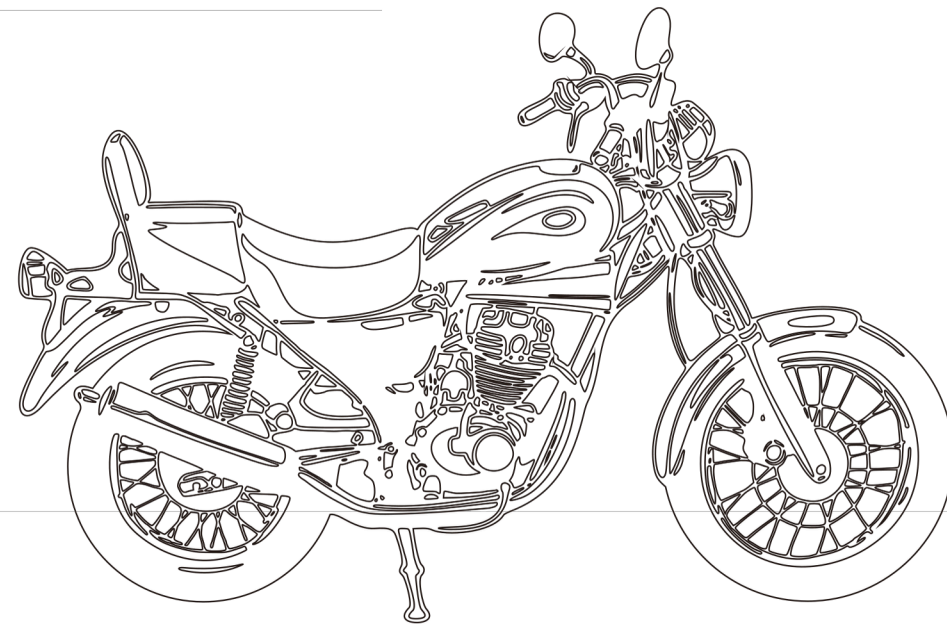




MOTORCYCLE GENERAL SPECIFICATION



TEASTING ACCURATE ENGINE, ENJOYING TECHNOLOGY AGE

ADVICE OF OPERATION

Want your beloved motorcycle goes her best? Kindly please join our complete periodical testing system. You are suggested to take your motorcycle to the nearest appointed afte-sale station for inspection when you finished 300 km's drive after your purchase. Also, you'd better take it for inspection once every 1,000 km's drive after that.

PREFACE

Thank you for choosing our Motorcycles. All of our products are designed for you by high techniques and advanced equipments, which could provide you with comfortable ride, sturdiness and durability, as well as safe driving. It will bring more conveniences to your study and life.

Please fully read this manual before your first driving. It summarizes the the correct maintenance methods and will decrease the failure rate and extend the service lifetime of the motorcycle.

Wish you a good trip on our motorcycle!

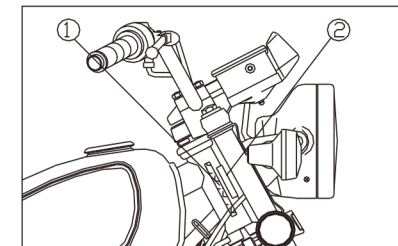
IDENTIFICATION

The frame series number and engine number are used for the vehicle registration and the Maintenance guarantcc.

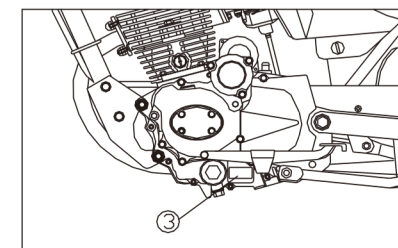
Write down the numbers for reference:

1.Frame series number: _____

2.Enginer series number: _____



1.Frame series number 2 .Nameplate



3.Engineer series number

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1. Daily Inspection

Inspection items		Inspection points
Engine oil		Oil is within limits level or not? (1.0L)
Gasoline		Fuel enough or not? (Don't mix it with oil)
Braking system	Front wheel	The front brake is in good order or not? (The moving clearance of the brake is within 20-30mm)
	Rear wheel	The rear brake is in good order or not? (The moving clearance of the brake is within 20-30mm)
Clutch assay		The clutch assay is in good order or not? (The moving clearance of the clutch is within 10-20mm)
Driving chain		The driving chain is tightened rightly?
Battery		The battery liquid is within the limits level or not?
Tires	Front wheel	Air-pressure of the tire is enough or not? (175kpa)
	Rear wheel	Air-pressure of the tire is enough or not? (225kpa)
Steering handlebar		The steering handlebar is turned smoothly or not?
Instrument indicators rear view mirrors		The performance of the indicators is sensitive or not? The brightness of the indicator is enough or not? Can you see the things behind you clearly from the rear view mirrors
Tightening for the main components		Screws and nuts are tightened or not?

