Important Cautions

About running-in of a motorcycle

The first 1000 km operation is very important in the entire service life of a motorcycle. A correct running-in can guarantee both the longest service life and the best performance of the vehicle. Proper running-in can polish machined surfaces to form correct seals and mating surfaces.

Careful and patient running-in can make the motorcycle stable in riding and optimize performance. It is important not to do any operation which may overheat engine components.

For specific running-in method, please refer to "Running-in of a new vehicle".

Please carefully read the manual and strictly observe all instructions or descriptions.

Special attention should be paid to the contents emphasized with the terms of "**warning**" "**Precaution**" and "**note**", etc.

Warning…… Concerns personal safety. Ignoring it may result in accident.

Precaution…… Refers to operational methods that must be followed or measures that should be taken, so as to prevent damage.

Note…… Refers to special explanations to make maintenance or important descriptions more explicit.

The operation manual should be deemed as a permanent document of the motorcycle. When transfer the vehicle to others, the instruction manual should also be transferred to the new owner.

This manual pertains to the following models:

QM110GY

QM125GY

QM125GY-2

QM125GY-2B

QM125GY-2C

QM200GY

QM200GY-B

QM200GY-B（A）

The instruction manual takes QM200GY as example. There are some differences among various models. For any unconformity between your vehicle and the instruction manual, the real vehicle should prevail

Foreword

Thank you for your choosing QingQi brand GY series motorcycles. In design, development and manufacture this series, our company applies the latest advanced technology and equipment to provide you with a motorcycle that is reliable in performance, unique in design and elegant in appearance. Motorcycle riding is one of the most exciting sports. Motorcycles are an ideal means of transport and can give you infinite riding pleasure. Before riding your motorcycle, please familiarize yourself with all stipulations and requirements mentioned in this instruction manual.

The instruction manual deals in the correct use and maintenance of your motorcycle. Observing the following guideline will help guarantee years of trouble-free use. The distributor has skillful and well trained technical professionals to provide the best maintenance and service to your motorcycle.

Executed standards:
Q/QM021021-2007

Jinan QingQi Motorcycle Co. Ltd.

Contents

Chapter 1 User Instructions

Instructions on safe motorcycle riding

There should be a condition for the motorcycle to serve your well. The condition is paying attention to safety at any time. Therefore, please observe traffic laws and follow the six points below.

Wear safety helmet

Safe riding starts from wearing a safety helmet. This is an important factor in motorcycle riding. A high-quality safety helmet is the first thing of personal protection in motorcycle riding. The most serious traffic accident is head injury. Therefore, be sure to wear a safety helmet to drive a motorcycle, and wear a pair of proper protective glasses.

Please be familiar with the vehicle structure

Your riding technique and your understanding of mechanical knowledge are the basis of safe riding. Make exercises in a spacious place without other vehicle and make yourself fully familiar with your motorcycle and control method. Be sure to keep in mind that, skill comes from practice.

Understand the limit of your safe speed

Riding speed depends on road surface conditions, your skills and the weather. Understanding the limit may prevent accident. At any time, accident may be prevented as long as riding in the range of your skill.

Wear well-fitting dress

Loose and fancy dress may make you uncomfortable and unsafe in your riding. Riding on the cradle, a well-fitting dress may give you freedom for activities of your arms and legs. Gloves, boots and safety helmet will show that you are qualified driver. High quality and tight dress shouldbe your selection.

Pay more attention to safety during riding in rainy weather

Wet roads are dangerous. Please note that, in rainy days, the braking distance is two times as much as that in dry weather. Stay away from manhole covers, paint marks or oily surfaces to prevent slipping. Avoid abrupt steering during acceleration. Be careful when drive over railways and bridges and keep a safe distance with any vehicle in front.

Inspection before riding

Please carefully read all instructions in "inspection before riding" of the manual to guarantee the safety of you and passengers.

Position of serial numbers

Chassis number (or VIN code)

Engine number

Position of metal nameplate

Chassis number (or VIN code) and engine number is necessary for registration of your motorcycle. Such numbers are needed with order components or service, to allow the distributor to provide you with better service.

Chassis number (or VIN code) is on the head tube of chassis. Engine number is on the left side of crankcase. Metal nameplate is on the head tube of chassis, showing the main technical parameters, manufacturer and date of production of the motorcycle.

Write the numbers in the spaces below, for future reference.

Chassis number:
Engine number:

Chapter 2 Installation Position of Parts

Handle bar instrument

1 Clutch lever
2 Left handlebar switch
3 Speedometer
4 Ignition switch
5 Tachometer
6 Right handlebar switch
7 Accelerator grip
8 Front brake lever
9 Rearview mirror

Left side view

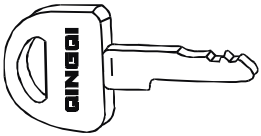
1 Fuel tank switch
2 Carburetor
3 Gear lever
4 Side stand

Right side view

1 Rear brake pedal
2 Kickback start lever
3 Spark plug

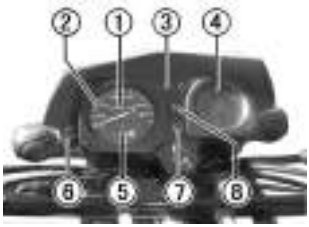
Chapter 3 Control Part

Key



Two keys are provided. Please use one key and put the other in a safe place for future use.

Instrument panel



Odometer (1) ecords the total distance that the motorcycle has traveled since it was used.

Speedometer (2) shows the moving speed in km per hour.

Turning signal lamp (3) When left turning signal lamp is ON, the left turning signal indicator on the panel " ⇦ " and turning signal lamp will flash.

When right turning signal lamp is ON, the right turning signal indicator on the panel " ⇨ " and turning signal lamp will flash.

Precaution:

If one of front and rear turning lights is damaged, the indicators on the instrument panel and the turning lights may be lit consistently, or may flash fast or slow. Then, timely locate the cause and carry out troubleshooting.

Tachometer (4) It shows the engine rotation speed in number of revolutions per minute.

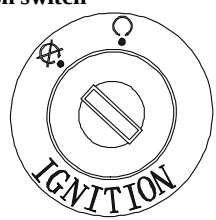
Trip meter (5) Trip meter is a kind of odometer that can be reset. It is installed in odometer. It is mainly used to measure short distances or for calculation of fuel consumption.

Reset knob (6) Turn it counterclockwise to reset the mileage number on the trip meter to zero.

High beam indicator lamp (7) When the head light is in high beam, the indicator is lit.

Neutral gear indicator lamp (8) when the transmission is in neutral position, the indicator will be lit. When any other gear is engaged, the indicator goes OFF.

Ignition switch



The ignition switch has two positions:

" " (OFF) position All circuits are disconnected and the key can be removed.

