
FYM 飛鷹 摩托
霹雳侠
FY125-3P
FY150-3
Instruction Manual

INTRODUCTION

Thank you for choosing the motorcycle of Feiying Brand. The high quality motorcycle of FY125-3P series or FY150-3 series (hereinafter referred to as the vehicle in the User's Manual), which makes the pace in the industry, is designed and manufactured by the Company on the basis of its modern production technologies of motorcycle. The vehicle is characterized by its high technical performances and reliability, and its emission can meet the latest national emission standard; therefore it is a fairly environment-friendly motorcycle that may satisfy the demands of modern society. Riding the vehicle may bring you safety, coziness, and convenience in your job and living. Before you ride the motorcycle of this model, you must know well the contents in this User's Manual so that you may understand relevant operation of the vehicle.

This Instruction Manual tells you how to service the product. Follow the instructions in the manual, you will be able to ensure your motorcycle a long service life and free of troubles. In case of any doubt about operation and service, please do not hesitate to contact your distributor. Its well-trained technicians, equipment and tools will provide you with satisfactory service.

All configurations and parameters are for reference only, not contracted ones. Please refer to the actual configuration of the manufacturer.

The product is designed and manufactured in accordance with "2002/24 / EC Compulsory certification of motorcycles by European Union ", the standard of GB7258-2004 "Safety Specifications for Operation of Vehicles", and the enterprise standard Q/（PY）HNM7-2005 Q/（PY）HNM56-2005.

The following information appears as signs in this Instruction Manual

This sign indicates procedures that must be followed to avoid immediate hazard to you.

This sign indicates procedures that must be followed to avoid injury to you, other people or the motorcycle.

This sign indicates procedures that must be followed to avoid damage to the motorcycle and yourself.

This sign indicates procedures with further information.

This User's Manual should be considered as part of the motorcycle and should be kept with the motorcycle for use in case of emergency. Even if this motorcycle is resold, it should also be kept with the motorcycle. The Company makes great efforts to improve the design and quality of its products all the time. Though this User's Manual contains the latest information of products when printing, there still might be in it somewhat discrepancies from the motorcycle you purchased. In case of any question, please contact your local dealer or appointed maintenance station.

Read this Instruction Manual carefully prior to driving.

CONTENTS

Safe driving

DANGER Danger

To drive a motorcycle, you have to pay attention to driving safety, understand safety instructions and do routine vehicle examinations.

Driving rules

1. Check the vehicle before driving to avoid accident or damage to the machine.
2. Attend traffic authority driving examinations and obtain a driving license. Never lend your motorcycle to anyone without a driving license.
3. To prevent being injured, you are recommended to bear in mind the following points:

- Dress in bright and vivid color.
- Keep a distance from other motor vehicles.
- Abide by local traffic rules and never contend with other drivers.
- Accidents mostly result from speeding. Do not drive above the speed limit.
- Switch on the turn light before you turn or change lane.
- Drive carefully on crossroads, car park entrance/exit and speed way.
- Hold handlebars with both hands and place feet on the pedals. Passengers shall also hold tight to safety handle or the driver and place feet on passenger pedals.

Refitting

NOTICE Notice

Refitting motorcycle or replacing original parts may compromise driving safety and is against traffic rules. Please abide by rules on the use of motorcycles.

Loading goods and installing accessories

NOTICE Notice

Drive carefully when you're carrying goods or accessories are installed. Improper loading may harm the vehicle's performance and stability and lead to accident.

Goods loading

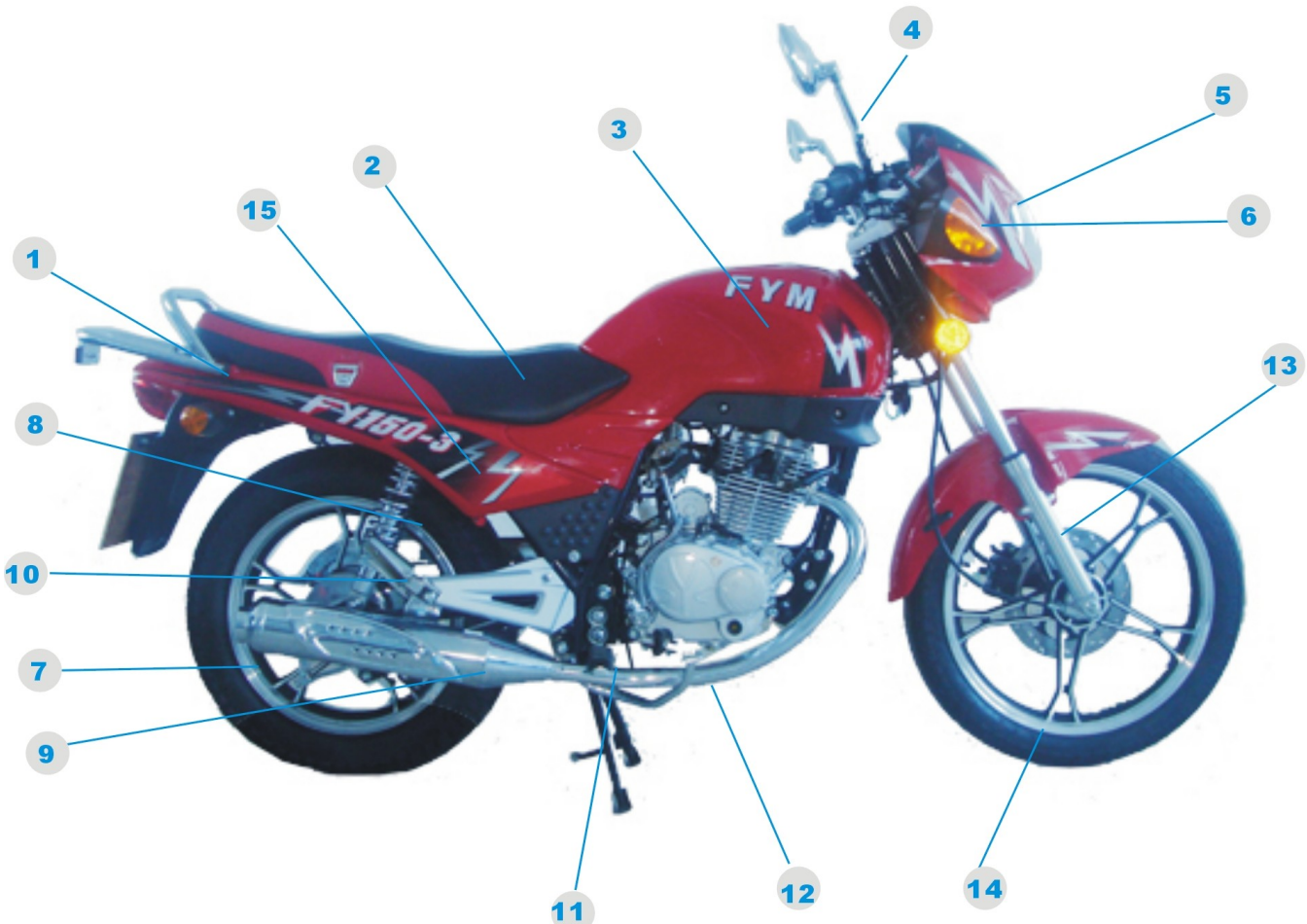
1. The goods shall be loaded in a middle position and as low as possible. Put the goods evenly on both sides of the vehicle and in balance. If the goods are loaded too far away from the center, the motorcycle will become difficult to handle.
2. Properly adjust the tire pressure and rear damping spring according to the weight of loaded goods and the driving conditions.
3. To ensure driving stability, the goods shall be firmly fixed to the vehicle and checked regularly.
4. Never bind large or heavy objects to the steering handle or front fork. The driving balance or steering reaction might be compromised.
5. Never overload the motorcycle (150kg).