2. Periodical Maintenance List

Order	Mainitenance items and time	New Vehicle 300/1000 km	Periodical maintenance			
			Evevy month	Every 3 month	Half a year	Each year
1	Engine oil	R(300km)	Change the oil every 1000km			
2	Braking device and cable	I	I			
3	The action of font/rear braking	I				
4	Clutch assay	I		I		
5	Lamping/electric device/instrument	I	I			
6	Steering column bearings and handlebars stabilization	I		I		
7	Fuel cock and fuel through pipe	I			I	
8	Gasoline filter	I			I	R
9	Throttle valve cable	I	I			
10	Carburator	I		C	I	
11	Air filter element	I		I		R
12	Spark plug	I		I		

13	Normal ignition	I				
14	Battery	I				
15	Valve clearance	I			I	
16	Oil filter	C			C	
17	Centrifugal oil filter					C
18	Drive chain and sprocket	I&L	I&L			
19	Front shock absorber					R
20	Front/rear suspending system	I			I	
21	Standing support/side support and spring	I			I	
22	Tire	I	I			
23	All bolts nuts cable connectors	I	I			

The above table is under the condition of 1000-1500 km' drive each month.

I-inspection, cleaning, adjustment, or exchange (if necessary)

R-exchange C-cleaning L-lubrication

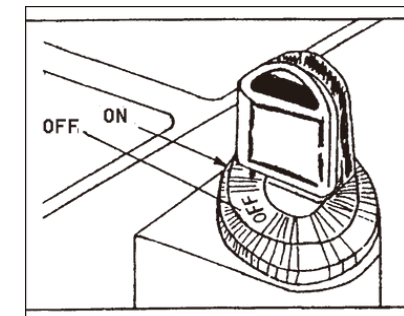
Note: Please frequently clean the air-filter when driving on sandy roads or in serious polluted areas in order to extend the service lifetime of the engine.

3.Operating instructions for the components

☆ Ignition switch

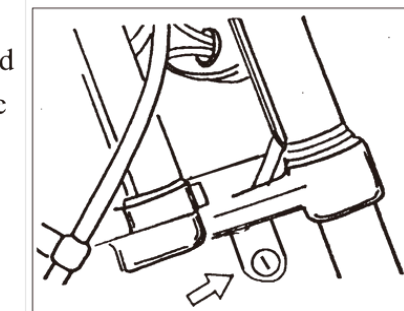
OFF circuit is closed, engine can't be started, key can be taken out

ON circuit is in connection, engine can be started, key can't be taken out



☆ Vehicle security anti-thief key locking device

First you must turn the steering column to the left first, and then put the key into the keyhole, rotate it clockwise, then the steering column is locked.



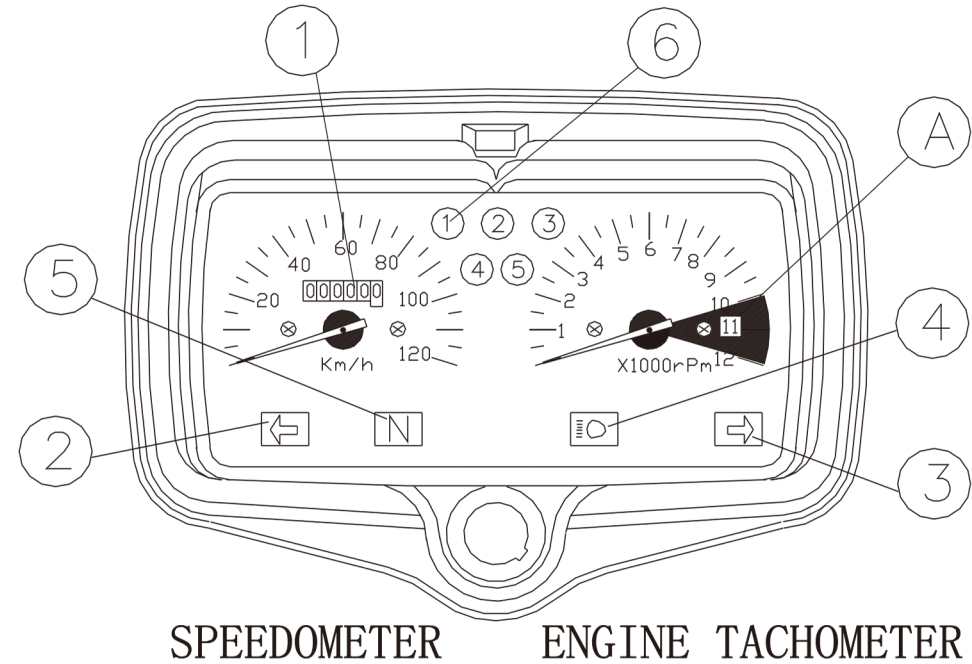
☆**Speedometer**

The speed unit of the vehicle is km/h

☆**Engine tachometer**

The engine tachometer indicates the engine rotations with r/min as unit.

- ①Odometer: the counting device of the odometer will indicate the total mileage of the vehicle running, with r/min as unit.
- ②Left direction light: when the left direction lights are switched on, the orange indicator will flash.
- ③Right direction light: when the right direction lights are switched on, the orange indicator will flash.
- ④H-light indicator: when H-light is in use, the indicator will be light on.
- ⑤Neutral gear light: when the gear is put into the neutral gear, the light will be on.
- ⑥Gear's position indicator: point out the gear's situation.
- ⑦Red alarm section: Don't run in red alarm section (9500-12000)r/min for a long time, although this speed is acceptable for a short time



☆Fuel cock

The fuel cock is located under the left side of the fuel tank.

“●” : Fuel supply stop

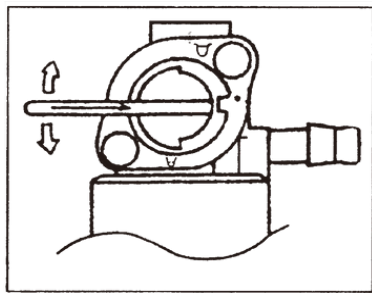
“☞” Fuel supply in use

“☛” reserved fuel supply(please refuel at once)

Note:

① Only 90# or 97# gasoline can be used for this kind of vehicle.