" " (ON) position All igniting circuits are ON and the engine can be started. The key cannot be removed in this position.

Steering lock

To lock the steering handlebar, turn the handlebar to left, insert the key and turn it clockwise.

Warning:

When the steering handlebar is locked, never move the motorcycle or you may lose balance.

Left handlebar control system

Dimmer switch (1) When dimmer switch is turned up to " " (high beam) position, the head light is in high beam and the high beam indicator lamp on the instrument panel is lit. On contrary, when it is turned down to " " (low beam) position, the low beam is lit.

Lighting switch (2)

" " ON position When the switch is turned to this position, the head light, front position light, instrument panel light and rear tail light will be lit.

" " parking light position When the switch is turned to this position, the front position light, instrument panel light and rear tail light will be lit.

"●" OFF position All the head light, front position light, instrument panel light and rear tail light go OFF.

Turning signal operation (3) When the switch is turned to left " ⇦ " position, the left turning signal lamp is lit and the indicator lamp on instrument panel flashes. When the switch is turned to right " ⇨ " position, the right turning signal lamp is lit and the indicator lamp on instrument panel flashes.

Warning:

Whenever you are going to change lane or make a turn, turn ON the turning signal lamp. After lane change or turning, timely turn the

signal light OFF.

Horn button (4) Press "" button and the horn will sound.

Clutch lever (5) To start the engine or make a gear shifting, press the lever to release the drive system and cut off the clutch.

Right handlebar control system

Front brake lever (1)

To apply front wheel brake, slowly press the brake lever on the right handlebar. As the motorcycle adopts hydraulic braking，do not press it abruptly or forcefully.

When the brake lever is pressed, the brake light will be lit automatically.

Engine shutdown switch (2)

The switch is a rocker switch, located on the tip of right handlebar control panel, with the rockshaft at the center of the rocker. When it is pressed in " " start position, the switch is turned and the engine can be started. It is an emergency switch. If the switch is pressed in " " position, the starting circuit is completely cut off and the starter motor cannot be started. Do not put the switch in this position during riding.

Accelerator grip (3)

Accelerator grip is used to control the engine speed. To accelerate, turn the grip towards yourself. To decelerate, turn the grip away from yourself.

Electric start button (4)

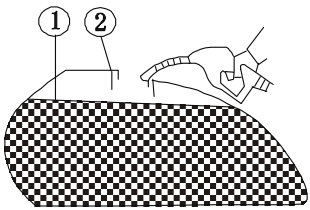
Press" " button to turn on the start motor circuit. During starting, put in neutral gear position to cut off transmission and guarantee safety.

Warning：

The starter motor should be operated not more than 5 seconds. Heavy discharge may cause overheat to circuit and starter motor. If starting is failed after several attempts, stop to check the fuel supply system and starting circuit (refer to "Troubleshooting").

Fuel tank cap

To open fuel tank cap, insert the key and turn it clockwise. Then, the fuel tank cap can be removed together with the key. To replace the cap, align the arrow on the cap and press the cap, together with the key, into the fuel tank cap hole until a click sound is heard. Then, remove the key.



(1) Gasoline level (2) Filler

Warning:

Do not fill the tank excessively. Never splash fuel to hot engine. No fuel should be left on the upper part of the filler, or the fuel may overflow when fuel temperature risess and expands, causing hazard.

During fuel refilling, shutdown the engine and turn the key to OFF position. Smoking or lighting fire is strictly forbidden during fuel refilling.

Gear lever

The motorcycle is provided with a 5-speed gear transmission. The gear lever connects to a ratchet mechanism in the transmission. After selecting a gear, the gear lever returns to the home position，so that the next gear can be selected. The neutral gear is between the low gear and two speed gear. From neutral position, press downs the gear lever to engage a low gear. Raise the gear lever one step to move forward a gear. Owing to the ratchet mechanism，it cannot move two or more gears up or down in one operation. To shift from 2-speed gear to low gear, or from low gear to 2-speed gear, it passes the neutral position but not stays there. To engage to neutral gear，stop it in the middle of moving from low gear to 2-speed gear.

Precaution:

When the transmission is in neutral position, the neutral indicator lamp is lit on the instrument board.

Despite the lamp is lit, be careful to release the clutch lever slowly to make sure if the transmission is really in neutral position.

When engaging into a low gear during high speed riding, the engagement of clutch may make a sudden increase in engine speed. Before engaging a low gear, slow down the motorcycle to prevent unnecessary wear of components in transmission system.

QM110GY adopts 4-speed gear transmission. The operation is the same as mentioned above.

Rear brake pedal

Press down this pedal to apply rear wheel brake, and the brake indicator light is lit.

Stand

The vehicle is provided with a side stand on the left side.

To support the motorcycle with the side stand, put your foot on the tip of side stand and press it forcefully, until the stand rotates fully and is blocked by the stopper.

Precaution:

When parking the motorcycle on a slope, make sure the motorcycle is headed toward upper slope to avoid sliding of the side stand. It is also advisable to engage the first gear to prevent the side stand from sliding.

Warning:

Before starting, check if the side stand is retracted to normal position, without loosing.

Carburetor enrichment lever

To help starting, the vehicle is provided with carburetor enrichment system: ① Equivalent vacuum diaphragm carburetor: To start a cold

engine, pull out the enrichment lever. After starting, push the lever to a half way and allow the engine to warm up to a proper temperature, before pushing the enrichment lever to its home position. ② Plunger carburetor：To start a cold engine, raise the enrichment lever to the highest position. After starting, lower the lever to a half way and allow the engine to warm up to a proper temperature, before returning the enrichment lever to its home position. (3) Wire type enrichment plunger carburetor: To start a cold engine, put the wire handle forward to the end position. After starting, put the handle to a middle position and allow the engine to warm up to a proper temperature, before returning the enrichment handle back to its home position.

Note：

The enrichment system is designed for starting a cold engine. When temperature is low, the warming time be extended properly (if no warming is made, the speed transition may become poor).

During riding, the enrichment system should be shutoff; otherwise the fuel consumption may be increased. The correct enrichment shutoff status is ： For vacuum carburetor, fully push in the lever； For plunger carburetor, lower the lever to the end； For wire type enrichment carburetor, turn it to the front end.

Warning：

After using the enrichment system, shutoff it timely to prevent overheat that may damage the silencer elbow.

Kickback start lever

If your motorcycle has this device, please refer to the following contents.

The kickback start lever is installed on the right side of the motor. Owing to motorial kickback starting mechanism, the engine can be started in any gear position provided the clutch is released.

Warning：

After the engine is started, check if the start lever has returned to its normal position.

Do not use the kick starter and electric starter at the same time.

Fuel switch

The vehicle is provided with manual fuel valve. There are three positions : “ ⊓ ” (Open) “⊔”(Reserve) “●” (Close).

