

快乐人生路 处处洛嘉情

洛嘉摩托

LUOJIAMOTO

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适用车型: LJ110-16

使用说明书

SERVICE MANUAL

洛阳北方企业集团有限公司

LUOYANG NORTHERN ENTERPRISES GROUP CO.,LTD

MAIN TECHNICAL DATA

Item		Data or type	Item	Data or type
Dimension	Length(mm)	1940	Engine	LJ152FMH-2
	Width(mm)	715	Bore * stroke(mm)	52.4×49.5
	Height(mm)	1230	Cylinder capacity(ml)	107
	Wheel base(mm)	1225	Max power(Kw/r/min)	5.4(8500)
	Ground clearance(mm)	115	Max torque(N.m/r/min)	7.2(5500)
Loading	Dry weight(kg)	98	Idle speed(r/min)	1500
	The max load(kg)	150	Gap of spark plug(mm)	0.6~0.7
			Gap of choke (mm)(cold state)	air in 0.07 air out 0.07
tyre	Front wheel	2.5-17-6PR	Electric element	
	Rear wheel	2.75-17-6PR	Fuse	15A
Capability	Max speed(km/h)	≥80	Battery	12V-7AH
	Economical fuel Consumption	1.4(L/100KM)	Head light	12V-35W/35W
	Climbing ability	≥16°	Taillight / braking light	12V-5W/21W
Ignition		CDI	Turning indicator light	12V-10W
Tank capacity(L)		3.8	Instrument and indicator light	12V-3W
Lubrication capacity(L)		0.9	semaphore indicator light	12V-3W
Spark plug	LG; D8TC; NGK; D7EA、D8EA			
Fuel	90#以上 GB17930-1999			
lubrication	SD15W/40 GB11121-1995			

Remark: All data are obtained under lab condition according to relevant standard

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▲Safety is the first all the time. Before driving, you should know the relevant knowledge.

SAFETY DRIVING RULE

1.before starting, you should oversee the motorcycle in case of accident and breaking parts.

2.the driver should pass the test organized by the traffic administration and acquire the licence.

Don't lend the motorcycle to the person without the licence.

3.to avoid hurt by other motors. you should pay attention as follows:

- Wear the bright and marked clothes.

- Don't drive too closely to the other motors, and avoid driving out of others' eyeshot.

- Never force to occupy the lane and overpass the other motors.

4.obey the traffic rules strictly

- Over-speed can cause accidents, so the speed can't surpass the limit in different condition.

- When turning or shifting the lane, the turning light should be on to warn walkers and other drivers.

- Don't drive the motorcycle to do the dangerous movement.

5.you should drive carefully at the crossing or the entrance of park.

6.when driving, you should hold the handle firmly and put your feet on the steps. The rider should grasp the rear grip or the driver.

protecting measures

1.To insure the safety, the driver and the rider should wear protecting suit, the helmet, glasses, gloves and other articles.

reduce pollution.

(7).keep fuel supply system and CDI system in good condition, the motorcycle can save oil and decrease pollution.

(8).when driving the motorcycle, take care, the fuel can be saved and the pollution can be reduce.

①when starting in cold state. The engine should be pre-heated, then you can drive the motorcycle.

②when driving, operating throttle should be steady, don't be impetuous, you 'd better drive at the same speed, never twist the throttle too often at will.

③When needing to stop, you should slow down, don't brake suddenly.

(9).after the motorcycle has been maintained and adjusted properly to pass the exhaust test, it will reach the best. You may feel the speed-up power inadequate, but in fact it can save fuel, reduce pollution. you shouldn't adjust the motorcycle back to its original state so as not to waste fuel and abrase the engine, the gain can't make up the lost.

In order to keep the motorcycle in good performance and reduce the exhaust gas and save the gasoline, the maintenance must be done in the day's work.

(1).Clean or replace the air-filter.

(2).Adjust or replace the carburettor, if the carburettor isn't adjusted well, it will cause the ratio of oil and air too thick or too thin, which will lead to inadequate burning and wasting oil.

The reasons that carburettor isn't adjusted well are as follows:

①the oil level in carburettor is too high, and it should be adjusted to stipulated level.

②the choke can't work well, and it should be adjusted to its normal condition.

③the carburettor gets to aging, which causes the oil supply and the boiloff unformal resulting in fuel waste. It should be replaced.

(3).clean, adjust or replace of a new spark plug.

(4).when adding the lubrication, the level shouldn't surpass the upper mark..

(5). Ignition time should be exact, when it appears violent spark, the fuel can burn adequately, which make the engine more powerful and save the oil, reduce the exhaust gas.C.D.I can avoid adjusting.

(6).if the engine aging or abrasion result in wasting oil and lubrication, it should be repaired in time. Then it can save oil and

2.When driving or stopping, the muffler has a high temperature.

To avoid being burnt, you should wear boot or the suits to shield legs.

3.Don't wear loosen clothes. It may hook the gear- shift pedal, kick starter arm, step, the rear braking pedal or the wheel and causes the dangers.

reequip the motorcycle

Reequipping the motorcycle or exchanging the original sets at will can't insure the safety. The user must obey the rules for using motorcycles.

the loading

The loading distribution has the standard. if the loading isn't well-balanced, the performance will be affected.

you should pay attention as follows:

1.the goods must be fixed firmly to ensure the barycentre doesn't diverge when driving. the goods barycentre should get close to the motorcycle barycentre, the goods on each side should almost have same weight. All goods can't hinder the operating.

2.the tire pressure should fit the loading.

3.after loading, check to see if the goods are lost.

4.don't hang things on the steer handle, the absorber or fender.

5.never surpass the loading limit.

Assemble the annex

When assembling the other company's annex, you should pay attention as follows:

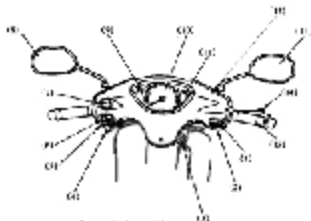
1.After assembling, you can't change the journey of absorber, the light position, and the steer angle.

2.Don't block the intake and ventilation to let the air pass to make sure of the air needed in radiation and engine operation.

3.The annex shouldn't hinder the operating. Otherwise. It isn't good for you to face different conditions.

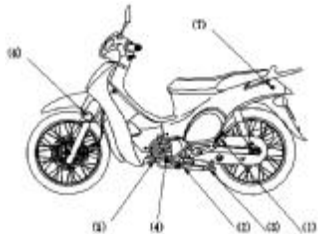
4.Don't assemble the overpowered light and circuit component. Otherwise, they will cause the fuse melt or the engine power lowered.