② Before driving your new vehicle. Please clean the fuel tank with gasoline. When the tank is filled up with gasoline, please rotate the fuel cock to the position “☞”, when the fuel is used out, please rotate the fuel cock to the position “☛”. When the fuel cock turn to “☛”, the vehicle could also run for a certain time.



Note:

When the fuel cock turned to “☛”, there is only 2 liters's gasoline left, you need to refill. If you want to disassemble the tank, you must rotate the fuel cock to the position “●”, in this way, the fuel through pipe will be blocked and the gasoline can't run out of the tank

☆Right Handle Bar Switch Assy (Other Model)

① Engine start button

Press it to start the engine.

② Surpassing light switch

Push the switch, the direction lamps on, remind the vehicle before you to notice surpassing.

③ Headlamp button

Push it to the position “●”, headlamp, tail lamps, instrument lamp, position lamp go out.

Push it to the position “☞” position lamp, instrument lamp, tail lamp on

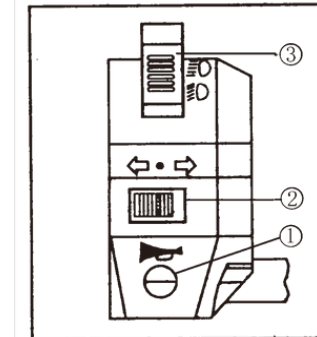
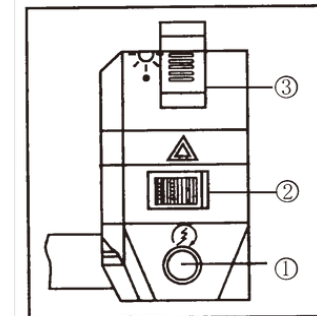
Push it to the position “☛” headlamp, position lamp, instrument lamp, tail lamp on

☆Left Handle Bar Switch Assy (Other model)

① Horn button



Press it, the horn sounds.

② Direction button



Push it to the position “→” the R-light, the indication lamp on the instrument on. Push it to the position “←” the L-light on, push it to middle the direction lamps off

③Dim button

Push it to the position “”, the H-light, the indication lamp and the instrument on. Push it to the position “”, the L-light on.

Note:

If you want to change the line when you are driving, please turn on the direction lamps for signaling, and after having changed line and turned direction, you must turn off the lights.


☆**Engine Start Button and Method of Transiently Accelerating**

Engine start button (attached star motor, which could bring you easy start.)

- 1.This button is used to start the engine .
- 2.Before starting, you must check the transmission box in order to see whether the gear in the neutral gear position.

If being in neural gear—press the engine star button, the engine can be started immediately.

If being in gear--- engine can’ t be started, in this case, first pull the clutch control lever back, and then press the engine start button, the engine will be started at once.

- 1.Do not press the engine start button for a consecutive time of 5 seconds.
- 2.Before starting, make sure that the engine stop button is on the position “” 。

☆**Method of transient acceleration:**

During driving, if you want to overtake, just slow down the vehicle for one gear first, and then speed up to overtake .

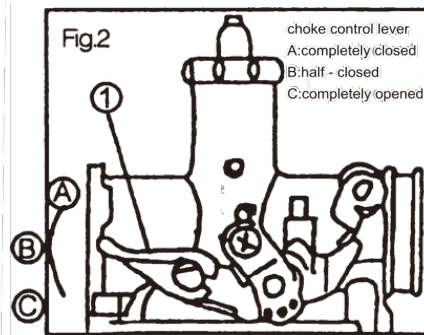
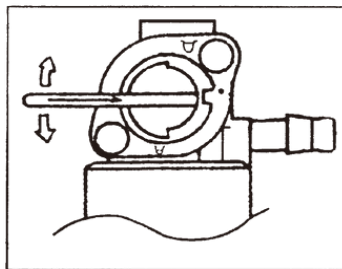
The 5 th gear the 4 rd gear	Below 70km/h
The 4 th gear the 3 rd gear	Below 50km/h
The 3 rd gear the 2 nd gear	Below 30km/h
The 2 nd gear the 1 st gear	Below 20km/h

If the vehicle is running at a high speed, it's not suitable to transiently accelerate again to avoid the the risk of over running of the engine and reducing its service life.

4.Engine Start And Begin To Drive

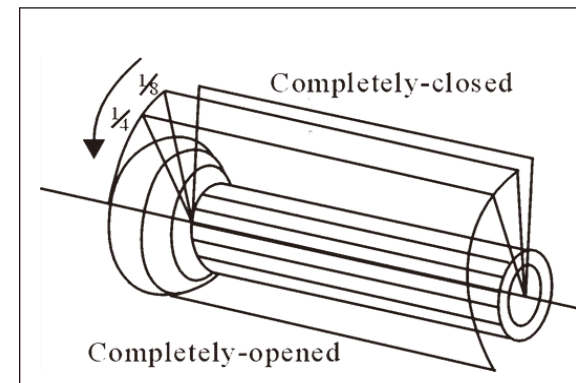
☆Engine start

1. Before starting, please check the storage of fuel and oil is enough or not, moreover you' d better start the engine in a well- ventilated place.
2. Turn the fuel cock to the position “ \cup ” (fig1)
3. Put the key into the master switch, and then turn it to the position “on” (to set up the electric circuit of the motorcycle)
4. Put the choke lever of the carburetor to the closed position “A” (fig 2)
5. Turn the throttle valve sleeve to the position of $1/8$ - $1/4$, and then kick the engine start lever to start the engine, when the engine begin to operate, turn the choke lever back to the half-closed position “B”
6. After starting, warm up your vehicle for 2-3 minutes, reset the choke to a completely - opened position. “C” .
- 7.After starting don't let it run transiently. It is good for engine protection and fuel saving.