“⊓” Open position

Generally, the fuel switch is in this position. When the accelerator grip is rotated, fuel flows from valve to carburetor.

“⊔” Reserve position

If the fuel level is too low, turn the fuel switch to this position and a certain amount of fuel in reserve can be available.

“●” Close position

Turn the fuel switch to this position after the engine is shutdown.

Precaution:

If the fuel switch is in “ ⊓ ” Open position for a long time, fuel may overflow from carburetor to engine. Fuel in engine may cause serious mechanic damage during engine starting

Note:

Every time after turning the fuel switch to reserve position, refill the fuel tank immediately to the nearest gas station and return the fuel switch to open position.

Tool kit

The tools box is below the cradle on the rear left side of the motorcycle.

Chapter 4 Instructions on fuel and engine oil

1. Fuel

! Warning

Gasoline is inflammable and explosive. When handling gasoline, attention should be paid to prevent burnt or accident.

- In places where gasoline is stored or handled, shutdown the engine, do not smoke, and keep away from naked flame or spark.
- Refueling should be made in a well ventilated place. After refueling, immediately clean off any gasoline outside the fuel tank.

Please #93 or #95 (GB17930-1999) unleaded gasoline. This may prolong the service life of spark plug.

Note!

If the engine produces ping noise, it may be caused by using of improper fuel. Replace with correct fuel.

Ethanol gasoline

If ethanol gasoline is used, please use #90 or higher conforming to GB18351-2004. Do not use methanol gasoline, even though it may contain cosolvent and anti-corrosion agent.

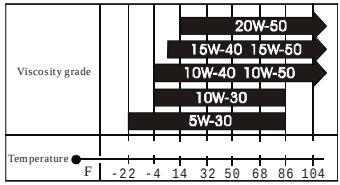
Note!

- If ethanol gasoline is exposed to water excessively, ethanol may be separated, resulting in decrease of gasoline octane number. Therefore, the storage time should not be too long.
- Before using ethanol gasoline for the first time, make a through cleaning of the fuel supply system and fuel tank.
- Always buy a proper amount of ethanol gasoline. Once there is a poor fuel tank sealing or a long storage time, moisture content may increase, causing low octane number and resulting in difficult ignition or weak power.

2. Lubricant

(Please refer to Regular Maintenance Table)

Use high quality 4-stroke engine oil to prolong engine life. Engine oil should be SE or SD product in API classification. Engine oil of proper viscosity should be used according to local air temperature. There are three viscosity levels suitable for the engine, namely, SAE15W-40, SAE10W-30 and SAE5W-30. Refer to the figure below:



API classification	
SG	High
SF	
SE	
SD	Low

SE or SF level SAE10W-30 4-stroke lubricant is recommended.

Note:

Lubricant should be replaced at 1000km or about one month for the first time, every 3000km thereafter. Oil volume is 850ml for replacement or 1300ml after overhaul.

The quality of engine oil is a major factor affecting the service life of engine. Replace engine oil according to the maintenance period stated in maintenance table (please refer to Page 19). When riding in dusty areas, engine oil should be replaced more frequently than the stipulations in the maintenance table.

Explanation:

During cold weather in northeast and northwest China, it is advisable for user to use high quality low temperature lubricating oil. SE 10W-30 or SF 5W-30 is recommended. For temperature below -35°C, the following use time, API SG or higher class 5W-30 lubricant of notable brand is recommended.

Warning:

Inferior lubricant may cause irretrievable loss to the engine and seriously shorten the service life of engine.

Chapter 5 Running-in of new motorcycle

The importance of correct new vehicle running-in was mentioned in Foreword. The correct running-in method is as follows.

Maximum speed

The maximum speed during running-in period is shown in the table.

First 800 km	<5000 rpm
At 1600 km	<7500 rpm
After 1600 km	<10000 rpm

Changes of engine speed

Do not drive at a constant engine speed for a long time. For a better running-in, properly increase and reduce the throttle opening.

Change engine speed from time to time to let various engine parts get "bearing" pressure. When the pressure is "unloaded", the engine parts will cool down, helping the fitting of different parts. During running-in period, engine load may be properly increased. Apply some load to engine parts to guarantee good fitting. This is every important, but do not apply excessive load to the engine.

Avoid riding at a low speeds

Running at a certain low engine speed (with light load) can only polish the parts but cannot get a good running-in. So long as the upper limit of recommended throttle opening is not exceeded, drive the vehicle in various gears with proper acceleration. However, never drive at the maximum acceleration during the first 1600 km.

Circulating oil before riding

After starting of warm or cold engine and before applying load or riding, let the engine run at idle speed for an adequate time. This allows lubricant to flow to all import engine parts, so as to reduce wearing and increase the service life. This also helps the engine to warm-up sufficiently.

First maintenance inspection

The maintenance of the first 1000 km is the most important. During running-in period, all engine parts have been run-in and other parts engaged. Then, all parts should be adjusted, all fasteners be tightened, contaminated engine oil be replaced and filter element be replaced.

Timely making 1000 km maintenance can guarantee a long engine life and the best engine performance.

Precaution:

1000 km maintenance should be carried out according to the "Troubleshooting" in the manual. Pay special attention to the "precaution" and "warning" in the section.

Chapter 6 Inspection before Riding

Before riding, make sure to carefully check the following items. Never ignore the importance of the inspection.

Contents	Purpose
Steering handlebar	1、 Smooth 2、Free steering 3、No loose
Lighting	Operate all lamps -- head light, tail light, brake light, instrument board lighting lamp, turning signal lamps
Transmission oil	Proper oil level
Brake	1、 Adjust clearance of rear brake pedal and front brake lever 2、 No "spongy" feeling 3、 No leakage
Indicators	Neutral gear, gear position, oil level indicators (or turning signal indicators)
Accelerator	1、 Proper free play in accelerator wire 2、 Free fuel flow and reliable accelerator throttle valve returning to closed position
Tires	1、Correct air pressure 2、Proper tread pattern depth 3、No injury or cut
Horn	Correct function
Clutch	1、Proper free play in clutch wire 2、Smooth operation and full releasing.
Fuel	Adequate fuel for the distance to drive.
Drive chain	1、Proper tightness 2、Proper lubrication

Chapter 7 Riding Essentials

Warning:

If it is the first time for you to drive this type of motorcycle, you are advised to practice on a road away from highways, until you have completely been familiar with the control and operation of the vehicle.

Before riding, make sure that the side stand is returned to the uplift position.

Do not make gear shifting or deceleration in course of turning. Slow down to a safe speed before turning.

Do not shift into a low gear during turning.

It is dangerous to drive a motorcycle with a single hand. While riding, take a firm but relaxed hold of the handlebar with both hands and put your feet on the foot board. In any event, never free both hands from the handlebar.