PARTS FUNCTION

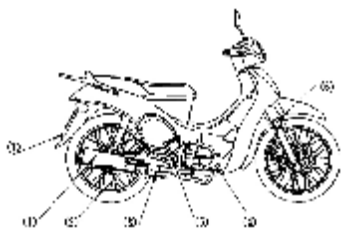


- (11) fuel indicator
- (13) mirror comp. R.
- (15) grip comp., throttle

- (1)Headlight switch (2)Electric button
- (3)Ignition switch (4)choke lever
- (5) horn (6) switch unit winker
- (7) switch unit dimmer
- (8) mirror comp. L.
- (9) gear position indicator
- (10) speedometer comp.
- (12) cylinder assy .,RR. master
- (14) lever.R.steering handle



- (1)holder, pillion step (2) side stand
- (3) main stand (4) bar comp,step
- (5) pedal ,gear change
- (6) side reflector
- (7) seat lock



- (1)muffler comp.,
- (2)holder,pillion step
- (3) main stand
- (4) pedal comp., brake
- (5) arm assy., kick starter
- (6) side reflector (7) rear reflector

2.1 Start the engine, make it warm –up to the normal working temperature.

2.2 Rest the motorcycle on its main support. Shift gear to neutral position.

2.3 Turn the screw of idle speed to adjust the idle speed until a satisfied speed is obtained.

2.4 You can use the method of twisting the throttle-control handlebar suddenly to keep the engine working for 3-5 minutes to check the stability of the idle speed.

3.The adjusting method of exhaust gas

3.1 When the “CO” exhausted exceed the standard, turn the mixed ratio screw to 1/8—1/2 circle clockwise, then adjust the screw of idle speed to guarantee the engine works steady with stipulated idle speed

3.2 When the “HC” exhausted exceed the standard, unscrew the mixed ratio screw to 1/8-1/2 circle counter-clockwise and guarantee the engine works steady with stipulated idle speed.

3.3 When the “HC” and the “CO” exhausted exceed the standard at the same time, first, use 3.1 method to adjust the “CO” into stipulated range, then use 3.2 method to adjust the “HC” into stipulated range.

4.During 600km, the adjusting of the motorcycle according to term 1.4, 1.5, 2, 3.

【The method of reducing air pollution and saving the gasoline】

The main cause that the motorcycle produce the exhaust gas (“CO” and “HC”) is inadequacy of gasoline burning. If gasoline don't burn adequately, then the gasoline must be wasteful.

than 4 months.

2.recharge the battery and assemble it top the motorcycle.

3.drain off the anti-rust liquid in the fuel tank then refilled the tank fully.

4.you should carry out the inspection prior to driving the motorcycle and make a test driving on a safety at low speed.

THE ADJUSTMENT OF IDLE SPEED

1.Check whether the under mentioned parts is normal

1.1 Whether the side electrode has coated with carbon,

Whether the gap of the side electrode of the spark plug is normal,

1.2 Whether the cylinder head and piston is worn out or has coated with carbon.

1.3 Whether the gap of the piston ring accords with the standard, if not, replace it.

1.4 If the fuel path is blocked, dredge it.

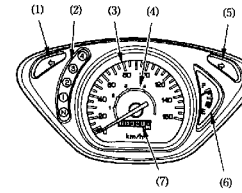
1.5 When the air cleaner is dusty. If It is the paper element, use the high-pressure air blow away the dust; if it is foam element, use the high burning point lubrication clean it and let it dry, then immerge it into the lubrication, take it out, squeeze out the extra lubrication.

1.6 If the carburettor fasten screw or the engine fasten bolt is loosen, you should screw it in case of leaking.

The torque of the carburettor fasten screw can't exceed 6 N.m.

2.Adjust the idle speed to stated range

SPEEDOMETER AND SIGNAL INDICATOR LIGHTS



(1).L.turning indicator: when the switch is put to this position, the left turning signal light should be winking.

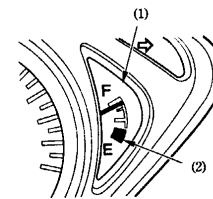
(2).ear position indicator: display the gear numeral.

(3).speedometer comp. indicate the instantaneous velocity of driving.

(4).gear display: indicate the velocity of each gear.

(5).R. turning indicator: when the switch is put to this position, the left turning signal light should be winking.

(6).fuel indicate: indicate the amount of fuel in the tank.



(1).When the speedometer hand point to the position "F", it shows that there is 3.8L gasoline in tank.

(2).When the speedometer hand point to the position "E", it indicates that gasoline should be fed.

ADJUSTMENT OF IMPORTANT PARTS

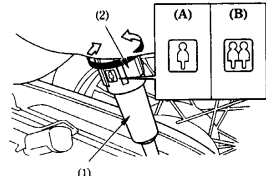
Adjustment of RR. Cushion

According to different driving mode and the load, there are two kinds of adjustment .

RR. Cushion can be adjusted manually.

‘Single man’ mark signifies usual statement.

‘Double men’ mark signifies load statement.



L. & R. cushion should be adjusted at the same degree to make balance of the load.

Brake system

! Caution:

To avoid accident, the maintenance, repairing and necessary adjustment are required.

【adjustment of FR. Brake】

LJ110-16 is equipped with brake plate driven by liquid oil for the front wheel, with the abrasion of the brake –work pieces .the surface level of the liquid oil will be lowed, although you do not have effect way to refill the oil, it is necessary for you to check the level as often as you can in order to avoid accidents. If the movement distance of the brake handle bar is too far than, this manual limits ,maybe there is some air in the system yourself or ask the service point to give you a hand.

! Caution:

Keep the eyes and the skin off the liquid oil, or else it can cause pain or inflammation. If splashed by liquid oil, please rinse out and see a doctor immediately.

Keep the children off the liquid oil.

When the level is below the signal ‘LOWER’, brake oil should

long term. You should check the main parts carefully prior to stopping the motorcycle, in order to avoid unexpected accidents.

1.replace the lubricating oil.

2.lubricating the driven chain.

3.drain off the fuel in the carburettor fuel tank completely and close the fuel cock, then put some antirust liquid into the fuel tank and close the cover of the fuel tank.

The fuel in the carburettor must be drained off fully if your motorcycle is to be stopped for more than a month..

! Cautions:

The fuel is combustible, so fill the fuel in a well- ventilated area after shutting the engine. In the refilling station or fuel storage place, no smoking and lighting of flame or spark ix permitted

4.take out the spark plug and fill one spoon (15-20ml) of pure lubricating oil in the cylinder then step the kick starter for several times, and finally assemble the spark plug.

5.keep the battery in a cool and well-ventilated place and recharge the battery once a month is recommended.