Protective suits

1. For the sake of your safety, you should wear helmet, mask or glasses and gloves. The passengers shall also wear helmet.
2. The exhaust pipe may be very hot. To avoid scalding, wear something to protect your legs.
3. Avoid wearing any loose clothes that may stop the handlebars, starter lever, pedals or wheels.

B Parts Names

1. Rear carrier
2. Seat pad
3. Fuel tank
4. Rearview mirror
5. Spoiler
6. Front turn signal light
7. Rear wheel
8. Rear damper
9. Exhaust muffler
10. Rear pedal
11. Front pedal
12. Rear brake pedal
13. Front damper
14. Front wheel



15. Right side cover

16. Main stand

17. Rear turn signal light

18. Instrument assembly

19. Steering handle

20. Carburetor

21. Fuel switch

22. Gearshift lever

23. Kickstand

24. Left side cover

25. Mounting position of data plate

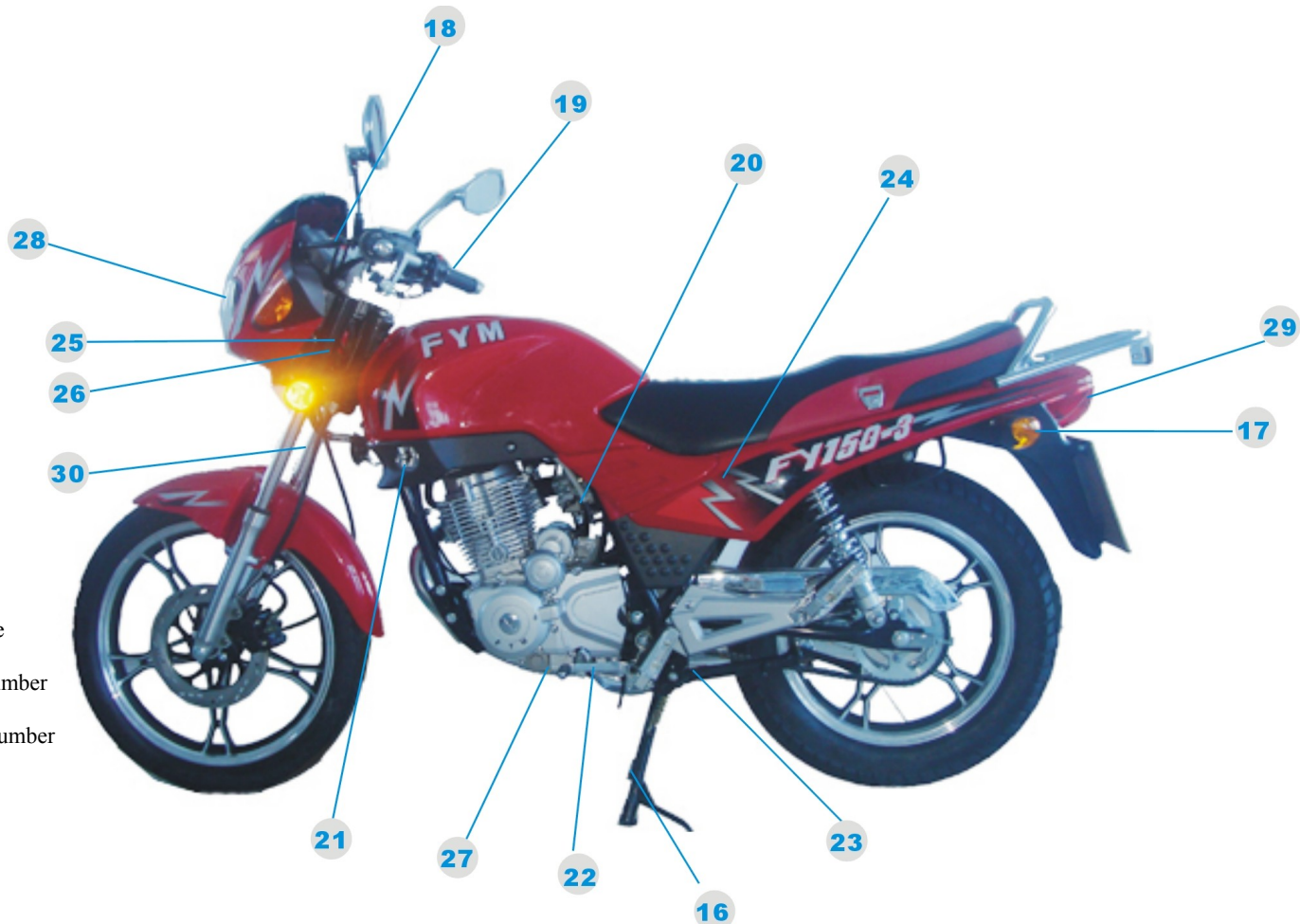
26. Stenciling position of frame number

27. Stenciling position of engine number

28. Headlight

29. Taillight

30. Horn



C Motorcycle identification

Vehicle identification number (VIN), nameplate and engine number

Note

To register your motorcycle, you'll have to supply the vehicle identification number (VIN) and engine number. When you order new parts, you need also to supply the service center with these numbers. Please note down these two numbers for future reference.

Vehicle identification number (VIN)

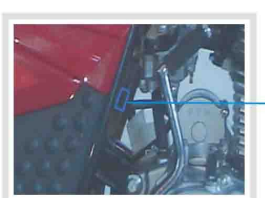
Engine number

The frame identification code (VIN) ① is stenciled on the head-end tube of the frame.

The vehicle's data plate ② is riveted onto the front of the head-end tube of the frame, or riveted onto the central point on the right side of the frame.

The engine's serial number ③ is stenciled onto the lower left side of the engine.

①Vehicle identification number



②Nameplate

②Nameplate

D Controller functions

Meters and indicators

1 Turn indicator: when the switch of turn signal lamp functions, this indicator flickers.

2 High beam indicator: when the motorcycle uses high beam lamp, this indicator is on.

3 Neutral gear indicator: when motorcycle is set to its neutral position, this indicator flickers.

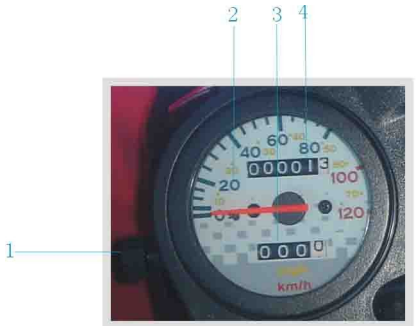
4 Gearshift position display: when gearshift of the motorcycle, the indicator is on.