On a wet road, the friction force is low and so is the brake force and turning capability. Therefore, decelerate in advance.

Observe the traffic laws and speed limit.

Engine starting

Make sure the fuel switch is in open position and the engine shutdown switch in " " position. Insert the ignition key in ignition switch and turn it to ON position. If the transmission is in neutral position, the neutral indicator lamp is lit.

Warning:

Make it a habit to engage the neutral gear and firmly press the clutch lever before starting the engine. This can prevent dash forward in case of mistaking gear engagement.

1、 Press the electric starting button for ignition. Never rotate the accelerator grip when pressing the starting button.

Note:

After engine ignition, immediately release the starting button, to avoid adverse effects to the engine.

If the engine is not started after 5 seconds, wait for 10 seconds before making another attempt to prevent damaging the battery.

In case of failure in engine starting after two or three attempts, rotate the accelerator grip for 1/8 or 1/4 turns and try again.

A motorcycle not used for a long time and poor atomizing fuel may

result in starting difficulty. In this case, do not rotate the accelerator grip, but repeat starting.

2、 Starting with the kickback start lever

When the battery is over discharged, the engine can be started by using the kickback start lever.

Turn the ignition switch to ON position.

Forcefully kick the kickback start lever.

Cold engine

Put the carburetor enrichment handle (plunger carburetor) or lever (vacuum carburetor) to the highest position (plunger) or pull it fully out (vacuum carburetor), keep the accelerator closed, and press the electric start button; After the engine is started, press the handle half way down (plunger) or push the lever half way in (vacuum) and wait for the engine is adequately warmed-up, before putting the handle or lever to the original position. The colder it is, the longer warm-up time the engine takes. Otherwise, the acceleration may be poor.

Warm engine

Rotate accelerator grip for 1/8 - 1/4 turns, and press electric start button to start the engine. When the engine is warm, it is not necessary to use carburetor enrichment system.

Warning:

Never start the engine in a room with poor or no ventilation because carbon monoxide gas is poisonous. Never leave the motorcycle unattended with a running engine.

Precaution:

Do not allow the engine run for a long time without riding, or the engine may get overheat causing damage to internal parts or chrome plating of exhaust system.

Start riding the motorcycle

Precaution:

Start the engine with the transmission in neutral position, the clutch engaged and driver riding in normal riding position.

Firmly press the clutch lever, wait a little moment, press down the gear lever to engage the first gear, rotate the accelerator grip slowly to you and smoothly and slowly release the clutch lever. When the clutch is engaged, the motorcycle will move forward.

To change into a higher speed gear, firstly decelerate a little, release the accelerator and, at the same time, press the clutch lever, shift the gear lever to the next higher speed gear position and release the clutch lever, slightly rotate the accelerator. In this way, the highest gear can be engaged gradually.

Note:

For high speed riding, always avoid releasing the accelerator suddenly. it is advised to wait a moment when the engine is running at 3000-5000rpm before fully releasing the accelerator. This can prevent the engine from shutdown due to abnormal combustion.

Use of transformation device

Transformation device is able to allow the engine running smoothly within normal range of operation. The transmission gear ratio is carefully selected for the engine performance. Driver should select gears suitable to general conditions but should not use the clutch for the purpose of speed control. To decelerate, shift to a low gear to allow the engine running in a normal speed range.

Precaution:

① The engine speed should not be in the red range of the tachometer in any gear.

Riding on a slope

② To shift from a high gear to a low gear, control the speed in a safe speed range before gear shifting. Otherwise, abrupt deceleration (sudden rise of engine speed) may happen, causing gear impacts, sever parts wearing, or overbalance of the vehicle. it is dangerous.

Slope climbing:

● When going up a steep slope, the motorcycle may decelerate due to insufficient power. Then, immediately shift to a low gear to allow the engine running a normal power range. Pay attention that, gear shifting should be made quickly to keep adequate forward momentum of the motorcycle.

● When going down a slope, use the engine for braking, by shifting into a lower gear.

● Be sure to keep in mind that, never drive too fast down a slope! Never allow the engine to run a very high speed for a long time.

Use of brake and parking method

Rotate the accelerator grip outward to fully close the throttle.

At the same time, apply the front and rear brakes with even forces.

Use gear shifting to slow down.

Before the motorcycle is stopped, firmly press the clutch lever, shift into neutral gear and observe the neutral indicator to make sure the neutral gear is engaged.

Warning:

The faster the vehicle is driven, the longer the braking distance will be. Be sure to make correct estimation of the distance between you and the vehicle or object in front of you for adequate braking performance.

An inexperienced driver always uses the rear brake only. This will cause premature wearing and too long a braking distance.

It is dangerous to use front brake or rear brake only. This may cause slipping and out of control. On wet highway or other dull road surface and during turning, be extremely careful to apply the brake gently. Hard braking on rough or dull road surface is very dangerous.

The motorcycle should be parked on stable and flat ground.

To park your motorcycle on a gentle slope by using the side stand, engage the first gear to prevent sliding off the side stand. Remember to shift to neutral gear before starting the engine.

Turn the ignition switch to OFF position to shutdown the engine.

Remove the key from ignition switch.

Lock the steering bar for safety.

Chapter 8 Inspection and Maintenance

The following table shows the interval of regular maintenance in travel distance or number of months. At the end of an interval, be sure to carry out the specified inspection, lubrication and maintenance. If your motorcycle is used with heavy loads, such as high power riding in a dusty environment, the maintenance should be carried out more frequently. Your distributor can give your further guide. The parts of steering gear, shock absorber, bearings and wheels are critical components, and require professional skills to repair. In the light of safety, it is advisable to the inspection and maintenance done by your distributor or qualified maintenance staff.

Precaution:

In regular maintenance, it may be necessary to replace one or more parts. For part replacement, it is advisable to use genuine parts or equivalent products. No matter if you are experienced in vehicle maintenance or not, the items with * mark should be handled by your distributor or qualified maintenance staff. For the items without such mark, you can do it by yourself according to the instructions.

Warning:

After correct running-in of 1000 km, maintenance is mandatory to ensure the safety of your motorcycle and give it a full play of its performance.

Be sure to make regular maintenance thoroughly according to the instructions in the manual.