6.clean the motorcycle and coat the colour –fix agent on the coloured parts then coating the lubricating oil on the rusty parts.

7.the motorcycle should be inflated with the stipulated pressure and support it to keep its double wheels from the ground.

8.put on the cover of the motorcycle.

【RESUMPTION USE OF THE MOTORCYCLE】

1.Remove the cover of the motorcycle and clean it, the lubricating oil should be replace if it has been placed in the motorcycle for more

cleaned and dried out.

3. check the brake assy again and time prior to driving the motorcycle and repair and adjust it, if necessary.

! Cautions:

The braking performance may be reduced after the washing of the motorcycle. therefore, do not drive the motorcycle at once so as to ensure a safety driving and prevention from traffic accidents.

Clean the battery end

- (1) if there is dirt on the end, please take out and clean it.
- (2) when the end is eroded and covered with white powder, use the warm-water to brush it
- (3) when the end is eroded deeply, take out electrode wire and use steel brush or sand paper to clean it
- (4) after cleaning, connect it again, paste some grease on the end.

! Cautions:

When taking out the electrode wire, put off the ignition switch. You should take out the cathode wire first.

When assembling, connect the anode wire first.

Make sure locked nut or screw isn't loosened.

Don't open the battery cover in case the dirt comes in when cleaning

When the battery doesn't work for a long time, to avoid creepage, please take out the battery and electricize it, put it in the well-aeration, weak-light place. If not, take out the cathode wire.

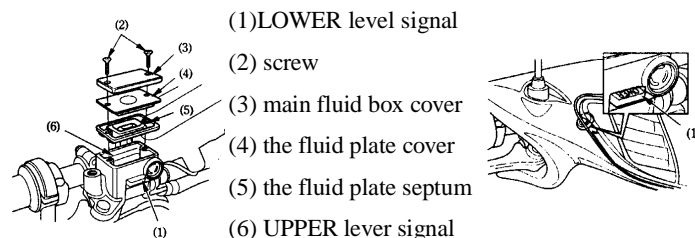
CHECK MOTORCYCLE

Pay close attention to keep your motorcycle away from moisture, rain and sunlight if your motorcycle is not in use for a

should be be refilled. Unscrew (2), open the oil box cover (3) and the oil container cover (4) and (5). Add oil of model DOT3 or DOT5 (brake fluid) up to the signal 'UPPER'. Then reassemble the equipment you've just dismantle conversely.

OTHER RELEVANT INSPECTION:

Make sure whether the liquid is enough. Check the liquid table and the other relevant attachments to assure availability.

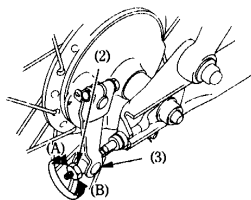
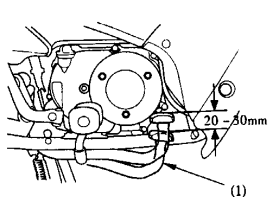


【adjustment of the rear brake】

1. Rest the motorcycle on its main support.
2. Measure the free play of rear brake pedal from the beginning of braking to the end of it, it should be 20—30mm.
3. To adjusting the free play, turn the adjusting nut 2 of the rear brake.
4. Check whether the rear wheel can be turned freely after adjusting.

Remark:

- If above-mention ways are not up to the demand, please send the motorcycle to our service point.
- Make sure adjusting nut (2) and rear brake-pin (3) are at the right position.

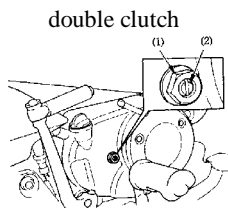


(1) rear braking pedal (2) adjusting nut (3) rear brake—arm pin

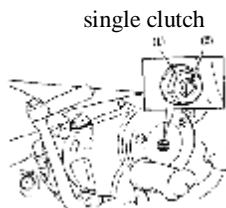
Adjustment of the clutch

1. Unscrew the lock nut (1).
2. Turn the adjusting bolt (2) in a circle (never turn excessively) clockwise. Then turn the adjusting nut slowly counter clockwise until it is tight.
3. From this position, turn the adjusting nut 1/8 circle counter clockwise and then tighten the lock nut.
4. After the adjustment of the clutch is over, start the engine to check whether the clutch is in good condition. If the clutch is slipping or difficult to put into a gear after adjusting, you must adjust the clutch again according to aforesaid procedures.

Remark: If above-mentioned ways are not up to the demand, please send the motorcycle to our service point.



(1) lock nut



(2) adjusting bolt

will be damaged by the large pressure inside the battery.

When filling in the electrolyte, smoking and firing should be avoided. The gas reeking from the battery is easy to explode.

Pay attention to keep the electrolyte from your skin or eyes, because it contains the sulphuric acid.

If the electrolyte touch your skin, wash the water immediately.

If the electrolyte splashes your eyes, you should wash 15 minutes immediately and go to the hospital.

If you drink the electrolyte by mistake, you should drink the plant oil immediately and go to the hospital.

The electrolyte should be kept in a place far from the children.

CLEANING

The motorcycle should be cleaned periodically so as to prevent its colour from slipping and its helpful to check whether there is any oil leakage or damage to the motorcycle.

! CAUTIONS:

The parts of the motorcycle will be damaged if the water pressure is too high when cleaning the motorcycle. therefore, try best to avoid using a high pressure water to spray the following parts:

Wheel hubs. Exhaust hole. Fuel tank and the parts under the seat . Lock and ignition switch. Tools .

1. The motorcycle should be washed again after it is cleaned, in order to wash out the accumulated dust and avoid it from becoming rusty.

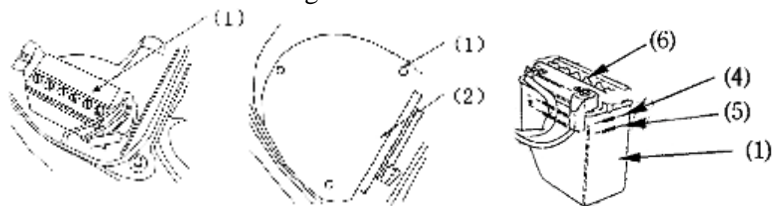
The plastic parts of the motorcycle should be cleaned by cloth or sponge with detergent and rinsed clean with water

2. lubricating the driving chain and keeping the engine running at idle speed for a few minutes after the motorcycle is

If the electrolyte is not sufficient, the terminal will be damaged. If the electrolyte consumption is too quick, then the current intensity is reduced and this may create other electric problems.

ELECTROLYTE:

The battery is located inside luggage box, under the cover of the battery. Unclench the bolt, take off the cover and battery to check the fluid level. The fluid level should be between the highest-level and the lowest-level. If the fluid level is below the lower mark, you should open the filling cap of battery, and fill in the distilled water to the highest-level mark.



