the throttle , connecting cable and the status of free stroke of the handlebar , when need badly , correct & change.

7.check illumulation and horn — check headlight ,rear light ,position light ,steer-6 ing light,indicator and the performance of the horn whether are good. 8.check the tension of the drive chain ,the lubricated status . if serious abrasion &damage , need change in time .

9.check the operation system of steering ——check the sensitivity and stability of the operation

10.check the front wheel and rear wheel, front and rear shock absorber of the rear fork, suspensive bolt and nut of the engine, etc fasteners.

ENGINE STARTING

WARNING:

No starting the engine in the narrow place so that cause danger No starting the engine when hanging gear,otherwise ,cause equipments and parts damages and accidents

• rotate the fuel switch to "ON"

•insert ignition key into ignition switch ,rotate to "ON"

• tread gearshift pedal ,which makes engine lie in the idle gear,whose indicator "N" flashing

 \bullet be sure to the quantity of the fuel

REMARKS:

MAKING USE OF THE FOOTSTARTING ,NO TREAD THEKICK ROD SO THAT REBOUND AND IMPAIR FEET &DAMAGE THE EQUIPMENTS AND PARTS .AVOID IDLE(SPECIALLY THE HIGH ROTATING SPEED) FOR RE-DUCING THE ABRASION OF THE ENGINE .

IN THE PLACE OF THE SPECIAL LOW TEMPERATURE, BEFORE DRIV-ING, PLEASE ROTATE THE KEY OF THE IGNITION SWITCH TO "OFF", SLIGHTLY OPEN THE THROTTLE, MEANWHILE, USE THE KICK ROD OF THE FEET TREADING MAKES CAMSHAFT MOVE SEVERAL TIMES, LATER OPEN THE IGNITION SWITCH TILL CAN NORMALLY START

FOR ELECTRIC /FOOT STARTING ENGINE, WHICH CAN NOT START AT THE SAME TIME. WHEN CAN NOT START WITH ELECTRIC STARTING WITHIN 5 MINUTES, AFTER 10 SECONDS INTERVALS, USE ELECTRIC STARTING AGAIN PREVENTAGAINST THAT THE BATTERY OVER-DIS-

CHARGE SO THAT DAMAGED.IF ELECTRIC STARTING CAN NOT START, PLEASE USE FOOT STARTING.

BREAK-IN OF THE ENGINE

During driving 0-1000km ,which it is essential phase that motorcycle rotating .avoid engine over-loading

During driving the break-in of 150 km, avoid the throttle opening 1/4 above. after continuing operation an hour , should stopping operation and cooling to 5-10 mins. When driving , should pay attention to shift gears frequently .forbidding to use one gear in a long term.

during 150-500km ,avoid the throttle opening 1/2 above .notes ; anytime no opening completely the throttle.

during 500-1000km, avoid the throttle opening of 3/4 above.

exceeding 1000km ,have no special demands ,but still should avoid opening completely the throttle in a long term

REMARMS: AFTER BREAK-IN ,SHOULD MAINTAIN .WHOSE MAIN PUR-POSE IS THATCOMPENSATESTHE SLIGHT ABRASION OF THE BEGINNING SO THAT COULD OBVIOUSLY LAST THE USING LIFE OF THE ENGINE.

MOTORCYCLE DRIVING (FIG16)

•after driving ,preheat fully the engine



• grasp at the clutch handlebar and make the clutch separate ,tread the gearshift rod entering the frist gear .

•slowly rotate the throttle handlebar .meanwhile slowly loose .the clutch handlebar till the clutch completely combined.

• if need change to the higher gear, first close the throttle and swiftly grasp at the clutch handlebar. move the gearshift rod to the second gear.

• increase throttle, meanwhile slowly let the clutch handlebar go so that can drive normally.

● repeat the above movement so that enter into the higher gear & lower gear . REMARKS: WHEN NOLETTING GO THE CLUTCH AND REDUCE THE THROTTLE ,NO SHIFTING GEAR ,OTHER WISE, WILL CAUSE ENGINE , DRIVE CHAIN AND OTHER ENGINES AND PARTS DAMAGED

BRAKE AND STOPPING OF THE MOTORCYCLE

When need stop ,should close the throttle ,grasp at the handle of the clutch letting go the clutch ,meanwhile evenly use the front and rear brake till completely stop driving.

The motorcycle moves to the blank gear, the switch button of the engine stalling rotate to "off"so that make the engine rotate ,make the switch of the fuel rotate to

"off", stand the bracket and make the motorcycle stop evenly.