List of Regular Maintenance

Interval: based on odometer reading or number of months	km	1000	4000	8000
	Number of months	5	20	40
*Battery (specific gravity of electrolyte)		I	I	I
Carburetor		I	I	I
Spark plug		I	C	R
Gasoline filter		C	-	C
Clutch		I	I	I
*Valve clearance		I	I	I
Air filter		-	C	C
*Fuel hose		I	I	I
		Replace every 4 years		
Engine oil and oil filter		R	R	R
Oil filter screen		C	C	C
*Chassis bolt and nut		T	T	T
Transmission oil		R	R	R
*Brake		I	I	I
Front fork		-	I	I
Tyres		I	I	I
Drive chain		I	I	I
		Clean and lubricate every 1000 km		
*Steering gear		I	I	I
*Rear shock absorber		-	I	I
*Cylinder head nut and exhaust pipe bolt		T	T	T

Note: Inspection: I, Tightening: T, Cleaning: C, Replace: R

Lubrication Table

Item \ Interval	Every 6000 km or 6 months	Every 12000 km or 12 months
Accelerator wire	Engine oil	-
Clutch wire	Engine oil	-
Speedometer wire	-	Grease
Drive chain	Lubricate every 1000 km	
*Brake cam shaft	-	grease
Accelerator grip	-	grease
Brake wire	Engine oil	-
Speedometer gear case and wheel bearing	-	grease
Brake pedal	Grease or engine oil	-
*Steering gear	Lubricate every two years or every 20000 km	

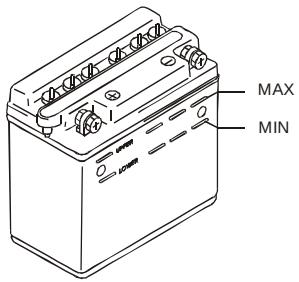
Tools

To help you for regular maintenance, a set of tools is provided in the tool box on the rear left side of the vehicle.

Battery

Battery is normally stored inside the guard board on the right side of the frame. The battery for the model may be of conventional type or maintenance-free type.

Direction for use of conventional type battery:



Before using, fill electrolyte to a level between the upper and lower limits. During using, the fluid level must be kept between the upper limit and lower limit.

Warning:

Once the battery has been in use, no diluted sulfuric acid should be added. If the fluid level drops below the lower limit, fill distilled water to the upper limit. Never use tap water.

Precaution:

Never damage, clog or alter the vent pipe for battery. Please make sure that the vent hose is connected to the vent fitting of battery, with the other end kept always open. The vent pipe and battery should be installed correctly.

The polarity of battery wiring should be always correct. Connect the red wire to positive (+) and the green wire to negative (-). Wrong connection may damage the charging system and battery.

Note:

After the first 1000 km and every 3000 km, have the specific gravity of each battery cell checked by your distributor, by using an electrolyte hydrometer.

1. Safety

① Electrolyte contains strong acid and should be prevented from contacting the skin. During operation, wear safety helmet and safety clothing.

② In case that electrolyte gets in eyes, immediately wash the eyes with plenty of clear water for at least 15 minutes, before going to hospital.

③ In case that electrolyte is drunk, drink a large amount of water or milk, and then milk or vegetable oil containing

magnesia.

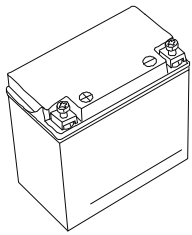
④ Keep away from reach by children.

2. Electrolyte filling

Before filling electrolyte, remove battery from the vehicle.

Check if the electrolyte conforms to specification requirements.

Direction for use of maintenance-free battery:



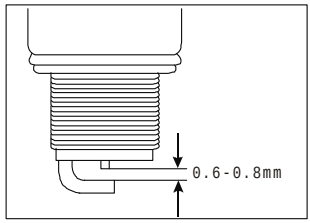
No electrolyte filling is necessary before and after battery using. To prolong the service life, fully recharge it before using.

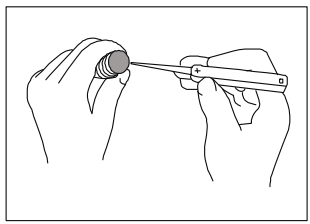
Note:

No matter what type it is, the battery may discharges and power may drop after a long store time. After removing from the vehicle and fully recharge, store it in a cool and well ventilated place.

When the vehicle is not used for a long time, remove the negative (-) wire from battery.

Spark plug





After the first 1000 km and every 3000 km thereafter, clean off any carbon deposit from spark plug by using a small steel wire brush or a spark plug cleaner. Readjust the spark plug gap with a thickness feeler to keep it between 0.6 - 0.8 mm. Replace spark plug every 6000 km.

When cleaning off carbon deposit, observe the color of the ceramic tip of spark plug. The color can tell you if standard spark plug suit your usage. If a standard spark plug shows wet or very dark, it may be better to use a spark plug with lower caloric value. A normal working spark plug should be light

gray or cotton yellow. If a spark plug is very white or even glowing, it means the spark plug was working in overheated conditions. Replace it with a spark plug of higher caloric value.

Precaution:

Spark plug should not be over tightened to prevent the threads of cylinder head from being damaged. When spark plug is removed, prevent any impurities from getting into the engine through spark plug hole.

Standard spark plug for the motorcycle is carefully selected and suitable for most operations. If the color of spark plug is found different from standard spark plug, it is advisable to contact your distributor before replacing with spark plug in a different heat resisting range. An improper spark plug may cause serious damage to the engine. A spark plug of other brand may result in operational difficulties. Therefore, consult with your distributor before selecting other brand spark plug.

Engine oil

A long service life of the engine depends on using high quality engine oil and regular oil replacement. Oil level check and regular oil replacement are very important tasks.

Check engine oil level

Precaution:

Engine oil window shows the oil level. When oil level is low, never start the engine. Fill oil until the oil level is just below the upper limit of oil window.

Replacement of engine oil and oil filter

Replace engine oil and oil strainer after the first 1000 km and every 3000 km thereafter. Oil replacement should be carried out when the engine is still warm, so as to thoroughly drain old oil from the engine. The method is as follows:

1、Park the motorcycle by using the central stand.

2、Remove oil filler cap.

3、 Remove drain plug from strainer cover on the engine bottom to drain oil.

Note：Be careful not to remove the neutral gear positioning screwed plug to avoid dropping of neutral gear cam pin and spring, resulting in difficult gear shifting.

4、Remove three screws from filter element cover.

①Cap nut ②Filter element cover

5、Remove filter element cover, pull out oil filter element and replace it with a new one.

Precaution:

Insert the opening part of oil filter element in the engine and check if the element is installed firmly.

6、Before reinstalling the filter element cover, check for any mistake in installation of the spring and gasket of oil filter element.

Precaution:

The gasket should be replaced with a new one each time when the element is replaced.

7、Install the filter element cover and screw on the nut. Do not fasten the nut excessively tight.

8、Tighten the oil drain ring and fill fresh engine oil about 950 ml into the oil filler, before gently tightening the top cover.

Note:

If only oil is changed without replacing the element, the volume of fresh oil is 850 ml.

9、Start the engine and allow it running idle speed for several seconds.

Precaution:

Carefully check for any oil leakage around the filter element cover.

10、 Shutdown the engine and wait for a minute before checking the oil level from engine oil window. The oil should be kept on "F" (full) line. If the oil level is below "F" line, replenish until it reaches the "F".