Inject the distilled water

fill the distilled water

! CAUTIONS:

When checking the electrolyte or filling in the distilled water, you should check whether the outlet hole and outlet pipe is well connected.

Only distilled water can be used in a battery, tap water is not allowed to use.

Never overfill the distilled water when refilling, otherwise, the fluid will flow into the oil tank and the engine and cause corrosion.

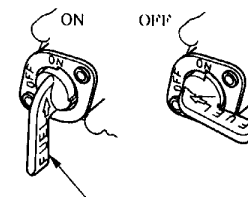
Insert the outlet pipe as shown in the diagram and pay close attention to avoid blocking the outlet hole, otherwise, the battery

Fuel system

【Fuel cock】

The rotary-valve type fuel cock of the motorcycle is located on the left of the carburettor.

OFF When the fuel cock is put to 'OFF' position, the fuel can't flow into the carburettor. After stopping the motorcycle, the cock should be at the position of 'OFF'.



(1) fuel cock

ON At this position, the fuel will flow into the carburettor from the tank.

! CAUTION:

The fuel cock should be properly so as to avoid being forced to stop when driving.

To prevent the fuel from coming into contact with any heated parts of engine.

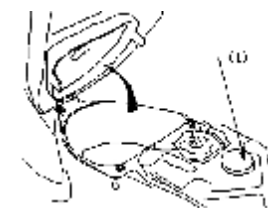
Octane-number: 90 or above. GB484-1993

【Fuel tank】

The fuel tank is located under the seat. To open the cap of fuel tank, open the seat and turn the cap of fuel tank counter clockwise.

Capacity: 3.8L

After the refilling of the fuel, turn the cap of the tank clockwise until it is tight.



! Caution:

The fuel is combustible, so the fuel should be refilled in the well-ventilated area after the engine has been shut down. In the gas station, smoking and using mobile telephone is not allowed. Do not overfill the tank and the cap of tank should be tightened after fuel-filling.

Due to the gasoline's flammability it should not be spilt when fuel-filling. Therefore, you must check the related parts and keep them free from any gasoline before starting the engine.

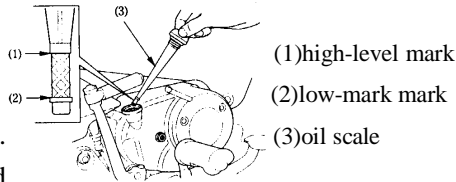
Do not inhale or suck the vapour of the gasoline and keep your skin away from the gasoline.

【lubricating oil】

Inspection of lubricating oil level.

The lubricating oil level should be checked everyday before driving. The lubricating oil should be kept between high-level (1) and low-level (2) marks.

1. Starting the engine and keeping it running in idle speed for 2-3minutes.



2. Stopping the engine and

keeping the motorcycle in place vertically.

3. After 2-3minutes, remove oil plug, and then insert the oil scale into the oil hole after the oil scale is wiped. The oil level must be kept between the high-level and low-level marks.

4. If necessary, refilling the oil to the upper mark, the oil should be not allowed to overfill.

5. Tighten the oil plug again and check for any leakage.

6. Lubricating oil grade: SD10W/30 OR SD15W/40, GB/T11121-1995.

9

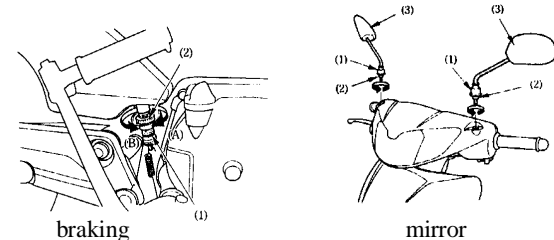
When washing, don't wash wires directly or brush them. When there is too much dirt, please clean it with clean cloths.

Adjustment of the braking light

Check whether the switch (1) of the braking light located on the right frame cover is in good condition.

The switch of the braking light can be adjusted by the adjusting nut(2), the procedures as follows:

If the lighting time of the braking light is to be faster, you should turn the adjusting nut forwards direction "A"; If the times to be delayed, you should turn the adjusting nut towards direction "B".

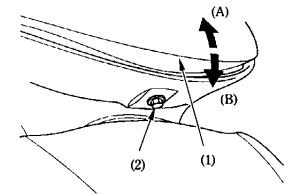


dismantling of the mirror

- ① remove upwards the rubber tube, take off the adjust nut.
- ② screw off the mirror

the adjustment of the high-low beam

- ① loosen the adjustment bolt
- ② Adjust the headlight
- ③ Screw down the adjustment bolt.



BATTERY

easy to worn out when driving on dusty, humid road). The brake disc should be checked according to schedule of service and maintenance.

Check the thickness of the abrasions plate and the brake disc.

If the pointers are in line with the indicating symbol, then the brake disc should be replaced by the new ones.

Replacement of the fuse

If the fuse often burnt, there must be a short circuit or electric overload. Please check and replace it in time.

! Cautions:

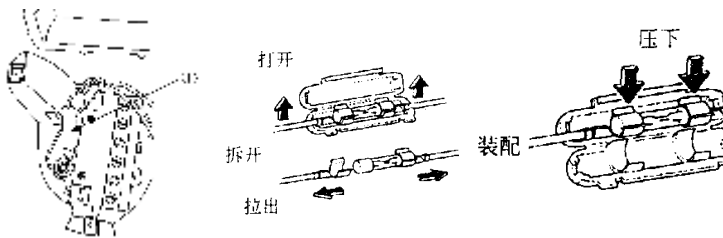
Before replacing the fuse, the key ignition switch must be turned off.

Never use the fuse with a higher rating current. Otherwise, it will cause a serious accident or fire on the electric system. sometimes, it will cause the engine to stop due to the sudden lowering of the engine power.

The fuse tube (1) is located near the battery cover.

Fuse standard : 10 A

Open the fuse device and pull the grip towards both sides to remove the fuse. Finally replace by new fuse and then put the grip into fuse device.



Check the wire cable rubble cover

To protect the wire cable, please often check.

! CAUTIONS:

Never start the engine when the lubricating oil is insufficient, otherwise ,the engine may be damaged. The fuel must be refilled as soon as possible if the fuel level is too low.

TYRE

Proper tyre pressure will provide you longer tread life and comfort in riding.

The tyre should be checked frequently when it is in cold state, if necessary, adjust it properly according to the table below.

	Front	Rear
Size of tyre	2.50-17-6PR	2.75-17-6PR
Pressure of tire in cold state	250 Kpa	280 Kpa

Check whether there are nails or other sharp objects on the tyre

USE METHOD OF MAIN PARTS

IGNITION

The ignition switch (1) is located on the lower right of the handlebar.

