

MOTORCYCLE OWNER'S MANUAL

SNAKE EYES XF250-GS

SSR MOTORSPORTS INC.

Important Cautions

About motorcycle break-in:

The first 600 miles of operation is very important in the entire service life of a motorcycle. Proper break-in can guarantee both the longest service life and the best performance of the vehicle. Break-in can polish machined surfaces and form smooth engagement.

It is important to avoid any operation that may overheat the engine components.

For specific break-in method, please refer to "Break-in of a new vehicle".

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

Special attention shall be paid to the contents emphasized with the terms of "warning" "caution" and "note", etc.

Warning ... This concerns your personal safety. Ignoring it may result in injury.

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

Note..... This refers to special explanations to make maintenance or important descriptions more easily understood.

This operation manual shall be kept with the motorcycle. When the vehicle is transferred to a new owner, the instruction manual shall also be transferred to the new owner.

SNAKE EYES (XF250-GS)



This instruction manual is designed for the Snake Eyes (XF250-GS). There are some differences among various models. For any unconformity between your vehicle and the instruction manual, use the vehicle for reference.

Foreword

Thank you for your choosing our motorcycle. In design, development and manufacture of this motorcycle, our company applies the latest in advanced technology and equipment to provide you with a motorcycle that is reliable in performance, novel in design and elegant in appearance. Motorcycle driving is one of the most exciting sports. The motorcycle is an ideal means of transport. It can give you infinite driving pleasure. Before driving your motorcycle, please be familiar with all stipulations and requirements mentioned in this instruction manual.

The instruction manual deals in the correct use, and maintenance of the motorcycle. Observing the following stipulations will provide a guarantee that your motorcycle will run for a long time use without trouble. SSR dealers have skillful and well trained technical professionals to provide the best maintenance and service to your motorcycle.

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Chapter 1 User Instructions

Instructions on safe driving of your motorcycle:

Following the below instructions will help ensure your safety. You must pay attention to the traffic around you at all times. Also, you must observe all state and federal traffic laws and follow the six points below:

Always wear a safety helmet

Safe driving starts from wearing a safety helmet. This is an important factor in motorcycle driving. A high-quality safety helmet is the first thing of personal protection in motorcycle driving. 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 driving technique and your understanding of mechanical knowledge are the basis of safe driving. Practice in a spacious place without other vehicles 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

Driving speed depends on road surface conditions, your skills and the weather. Understanding these limits may prevent accidents. Accidents may be prevented as long as driving within the range of your skill.

Wear well-fitting clothing

Loose and fancy dress may make you uncomfortable and unsafe while driving. Gloves, boots and a safety helmet will show that you are qualified driver. High quality and tight clothing shall be your selection.

Pay more attention to safety while driving in rainy weather

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

Inspection before driving

Please carefully read all instructions in "inspections before driving" of the manual to guarantee your safety.

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 to order components or service, and allow the distributor to provide you with better service.



Chassis number (or VIN code) is on the steering stem frame tube. Engine number is on the lower left side of the crankcase. Metal nameplate is on the riser pipe 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 Rearview mirror
- 3 Left handlebar switch
- 4 Speedometer
- 5 Fuel gauge
- 6 Signal indicator
- 7 Right handlebar switch
- 8 Front brake lever
- 9 Throttle



Left side view

- 1 Front wheel
- 2 Carburetor
- 3 Air cleaner
- 4 Fuel tank petcock
- 5 Shift lever
- 6 Side stand
- 7 Rear wheel



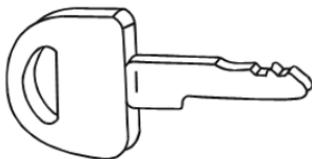
Right side view

- 1 CDI and fuse
- 2 Battery
- 3 Foot peg
- 4 Rear brake pedal
- 5 Oil drain bolt



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



Speedometer ①

Shows the driving speed in miles per hour.

Odometer ②

Records the total distance that the motorcycle has traveled since it was used.

Fuel Gauge ③

Shows fuel level in the tank.

Neutral Gear Indicator ④

This indicator will show the neutral gear. When the gear shifter is set in the neutral mode, the neutral indicator (N) is lit.

High beam indicator lamp ⑤

When the head light is in high

beam, the indicator is lit.

Turn Signal Lamp ⑥

When left turn signal lamp is ON, the left turn signal indicator on the panel "←" and turn signal lamp will flash.

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

Precaution:

If one of front and rear turn 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.