Precaution:

Please use the engine oil

recommended in "Instructions on fuel and engine oil".

Brake

There are two types of brake for the front and rear brake of the motorcycle, i.e., drum brake and disk brake.

Check the brake after first 1000 km and every 3000 km thereafter.

Correct braking operation is very important to safe riding. Be sure to carry out regular inspection of brake system by qualified distributor.

Warning:

Brake is related to personal safely and should be kept in good order.

If the brake system or brake lining needs repair, you are strongly recommended to have the job done by your distributor. They are equipped with complete tools and proficient techniques and capable to do it in a safe and economical way.

Front brake

For the brake, the distance from natural status to braking action is known as "free play". If the front brake is a drum brake, the free play of brake lever measured at lever bracket should be 10-20mm.

1、 Rotate the adjusting nut of front brake clockwise or counterclockwise to adjust the free play to specified value.

2、 After free play adjustment, lift the front wheel off the ground. Rotate the front wheel to check for any resistance. At the same time, press the front brake lever firmly and there should be adequate clearance between the front brake lever and handgrip.

If the front brake is a disk brake, the free play of brake lever measured at lever bracket should be 5-10mm.

Hydraulic brake system should be checked everyday, as follows:

1、Check for leakage in the front wheel brake system.

2、Check for any leakage or crack in oil pressure pipe.

3、The front brake lever should have a certain back spring force.

4、Check wearing conditions of front wheel brake lining.

Precaution:

Wheel disk brake system is a high pressure brake. For safety, the

replacement of oil pipe and hydraulic oil should not exceed the interval specified in the maintenance schedule in the manual.

Brake fluid

Warning:

It is harmful if brake fluid is drunk by mistake or contacts the eyes or skin. If it is drunk by mistake, spit it out by force. If it contacts skin or eyes, wash with plenty of clear water and go to hospital.

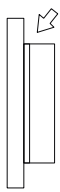
Precaution:

The vehicle uses ethanol series hydraulic oil. It should not be mixed with silicate or petroleum fluid. Otherwise, the brake system may be seriously damaged. Never use unpacked fluid or any fluid left over in the last maintenance, because moisture may get into the old fluid. Only SAE J1703 brake fluid should be used. Pay attention not to splash hydraulic oil to paint or plastic surface, to prevent corrosion.

Check the fluid level in the brake fluid tank. Replenish with specified hydraulic fluid if the level is low. Along with wearing of brake lining, fluid in the tank may flow to the pipe and the level may become low. Brake fluid replenishment should be considered as an import item in regular maintenance.

Brake lining

The essential of checking the front wheel brake lining is to see if the lining is worn to the limit mark. If wearing exceeds the mark, the brake lining should be replaced with a new one.



Warning:

Do not drive immediately after replacing a new wheel disk brake lining. Press the brake lever several times to allow the brake lining to fully extended, restore lever resistance, and circulate the brake fluid.

Front brake light switch

The switch of front brake light is located below the brake lever. Loosen the screw and move the switch position back and forth to find a proper point so that the lamp is lit immediately when pressure is applied but before the lever is fully pressed.

Rear brake

Adjustment of rear-wheel brake

If the rear brake is drum brake, to adjust the rear-wheel brake pedal, set the pedal to the most comfortable position for riding by rotating the pedal adjustment nut. Then, rotate the free play adjusting nut (2) to keep the free play (1) between 20-30mm.

①Free play

②Adjusting nut

Wearing limit of brake lining

The motorcycle is provided with brake lining wearing limit indicator in the rear brake. To check the wearing of brake lining, do as follows:

1、 Check for correct adjustment of the rear brake.

2、 Operate the brake and check if the limit extension line is in the allowed range, as shown in Fig. A.

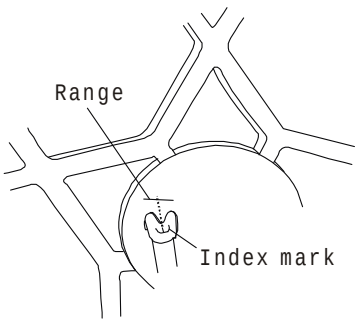


Fig. A Limit extension line is in the allowed range

3、If the extension line exceeds the allowed range, as shown in Fig. B, have the brake components replaced by your distributor.

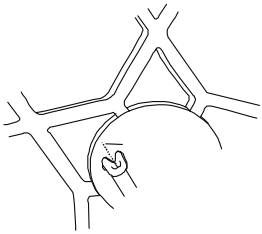


Fig. B Limit extension line is out of the allowed range

If the rear brake is disk brake, refer to the paragraphs for front brake disk brake for maintenance.

Rear brake light switch

Rear brake light switch is located at the right side of chassis. Adjust rear brake light switch as follows: Lift or lower the switch, so that, when the brake pedal is pressed, the lamp is lit before feeling a pressure.

Silencer

To avoid being burnt, please keep away from the motorcycle silencer after extended periods of riding.

Fuse

The fuse box is located inside the guard board on the right side of

the chassis. A fuse is provided for all the electrical system. In case of any trouble to electrical system, check the fuse first. If the fuse is blown out, replace it with the spare fuse (15A) in the fuse box.

Precaution:

Always replace the blown fuse with a new one of the specified amperage. Never use aluminum foil, steel wire or other things as substitute for fuse. If a new fuse is blown in a short time, it means there is a major electric trouble. Contact your distributor immediately.

Replacement of bulb

The rating of bulbs can be found in Chapter 13 Parameter List. Always replace a bulb with a new one of the same rating. Otherwise, overload to electric system and premature bulb damage may be caused.

Precaution:

The head light is generally reflection lamp. Do not touch the reflector during bulb replacement, so as to prevent reduction of service life.

For turning signal light, tail light and brake light, when installing light shield, do not excessively tighten the fixing screws to avoid damaging the light shield.

Air filter

If the air filter element is clogged by dust, the output power may reduce and the intake resistance may increase; The fuel consumption will also increase. Therefore, the air filter element should be checked and cleaned every 3000 km, as follows.

Precaution:

If the motorcycle is working in dusty conditions, the air filter should be checked and cleaned more frequently before schedule.

1、Remove the left side guard board.

2、Unscrew the air filter outer cover screw (1) and take out the air filter sleeve (2).

3、Take out the air filter foamed plastic sleeve shell.

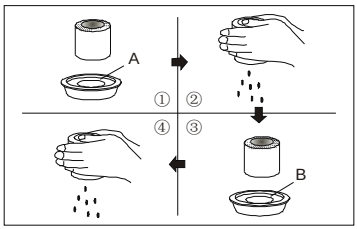
4、Separate the foamed plastic from the outer frame.