☆Begin to Drive

1. Before driving, please check the front/rear Brakes and the air pressure of the tires.
2. Please refer the speed of the gear according to the right diagram.
3. Please drive in the lower gear at the beginning.
4. Please do not drive at a speed of more than 60km/h and 6,000r/min within 1,000km in order to protect the service life of the engine of your new vehicle.



Speech	20	40	60	80	100	120	140
The 1st gear	[Bar from 0 to 20]						
The 2ND Gear	[Bar from 20 to 40]						
The 3RD Gear	[Bar from 40 to 60]						
The 4TH Gear	[Bar from 60 to 80]						
The 5 TH Gear	[Bar from 80 to 100]						

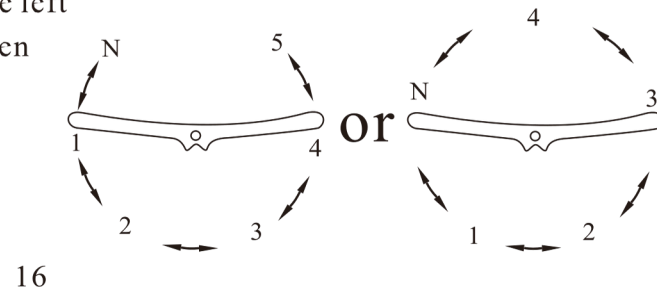
5. Operation Instruction For The Transmission Box

The transmission box is a left-foot operated, four-gear cycle or five-gear cycle and synchrony-spiral gearbox with easy operation. When driving in a heavy traffic area if you need to

Overcome a slope or turn, you must change the gear into a lower one before you feel the engine difficult to run, When driving on a downhill road, you also must drive in a lower speed gear to keep safe and avoid braking the vehicle so often.

The 5 th gear the 4 rd gear	Below 70km/h
The 4 th gear the 3 rd gear	Below 50km/h
The 3 rd gear the 2 nd gear	Below 30km/h
The 2 nd gear the 1 st gear	Below 20km/h

When changing the gear please draw back the clutch control cable and put the transmission box control pedal which on the left side of the vehicle to a right position and then loose the clutch gradually.



6. Main Points Of Slope Way Driving

☆ Uphill-road driving

The vehicle can overcome gentle slope at high-speed gear but it's necessary to change the gear into lower one to overcome the steep or for heavy driving

☆ Downhill-road driving

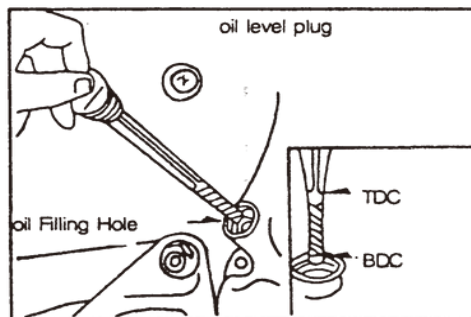
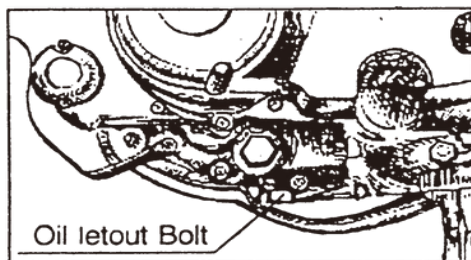
The vehicle can overcome ordinary downhill roads by resetting the throttle control sleeve (don't draw back the clutch) and using the front/rear brakes properly. In the case of steep down hill road or heavy-road driving. Please change the gear into lower one according to the situation

7. Inspection & Maintenance

☆Oil inspection

Oil is regarded as the blood of the engine lack of it or too dirty will reduce the service life of the engine even make it out of order. The steps of the oil inspection are as follows.

- (1) Put the vehicle on the flat ground and stop it
- (2) Take out the oil level plug and clean it
- (3) Put the oil level plug into the engine and take it again to check the oil level.



☆Oil supplement

If the oil level is below BDC. Please check the engine and find out the reason (for example oil leakage) and then fill the engine with oil up to TDC

☆Oil exchange

1. Oil exchange time: the oil must be changed after running 300km for a new vehicle or newly repaired engine and changed every 1000km later on. The time is shorter if the vehicle is often in short travel or drive in cold condition..
2. Oil must be changed when the engine is in a warm condition.
3. Remove the oil level plug and the oil let out bolt let the oil out of the engine.
4. Screw the oil let out bolt on and fill in 10W-40/SF oil up to TDC mark (0.9-1.0liter). Screw the oil level plug on. Start the engine and check the oil let out bolt to ensure the engine against oil leakage.