Turn the ignition switch to "off", take out the key of the ignition switch

Lock the lock of the head of the motorcycle, take out the key of the ignition switch **REMARKS:**

Slow down the stopping vehicle while must use the front and rear of the brake in order to prevent from side sliding or side turning over ,but independently operate the front and rear brake which will give rise to the swift abrasion and damage of the brake.

Overspeed or in the wet and sliding surface of the road, should avoid braking urgently, otherwise, it would cause the danger of the accidents.

When need slow down ,in the first place ,should reduce the throttle ,gradually use the front and rear brake, which may come to deceleration and stopping .when need brake urgently, first should reset the throttle, and then using decisively the front and rear brake .

On the damp surface of the road where going on the brake is quite difficult: avoid braking urgently and stopping movement .owing to this easily cause the turnover of the motorcycle .when need stop on the damp surface of the road ,should slowly brake so that the vehicle can evenly stop.

When closing near to the zigzag or turning, should close the throttle and use the brake slowing down .otherwise, which has difficulty in controlling that give rise to side sliding and turning over .

On the wet or soft surface of the road , should take note of operation evenly .otherwise, it would be out of control.

When pass by the other vehicles stopping on the roadside, must be careful:owing to inside the drivers perhaps do not see you and open the door of the motorcycle, shelter your advance direction.

damp so slip ,when the vehicles pass by ,should slow down ahead of time and take note of keeping the vertical body ,otherwise may be cause the side sliding of the tyre and out of control.

The grinding slice of the brake may be wet when the motorcycle cleaned. before starting, should check all controlling systems .

No over-loading on the motorcycle, above all no hanging any goods, otherwise it would make the motorcycle lose balance.

INSPECTING AND REPLACEMENT OF THE LUBRICATION (INSPECTING OF THE FUEL LEVEL) (FIG17)

before driving, check the level of the lubrication . the rear of the box of the camshaft has no the ruler of the engine oil ,measuring the level of the lubrication ,which in between the two scales indicated up and down.



*lay the motorcycle down on the ground ,support the bracket ①Oil filler cap/Dipstick take out the ruler of the engine oil ,after cleaning, insert the ② Upper leve mark ruler, and then take out and observe . ③ Lower leve mark

*add to the engine oil of the gasoline of 15w/40-SE up to upper scale, no filling up *resettle the ruler of the engine oil ,inspect whether leaks oil

REMARKS:

WHEN THE ENGINE OIL IS NOT ENOUGH , DRIVING MAY CAUSE EQUIP-MENTS AND PARTS DAMAGED.

(REPLACEMENT OF THE LUBRICATION)

*lay the motorcycle down on the ground ,support the side stand ,start the engine and let it idle a few minutes ,and then unscrew the ruler of the engine oil of the engine and the bottom of the plug of the taking oil, tread and press the kick rod many times ,thoroughly give off the left oil .

*check the gasket of the plug of the taking oil whether is good , if damaged , should change ,and reset the plug of the fuel and screw tightly.

*inject the engine oil of the dictating quantity, start the engine , after rotate many The road rail on the road, steel boardon the building place and channel which are no minutes with idle speed, and then stopping, check the level of the fuel again, but

check whether leaks oil.

REMARKS

DURING THE REPLACEMENT OF THE LUBRICATION, MUST MOVE TO THE BLANK GEAR.NO ADDING TO ANY THE CHEMICAL ADDITION IN THE LUBRICATION.JUNK OIL AND CLEANSER NEVER CAN READILY DUMP, SHOULD HAND OVER THE RELEVANT PROFESSIONAL UNIT TO TREAT. CLEARANCE OF THE ACCUMULATED CARBON

According to the regulations ,regularly clear up the accumulated carbon of the spark plug ,the top of the piston,piston ring and gap ,burning roometc the relevant parts by the professional personnel so that could make the engine burn fully and its state better.

OPTION AND REPLACEMENT OF THE SPARK PLUG (FIG.18)

The spark plug is the important part of the engine ,which must regularly make use of the cylinder of the spark plug dismantling ,check its electrocute and accumulated carbon. The use of the pattern of the spark plug is D7/D8. Fig.18

Dismantle the cap of the spark plug and check its accumulated carbon .if its accumulated carbon is very serious, which

will have an effect on the power of the engine and the performance of the ignition ,replace with the iron brush.

Measure the gap of the electrocute of the spark plug with the rectangle & the ruler of the spark plug should be 0.6-0.8mm.if the gap is incorrect , should adjust to the dictating figure.