Position of the key	Function	State of the key
	Handler bar can't steer, the engine and electric device can't work	The key can be withdrawn
	Engine and electric device can't work	The key can be withdrawn
	Engine can be started and the electric device are functioning	The key can't be withdrawn
	The engine can't work, headlight and position lamp, taillight are functioning	The key can be withdrawn



(1) Ignition

RIGHT SWITCH STEERING HANDLEBAR

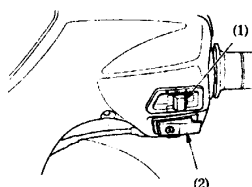
Headlight switch (1): There are three positions for the headlight.

When the switch is put to “•” position, the headlight, the taillight and odometer-light are on.

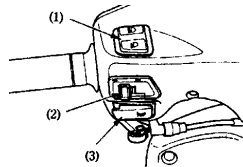
When the switch is put to “☞☜” position, the pilot light and the taillight are on, the headlight is off.

When the switch is put to “☞☜” position, the headlight and the taillight are off.

Starting button (2): Just press this button, and you'll start the engine.



Right switch steering handlebar



left switch steering handlebar

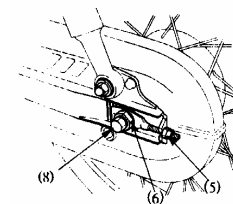
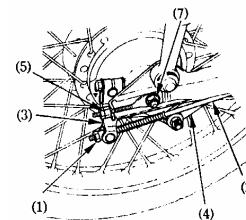
LEFT SWITCH STEERING HANDLEBAR

Beam switch (1): “☞☜” Hi beam light is on, “☞☜” Low beam light is on.

Switch of turning signal light (2):

Try braking several times after the assembly of the front wheel is over.

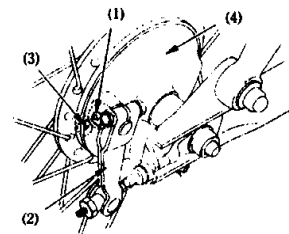
Check whether the front wheel can be turned freely.



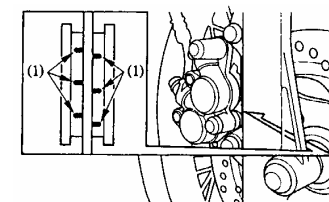
REAR BRAKE

The worn-out of the rear brake shoes will be displayed by the indicating mark. The detailed procedures as follows:

When using the brake, the pointer (located on the braking arm) will move toward the worn-out indicating symbol (located on the braking disc). If the pointers are in line with the indicating symbol, then the brake shoes on the rear wheel should be replaced by new ones.



rear brake



front brake

FRONT BRAKE

The abrasions of the front brake depend on the using of motorcycle, the driving and the road (in general, the brake disc is

dismantling.

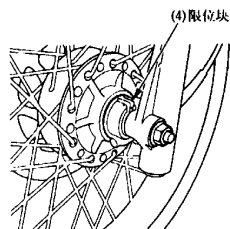
Threading the front shaft through the wheel hole and the hole of the front shock absorber

Pay attention to fixing of the protrusion (4) on the right shock absorber into the groove besides the front wheel hub.

Tighten the nut of the wheel shaft. The torque of the wheel shaft should be 49 N.m.

Try braking several times after the assembly of the front wheel is over.

Check whether the front wheel can be turned freely.



【DISMANTLING OF THE FRONT WHEEL】

Rest the motorcycle on its main support.

Dismantle the adjusting nut (1) of the rear brake and remove the braking lever (2) from the braking arm (3).

Take off the rear braking lever.

Unscrew the adjusting nut (5) of the chain.

Take out the rear shaft nut (6) and rear shaft (7).

Remove the rear wheel.

【ASSEMBLING OF THE REAR WHEEL】

The rear wheel can be assembled in reverse form after dismantling.

Tighten the nut according with standard of torque.

The torque of the wheel shaft should be 49N.m.

Adjust the brake and the chain.

When the switch is put to ‘←’ position, the left turning signal light is on, signalling left turning.

When the switch is put to ‘→’ position, the right turning signal light is on, signalling right turning.

After turning, the switch should turn back to middle position.

HORN BUTTON (3): Pressing the horn button, the horn will be activated.

HELMET LOCK

After parking the motorcycle, open the seat and put the helmet on the helmet hook (1), and then lock the seat.

! Caution:
The helmet hook is used for hanging of the helmet when the motorcycle has stopped, so the helmet is not allowed to be left on the hook when driving as a safety measure.



Helmet hooks



Seat lock

SEAT LOCK

The seat lock (1) is located on the lower left behind the seat.

To open the seat. Insert the key (2) into the key hole, and turn it clockwise.

For safety driving, the seat must be locked prior to the driving of the motorcycle. To lock the seat put down the seat and press the rear of the seat until it is locked with a sound of “crack”.

DOCUMENT PACKAGE

The document bag is located in the luggage box under the seat.

The manual and other documents are located in the document bag.

When wash the motorcycle, you should avoid water inflow.

DRIVING

INSPECTION BEFORE DRIVING

The pre-driving inspection must be performed, otherwise, the motorcycle may be heavily damaged or result in an accidents. Before starting the engine daily, you must check the motorcycle for a few minutes, but also ensure a safety driving.

1.check the lubricating oil level and refill as required, then check for any leakage.

2.check the fuel level, refill the fuel in the tank as required, and then check for any leakage.

3.check the front and rear brakes and adjust the free play if necessary. The reliability of the brake cable should be ensured.

4.check the front and the rear tyre and pressure.

5.check the tension of the driven chain and its performance.

6.check the whether the twistable throttle-control handbar can be easily turned from fully open position to the fully close position, and check whether the cable is stable.

7.check whether the headlight , taillight, turning light, brake light, horn indicator light are all in good condition.

8.check the fluid level of electrolyte.

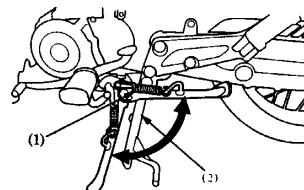
absorber must be tight.

3.check whether there is any loosening phenomenon the front and rear shock absorbers.

4.check whether all any nuts or any bolts have been tightened.

SIDE SUPPORT

Check the spring and its sensitivity and check whether it is in good condition. In case the side support can not work, you should clean it and fill the lubricating oil on its rotating parts



(1) side support

(2) main support

REPLACE TYRE

DISMANTLING OF THE FRONT WHEEL

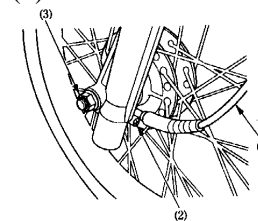
1.Put a supporting block below the engine to support the motorcycle and keep the front wheel from the ground.