☆Vehicle trouble

When the vehicle breaks down on the way, please check the following:

1. Is the fuel enough or not? Has the fuel cock been turned to the position "ON" ?
2. Is the oil enough?
3. Is the high voltage cable or the spark plug cover disjointed or losing contact?
4. Are the electrolyte and the poles of the battery in good condition?
5. Fuse blown?
6. Has the Braking locked or function been out of order?

☆Pollution and noises inspection.

1. Please maintain your motorcycle periodically otherwise the consistency of the exhausted waste air will be changed. Please go to the waste air-testing centre for inspection.

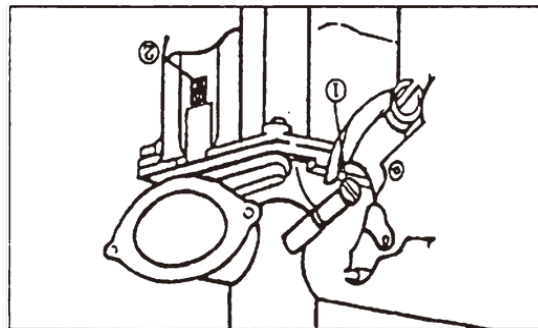
2. In order to avoid violating the noise regulations. Please do not change the exhaust device randomly.

☆Adjustment for carburetor

If the carburetor is not maintained well enough, it will affect the efficiency of engine, thus you should never ignore the maintenance work. You must do the adjustment of the carburetor. The adjustment must be done in 3 minutes after the engine functions.

Turn the idle adjusting screw ① until the idle of the engine is $1,400 \pm 100$ r/min.

Turn the idle adjusting screw clockwise; the rotation speed of the engine will be increased, vice versa.



☆Adjustment for the clearance of the throttle control sleeve:

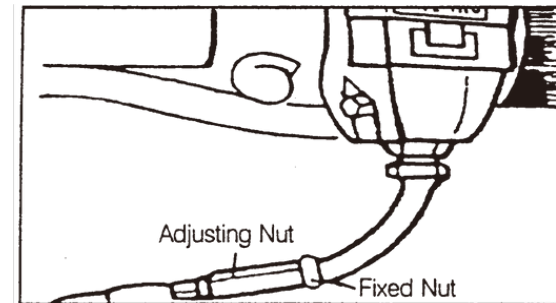
The proper moving range of the throttle control sleeve is $5-10^\circ$

When adjusting enlightens the fixed nut, turn the adjusting nut, and tighten the fixed nut again.

☆Adjustment for throttle cable

Check the following and adjust properly

- ① Whether the throttle can be changed from the completely closed position to the completely opened position successfully
- ② When turning the steering handlebar from left to right, has the throttle cable been held up?
- ③ Is the throttle cable entangled with other cables?

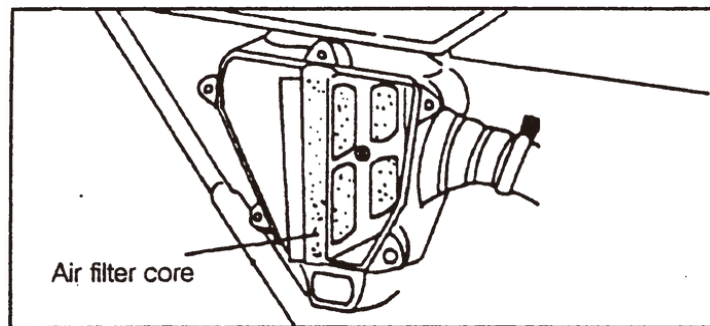


☆ Clearance for air filter

If the air filter is with too much dirt, it will affect the function of the engine and cause more fuel consumption, so it's necessary to clean the air filter periodically.

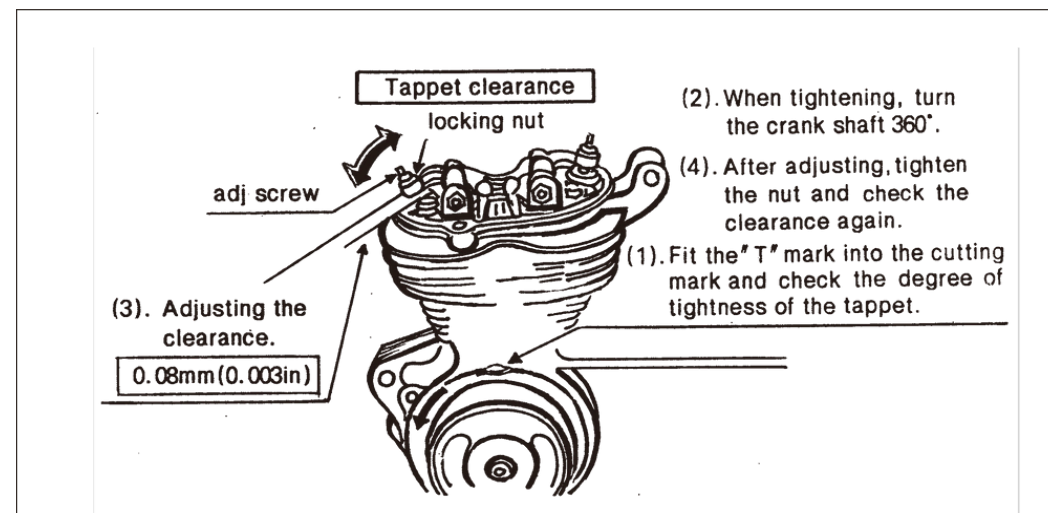
1. Remove the right side cover.
2. Remove the five fixed screws and take out the air filter from the air filter box.
3. Take out the filter core, wash it with soapsuds, make it dry and dip it into clean oil.