When resettle the spark plug with hands screwing to motionless position ,again screw tightly with the cylinder of the spark plug (the new spark plug rotates 1/2 cycles,the old spark plug rotates 1/8-1/4 cycles)

NOTES: THE VARIOUS TYPES OF THE SPARK PLUG WHOSE DURABILITY SCOPE ARE DIFFERENT, CHANGING THE IMPROPER SPARK PLUG WILL CAUSE THE ENGINE NO STARTING EVEN SERIOUS DAMAGE .IF CAN NOT

BUY THE SPARK PLUG OF THIS TYPE, SHOULD CONTACT WITH THE DEAL-ERS OR THE MAINTENANCE STATION, SELECT THE PROPER REPLACE-MENT .WHEN TAKE OUT THE SPARK PLUG, SHOULD PAY ATTENTION TO AVOID PECULIAR OBJECTS PASSING THE HOLE OF THE SPARK PLUG EN-TERING INTO THE CYLINDER, WHICH SPEED UPTHE ABRASION OF THE CYLINDER AND THE PISTON .WHEN RESETTLE THE SPARK PLUG, FOR-BIDDING TO SCREW TIGHTLY SO THAT DAMAGE TO THE THREAD OF THE SPARK PLUG RESETTLINGHOLE OF THE COVER OF THE CYLINDER

WASHING AND RESTALLING OF THE AIR FILTER(FIG19)

After the air filter driving 1000km per hour ,which at least should be cleaned and immersed oil one time .if you drive on the dusty area ,must do much maintenance . in the light of your driving conditions ,our company will help you decide on the schedule of the right maintenance

*take apart the left guard plate

light state of the lubrication.

 $C=0.7\pm0.1$ mm

*take apart the cover of the air cleaner.

*decompose the air cleaner, take out the gauze core of the air filter

*immerse the gauze core of the air filterinto the cleaning solvent ,after cleaning ,make it dry completely .

*immerse the gauze core into the engine oil of the petrol engine of the 15W/40-SE, crowd out over-oil ,and keep the

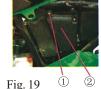
*wash the dust and peculiar objects of the inner and outer surface of the housing of the air cleaner ,and scrub drying .

*refit the air cleaner ,the air cleaner must be good goo.

REMARKS:

IF NO RESETTLING THE GAUZE CORE ,NO STARTING THE ENGINE ,OTH-ERWISE ,WILL CAUSE THE EXCESSIVE ABRASION OF THE PISTON OR THE CYLINDER.

THE GAUZE CORE NEVER CAN BREAK ,OTHERWISE,SHOULD CHANGE. DURING WASHING ,NEVER USE THE METHODS OF THE MIXTURE SO THAT



Screw
 Air cleaner housing

core of the air filter , make it dry comple core into the engine -SE, crowd out over-



THE GAUZE CORE DAMAGED.

WHEN WASHING THE GAUZE CORE, NO USING THE CLEANSER OF THE PETROL OR LOW POINT OF BURNING.

WHEN WASHING, SHOULD AVOID THE AIR CLEANER INWASHING, AT THE SAME TIME, PAY ATTENTION TO THE BALANCE PIPE OF THE CAR-BURETOR CLIPPING THE LEFT SIDE SINK OF THE AIR CLEANER INSIDE, THE BALANCE PIPE NO INRUSHING WATER, PREVENT AGAINST DUST,

SILT BLOCKING THE BALANCE PIPE .

WASHING AND RESTALLING OF THE GAUZE OF THE **THROTTLE SWITCH**

*unscrew the plug of the throttle switch, take out the gauze, after washing, restall and reset and screw tightly the plug.

INSPECTING OF THE LEAKAGE OF THE GAS CHANNEL

Joint of the gas channel should check the leakage according to dictate ,above all ,the joint of the silencer and the engine ,air filter ,carburetor ,intake pipe,if exist the leakage, must maintain & change at once to the relevant parts so that the exhaust enters into directly the atmosphere ,cause environmental pollution.

OPERATION AND CHECKING AND ADJUSTING OF THE

THROTTLE(FIG20)

The free stroke of the throttle handlebar is 2.6mm, if the free stroke exceed this scope, should adjust it.specific method of the adjusting as follows:

*release the locked nut and take out the boot.

*rotate theadjustable nut and adjust the length of the throttle cable

*after gap adjusting ,lock the locked nut ,and trap the boot completely.

REMARKS: after adjusting, check the throttle handlebar whether can restore the 10 Specifications of the drive chain is 10MA

normal position ,rotate the handlebar of the throttleand check whether exists in fiction and the sense of the resistance .