Precaution:

- During cleaning the filter element, check for any damage to the filter element and replace when necessary.
- Never start the engine without the filter element installed, or the engine wearing may be

increased.

Clean the foam type filter as follows:



1、Fill a pan of proper size with incombustible cleaning solution. Immerge the filter element in the cleaning solution and wash it.

2、Press the filter element with both palms to squeeze out cleaning solution. Never twist the filter element to avoid damaging.

3、Soak the filter element in engine oil tank and squeeze oil out, keeping it slightly wet.

Precaution:

Before and during cleaning, attention should be paid to check the filter element for any crack. Replace it if any crack is found.

4、Reinstall the filter in reverse order. Make sure the filter element is firmly fixed in correct position and reliably sealed.

Cleaning of paper filter element

Cleaning method is as follows:

1、Remove the left side guard board.

2、Remove the tensioning band screw of air filter connector. Pull out the intake pipe and separate it from the filter.

3、Take out the filter element

4、Pat the filter element while rotating it, to remove dust, and blow off remaining dust by using compressed air.

5、The filter element is made of paper and cannot be cleaned by using any oil-based agent.

Precaution:

Before and during cleaning, pay attention to check the filter element for any contamination, crack or damage. Replace it with a new one when necessary.

Reinstall the filter in reverse order. Make sure the filter element is firmly fixed in correct position and reliably sealed.

Precaution:

Never start the engine without the air filter installed. The air filter element must be cleaned or replaced more frequently if the motorcycle is used in dusty conditions. Never start the engine without the filter element installed, or the engine wearing may be increased. Be sure to the air filter element is in good working conditions, because this part is very

important to engine service life.

Carburetor

A stable carburetor is the basis of guaranteeing the engine performance. Before leaving the factory, carburetor has been adjusted to the best condition. Any unnecessary adjustment should be avoided. Please note that, there are two adjustment items for carburetor, i.e., accelerator wire clearance and idle speed. Carry out adjustment after the first 1000 km and every 3000 km thereafter, as follows.

Adjustment of carburetor idle speed RPM

1、 Start the engine and allow it to fully warmed-up without load.
2、 Close the accelerator. Rotate the idle adjusting screw to keep the engine running at 1500±100 rpm.

Precaution:

Idle speed adjustment should be carried out while the engine is fully warmed up.

Adjustment of accelerator wire

①Locking nut ②Adjuster

1、 Loosen the locking nut.
2、 Rotate the adjuster to make the wire clearance between 0.5 - 1.0 mm.
3、 After clearance adjustment, tighten the locking nut once again.

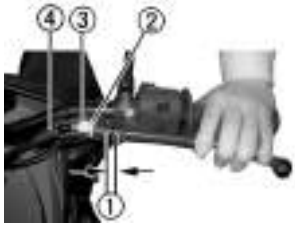
Precaution:

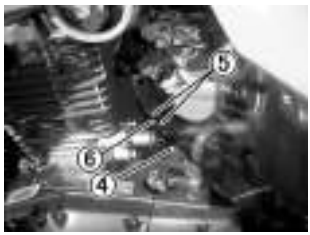
After accelerator wire adjustment, check the operation of accelerator grip. Engine idle speed should not increase due to the adjustment, and the grip should return to the closed position automatically.

Adjustment of clutch

Clutch adjustment is made through adjusting the tension of wire rope for clutch lever. Before feeling the gear disengagement by pressing the clutch lever, the wire clearance

measured at clutch lever should be 4 mm. If the clutch wire clearance is found incorrect, carry out adjustment as follows.





Loosen nut (2) and rotate the lever tensioning ring (3) clockwise to the stop. Loosen the wire rope adjusting ring lock nut (6), and rotate the wire tensioning ring (5) back and forth, until the lever clearance is about 4 mm. Lever tensioning ring (3) can be used for fine tuning. After the adjustment is completed, tighten locking nut (2) and (6), and cover them with rubber sleeve (4).

Adjustment of drive chain

①Adjusting bolt ②Locking nut
③Mark ④Rear wheel shaft nut

To adjust:

1、 Park the motorcycle with central stand.

2、 Loosen rear wheel shaft nut.

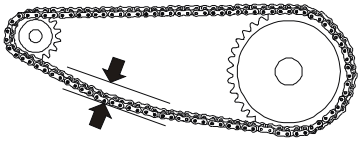
3、 Loosen the locking nut.

4、 Rotate the adjusting bolt left and right to adjust the chain.

Note:

When a new chain is installed, it is necessary to check both chain wheels. Replace if necessary.

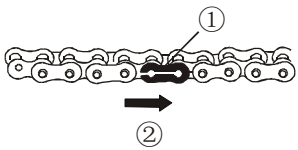
The drive chain tension should be adjusted every 1000 km, to keep a movable distance of 20 - 30 mm in the midpoint of the two chain wheels.



20-30 mm

Precaution:

The open end of drive chain connection clip should point away from the direction of rotation.



①Chain connector clip
②Direction of rotation

Cleaning and lubrication of drive chain

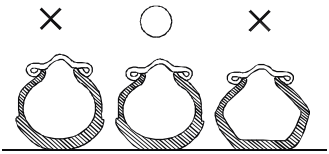
Dirt on drive chain may intensify the wearing of drive chain and chain wheels. Therefore, clean the drive chain every 1000 km with cleaning solvent, and lubricate it with special chain lubricant or engine oil.

Tires

Check the tire air pressure and tread pattern after first 1000 km and every 3000 km thereafter. Besides regular check, make it habit to check the tire air pressure from time to time, to ensure maximal safety and long life.

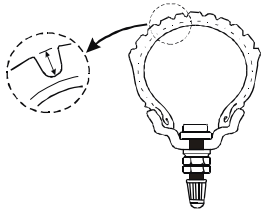
Tire pressure

A low tire pressure may intensify tire wearing and badly affect riding stability, causing difficulties in turning. But, a too high tire pressure may reduce the contact area between tires and road surface, causing wheel-slip and even out of control. It is necessary to always keep the tire pressure within specified limit. Tire pressure adjustment should be made when the tire is cold.



Tread pattern

When riding a motorcycle with over-worn tires, the riding stability is low and it may get out of control. When the depth of front wheel tread pattern is reduced to 1.6 mm or less, it is advisable to replace the cover tire. When the tread pattern of rear wheel is reduced to 2 mm or less, replace the tire with a new one.



Warning:

Problems may happen if no standard tire is used. You are sincerely recommended to use standard tire.

Correct tire inflation pressure is very important for normal vehicle performance and riding safety. Check the tire wear and inflation pressure from time to time.

Chapter 9 Measures to Reduce Pollution

To reduce exhaust emission and noise pollution, please follow the several points below:

Use special purpose lubricant

Use unleaded gasoline

Observe any abnormal engine noise

Chapter 10 Troubleshooting

If the engine cannot be started, check the following items to locate the cause.