Ignition switch



FIG1



FIG2

There are two types, three-position as showed in following sketches, to be used for different models.

"" (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.

"" (Parking) Position (FIG1)

To park the motorcycle, turn the key to "" position. In this position, the key can be removed and the tail lamps (parking lamps) and front positioning lamps stay ON for parking on the roadside at night.

WARNING

Before turning the key to "" position, park the vehicle with its side stand or central stand down.

"" " Position (FIG2)

In order to lock the handlebars, turn the bar to the left, then insert the key. Rotate it clockwise to full stop for locking the handlebars.

WARNING

If the handlebars are locked, the motorcycle should not be ridden; otherwise you will lose balance.

Left handlebar control system



Clutch Lever ①

To start the engine or shift gears, pull in the lever to release the drive system and cut off the clutch.

Dimmer Switch ②

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 the contrary, when it is turned down to "" (low beam) position, the low beam is lit.

Turn signal operation. When the switch is turned to left "" position, the left turn signal lamp is lit and the indicator lamp on instrument panel flashes. When the switch is turned to right "" position, the right turn signal lamp is lit and the indicator lamp on instrument panel flashes.

Warning:

Whenever you are going to change lanes or make a turn,
--

timely turn ON the turn signal lamp. After lane change or turning, timely turn the signal light OFF.

Horn Button ③

Press "🔊" button and the horn will sound.

Right Handlebar Control System



Engine Shutdown Switch ①

This switch is a rocker switch, located on the top of the right handlebar control switch, with the rocker shaft at the center of the rocker. When it is pressed in "○" start position, the switch is turned on 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 while driving.

Front Brake Lever ②

To apply the front brakes, 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 light automatically.

Electric Start Button ③

Press "☀" button to turn on the starter motor circuit. During starting, make sure the engine is in neutral gear position to cut off transmission and guarantee safety.

Warning:

The starter motor shall 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").

Lighting Switch ④

"☀" 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 The head light, front position light, instrument panel lights and rear tail light go OFF.

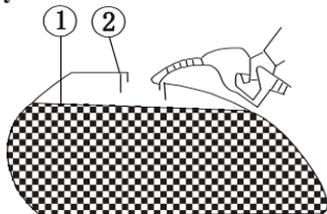
Throttle Grip ⑤

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

Fuel tank cap



To open the 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 onto a hot engine.

No fuel shall be left on the upper part of the filler, or the fuel may overflow when fuel temperature rises and expands, causing hazard.

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

Shifter Lever



The motorcycle is provided with a 5-speed gear transmission. The shifter 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 1st gear and 2nd gear. From the neutral position, press down the gear lever to engage a low gear. Raise the gear lever one step to move up a gear. The ratchet mechanism cannot move two or more gears up or down in one operation. To shift from 2nd gear to 1st gear, or from low gear to 2nd gear, it passes the neutral position but does not stay there. To engage to neutral gear, stop it in

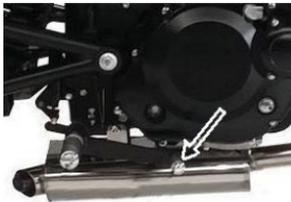
the middle of moving from 1st gear to 2nd gear.

Precaution:

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

When engaging into a low gear during high speed driving, 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.

Rear Brake Pedal



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

Stand



The vehicle is equipped with a side stand.

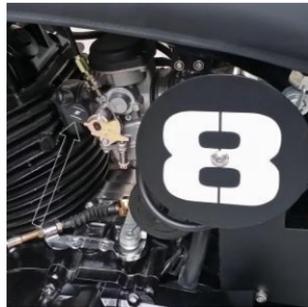
If you want to park the vehicle with the side stand, step on side stand end to front limit position on chassis.

CAUTION:

If you park the vehicle on sloped ground, please park in such a fashion to prevent the side stand from folding up.

For the sake of driving safety, before setting out, please make sure that stands are returned to their upper position and they don't hang or swing.

Carburetor Choke Lever



To help starting, the vehicle is equipped with a carburetor enrichment system : Plunger carburetor: To start a cold engine, raise the enrichment lever to the highest position. After starting, lower the lever to half way and

allow the engine to warm up to a proper temperature, before returning the enrichment lever to its closed position.