ADJUSTING OF THE IDLE SPEED OF THE CARBURET OR(FIG21)

*starting engine for preheating, can't operate until the temperature goes up

*adjust the screw of the idlespeed, according to clockwise adjusting the idle speed to 1500r/min,rotate the screw and make the idle speedrise ,quite the opposite, according to the counterclockwise.



(1) Throttle stop screw

*when the engine comes to theno idle speed &deceleration ,put the screw into between the middle of the two limitations so that cooperate the mixture of the fuel and the air

*try to rotate, if improperly adjust the idlespeed, in need of the readjusting it. NOTES : THE CARBURETOR BELONGS TO THE CLOSE PARTS, IF HAVE NO EXPERIENCE ENOUGH, NO TAKING APART FREELY.

ADJUSTING OF THE CLUTCH (FIG22)

Adjusting of the clutch should be under the stopping state .the free stroke of the handlebar of the clutch is 10-15mm, if is incorrect, should adjust as follows :

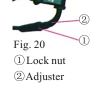
*release the locked nut of lying in the clutch line of the fuel tank below, rotate in or out the adjustable nut till come to the free stroke ,lock the locked nut.

*after adjusting ,starting the engine , make sure that the clutch whether is normal .If the adjusted clutch shows the difficulties of the sliding & hanging gear , and so in need of readjusting till come to the demands.

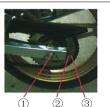
Fig. 22 ① Clutch lever 2 Adjusting nut ③ Lock nut



CHECKING AND ADJUSTING AND LUBRICATING OF THE DRIVE CHAIN (FIG23)



Not only does the adjusting of the drive chain directly have an effect on the life of the drive chain ,but affects the effectivity of the driving and security of the driving , and so must strictly and regularly check and maintain according to the maintenance schedule. Fig.23



(1) rear wheel axle

2 adjustable nut

(ADJUSTING OF THE CHAIN)

check the releasing degree of the chain is 10-15mm, check overtight &over loose which should adjustaccording to the following methods :

(1)release the rear wheel nut ,the adjustablenut of the chain

(2) adjust the nut of the adjustor of the left and right chain and the loosing degree of the adjustable chain

(3)lock the adjustable nut of the chain and the rear wheel nut

NOTES: THE LEFT AND RIGHT ADJUSTOR OF THE CHAIN WHICH MUST ADJUST IT TO THE SAME POSITION OF THE SCALE, MAKE SURE THAT THE FRONT/REAR WHEELARE IN THE SAME SURFACE OF THE CENTER.

(LUBRICATING OF THE CHAIN)

(1)release the clip of the chain and take out the chain, dry up with the cleanser washing the chain wheel and chain .

(2)Rub the lubrication on the chain and refit the chain.

REMARKS :

THE OPENING DIRECTION OF THE CHAIN CLIP OPPOSITES WITH THE DRIVE DIRECTION OF THE CHAIN

IF FIND THE CHAIN &CHAIN WHEEL DAMAGED SERIOUSLY*SERIOUS ABRASION WHICH SHOULD BE CHANGED.

CHECKING OF THE FRONT SHOCKABSORBER

(APPEARANCE CHECKING)

check whether the front/rear shock absorber have bend and reduction etc abnormal circumstances

(OPERATION CHECKING)

grasp at the handlebar of the front brakebraking the front wheel, press the front shock absorber ,up and down observe the restoring several times whether is normal. NOTES: IF FIND THE FRONTSHOCK ABSORBER DAMAGED, PLEASE AT ONCE REPAIR&CHANGE

THE REAR SHOCK ABSORBER CHECKING (FIG24)

Check the rear shock absorber whether leakage ,bend ,reduction etc abnormal circumstances.

Press the rear shock absorber ,up and down observe the restoring several times whether is normal

Spring pre-loading of the rear shock absorber can adjust in the



light of the various loading and driving conditions as the caption, according to "A" direction adjusts the min preloading of the spring, according to "B" direction adjusts the preloading addition of the spring.