After cleaning the filter reset it into the box



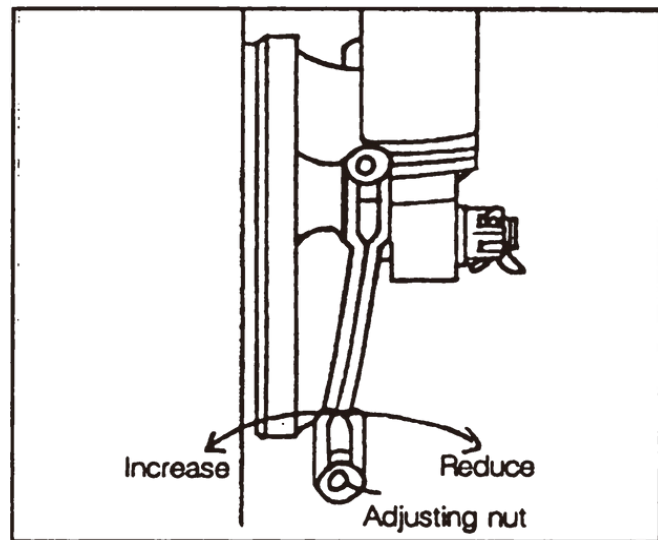
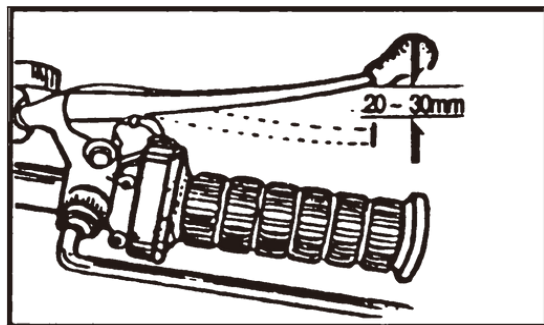
☆ Adjustment for valve clearance

Wide clearance will produce noises, while narrow clearance will damage the valve and lead to insufficient power, so it is necessary to periodically adjust the valve clearance. It must be done when the engine is cooled down to normal temperature.



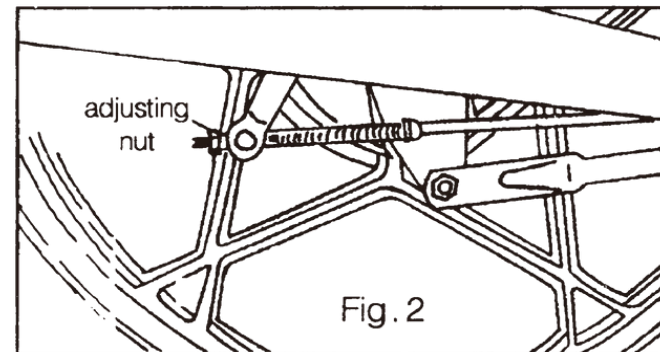
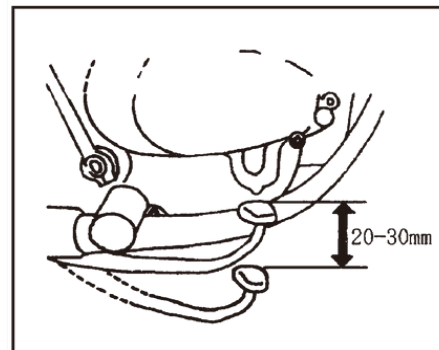
☆Adjustment for the front brake

The effectively moving range of the brake lever is within 20-30mm, please adjust it by turning the adjusting nut. The brake is regarded as the key of maintaining life. Please check the brake before your driving.



☆Adjustment for the rear brake

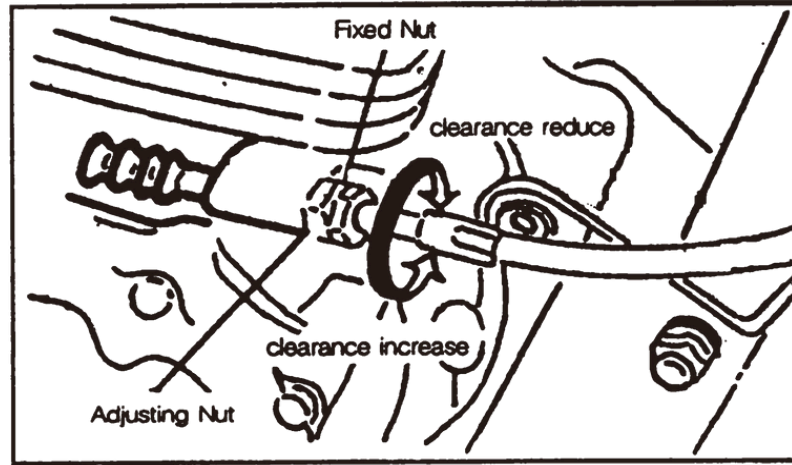
1. The effectively moving range of the rear brake lever is within 20-30mm. Once it is out of the range, please adjust it at once.



When adjusting, please turn the adjusting nut to the right direction to reduce the moving clearance; otherwise the clearance will be increased.