1. Fuel meter
2. Tachometer
3. Red zone in tachometer

③Engine number

Notice

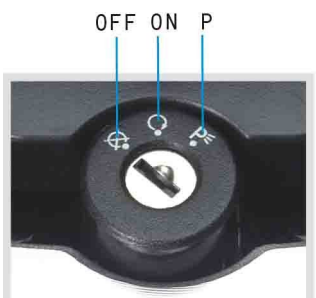
Even if the running in of engine is finished, do not allow the pointer to enter into the red zone. Pay special attention in case of rapid acceleration or acceleration at gear 1 or 2 because the point is apt to enters into the red zone then. The red zone indicates that the engine has already reached the maximum limit of its rotational speed. To ride at the said rotational speed may lead to reduction of its service life.



1. Short-distance zero-clearing (reset) knob
2. Speedometer
3. Short-distance odometer
4. Odometer

Ignition switch

Ignition switch is located in the lower medium part of the instrument, with three positions namely OFF, ON, and P.



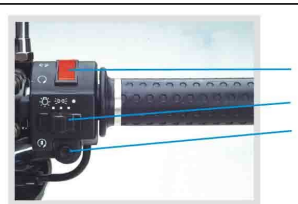
OFF: It indicates that the whole circuit is turned off, the engine cannot be started up, but the key may be taken out.

ON: The whole circuit is turned on. You can start the engine and the

Handlebar switch

1. Turn signal lamp switch
2. High/low beam switch
3. Horn ring

Position	Explanation
≡D	Set the switch to this position, and the headlight is switched to high beam
≡D	Set the switch to this position, the headlight is switched to low beam
⇦	Set the switch to this position, and the front and rear left turn signal lamps flicker
	Turn signal lamp is turned off
⇨	Set the switch to this position, and the front and rear right turn signal lamps flicker
	Press this button, and the horn sounds



key cannot be removed.

Park (P): Except the taillight and position light, all other circuits are turned off, the complete vehicle is set to its shutting-down state, and the key can be taken out.

1. Shutting-down switch
2. Lighting switch
3. Electric starting button

Position	Explanation
	When the switch is set to this position, it is allowed to start up the engine
	When the switch is set to this position, the engine can't be started
·	Turn off the lighting lamp
	The position light, instrument light, the taillight are on
	The headlight, instrument lighting lamp, and taillight are on
	Press this button to start up the engine

Fuel tank, fuel tank cap

Fuel-tank capacity is 12L, of which, the capacity of spare (auxiliary) fuel duct is 1.6L.

It adopts lead free gasoline, with octane rating of #90 or higher.

Opening procedures of fuel tank cap:

- Insert the ignition switch key.
- Turn the key rightward for 90 degrees to open the fuel tank cap.
- Just press and close it.

Notice

Do not fill two much gasoline into the fuel tank (the fuel level must not exceed the neck of the fuel tank). After fuel filling, the fuel tank cap must be tightened. Gasoline is extremely inflammable or even explosive. Before you open the cap, check whether or not the engine shutting-down is completely achieved; fuel filling shall be carried out in good-ventilated place, and strict measures shall be taken so as to prevent alight cigarettes or other tinder from approaching the place.

Fuel switch

Fuel switch is located under the left side of the fuel tank, and the fuel supply is switched off once you turn the switch knob to its position "●" (OFF). When you do not ride the vehicle, just turn the switch knob to its position "●". Before you ride the vehicle, turn the switch knob to its position "♉" (ON) for normal fuel supply (fuel begins to flow into the carburetor).

When the switch knob is turned to its position "♉" (spare fuel duct), spare fuel duct begins to supply fuel (the spare fuel duct may be utilized only if the normal fuel supply is over). But the capacity of spare fuel duct is 1.6L only, therefore you shall have fuel filled as soon as possible.

Use of fuel and engine oil

1. Fuel

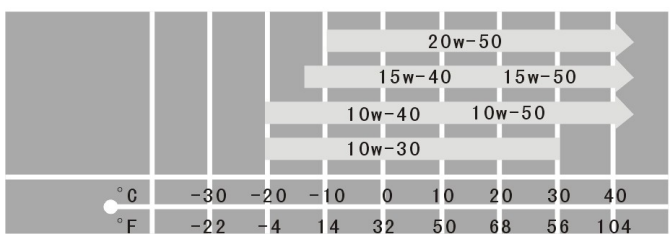
Use lead-free gasoline with octane value above 90#.

Notice

Use of low-lead gasoline can lengthen the service life of the spark plug.

2. Engine oil

Use of high-quality four stroke engine oil can lengthen the service life of the engine. Use API classification method to choose SF or SG grade engine oil. Engine oil viscosity should be of SAE10W-30/40. If this kind of oil is not available, purchase on selection of the substitute according to the values listed in the table below.



Engine lubricating oil

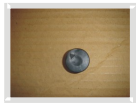
When using your motorcycle, it is required to check frequently the engine lubricating oil. The filler cap for lubricating oil is located on the right crankcase, the cap is connected with a dipstick, the oil level should be between the upper and power carved lines on the dipstick. Make sure not to start the engine when oil capacity is insufficient, or otherwise it will cause bad aftereffect to the engine.

Upper limit

Lower limit

Key

Indicated direction



Position

Rubber cap

Notice

After fuel filling, do not have the switch knob left on its position “ ”; otherwise the main fuel duct and spare fuel duct supply fuel simultaneously, and you cannot continue riding because all fuel (including the spare fuel) is used up before you realize it.

Tire

Appropriate tire pressure can make vehicle keep a most stable running, with not only a comfortable riding, but also a durable tire service life.

Tire pressure: (kPa) Front: 175kPa: Rear: 225kPa

Notice

Continual use of excessively worn-out tire is extremely dangerous, as the worn-out tire will affect the traction force, the stability, the steering and performance of handling.

Note

Before driving, check the tire pressure when the tires are cold, check the tires for any cracks, nails, or other sharp objects that may insert into the tire, check the wheel felloe for any sunken or distortion defects. Any tires, if damages are found, should be repaired or replaced at the maintenance station.

Notice

Improper tire pressure will lead to unusual attrition of the tire tread, or even cause safety incidents. Insufficient tire pressure, not only causes tire damages but also leads to slippage with wheel felloe or even separation with the wheel felloe. When the depth of tire tread in the middle part of the tire is less than 1.6mm for front tire, and less than 2.0mm for rear tire, please replace them at once.

Operation guidelines for driving your motorcycle

Inspection of tire attrition

Driving a motorcycle with seriously worn-out tires will lower driving stability and possibly cause loss of control. We recommend replacing with a new front tire when the depth of its tire engravings is reduced to 1.6mm and so do the same for the rear

Inspection before driving

Check your motorcycle before driving, Taking a few minutes to check the following items will save your time for repairing the failure in your way and ensure a safe driving in the meantime.