CHECKING AND ADJUSTING OF THE FRONT BRAKE (FIG25)

To the disc brake grasp at the handlebar of the front brake ,measure it's the free stroke on the top of the brake handlebar ,whose figure is 10-20mm.when need adjust the free stroke ,rotate the adjustable nut .after adjusted the free stroke ,must make the arc sink of the adjustable nut and the connecting rod overlap .Grasp at the handlebar many times ,and then release it, again rotate the wheel whether is sensitive



Fig.25()① Brake caliper② Brake disc③ Brake main cylinder



(THE FRONT BRAKE CHECKING)

*check the main pump of the brake whether the height of the oil surface of the brake keeps the dictated the bottom line above, otherwise should take apart screw taking out the cover of the main pump ,inject the brake oil into the main pump

*unscrew the bolt ,take out the split pump of the brake and check it whether exceed the limitation of the abrasion .if exceed the limitation of the abrasion ,should change

(THE FRONT BRAKE ADJUSTING)

the free stroke of the handlebar of the front brake is 10-20mm, if the free stroke is incorrect, should adjust as follows:

continuously operate the handlebar many times, grasp at the handlebar of the brake ,take apart the the exhaust cap of the nut of the brake pump, give off the air of the cylinder later swiftly lock the locked the cap of the nut.if can't finish adjusting in a lump, as the above methods repeat till the handlebar of the brake coming to the dictated free stroke.

WARNING: the brake oil should strictly selected as the dictated specifications , never can use the brake oil of the other specifications & the engine oil instead . otherwise maybe influence on the effectivity of the brake , can erode the brake .when injecting the brake oil , avoid mixing into the peculiar objects of the blocking the oil passage . NOTES: IF THE ABOVE METHODS DON'T ADJUST BETTER, PLEASE LOOK FOR OUR PERSONNEL OF MAINTENANCE STATION FOR ADJUSTING .

CHECKING AND ADJUSTING OF THE REAR BRAKE (FIG26)

After checking ,the free stroke of the pedal of the rear brake is 20-30mm, if it is incorrect ,adjust as follows :

After treading the pedal of the rear brake several times ,and then release the rotating wheel of the brake whether can rotate freely.

REMARKS: CHECK THE CIRCUMSTANCES OF THE ABRASION OF THE FIC-TION SLICE, IF THE FICTION SLICE EXCEEDS THE L IMITATION OF THE FIC-TION , PLEASE CHANGE IT .





1 Rr.brake pedal

THE SWITCH OF THE BRAKE LIGHT ADJUSTING (FIG27)

The switch of the front brake light lies in the handlebar of the front brake inside, which produces the brake momentum while turn on the circuit of the brake light, otherwise, which adjusted.

The switch of the rearbrake lies in the rightside of the frame body ,which produces the brake momentum whileturn on the circuit of the brake light ,otherwise,should adjust the adjustable nut of the switch of the rear brake light .if themovement of the switch lag ,rotate the adjustable nut as "A" direction.if the movement of the switch in advance ,rotate the adjustable nut as "B" direction .



Adjusting nut

REMARKS: INDEPENDENTLY OPERATE THE FRONT/REAR BRAKE WHICH CAN TURN ON THE BRAKELIGHT.

MAINTENANCE AND CHANGING OF THE SILENCER

Should according to dictates clearing up the carburetor of the silencer pipe inside , check the silencer pipe inside whether have loosing , breakage & bush coil loosing . If have the above phenomena, should maintain & change

REMARKS: EACH TIME TAKEAPART THE SILENCER, RESETTLING THAT SHOULD USE THE NEW GASKET.

AFTER OPERATING THE ENGINE ,SILENCER AND EXHAUST PIPE ALLARE VERY HOT, SHOULD AVOID BURNING.

THE WORKING PRINCIPLE OF THE TRANSMISSION OF THREE ELEMENTS CATALYSIS (SELECTING PRODUCTS)

Transmission of three elements catalyst which is restalled in the exhausting system of the motorcycle, through catalyst the reaction of the oxidation and deoxiditing, which can obviously fall down"CO", "HC" and "NOX "etc the device of the catalyst and convertation of the emission quantity of the pollution make use of the catalyst controlling the emission of the pollution of the motorcycle, which let the exhaust into the atmosphere, first through the transmission device reacting fully .the catalyst is of the chemical absorbing trait, which increases the speed of the chemical reaction and don't cause the rare matter of the chemical change.during giving off, the reacting objects (e.g "CO", "CH", "NOX") flow to the catalyst, first diffuse inside the micro-hole, absorb on the surface of the catalyst, and then the results (CO2, "12" N2") etc separated again, through the micro-hole diffusing outside, finish the course of the reaction, through the reaction of the oxidation and deoxiditing, the cleaning efficiency of the catalyst will change with the temperature, density and speed of the flowing air.

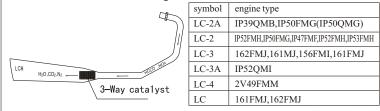
during maintaining ,pay attention to the follow items:

1.three elements of the catalyst must take slightly, no stroking and pressing .forbidding to the pollution of the oil spot and dust .pay attention to keeping the environment of the dry and good ventilation.