2.Take off the cable of the odometer (1).

3.Loosen the adjusting nut and pull out the braking cable.

4.Dismantle the front shaft nut (3).

5.Pull out the front wheel shaft to remove the front wheel.



(1) odometer (2) bolt (3) front shaft nut

【ASSEMBLING OF THE FRONT WHEEL】

The front wheel can be assembled in reverse form after

Take off the drive chain to clean and lubrication when it is very dirty.

1. Shut down the engine, carefully take out the elastic lock sheets of the chain(1) and pull out the chain.

2. Clean the chain with kerosene and dry it out. Check whether its chain is worn out. A new one should be replaced if the rollers and other parts are worn out.

3. Check whether the sprocket is worn out and replace by new ones, if necessary.

4. Lubricating the chain.

5. When assembling the chain on to the sprocket, the elastic lock sheets of the chain should be assembled properly, the closing end should be turned along the wheel.

6. Adjusting the tension of the driving chain and the free play of the rear brake.

INSPECT FRONT AND REAR SHOCK ABSORBER ASSY

1. Check whether the parts of the front shock absorber are completed and press hard on the front shock absorber to check whether it is in good condition after holding the front braking handlebar. The front shock absorber should move smoothly without any leakage.

2. Check whether the parts of the rear shock absorber are complete, rest the motorcycle on its main support, and press hard on the rear shock absorber towards the rear wheel. The rear shock

ENGINE STARTING

! Cautions:

Don't start the engine in a narrow place with poor ventilation, exhaust gas can be harmful to you health.

Never start the engine when the gear is engaged, the engine will be damaged.

PREPARATION BEFORE STARTING THE ENGINE

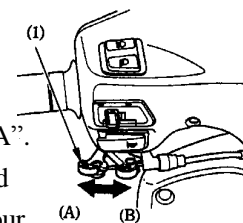
1. The gear change pedal should be kept in nature position, and put the fuel cock to position "ON".

2. Put the ignition to "O" position.

SATARTING THE COLD ENGINE

1. put the choke level(1) to position "A".

2. Turn the throttle (1/8-1/4 of all), and speedily step down the kick starter with your right foot, then lift up quickly.



3. After starting the engine, the engine should keep in a low rotate speed, until the motorcycle start smoothly. Then turn the choke lever to the original position.

! Caution:

Not step down the kick starter when the engine is operating, otherwise, the engine will be damaged

【ELECTRIC START】

Turn back the throttle to the original position, pressing the starting button until engine the engine begin to operate.

REMARK:

Pressing button shouldn't exceed 5 seconds, there is at least a

10 seconds interval to restarting.

STARTING THE HEAT ENGINE

The starting heat engine is the same method as the cold, but not open the choke.

Break –in of the motorcycle

During driving 1000km, the engine should be kept from overloading, the driving speed in any gear should be kept within 80% of the max-speed, fully-open of the throttle-control should be avoided, and to not always use the same gear or driving speed for a long time. The speed should be kept within 30km/h within 500km, from 500 to 1000km, the speed should kept within 50km/h. After driving 500km and 1000km, maintenance should be done. Ensure its good performance and prolong its service life.

Driving

! Cautions:

Before driving, you should study regulations for safety

1. Once the warm up of the engine is over, the motorcycle can be used.
2. Keep the engine in the idle speed and then step down the change gear pedal with tiptoe to shift the gear.
3. Step down the gear change pedal with heel, higher gear can shift lower gear.
4. Loosing the gun when braking.

【ADJUSTMENT】

If necessary, please adjust the driven chain as follows:

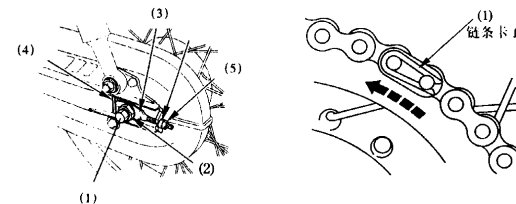
1. Rest the motorcycle on its main support, shut down the engine and put the shift lever to the neutral position.
 2. Loosen the rear shaft nut.
 3. First, turn the adjusting nuts of the chain s on both left and right, so as to adjust the tensions of the chain. The adjusting symbols on both sides must be in accordance with the symbols on the plate.
- Remark :

When the rear- shaft is moved to the farthest, a new chain should be replaced if the drive chain is too loose due to it being worn out.

4. Tighten the lock nut and rear –shaft nut. The torque of lock nut and rear –shaft nut should be 35N.m ~ 50N.m separately.
5. Repeatedly check the tension of the drive chain.
6. The free play of the rear braking pedal will be influenced when changing the position of the rear wheel and adjusting the tension of the chain. Therefore, you should check the free play of rear braking pedal and adjusting it, if necessary.

【LUBRICATION OF THE CHAIN】

Lubrication the connecting parts of the chain (such as chain plate, rollers, sleeve and others) with lubrication oil .



2. Turn the screw (1) of idle speed to adjust the idle until a satisfied speed is obtained.

Standard idle speed:

1400 ± 140 rpm (at the neutral position) neutral.

DRIVEN CHAIN

The service and the drive chain depends on a good lubrication and a proper adjustment. Improper maintenance will result in earlier wears and damages.

The checking of the drive chain should be put on the check contents before the driving of the motorcycle especially when driving in a dusty area or the motorcycle is used frequently.

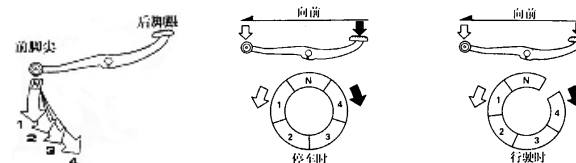
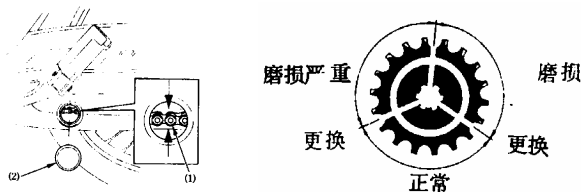
1. Rest the motorcycle on its main support, shut down the engine and put the shift lever to the neutral position.

2. Remove the cap of check hole (2) on the lower. Move the driving chain up or down by hand and its allowed moving is 15-20mm

3. Turn the rear wheel to check chain. Adding the engine oil or lubricating oil on drive chain in proper quantity, if necessary.

4. Check whether the sprocket are worn out.

5. In case of the chain or teeth are worn seriously, replace with new chain together with the used sprocket is not allowed, otherwise, it will make the new chain wear out fast.