- Check of engine lubricating oil level – Add oil if necessary and check for any possible oil leakage.
- Check of fuel oil level — Add fuel to oil tank and check for any possible oil leakage.
- Check of both front and rear braking – Conduct an operation check, and adjust the free gap when necessary.
- Check of tire—Check the state and pressure for both the front and rear tires.
- Check of driving chain—Check the driving chain for state and tightness and make adjustment and apply lubrication when necessary.
- Check of accelerator - Check the accelerator if the accelerator handle turns freely.
- Check of lighting and horn—Check if the headlamp, taillamp, brake light , turn signal lamp, indicator and horn are in normal operation. To facilitate startup, the vehicle is equipped with carburettor startup and thickening system. In a cold engine state, raise the choke control handle to position A and start the engine. Once the engine is started up, press the handle to position B to allow the engine pre-warm (for 3 minutes) till adequate temperature, and then press the handle to its original position C. This system works only when the accelerator is in full close state. Fuel will be supplied directly via the throttle

tire if the depth of its tire engravings is reduced to 2mm.

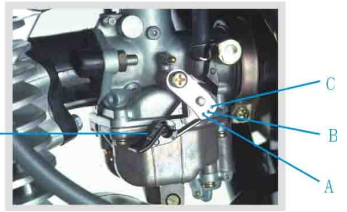
Front wheel: spec	2.75-18
Rear wheel: spec	110/90
Limit of wear (front/rear wheel) 0.8mm	

Tire wear mark "▲"

system instead of this system once you turn the throttle for acceleration during pre-warming.

● Do not start the engine with this system when the engine temperature is very high.

Choke handle



Engine running-in

The service life of your motorcycle depends on the operation condition in the initial 1,000km riding of your vehicle. In running-in period, engine is unsuitable to bear excessive load, and for any gear speed, drive at the speed not exceeding 80% of its maximum speed limit, try to avoid full throttling and driving with only one speed for a long time, as in the initial driving period, the machined surfaces of components will keep mutual contacts and gradually run in to normal clearance. So allowing the engine to obtain a low load running-in in initial driving period will prominently lengthen the service life of the engine.

After "running in period", driving at the speed with full throttling is possible, but attention should be paid to the engine operation condition and its noise so as to be sure that the engine has entered into normal operating state.

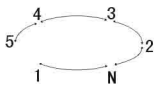
Note In the running in period, engine oil should be replaced in every 500 km .

Driving your motorcycle

- Prior to driving, check your motorcycle for the items as specified .
- Wait and get engine pre-warmed before driving.
- When engine is set to idle speed, hold the clutch lever tightly, and step with left tiptoe on the pedal lever, shift the transmission to the low-speed position (first gear) .
- Turn the throttle rotate handle gradually to raise the engine rotation speed, and at the same time, release the clutch handgrip slowly and these two actions should be well coordinated to so as to get a steady start.
- While the vehicle enters a steady running state , lower the engine speed , shut down the

Diagram of gearshift positions

The gearshift positions of this vehicle is shown in the right picture:



Braking and parking

1. Braking

The braking method we normally use is to apply a simultaneous braking for both front and rear brakes so as to ensure an effective braking. But in fact, this method is preferably applicable to emergency stop only. The most suitable way for braking is to shut down the throttle valve and the clutch. Step on (in a little advance), and hold braking handlebar so as to ensure smooth and steady braking operation.

NOTICE 注意

- Separate application of front or rear brake may lead to inadequate braking effect; but if you increase the brake force, the wheel may be seized, resulting wheel skid. This may lead to unstable driving or even a turn-over.

NOTICE Notice

- While making a turn, lower the speed and apply a slow braking, shutting down the accelerator or urgent braking will cause a side slip and a difficult control of the vehicle.
- It is not suitable to drive at high speed but with a special care in wet rainy seasons and on muddy road surface due to reduction of brake performance.
- Use lower gear with interrupted braking while running on a slope, and continuous braking will produce heat to the brake, and reduce braking

clutch , step on the pedal lever for shifting to the 2nd gear , and do the same until gearshift have been made in turns to 3rd , 4th and 5th gear .

- Proper handling the throttle valve in combination with brake can lower the engine speed.
- While braking, operate the front and rear brake simultaneously, do not use too much force and make a too tight braking to the wheel, or, it will cause a brake system failure and a difficult control over the vehicle.

It is required to disengage the clutch before gearshift and reduce the throttle so as to avoid the damages of engine parts or other parts.

result.

2. Parking

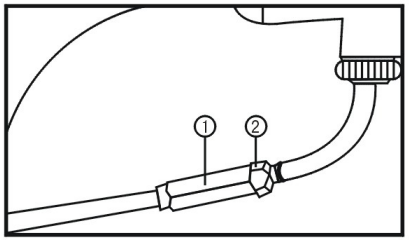
A. When the vehicle is stopped, set the gearshift pedal lever to its neutral position, and turn the fuel switch to "●".

B. Park your motorcycle on a flat and level parking area and support it with the main stand or kickstand. In case of a slope, the vehicle head should be placed at higher point so as to avoid turnover.

1. For safety reasons, do not push your motorcycle when its steering lock is locked, otherwise it will lose its balance. 2. The exhaust muffler is fairly hot when the vehicle is just stopped; therefore the vehicle shall be parked in a safe place in which there is no pedestrian or, or in a place that the child cannot reach.

F Maintenance

Check and adjustment of throttle rotate handlebar operation



1. Adjustment of the close nipple 2. Fixing nut

A. Check the throttle rotate handle if it turns freely from full open to full close positions; Check if the throttle cable between throttle rotate handle and carburetor is in good condition, and change in case of damage.

B. Check the free gap of rotate handle. The free gap at corner the rotate handle shall be 2~6mm. To adjust the free gap, firstly loosen the fixing nut 2, and then turn the adjusting screw.

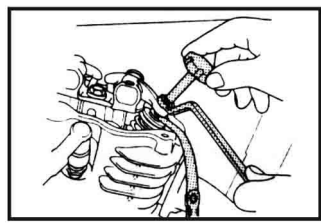
Adjustment of engine idle speed

Stable carburetion is a basic requirement of the engine for the carburetor. The carburetion function of carburetor was precisely adjusted before factory leaving, and its setting must not be changed. Just pay your attention to two points: the idle speed and the gap of the throttle cable.

Check and adjustment of valve clearance

An excessive valve clearance will produce noise, while a too small or no valve clearance will give hindrance to throttle closing, cause valve burning and lack of engine power, therefore, the valve clearance must be checked in regular intervals.

Check or adjustment of valve clearance should be made in cold engine state with the method given below:



1. Remove the cylinder head and the large and small timing covers on the left cover of the engine.

2. Turn counterclockwise the flywheel such that the carved line T is aligned to the mark;
   shake the rocker arm gently, and it indicates the piston is in the dead center position of its compression stroke if the rocker arm is relatively loose (with a gap); if it is excessively tight, just turn counterclockwise the flywheel for 360 degrees. Align the carved line to the mark again.

3. Insert a feeler gauge into the clearance between valve clearance regulating screw and tip of the valve guide rod to check the clearance.
   Standard valve clearance: Air intake 0.02-0.03mm, exhaust 0.02-0.04mm.

4. When making adjustment, unscrew the locknut, turn the regulating screw and adjust till the feeler gauge has a slight resistance while inserting, After adjustment, screw down the locknut and check the clearance again.

5. Reassembling can be made in reverse sequence of disassembling.

- Start the engine, and let it run idly until getting fully pre-warmed.
- After engine pre-warming, shut off the throttle, adjust the regulating screw by turning it leftward and rightward, and keep the rotation speed at 1400-1500 rpm.