2.forbidding to acid liquid, chrome liquid penetrating the exhaust silencers that cause the failure of the catalyst.

3.must use petrol of no "pb".

Notes: three elements of the catalyst belongs to the option products, which there is the type of the product on the silencer marked on the environmental bus with "LC-X"mark. In details see the following table.



PROTECTION OF THE BATTERY (FIG28)

In the light of "maintenance schedule "and "checking that before driving "recounted the interval of the mile inspecting the battery .the height of the electrolyte should keep the marking line of the liquid surface of the standard.if liquid surface is lower ,which properly add to the distillation water .when adding the distillation water ,can't exceed the standard scale ,oth-



Fig. 28

1) Upper level mark
 2) Lower level mark

erwise may be overflow the electrolyte causing the erosion. ⁽²⁾Lower level mark REMARKS:THERE IS THE ELECTROLYTE IN THE BATTERY ,BEOF ERO-SION CHARACTER.IF SULPHUR CONTACTTHE SKIN &EYES WHICH WILL CAUSE THE SERIOUS BURN .PLEASE MUST TAKE THE RELIABLE AND PROTECTIVE MEASURES. KEEP THE BEYONDREACH THE CHILDREN. 13

ELECTROLYTE ,JUNK BATTERY WHICH DEALT WITH AS THE REGULATIONS.NO LITTERING.

WARNING:

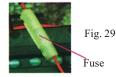
Electrolyte contains sulfur ,which avoids contacting skins &clothes ,if splashing the skins &clothes ,should flush with a plenty of water . serious victim which should send to the hospital .if be careless of drinking ,which should drink a plenty of water &milk ,and then drinking the lotion of the MgO2&vegetable oil .

When the battery electrifying ,which will cause the exloding gas ,which should far away the source of the water under the ventilated place .when restalling the battery , should make sure that the ventilated pipe smooth of the battery .When washing , avoid immersing around the battery.

When the new battery add to liquidhalf an hour till can use, when electric starting, the light of the blank gear becomes dim and can not start for lasting the using life of the battery ,under the low temperature ,please use the foot starting .when the battery comes out the loss electricity, should use the current of the 1A below continuing charging 10-15hours, at the same time ,please check regularly electrolyte whether is the normal scale . in order to guarantee the using life of the battery ,please strictly operate as the brochure of the battery.

THE HANDBOOK OF THE PROTECTOR ABOUT FUSING (FIG29)

When happen the fusing of the circuit & over-loading, whose protective pipe will automatically cut off .at the time , need inspect the circuit , after removing the failure , the insurance pipe of spareparts instead. WARNING:



Check & change the fuse which should close the ignition ,avoid happening the cutoff..

No using the extra fuse & even directly joint the conductor, otherwise, will cause a wide range of the electric system damaged, which may give rise to the fire destruction. **TOOL KITS (FIG30)**

IOOL KIIS(FIG30)

During driving,tool kits which can offer to simply repair, adjust and change the parts etc emergency. the tool box lain down the seat cushion. tools as follows:

(1)screw driver handlebar

(2)stud (3)spark plug wrench

(4)five inch slip-joint pliers(5)8mm×10mm open-ended spanner

(6)12mm×14mm open-ended spanner

(7)13mm×16mm open- ended spanner

(9)allen key5# (10)allen key6# (11) tool bag

MANUAL OF THE BUMPER (SELECT RESTALL)

1.when the motorcycle is the blank gear ,ignition switch is the state of the closing, use the electric starting of the swing-controlling.

2.electric starting with the swing-controlling activates the action of the warm motorcycle .within 2-5mins the motorcycle will automatically stall.

3.after using electric starting, before turning on the ignition switch which will not use the front/rear brake .otherwise the starting engine will operate again.

4. call off driving without the key, be sure that the reliable function of the bumper .

NOTES: the bumper belongs to the option restalling products as per the actual needs selecting.

FAILURE CHECKING AND REPAIRING

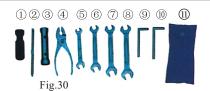
Even if before ex-factory ,passing strictly inspection ,but in the course of the using , which still exists failures to respective vehicle

If your motorcycles come out the failure ,in need of repairing, which at once contact with our maintenance station (point) ,our well-skilled professional personnel who will offer excellent maintenance service for you.