(N) Neutral position (1) 1st gear (2) 2nd gear (3) 3rd gear (4) 4th gear

Shifting gear

This model has two ways to change gear, namely at still state and at moving state. When it is at still state, the 4th gear can be changed to the Neutral Position directly. But at moving state, it couldn't.

Close the throttle-control before shifting every time.

The shifting pedal should be stepped down slightly reaching its proper position.

When driving, your foot shouldn't rest on the shifting gearing pedal so as to avoid the clutch from being damaged by careless shifting.

The brake

1. After shifting the gear into lower gear, apply both the front and rear brakes.

2. When decelerating, always apply both the front and rear brakes at the same time.

! Cautions:

Avoid using solely the front or rear brake in an emergency-braking. Otherwise, the braking performance of the brake will be reduced. A hard-braking will damage the tyres and make the motorcycle hard to control.


A decelerating or braking should be made prior to turning, otherwise, it makes the motorcycle hard to control.

Pay close attention to driving and the use of the brakes when driving or turning on a slippery road or in rainy weather, for it easily makes the motorcycle hard to control.

A low-speed gear should be shifted to when driving on a steep slope road so as to avoid using the brakes continuously. Otherwise, the brake disc will be heated up and the braking efficiency will be reduced.

Your foot and hand should not be on the braking pedal when riding the motorcycle. Otherwise, it makes the brake wears out fast. A long-time using of brake when riding the motorcycle will make the brake disc overheating and damage the brake.

Stopping of the motorcycle

1. After stopping the motorcycle, set the shifting pedal to a neutral position and turn the key to “” position. Then withdraw the key from the key hole.

2. To use the main support supports the motorcycle securely.

! Cautions:

The motorcycle should be placed on a hard surface so as to prevent it from falling.

In case of the motorcycle is to be stopped on a slope, the steering handlebar should be kept on a high position in order to prevent the support from sliding.

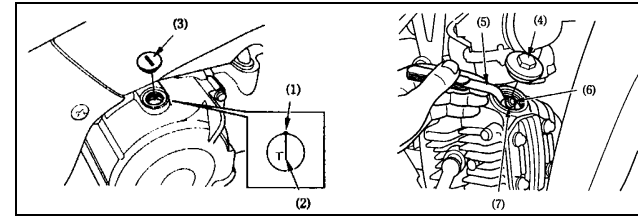
Others

1. Check whether the data register correctly according to stipulation.

2. Put the motorcycle in garage which can be locked.

3. Use the lock of good quality to make sure of more safety.

4. Fill your name, address, Telephone NO. in the manual, and put it together with the motorcycle.

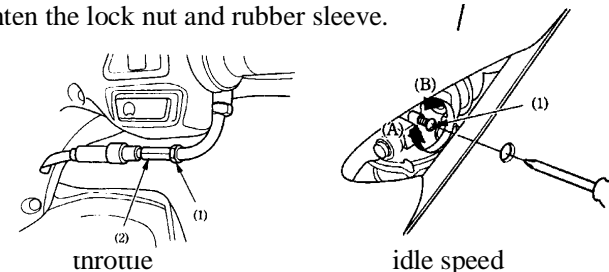


THROTTLE

1. Check whether the twistable throttle control handlebar can be agilely turned from the fully open position. All controls and connecting parts should be kept in good condition.

2. Check and adjust the effective rotation of throttle. Free journey is 2-6 mm.

Adjustment: loosen the lock nut (1) and turn it properly. Turn the adjusting nut (2) until the throttle control handlebar can be turned freely and the throttle can be opened properly. Finally tighten the lock nut and rubber sleeve.



IDLE SPEED

Warming up the cold engine or drive the motorcycle for ten minutes prior to adjusting accurately the idle speed.

1. Rest the motorcycle on its main support. Start the engine and put the gear to neutral position.

The choke gap should be checked or adjusted when the engine is in a cold state, the procedures are as follows :

(1)Take off the plate on the left side.

(2)Take off the caps for adjusting the hole and check hole on the left and the upper of the magnetic motor cover h then remove two choke covers.

(3)Insert the T- lever into the adjusting hole on the left magnetic motor cover and fix on nut of the rotor of the magnetic motor, turn the rotor clockwise until mark T is in line with the symbol of the engine. (It can be found from the check hole on the upper part of magnetic motor cover) slightly shake the rocket-arm, If the rocket-arm is loose (gap exists), the position of compressed stroke. If the rocket-arm is too tight, you should turn the wheel 360° clockwise, and then make the mark "T" in line with the symbol of the engine. Insert the thickness gauge to check the gap of the adjusting screw and choke lever.

STANDARD GAP FOR CHOKE

Air intake: 0.05 mm exhaust hole: 0.05 mm

(4)When making an adjusting, firstly unscrew the lock nut (7) and turn the adjusting screw (6) until there is slight resistance when the thickness gauge is inserted. After the adjustment is completed, screw to tighten the lock nut and check the choke gap. Finally cover the caps of choke, adjusting hole and check hole securely.

Name_____

Address_____

Telephone NO._____

SERVICE AND MAINTANCE

MAINTENANCE

If you face any problem with your motorcycle at any time , please contact the technician of our service center to repair it, for not only do they have a vast experience in repairing and maintenance but also the structure of your motorcycle. we will provide our best service for our complete materials, you can repair it yourself.

In order to keep your motorcycle in good condition, the maintenance and adjustment must be done in accordance with the periodic maintenance schedule provided by our company. Any special requirements or suggestions are welcome. Please contact our R & D dept, or our agents.

【MAINTENANCE】

! Notice

If accident occurs, for example bump. You should check the steer handle, brake cable, the engine and other important parts. Don't drive the motorcycle with malfunction, or it will cause danger. The important parts should be checked and maintained by service center, for example oil tank, shock absorber, steer handle, etc. then it is easy to check out the hidden troubles completely.

Before checking, stop the engine, and park he motorcycle on the plain ground.

When repairing, you should use the parts applied by our company or parts of the same quality. Poor quality parts will damage the motorcycle.

Marked items should be maintained by the service technician of our service center. If you are a qualified mechanic and have specific tools and materials, you can repair it by yourself referring to the instruction manual.

Marked items should only be maintained by the service technician of our service center for the safety reasons.

Remark :

The air filter must be checked and washed frequently, especially when driving in dusty areas.

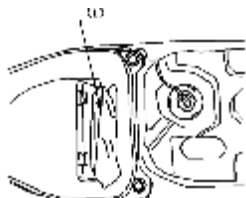
When the mileage record exceeds the maximum, maintenance should be carried out according to the mileage stipulated on above schedule (during the break – in period) intervally.