Adjusting screw

Adjustment of clutch

1. The free gap of clutch lever shall be 2~3mm; just loosen the lock nut of upper/ lower adjuster on the crankcase and then adjust it. Turning clockwise can reduce the free gap of the clutch lever.
2. Upper adjuster is on the left-hand clutch lever.
3. The adjustment can be made as per the method stated above.

Check, adjustment and lubrication of the driving chain

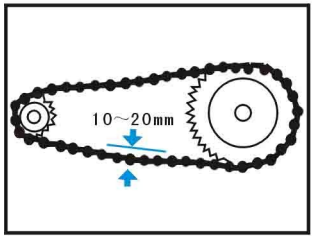
The service life of the driving chain depends on its suitable lubrication and proper adjustment. Proper maintenance will lead to an early attrition and damage.

Inspection of the chain

Check the chain for its attrition and tension.

Support your motorcycle with the main stand, and shift the gearshift pedal to neutral position.

Put your finger between the two sprockets and swing the chain 1 up and down, and adjust the swing to 10~20mm.



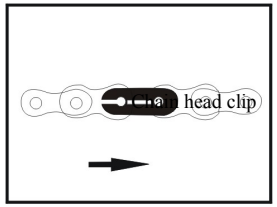
Vertical amplitude of oscillation of the chain

1. Chain 2.Connecting rod locknut 3.Regulation bolt 4. Rear wheel shaft nut

Check the driving chain for attrition and tension, and apply a coat of lubricating oil if it looks dry.

Cleaning and lubrication of the chain

- Use pliers to remove the chain clips and elastic locking pieces carefully, disassemble the chain clips and take out the chain.
- Clean the chain in the solvent, then dry it in air.
- Check the chain for any attrition (chain buckle attrition), rigidity, locking piece, roller breakage and chain pulling off. Make prompt replacement in case of chain damage and worn out.
- Apply oil or chain lubricating oil to lubricate the chain.
- Reassemble the chain in original sequence and make necessary adjustment.



Movement direction

NOTICE **Notice**

When reassembling the elastic locking pieces, make sure the orientation of locking piece gap clearance is contrary to the driving direction.

Adjustment of front wheel brake

Inspection of the brake fluid amount

- First unscrew connecting rod locknut 2 and rear wheel shaft nut 4, and then turn the regulation bolt 3 .
- Set the right and left chain adjuster to identical scale, and then tighten the socket nut and rear wheel shaft nut after check Torque value of the rear wheel shaft nut shall be 60~80N.m.
- When you check the tightness of the chain, the adjusting nut of brake-pull rod of rear wheel shall be readjusted and realigned after the tightness of the chain is changed; Otherwise, the free path of rear brake will be affected.

When brake fluid is insufficient, air will enter into the brake system, which will cause failure of the brake. First check the brake fluid amount prior to riding, add brake fluid if the amount is insufficient and check the following points while filling the fluid:

1. When checking the amount of brake fluid, turn the handlebar to keep the upper end of the brake master cylinder at horizontal position.
2. Replenish the appointed brake fluid only; otherwise rubber oil seal may be damaged, resulting in leakage of brake fluid. Poor brake performance. Recommended brake fluid: DOT #3 (or DOT #4)

Free travel of front brake

Free travel of front brake is 10-20mm.

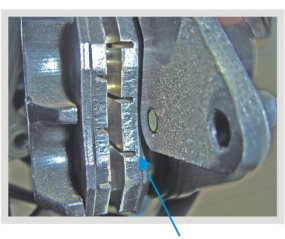
Brake oil

Brake oil is harmful, if it is spattered into the eyes or on the skin, wash instantly with clean water, or see a doctor for treatment.

Check the fluid level of the above brake oil cylinder and fill with specified brake oil if the level is down, the brake oil in the cylinder may flow into the oil pipe automatically and the level will go down accordingly due to attrition of brake shoes.

Limit nick

The main points to check the front wheel brake shoes is to see if shoes is worn to the limit nick. The brake shoes, if attrition exceeds the limit nick, should be replaced with new ones.



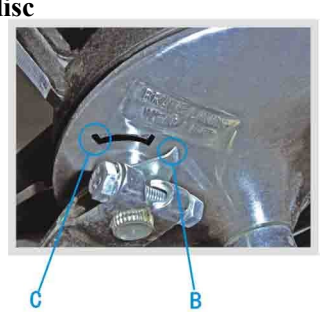
Adjustment of rear wheel brake

1. Support your motorcycle with the main stand.
2. Determine the moving distance (namely free travel of 20-30mm) from the rear

Wear limit line

Check of rear wheel brake friction disc

It is required to check the wear indicator condition of the brake block for braking. If the wear indicator B points to the position C, go to the dealer from whom the motorcycle was originally purchased or to the special maintenance station for replacement of the brake block.



Check of the lighting and signaling system

Switch on the main switch key to start the engine, check each illuminating lamp, signal lamp and horn if they are in good working condition, and make prompt maintenance in case of any abnormality.

Storage battery

Prior to driving, check the level of the

brake to the point where the brake is about to close.

3. When adjusting, turn the adjusting nut of the rear brake. Turn the adjuster as per the indicated direction to reduce the free path.
4. Tread the rear brake pedal several times, release the brake, and then turn the rear wheel to see if it rotates freely.
5. It is required to conduct a check after adjustment, and make sure that the arc notch of the adjusting nut lies on the cambered surface of the cylindrical pin of the rear brake rocker arm.

battery electrolyte, which should lie between upper and lower limit. In case the liquid level lies at lower limit, add a amount of distilled water.

Warning

Electrolyte is a kind strong corrosive liquid, which contains sulfuric acid that can burn your body and should be avoided from contacting your skin, eyes or clothes etc. In case of careless contact, wash timely with clean water or see a special doctor for treatment.

Notice

1. While checking battery liquid level or filling distilled water, make sure that the breather pipe has been connected to the blow vent of the battery.
2. Only add distilled water to your batteries, and adding of tap water will shorten the service life of the batteries.
3. If the added battery electrolyte exceeds the upper limit, it will overflow and corrode the engine and frame parts, and the overflowed electrolyte should be thoroughly washed clean.

Removal and mounting of the battery

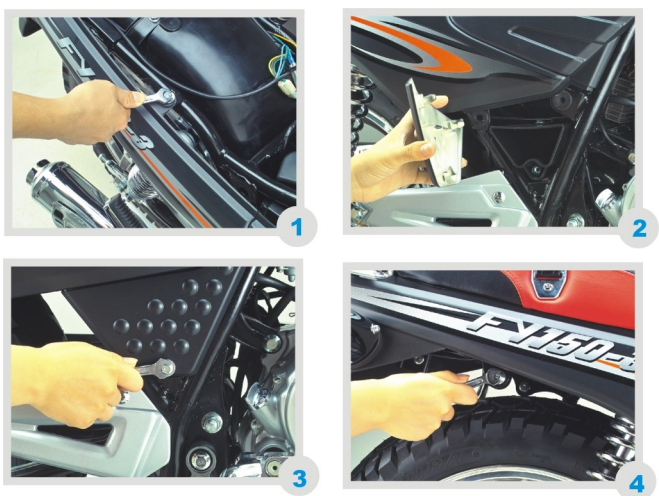
1. Use the main switch key to loosen the bolt (not removal) of the driver's toolbox, remove the driver's tool, and take out the driver's tools.
2. Use the driver's tool to unscrew the left and right fastening blots in the motorbike saddle; loosen the right medium fastening screw of the side cover, remove the side cover, and then carry out installation or removal of the battery.