WARNING:

Assembly and parts of this motorcycle etc ,all of which went through special designing .if you are not of the relevant professional knowledge of the motorcycles, please do not take leave to take apartand maintain.

WASHING AND KEEPING (WASHING)



(8)17mm×19mm open-ended spanner

1.before washing ,first check the spark plug and all of the mouth of the injecting oil restalling whether is correct

2.flush the spot and oil print with the hose

3.after washing ,scrub all surfaces with the towel of trim& the soft cloth of absorbing 4.drying and lubricating chain for preventing against rusting.

5.after washing, let the idle speed of the engine rotate several mins REMARKS:

IFTHE PRESSURE OF THE FLUSHING IS TOO BIG TO CAUSE LEAKAGE, WHEEL AXLE, REAR FORK, BRAKE, THE SEAL PARTS OF THE CHANGEAGBLE SPEED AND THE LOOSING OF THE ELECTRIC PARTS &CONSUMPTION.

WHEN WASHING, PREVENTAGAINST THE SILENCER INRUSHING WATER AND THE SPARK PLUG IMMERSING.

(KEEPING)

AFTER WASHING, IF NEED KEEP 60 DAYS & THE LONGER TIME, WHICH SHOULD OPERATE AS FOLLOWS:

1.RELEASE COMPLETELY THE FUEL OF THE FUEL TANK, FUEL PIPE, CAR-BURETOR AND OTHER FUEL PASSAGE.

2.TAKE OFF THE SPARK PLUG WHILE INJECTING THE PROPERLUBRICA-TION OF THE SAE10W/40QE GRADEINTO THES PARKPLUG HOLE.CLOSE THE IGNITION SWITCH, USE THE FOOT KICK ROD MOVE THE CAMSHAFT SEVERAL TIMES AGAIN, WHICH MAKE THE WALL OF THE CYLINDER COVER EVENLY THE LUBRICATION.

3. TAKE APART THE DRIVE CHAIN, WHICH WASHED AND LUBRICATED COMPLETELY.

4.LUBRICATE ALL THE CONTROLLING CABLE

5.put up the frame body with pad, which make the whole body (including tyres) far away from the ground

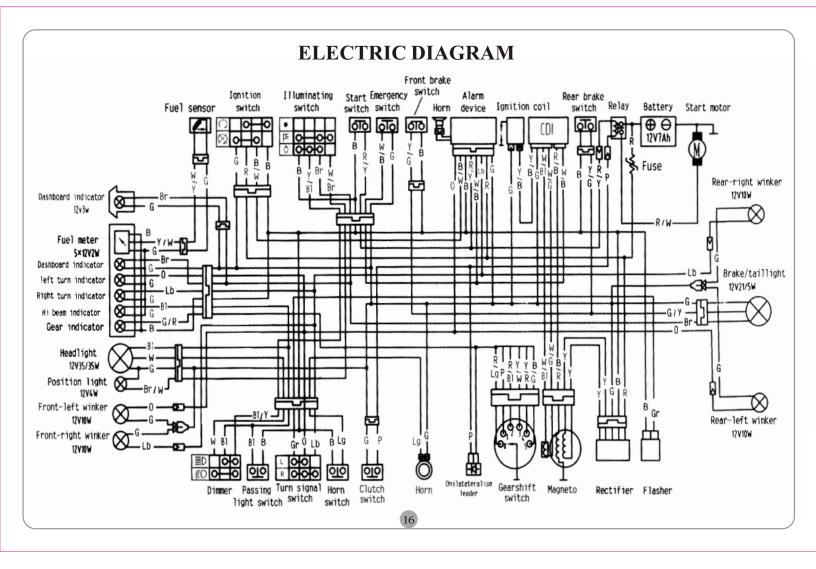
6.use the plastic boot tightening the mouth of the exhaust pipe, which prevent against the damp air entering.