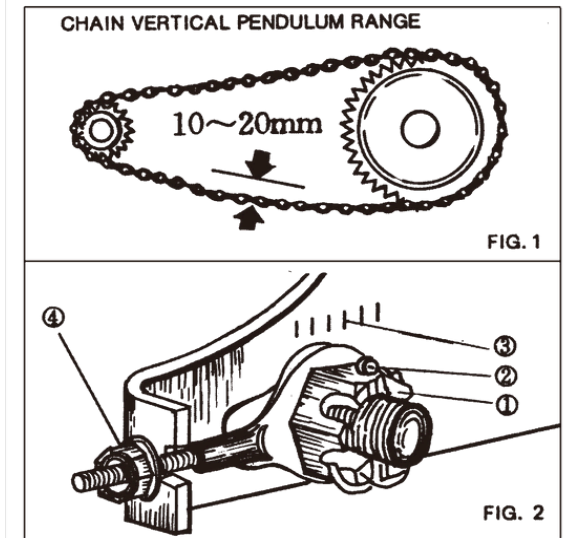
☆Adjustment for clutch

The function of the clutch is that the clutch passes the power of engine to the rear wheel and drives the action of the clutch properly. If the action of the clutch is unnormal, the vehicle will be difficult to put into gear and appear powerless driving for acceleration. If the free stroke of the clutch is too large or too small, please adjust it according to the process as showing on the following picture.



☆Inspection and adjustment for the drive chain

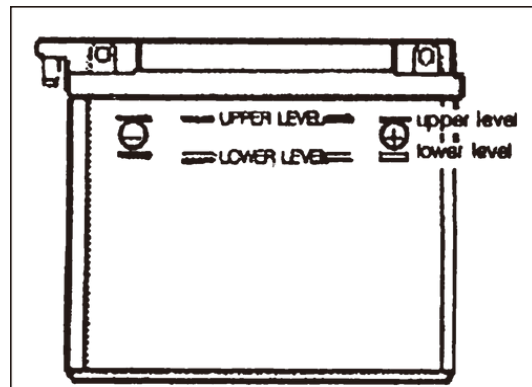
- 1.If the drive chain has been used for a long time, it will be lengthened and loosen even reach the chain case and make noise. You must check and adjust it.
- 2.Adjust vertically the chain between the two chain wheels, the max amplitude of moving the chain is within 10~20mm(Fig.1)
- 3.When adjusting, Please loose the vehicle axle nut ④, sprocket axle nut ① and the throe ②, and then turn the adjusting nut ④,to keep the chain adjustors on left and right side positioning the same graduation ③. After inspection, please tighten the locking nut, the sprocket axle nut and the vehicle axle nut. (The torque of the vehicle axle nut: 80-100N.m) (Fig2)
- 4.In order to protect the chain, you had better clean and lubricate it periodically to reduce the



☆Inspection and Maintenance for the Battery

The battery is the power source of the electric system, it must be inspected at any time and always kept in good conditions.

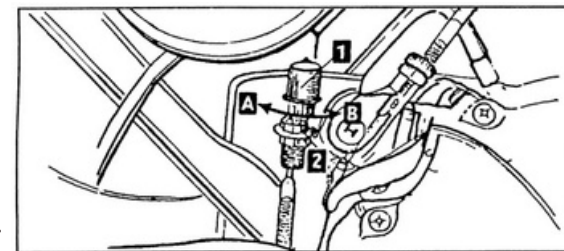
1. The electrolyte of battery evaporates normally, Please check this it frequently.
2. When inspecting, remove the left cover of the vehicle to see whether the electrolyte is below THE LOWER LEVEL or not.
3. If the electrolyte level has dropped to the lower level, take off the vent plug and fill the battery with distilled water to THE UPPER LEVEL.
4. If the electrolyte is beyond the limit, it will overflow. In order to avoid the electrolyte corroding away the battery caps, please put some grease on the caps.
5. Please always keep the battery valve ventilated.
6. When taking out the battery or pulling out the battery cables, be careful not to entangle the cables with each other.
7. If the battery caps are covered with oxide, clean it with hot water.



Adjustment for brake lights

The position of the brake lights switch ① is on the right side of the engine. The adjusting is as follows:

1. Check the front moving clearance of the rear brake paddle. Make sure it could brake smoothly.
2. Turn the switch on.
3. Kick down the rear brake pedal to make the braking on action. The braking lights will be on. If the brake lights flash too reluctantly, please turn the adjusting nut to A direction. If too early. Please turn to B direction.



☆Fuse exchange

1. Driving night, if the lights suddenly gone out, the fuses might have blown.
2. When changing the fuse, please use the required ones. Non-required fuse, brass wire and iron wire are forbidden to use.
3. The specification of the fuses is 15A.

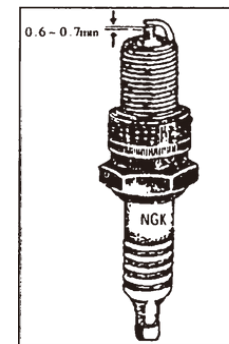
☆Inspection for the air-pressure.

1. Both too strong and inefficient air will increase the abrasiveness of tires and affect the safety of driving. The right specification are as follows.
2. Check the pressure of the tires with a pressure meter.

One person(75kg)	Front wheel:175kpa、 Rear wheel:200kpa
Two persons(max.weight)	Front wheel:175kpa、 Rear wheel:225kpa

☆Inspection for spark plug

- ①Remove the high voltage cable cover and turn the spark plug off with the wrench from the tools bag.
- ②Check the two poles of the spark plug whether there is any dirt onthem.
- ③Clean the poles from dirt with a steel hard and wash it with gasoline, and then make it dry.
- ④Check the two poles of the spark plug and adjust the clearance of the poles to 0.6~0.7mm, (testing with a feeler)
- ⑤When reset the spark plug, tighten it by hand, then turn it to ~3/4 with wrench.