Warning

1. When disassembling the battery, make sure to place the main switch to position "⊗" first so as to prevent short circuit from occurring.
2. Pay special attention to connection of positive and negative wires to corresponding positive and negative terminals of the battery, and ensure that they are firmly secured. Improper wire connection will easily lead to failure and damages to the electrical elements.
3. Perform a careful check after assembling, and do not allow any exposure of the metal part of the wires for fear of electric leakage or occurrence of danger.

Replacement of fuse

3. Before removal, disconnect the negative wire from the storage battery, and then disconnect the positive wire.
4. Remove the breather pipe of storage battery, remove the protecting band, and unload the battery.
5. Reassemble it in reverse sequence. Before reassembling, place the battery into the battery box stably, and then connect the negative and positive poles respectively.



A fuse is connected to the positive connection wire of the battery. In case the fuse is frequently blown out, it indicates a short circuit or a circuit overload. Go to your appointed maintenance station for overhauling.

Warning

Before checking or replacing a fuse, first turn the ignition switch to position off "⊗" for fear of short circuit. Do not use any fuse other than the ones specified in the specification, or otherwise, it will cause serious poor effects to the circuit system, or even a fire and burning of the headlamp, loss of engine power and that is very dangerous.

Replacement of bulb

Warning

The lamp bulb will get very hot at its operating state and hold this heat within a certain period even after it is turned off. So before operating, make sure to allow it to cool down completely.

Notice

1. When replacing the bulb, be sure to turn to main switch to off position "⊗",
2. Never use the bulb other than the ones specified in the specification for replacement.
3. Perform a test after bulb replacement so as to ensure the normal operation of the new bulb.

Motorcycle maintenance

Constant maintenance is an important guarantee for improving vehicle running security, reliability, and operating performance, please maintain your motorcycle regularly in accordance with the stipulations specified in the maintenance table.

Code: I –Perform a check, cleaning, adjustment, lubrication or replacement when necessary

C – Cleaning R -Replacement A – Adjustment L – Lubrication

Cycle / Item	number of month or distance of travel whichever comes first-distance of travel (×100 km) and follow this interval later on				
	Number of month	1	4	8	12
△Fuel pipeline			I	I	I
△Fuel filter screen			C	C	C
△Throttle manipulation			I	I	I
Air filter			C	C	C
Spark plug			I	R	I
△Valve clearance			I	I	I
△Engine lubricating oil	Every year	R	Every riding mileage of 2000km	One replacement	
△Fuel filter screen					C
△Idle speed of engine		I	I	I	I
Driving chain		Every riding	Performance of		

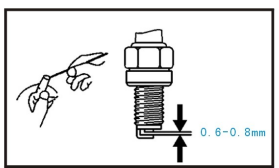
Replacement of lubricating oil

The lubricating oil must be replaced as per the specified time because lubricating oil quality acts as a major factor that may affect the service life of engine. Replace lubricating oil while engine is still warm, and the motorcycle should be supported with the main stand or placed in a vertical position, so as to ensure that the crankcase oil to be replaced will be fully drained.

1. When oil replacement is necessary, unscrew and remove the screw plug with dipstick at oil filler and the drain pug (at engine bottom)
2. After draining the lubricating oil, screw down the drain plug first.
3. Fill in recommended lubricating oil of approximately 0.6L, screw down the screw plug at oil filler; start up the engine and allow it to run for several minutes before stop, check the oil level once again; if the oil level is not adequate still, fill in oil again. Finally check whether or not oil leakage occurs.

Inspection and replacement of spark plug

1. Remove the dirt around the spark plug seat.
2. Remove the spark plug cap and remove the spark plug.
3. Check the spark plug for any electrode damage, ablation, and any insulator crackles or coming off, and replace it in case of yes.
4. Check the electrode at spark plug side if its clearance is 0.6-0.8mm, and make any adjustment when necessary.
5. When assembling the spark plug, put the washer first, and screw the spark plug to



		mileage of 1000km	I L		
Storage battery	Every month	I	I	I	I
△Brake shoe		-	I	I	I
Brake assembly			I	I	I
△Stop lamp switch		I	I	I	I
Clutch system			I	I	I
Kickstand			I	I	I
△Suspension system			I	I	I
▲Wheel, tire			I	I	I
▲Steering bearing			I	I	I
△Nuts, bolts, fastening pieces				I	I

△Specialized maintainer of the maintenance personnel may perform maintenance. If the user is provided with a whole set of maintenance tools, maintenance data, and maintenance capability, maintenance may also be perform by himself.

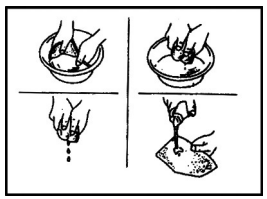
▲Serviced only by personnel of appointed maintenance station for the sake of security.

its position with hand (for fear of misplacing), and then screw it down with box key.

Spark plug

Cleaning, maintenance and assembling of the air filter

Air filter must be maintained at regular intervals and more frequent cleaning should be performed especially when driving in heavy dusty area.



1. Remove the air filter assembly.
2. Remove the air filter cover screw, lift off the cover board and take out the filter element.
3. Remove the dust on the filter element by tapping the filter element gently, check for any damage, and if any damage is found, replace it with a new one. Put it into cleaning solution for cleaning and dry it in air, drip drops of lubricating oil to make it wet .
4. While reinstalling, mount the filter in the reversed sequence as disassembling.

Washing

Wash your motorcycle regularly so as to protect the painted surface, check and repair the damage and attrition conditions. Caution: High-pressure water flow will cause damages to motorcycle main switch, instrument, carburetor, wheel hub, driving chain, exhaust muffler outlet, saddle, fuel tank, and handlebar switch.

1. Make sure to clean the motorcycle with sufficient amount of fresh water after washing.

Take necessary protective measures for your motorcycle in case you need to store it for a long time, e.g. in winter, so as to prevent the components and parts from being malfunctioned or damaged due to long time storage. In addition, you should have your motorcycle properly repaired and maintained before putting it for storage. Otherwise these tasks may usually be forgotten when you ride the vehicle again.

1. Replacement of engine oil.
2. Drain the remaining oil from the fuel tank and carburetor to a corresponding gasoline container and then paint the inside of the fuel tank with spraying type of antirust oil and put back the oil filler cap.

Notice It is very important to drain completely the remaining oil in the carburetor If your motorcycle will be stored for over a month, so as to ensure that its normal performance can be brought into full play when you take out your motorcycle for reuse.

3. In order to prevent rust from occurring in cylinder, the following measures should be taken:
   - Remove the spark plug lid from the spark plug, and attach it to the nearby plastic part with tape or string so as to make it separated from the spark plug.
   - Remove the spark plug from the engine and place it in a safe location and make sure not to put the spark plug and the spark plug lid together.
   - Pour a spoonful of clean engine oil into the cylinder and cover the spark plug hole with a piece of cloth.
   - Start up the engine for several times to make the poured engine oil scatter to every part of the cylinder.