8.take apart the battery ,electrify and keep the drying place and the normal temperature, later electrify every month one time.			ODOMETER READING		
		ITEM	Item	I	4000km
USING AFTER KEEPING	S/N	11 EAVI		First	
1. Take off the cover and clean the motorcycle.			Schedule	1000km	6 mont
2.inspect the voltage of the battery, if the voltage is lower, the battery electrifying	1	fuel passage			1
come to the demands which will be restalled on the frame body	2	petrol filter		1	1
3.remove the anti-rust inside the fuel tank, inject the dictated the fuel	3	throttle operating system		1	1
4. before driving , inspect all contents , and then trying in the spacious place of the	4	carburetor choke	remarks(1)		1
security ,and make sure that the motorcycle can drive normally and safely.	5	air filter			с
MAINTENANCE SCHEDULE	6	spark plug			1
The motorcycle should be maintained as the dictated time .all meanings in the table	7	lubrication	each year	R	per 2.0
as follows:	8	gauze of the lubrication			с
1.inspect, wash, adjust, lubricate and change	9	idle speed		1	1
C.wash, .R.change A.adjust L.lubricate	10	drive chain		1	per 5.0
" "the item maintained by the professional personnel of the maintenance station.if	11	gap of the throttle	each year	1	1
the user has the professional tool ,maintenance material &maintenance ability ,which		brake shoe/abrasion	5	-	
can maintain by yourself. The knowledge of the maintenance can refer to this bro-	12			1	1
chure	13	brake system		1	1
" "for security, this item only can be maintained by the professional personnel of the	14	brake light switch		1	1
dictated maintainance station.	15	headlight adjusting light		1	1
REMARKS;	16	clutch		1	1
1.SHOULD OFTEN CLEAN THE MOTORCYCLE IN THE DUSTYAREA DRIV-	17	side stand			1
ING	18	suspension		1	1
2. WHEN THE SPEEDOMETER READINGS EXCEED THE HIGHEST FIGURE	19	bolt ,nut ,fastenner		1	1
OF THE DICTATED, WHOSE MAINTENANCE SCHEDULE REPEATEDAS THE	20	wheel/spoke		1	1
INTERVAL OF THE DICTATED SPEEDOMETER .		front fork bearing		-	1
MAINTENANCE SCHEDULE AS FOLLOWS	21	from fork bearing		1	

7.under the atmosphere of damp and salt ,should cover a ply of thin protecting tar on the surface of the outer metal

MAINTENANCE SCHEDULE

		ODOMETER READING or PERIOD (Note 2)				
S/N	ITEM	Item	First	4000km or	8000km or	12000km or
		Schedule	1000km	6 months	12 months	18 m onths
1	fuel passage			1	1	1
2	petrol filter		1	1	1	1
3	throttle operating system		1	1	1	1
4	carburetor choke	remarks(1)		1	1	1
5	air filter			с	с	с
6	spark plug			1	1	1
7	lubrication	each year	R	per 2.000km change each time		ach time
8	gauze of the lubrication			с	с	с
9	idle speed		1	1	1	1
10	drive chain			per 5.000km change each time		ach time
11	gap of the throttle	each year	1	1	1	1
12	brake shoe/abrasion		1	1	1	1
13	brake system		1	1	1	1
14	brake light switch		1	1	1	1
15	headlight adjusting light		1	1	1	1
16	clutch		1	1	1	1
17	side stand			1	1	1
18	suspension		1	1	1	1
19	bolt ,nut ,fastenner		1	1	1	1
20	wheel/spoke		1	1	1	1
21	front fork bearing		1			1



SPECIFICATIONS

Length × width × height	2080mm× 680mm×1130mm	max power	12.5kw/8500r/min		
Wheelbase	1330mm	max torque	15N.m/7000r/min		
Clearance ground	160mm	volume of the cylinder	196.9ml		
Dry weight	140kg	starting method	electric/foot		
Steeringbar turning angle	41°	driving method	chain drive		
Max loading	150kg	changing speed ratio			
Max speed	100km/h	junior grade	3.091		
Grade ability(°)	$\geqslant 20$	first gear	2.5454		
Specs and pressure of the front whe	el 80/100-18(4PR) 225KPa	second gear	1.6875		
Specs and pressure of the rear whee	el 100/90-18(6PR)225KPa	third gear	1.28		
Economic consumption	≤2.3L/100km	fourth gear	1.0417		
brake type(front/rear)	disc/drum	fifth gear	0.9032		
ignition method	CDI perpetuation AC ignition	sixth gear	0.8148		
drive chain	10MA	end gear	3.538		
gap of the spark plug	0.6-0.8mm	fuel number	RQ-93#		
volume of the oil tank	13L	lubrication number	15W/40-SE		
the type number of the spark plug	D7/D8	magneto	perpetuation AC electromotor		
lubrication volume	1.1L	headlight	12V35W/35W		
volume of the spare oil tank	2.0L	steering light	12V10W		
engine type sir	ngle cylinder, water-cooling, four stroke	rear brake light/tail light	12V5W/21W		
engine model	163FML	horn specs	12V		
bore ×stroke	63.5×62.2	meter light specs	12V3W		
compression ratio	9.0:1	protector	15A		
standard power	11.5kw/8500r/min	battery specs	12V-9Ah		
17					

17