TOOLS

The tools (1) are placed in a tool kit located under the seat.

The tools can be used perform simple repairs.

- Wrench 8*10mm
- Wrench 12*13mm
- spark plug socket wrench
- Wrench 14*17mm
- screw drive
- Plier
- handle



MARK OF MOTORCYCLE

The driver should remember the number of the engine and frame of the motorcycle in order to register or replace the parts.

Please remember the two numbers to be referred.

The frame NO. (1) is marked on the back of frame under the seat.

off the plug base. Unscrew the spark plug with the specific wrench of the tool kit with the motorcycle.

3.Check whether the spark plug electrode is worn out, whether the side electrode has melted or coated with carbon. if you find the plug worn out or the insulator broken, or has fallen off, replace the new spark plug and eliminate carbon deposits and dust on plug.

4.Check the gap of the side electrode (2) of spark plug with the thickness gauge, and then adjust the gap to 0.6-0.7mm.

5.After inserting the casket into the spark plug base, you must thread the new spark plug in by hand in order to prevent cross threading, and finally tighten it with the specific socket wrench. (new plug must be tighten at 1/2 circle and the used plug should be 1/8-1/4 circle).

6.Reassemble the cap of the spark plug.

! CAUTIONS:

The spark plug must be assembled properly, otherwise, it will cause air leakage on the block of the spark plug and its temperature will rise and finally cause damage to the engine.

Never use the spark plug with incorrect heating value, otherwise, it will cause heavy damage to the engine.

ADJUSTMENT OF CHOKE GAP

When the gap of the choke is too large, noise will be heard; when the gap is too small or there is no gap, it will obstruct the opening and closing of the choke, corrode the choke and reduce the engine power. Therefore, the choke gap must be checked frequently.

! Cautions:

Because the lubricating oil is at a high temperature after the stopping of the motorcycle, you must pay close attention to your hands to avoid scald when draining off the oil.

Don't dump the oil at will in order to avoid polluting the environment.

If the lubricating oil touches your skin, wash out at once, otherwise they will be harmful to your skin.

Spark plug

Recommended spark plugs

Japanese type:

Ordinary type: NGK: C7HSA C7HSB

ND: U22FS-U

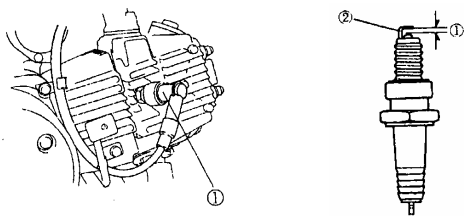
Cold type(under 5°C): NGK: CR6HSA

ND: U20FS-U

Long-time high-speed type: NGK: C8HSA

ND: U24FS-U

Chinese type: 1136, 1137 or F7



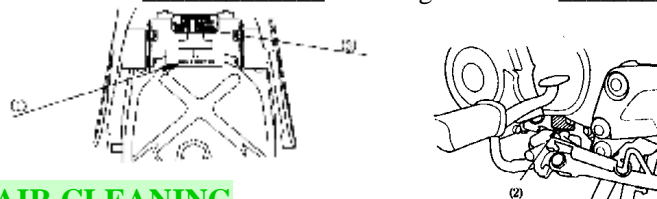
【INSPECTION AND REPLACEMENT OF SPARK PLUG】

- 1.Take off the right shield.
- 2.Take off the spark plug cap to clean the dust and deposits

The engine NO. (2) is marked left lower part of tank case.

Nameplate (3)is riveted on the back of frame under the seat.

Frame NO.: _____. Engine NO. : _____.



AIR CLEANING

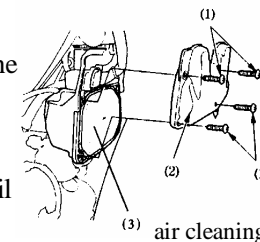
The air filter must be maintained periodically, especially when driving in a dusty area.

1.Unscrew the bolt (1), take off the cap (2).

2.Take out the filter element (3).

3.Clean the filter with a highpoint oil and try it out.

4.Assemble the air filter element and the relevant parts to the position.

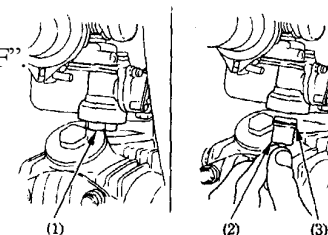


Fuel filter

Fuel filter is located in fuel switch. Too much dust massed in fuel filter will block the fuel circulation. So the fuel filter should be kept cleaning.

1.Turn the fuel to position "OFF"

2.Loosen the draining bolt, and the fuel in carburetor drained into the proper vessel.



! Caution

Because the fuel is flammable, stopping the engine and draining the fuel should be done in a place with good ventilation. Smoking and lighting is not allowed in the process of draining or in the place of oil storage.

3. Loosen the cover of the fuel filter (1), then take out the filter net and clean it with cleanser.

! Caution

Because the fuel is flammable, fuel is permitted to clean the filter

4. Replace the new filter net, the filter, then assemble it in the fuel switch, and screw up the cover of filter. torque: 4N.m.

5. After assembling, turn the fuel switch to position "ON", and check whether the fuel switch leak.

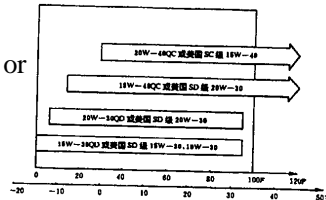
Lubricating oil

The lubricating oil used for the motorcycle is the gasoline Engine oil as stipulated in SD10W/30, SD15W/40, GBT11121-1995.

The ordinary oil, vegetable oil or crude oil are not allowed to be used for the motorcycle.

Because the viscosity of the lubricating oil depends on driving environment and temperature conditions, care should be taken in selecting the grade and brand of the oil.

Different brand and grades are suitable for different temperatures shown in the below diagram.



【Replacement of the lubricating】

The quality of the lubricating oil is the main factor which influences the quality of the engine. Therefore, the lubricating oil must be renewed in according with the maintenance schedule.

Renew the lubricating oil according to steps as follows:

(1) Rest the motorcycle vertically after the engine stalling.

(2) Open the oil cap to take out the oil plug and then drain off the oil completely.

(3) Step down the kick starter time and again in order to drain off the oil.

(4) Check whether each seal washer and oil plug to ensure that they are in good condition and tighten them.

(5) Refill the crank case with approx 0.9 L of new oil. Screw the oil plug tightly.

(6) Start the engine and let it run idle for 2-3 minutes. Then stop the engine, and check if the oil level reaches the proper marks of the oil scale. check for any leakages also.

REMARK:

You should use the lubrication suitable for environment.