2. After motorcycle drying, start the engine, and keep the engine operating for several minutes.
3. A trial operation of the brake should be performed prior to driving. This trial brake operation should be made repeatedly till the braking function has been fully restored.
4. After washing and drying, apply lubricating oil instantly to the driving chain.

Motorcycle storage guide

- Reassemble the spark plug and spark plug lid.

4. Remove the storage battery and put it in a place free of freezing and far from direct sunlight. Carry on a slow charge for the storage battery once a month.
5. Clean and dry the motorcycle, apply wax to painted surface and antirust oil to the chrome-plated surface.
6. Apply a coat of lubricating oil for the driving chain.
7. Charge the tire to the standard pressure specified for the tire and put a wooden block under the wheel tire for blocking up and isolation of the wheel from the ground after the motorcycle is placed.
8. Store your motorcycle in a shaded but not damp place with less day and night temperature difference, never store the motorcycle in a place with direct sunshine and where inflammable spontaneous combustion articles (such as grain, coal, cotton) are stored.

When reusing the motorcycle

1. If the motorcycle has been stored for more than 4 months, it is required to change the engine lubricating oil.
2. If necessary, charge the storage battery and mount it again.
3. Remove the remaining misty antirust oil inside the fuel tank thoroughly and fill the fuel tank with fresh gasoline.
4. Perform all the necessary checks before driving. Before restoring normal driving, ride your motorcycle first in non-crowded place with low speed. Normal driving can be resumed only when no performance problem is shown.

Maintenance of aluminum wheel

The aluminum wheels, when contacted with filth, mud and road surface salt etc., will get rusted. After driving your motorcycle, use a foam block dipped with mild detergent to clean the wheels and wash them with fresh water and dry with soft cloth.

NOTICE Notice

1. Never use steel wire velour or sanitizer containing with abrasive or polishing compound to clean the wheels, or otherwise it will damage the wheels.
2. Do not allow the wheels to rub with other articles, or it will cause damages to the wheels.

Main technical parameter

The main parameters for the motorcycle set		FY125-3P	FY150-3
Length×width×height (mm)		2045×715×1110	2045×715×1110
Wheelbase		1280mm	1280mm
Total weight of motorcycle set		131kg	131kg
Maximum load quality		150kg	150kg
Minimum space from the ground		150mm	150mm
Max. vehicle speed		⩾85km/h	⩾90km/h
Climbing angle		⩾20°	⩾25°
Braking distance		⩽7m（30km/h）	⩽7m（30km/h）
Brake type (front /rear)		Disc type/Drum type	Disc type/Drum type
Wheel felloe type (front /rear)		Aluminum alloy / aluminum alloy	Aluminum alloy / aluminum alloy
Brake operation mode (front / rear)		Hand braking / foot braking	Hand braking / foot braking
Front wheel specification		2.75-18	2.75-18
Front tire pressure		175～200kPa	175～200kPa
Rear tire specification		110/90	110/90
Rear tire pressure		200～225kPa	200～225kPa
Headlight		12V 35W/35W	12V 35W/35W
Taillight / stop lamp		12V 5W/21W	12V 5W/21W
Turn signal lamp		12V 10W	12V 10W
Engin	Model	FY156FMI	FY162FMI
	Cylinder diameter × stroke（mm）	56.5 × 49.5	62.0 × 49.5

e p a r a m et e rs	Displacement（mL）	124	149
	Compression ratio (ε)	9.0:1	9.2:1
	Nominal power / relevant rotation speed kw/(r/min)	7.20/8000	8.5/8000
	Torque/relevant rotation speed N.m/ (r/min)	9.35/7000	9.8/7500
	Minimum no-load stable speed (r/min)	1400±100	1500±100
	Initial gear ratio	4.055	4.055
	Final gear ratio	2.733	2.733
	Fuel type and brand	RQ-90	RQ-90
	Starting mode	two way: electric starting, and pedal starting	two way: electric starting, and pedal starting
	Ignition mode	C D I	C D I
	Fuel consumption for one hundred kilometers	2.10L	2.2L
	Lubrication method	Pressure and splash lubrication	Pressure and splash lubrication
	Clutch type	Wet multiple disc	Wet multiple disc
	Storage battery specification	12V 7.0Ah	12V 9.0Ah
	Spark plug model	P-RA7HC	P-RA7HC
	Fuse	12V 15A	12V 15A

Cause of common troubles and solutions

Cause of common troubles and solutions for transmission case

Failure phenomenon	Cause	Solutions
1. Throw-out of gear while changing speed	1. Shift gear and fork worn-out 2. Spring broken	1. Replacement 2. Replacement
2. Transmission case oil leakage	1. Poor sealing of joint surfaces for transmission case, screw loose 2. Oil seal worn-out and damaged	1. Apply fluid sealant and tighten the screws 2. Replace the oil seal
3. Poor gear engagement	Shift gear worn-out, spring broken, shifter fork seized	Overhaul and replace damaged parts
4. Abnormal sounds	Gear, gear shaft, selector fork worn-out	Replace it

Common driving and operation troubles and eliminating method

Driving	Failure phenomenon	Cause	Solutions
	1. The vehicle shakes violently	Front and rear damper spring broken, oil leakage, damper bended	Replace it
	2. Unstable driving direction	1. Too tight or loose for the correlated parts of the steering handle 2. Insufficient tire pressure 3. Loose front, middle, rear shaft	1. Adjust 2. Charge to standard value 3. Adjust
	3. Braking malfunctioned	1. Front and rear brake shoe excessively worn-out 2. Front and rear braking cable damaged, brake clearance too large 3. Attrition of brake cam	1. Replace 2. Replace and regulate 3. Replace
	4. Poor driving inertia	1. Insufficient tire pressure and too tight chain 2. Wheel bearing attrition, all relevant parts seized	1. Pressurize and adjust 2. Replace and overhaul
Operating	Operation disabled	1. Broken strands of throttle valve cable	1. Replace 2. Reinstall

		2. Throttle valve reversely mounted	

Cause of common engine troubles and solutions

Failure locations	Failure phenomenon	Cause	Solutions
Fuel supply system	Fuel supply short, difficult engine start or even unable to start,	1. No oil in fuel tank 2.Fuel switch not opened 3.Carburetor blocked 4. No oil at upper oil level	1.Refill the fuel tank 2. Open fuel switch 3. Clean carburetor 4.Supply with standby oil pipe
	Poor idling, difficult to start, blow out when accelerating after start, flame-out automatically	1. Carburetor blocked 2. Air door not opened 3. Throttle valve attrition 4. Incorrect mixture ratio 5. Water in the fuel tank	1.Clean the carburetor 2.Open the air door 3.Replace the throttle valve 4.Adjust the mixture ratio screw 5.Clear up the fuel tank
	Slack driving, with slow speed increase when increasing accelerator	1. Air door not opened 2. Incorrect mixture ratio	1.Open the air door 2.Adjust the mixture ratio screw
Ignition system	Engine unable to start or stops at midway: 1. With normal compression pressure, carburetor and high voltage coil discharge, but abnormal spark	1. Spark plug charcoal and dirt 2. Improper spark plug electrode gap 3. Spark plug insulator damaged, short circuit between electrodes	1. Clean spark plug charcoal and dirt 2.Adjust the gap to standard value 3.Replace the spark plug
	2. With normal compression pressure, carburetor, but abnormal high voltage coil discharge and spark discharge	1. Coming off or burning of high voltage coil joint 2. Damaged C.D.I ignition electronic induction components	1.Reweld the joint or replace the coil 2.Replace