☆CDI electric ignition system

CDI Makes use the charging and discharging theory of the capacitor.

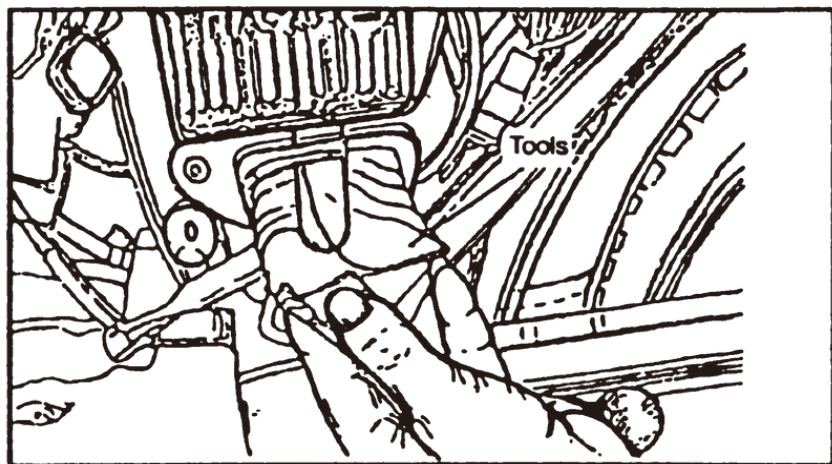
The ignition exaction coil of the start motor supplies the ignition coil with stored power and make the spark plug produce electric sparks.

☆The advantages of CDI ignition

- (1). Igniting punctually, no deviating and unnecessary to adjust the ignition time.
- (2). No wear for contact, water proof and shock proof.
- (3). Produce high voltage in short time and reduce the pollution of spark plug.
- (4). Easy-starting, energetic, promoting combustion efficiency, improving power and saving fuel.

☆Driver's tools

Tools on the vehicle are used for the inspection and maintenance of the vehicle, please place them in their housing located in the left side Of the vehicle.

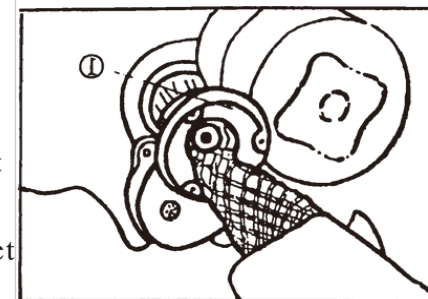
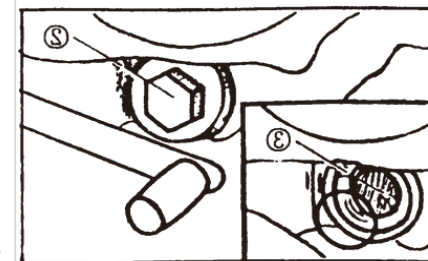


☆Clearance for oil filter

The vehicle is equipped with a metal filter gauze and a centrifugal filter device to purify the oil, ensuring the engine lubricating well, reducing the wear and tear of the engine in order to last service life of the engine.

The method of cleaning the oil filter is as follows.

1. Overflow the oil according to the oil exchange method.
2. Remove the shift pedal.
3. Unloose the fixed screws of the left crankcase; remove the left crankcase and the gasket.
4. Unloose the fixed screw of the centrifugal filter roller cover, remove the roller cover off, and clean the oil dirt inside the roller.
5. Reset the sprat parts you removed just now, if the gasket was damaged; change it with a new one.
6. Remove the filter gauze nut ② on the left side of the engine, take out of the gauze ③ and dean it.



^ .Method Of Removing Anti-rust Oil On The Surface Of The Vehicle

It's necessary to remove the anti-rust oil from the surface of the new vehicle before driving the new vehicle. You are suggested to clean it with the mixture of detergent and water(40-50°C, concentration 5%)first, then clean it with clear water only and make it dry.

1, engine: the horizontal bar, wind chimes, four stroke	3, ignition device: electronic ignition CDI
2, lubricating oil: the SAE: 15 w / 40	4, transmission: 4, 5, left foot manipulation

The main performance parameters

series	displacement	Compression ratio	Maximum power/speed	The maximum torque and rotational speed	The highest speed	The spark plug type
50	49ML	8.8:1	2.8KW/9000RPM	3.5KW/5500RPM	3.5N.W/5500RPM	D7RTC
100	98ML	8.5:1	5.4KW/8000RPM	6.7KW/6000RPM	6.7N.W/6000RPM	D7RTC
125	124ML	9.0:1	8.0KW/8500RPM	6.5KW/6000RPM	8.5N.W/6000RPM	D8RTC
150	149ML	9.0:1	9.0KW/9000RPM	9.0KW/7500RPM	9.0N.W/7500RPM	D8RTC
200	198ML	10.5:1	9.0KW/9000RPM	10.0KW/7500RPM	10.0N.W/7500RPM	D8RTC
250	235ML	11.0:1	9.0KW/9000RPM	9.0KW/7500RPM	9.5N.W/7500RPM	D8RTC

Electric Drawing For Motorcycle