1、If there is fuel in fuel tank.

2、If fuel flows from fuel valve to carburetor.

3、Disconnect the fuel pipe from carburetor and turn the fuel valve to open position. Check if there is fuel flowing out of the pipe.

4、If it is confirmed that fuel can reach the carburetor, take the next step to check the ignition system.

Warning:

Never allow fuel to flow everywhere. Collect it in a vessel. Keep fuel away from hot engine and exhaust pipe. During the operation, keep away from any flame or heat source.

Smoking is strictly prohibited during fuel system checking. Carry out the work in a spacious place.

1、Remove spark plug and connect it with the high voltage cable.

2、Turn the ignition switch to ON position and the engine shutdown switch to " " position. Place the spark plug near the engine, and start the engine. If the ignition system is in working order, there should be blue sparks jumping over the spark plug gap; If there is no spark, contact your distributor for repair.

Warning:

Do not make the above check with the spark plug fixed near carburetor to avoid fire hazard by igniting the vaporizing fuel in cylinder.

To avoid electric shock, it is advisable to put the metal part of spark-plug in contact to a metal part without paint on the vehicle body. To avoid disaster by electric shock,

any person suffering from heart diseases should not do the check.

Engine shutdown

1、Check the fuel volume in fuel tank.

2、Check sparks of ignition system.

3、Check no-load operation of the engine.

Note:

Before any troubleshooting, it is advisable to consult with your distributor in advance. If the motorcycle is still in warranty period, be sure to contact your distributor before making any attempt to repair by yourself. Tampering with the vehicle in warranty period may invalidate the basis of warranty.

Table of Engine Troubleshooting

Trouble			Cause	Remedy
Engine cannot be started or stalls suddenly	No fuel in carburetor		No fuel in fuel tank Fuel tank valve not opened Fuel tank valve clogged Float chamber needle valve hole clogged Main jet orifice clogged	Refueling Open the valve Clean fuel tank and fuel tank valve Disassemble and clean the carburetor Disassemble and clean the carburetor
	There is fuel in carburetor	Sparking normal in high voltage cable and no sparking in spark plug	Oil stained spark plug Broken spark plug magnetic core or broken electrode Carbon deposit in spark plug electrode Incorrect spark plug gap	Remove, clean and dry it Replace spark plug Clean out carbon deposit Adjust the gap.
		Normal sparking to spark plug, poor cylinder compression	Leaking cylinder head gasket Loose spark plug Seized piston ring Excessively worn piston or broken piston ring Serious cylinder wearing Leaking intake pipe Damaged crankshaft sealing	Tighten screw or replace gasket Tighten spark plug Clean off carbon deposit in piston ring and ring groove Replace piston and piston ring Replace cylinder body Tighten or replace rubber ring Replace sealing
Abnormal engine operation	Abnormal noise from engine		Serious worn out cylinder and piston Serious worn out needle bearings in small and big ends of connecting rod Premature ignition Excessive carbon deposit in combustion chamber Overheated spark plug	Replace cylinder body and piston Replace bearing and relate parts Adjust ignition time Clean out carbon deposit Replace spark plug
	Unstable engine operation		Water or dirt in carburetor Clogged fuel passage Leaking crankcase Leaking connection between carburetor and engine Over-rich or over-thin gas mixture	Clean the carburetor Clean or replace fuel pipe Replace sealing Tighten screw Adjust carburetor
	Overheat engine		Low gear riding over a long time Over loaded riding or extended riding with heavy load Over-rich or over-thin gas mixture Unqualified engine oil or insufficient transmission oil Slipping clutch Too tight chain Unreleased brake	Change gear position and control time Control load-carrying and rest from time to time for cooling Adjust carburetor Replace with qualified engine oil and fill oil to transmission case Adjust free play or replace clutch, friction lining and spring Adjust tension Adjust brake clearance

Chapter 11 Storage Method

If the motorcycle is not used for a long time in winter or other seasons, it is necessary to carry out special maintenance with appropriate materials, equipment and techniques.

Motorcycle

When a motorcycle is not used for a long time, make preparation before storage: Wash the motorcycle, park it with the central stand on a solid and flat ground and prevent it from rolling. Turn the handlebar of motorcycle to the left side and lock it. Remove the ignition key. For safety, select a place suitable for long time storage. To re-use the vehicle, carry out a complete inspection to ensure normal performance of all parts of the motorcycle.

Fuel

Before storing the motorcycle, empty the fuel tank. Gasoline used in motorcycles is highly flammable and even explosive under certain conditions. Therefore, never allow the motorcycle to get close to any fire. Never park the vehicle in a place storing articles subject to spontaneous combustion (such as grains, coal, cotton, etc.), because fire hazard may happen when the fuel in the vehicle contacts naked flame.

Tires

Ensure tire inflation to normal pressure value. Keep the outside of tire clean. Avoid exposing to sunshine or moisture for a long time. Avoid contacting acid, alkali and oil to prevent tire corrosion.

Battery

When the vehicle is not used for a long time, remove the battery and fully recharge it before storing it in a place out of reach of children. Then, recharge it every month in summer and every two months in winter. If the battery is installed on the vehicle for a long time, recharge it every month.

Steps during storage

For conventional batteries, check electrolyte levels every month. If the fluid level is low, replenish it with distilled water or pure water to the highest level mark. (Never use electrolyte or tap water)

Battery should be kept clean. Corrosion may happen if electrolyte is splashed to the vehicle body, terminal or wires. In case of corrosion, wash immediately with clear water and apply a coat of grease after drying off.

Insufficient power may cause difficulty in engine starting, weak horn

sounding and no flashing turning signal light. Then, immediately recharge the battery for 15-20 hours. Note that, storing a low battery for a long time may cause battery damage.

When a battery has whitened plate electrodes, low power or low fluid level below the lower limit, and cannot restore the performance after a long time storage even after recharging, it means the service life has been terminated.

Steps of returning service

1、 Clean the entire motorcycle.

2、 Remove spark plug; kick the kickback start lever to allow the engine rotating for several turns, before reinstalling spark plug.

3、 Reinstall battery.

Note:

Make sure to connect the positive connector before the negative one.

4、 Adjust tire pressure according to the tire part of the manual.

5、 Lubricate all parts that require lubrication according to the manual.

6、 "Check before riding" as instructed in the manual.

Chapter 12 Circuit Diagram

All information, descriptions pictures and specifications in the manual are the latest before publishing. Owing to improvement or other changes, the contents of the manual may differ from actual conditions. Jinan QingQi Motorcycle Inc. reserves the right of modification at any time.

Product specifications and parameters are subject to change without notice!

Product configuration and spare parts supply may vary for different countries or regions. For details, please consult with your local distributor!

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