Engine crank connecting rod mechanism	1. Engine unable to start or stops at midway (with normal carburetor, ignition plug, but slack of compression pressure)	1. Worn-out or broken piston ring. 2. Piston rings stuck 3. Inlet and exhaust valve air leak 4. Cylinder cap air leak 5. Broken start spring 6. Starting gear wheel attrition	1. Replace piston rings 2. Clean the piston and rings 3. Adjust or replace 4. Replace air cylinder cushion 5. Replace 6. Replace
	2. Abnormal engine operation with beating sound	1. Attrition of cylinder, piston or piston ring 2. Attrition of piston pin hole and piston pin 3. Attrition of crankshaft bearing 4. Attrition of connecting rod needle bearing 5.Excessive exhaust valve clearance 6. Attrition of camshaft, rocker arm, rocker arm shaft sleeve 7. Oil loss at engine running locations	1.Replace piston, piston ring and cylinder block 2.Replace the piston and piston pin 3.Replace the bearing 3.Replace the bearing 5.Adjust the clearance to the standard 6.Replace 7.Add the engine oil
	3. With normal spark, but abnormal engine operation	Water in the fuel tank	Clear up the fuel supply system and relevant parts
	4. Temporary slack of horsepower	1. Poor spark plug 2.Engine overheated	1. Replace 2. Cool the engine, adjust and avoid driving for a long time

I Use of engine oil from original factory is the essential for lengthening engine life

Is your motorcycle healthy? It is closely related to the quality of the oil used.

Engine oil from original factory

Engine oil from original factory is a product developed according to the design characteristics of engine. It plays a vital role in such performances as lubrication, power etc. for the engine.

Recommended engine oil: Engine oil from original factory

Gear oil: Gear oil from original factory

Dealers for engine oil from original factory have them available for selling

Oils replacement records, oils replacement date, traveled distance recording sheet.

Change times	Exchange date	Traveled kilometers	Engine oil
1	M D Y		
2	M D Y		
3	M D Y		
4	M D Y		
5	M D Y		
6	M D Y		
7	M D Y		
8	M D Y		

J Maintenance records

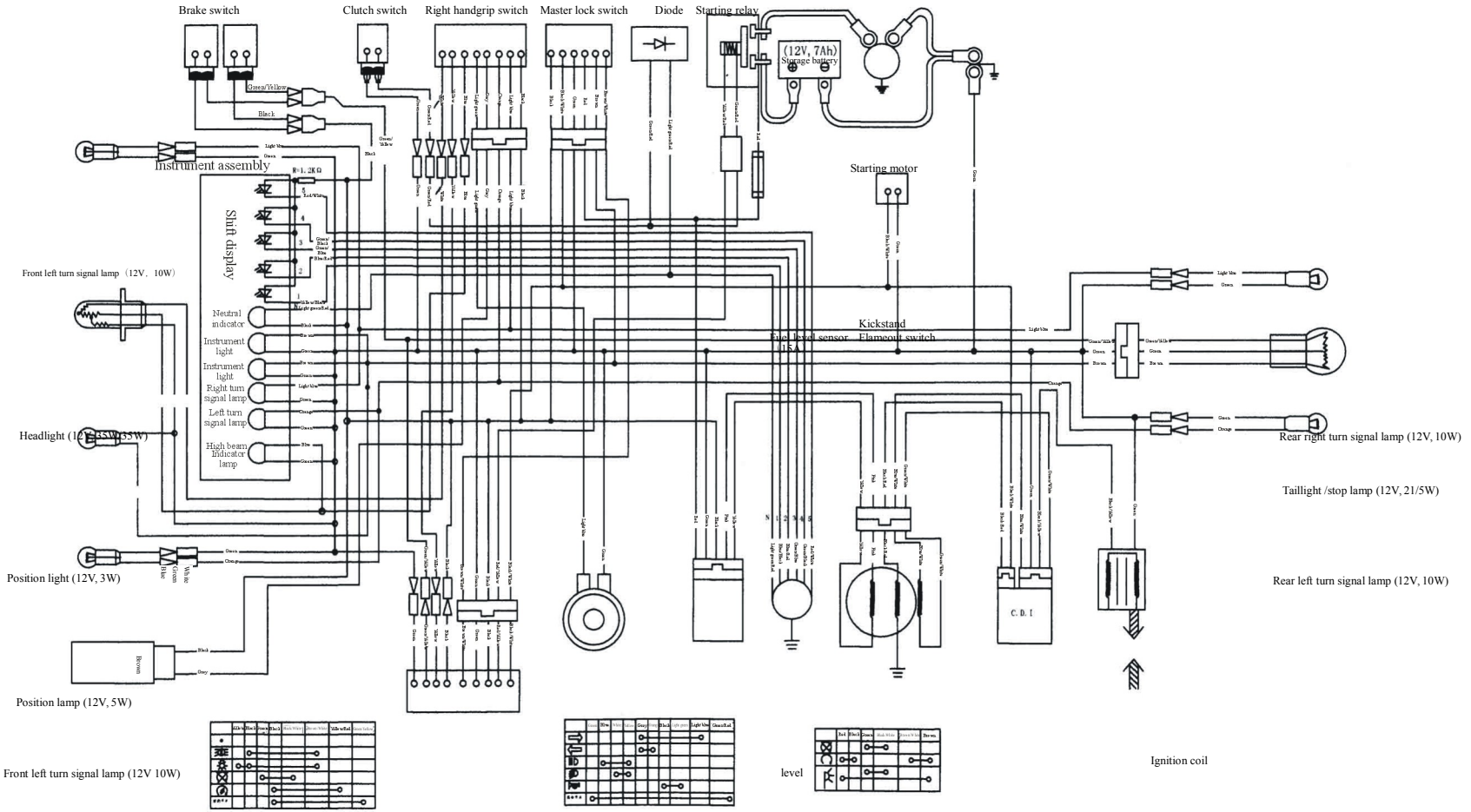
After completion of the normative maintenance , record the date, odometer readings, name of maintenance man in the provided columns. The additional information "Owner check and maintenance" and "Constant maintenance" can be added to the below recording sheet.

Maintenance records			
Date	Odometer reading	Name of maintenance man	Items maintained
Remark:			

9	M D Y		
10	M D Y		
Remark:			

Schematic circuit diagram

FY125-3P, FY150-3 circuit principle diagram



Flasher

Rectifier

Electric horn

Electronic
ignition device

Spark plug

Magneto

Left handgrip switch

Right handgrip switch

Master lock switch

Right handgrip switch

Guangzhou Huanan Motors Group/Guangzhou Panyu Feiying Motors Sale Co., Ltd.

Add: 7/F, Huanan Building, 35 Fuhua Xi Rd., Shiqiao, Panyu, Guangzhou

Tel: 020-34818999 Fax: 020-34818111 34818388

Service number: 020-84927222

Green number: 800-8302168

Http//:www.hnmoto.com

E-mail: feiying8492@vip.163.com