Note:

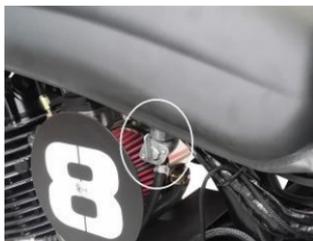
The enrichment system is designed for starting a cold engine. When the temperature is low, the warming time shall be followed properly (if no choke is used, the speed transition may become poor).

During driving, the enrichment system shall 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;

Warning:

After using the enrichment system, shut it off in a timely manner to prevent overheat that may damage the silencer elbow.

Fuel switch



The vehicle is provided with a manual fuel valve. There are three positions : “ON” (Open) “RES”(Reserve) “OFF” (Close).

“ON”: Open position

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

“RES”: Reserve position

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

“OFF”: Close position

Turn the fuel switch to this position after the engine is shut down.

Precaution:

If the fuel switch is in: “ON”

Open position for a long time, fuel may overflow from carburetor to engine. Fuel in engine may cause serious mechanical damage during engine starting

Note:

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

Rear Shock Absorber



Spring adjustment

The rear shock damper spring can be adjusted according to the payload, driving mode and road conditions. Park the vehicle on its side stand and turn the nut under the spring to the desired position.



Front Fork Assy



Steering Stem



Front Disk Brake / Rear Disk Brake



Tire



Chapter 4 Instructions on Fuel and Engine Oil

1. Fuel Warning!

Gasoline is flammable and explosive. When handling gasoline, attention should be paid to prevent ignition 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 shall be made in a well ventilated place. After refueling, immediately clean off any gasoline outside the fuel tank.

Please use #91 (GB17930-1999) unleaded gasoline. This may prolong the service life of spark plug.

Note!

If the engine produces pinging noises, it may be caused by using low octane fuel. Replace with correct fuel.

Ethanol gasoline

If ethanol gasoline is used, please use #91 or higher conforming to GB18351-2004. Do not use methanol gasoline, even though it may contain co-solvent and an anti-corrosion agent.

Note!

- If ethanol gasoline is exposed to water excessively, ethanol may be separated, resulting in the decrease of gasoline octane number. Therefore, do not store ethanol containing fuels for extended periods of time.
- Before using ethanol gasoline for the first time, thoroughly clean the fuel supply system and fuel tank.
- Always buy a proper amount of ethanol gasoline. Once there is a poor fuel tank seal or long storage time, moisture content may increase, causing a lower 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 shall be SE or SD product in API classification. Engine oil of proper viscosity shall be used according to local air temperature. There are three viscosity levels suitable for the engine: SAE10W-40, SAE10W-30 and SAE5W-30. Refer to the figure below:

Chapter 5 Break-In of your new motorcycle

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

Maximum speed

The maximum speed during the break-in period is shown in the table:

First 500 miles	<5000 rpm
At 1,000 miles	<7500 rpm
After 1,000 miles	<10000 rpm

Changes of engine speed

Do not drive at a constant engine speed for a long time. For a better break-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 the break-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 driving at a low speed

Running at a low engine speed (with light load) can only polish the parts but cannot get a good break-in. So long as the upper limit of the recommended throttle opening is not exceeded, drive the vehicle in various gears with proper acceleration. However, never drive at maximum acceleration during the first 1,000 mi.

Make oil circulating before driving

After starting of warm or cold engine and before applying load or driving, 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 600 mi is the most important. During

the break-in period, all engine parts have been run-in and other parts engaged. Then, all parts shall be adjusted, all fasteners be tightened, contaminated engine oil be replaced and filter element be replaced.

Timely making 600 mi maintenance can guarantee a long engine life and the best engine performance.

Precaution:

600 mi maintenance shall be carried out according to the "Troubleshooting" in the manual. Pay special attention to the "precaution" and "warning" in these sections.

Chapter 6 Inspection before Driving

Before driving, 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、 Not loose
Lighting	Operate all lamps -- head light, tail light, brake light, instrument lighting lamp, turn signal lamps
Transmission oil	Proper oil level
Brakes	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 turn signal indicators)
Accelerator	1、 Proper free play in throttle cable 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 damage or cuts
Horn	Correct function
Clutch	1、 Proper free play in clutch cable 2、 Smooth operation and full release.
Fuel	Adequate fuel for the driving distance.
Driving chain	1、 Proper tightness 2、 Proper lubrication

Chapter 7 Essentials of Driving

Warning:

If this is the first time driving this type of motorcycle, you are advised to practice on a road away from highways, until you have completely familiarized yourself with the control and operation of the vehicle.

Before driving, make sure that the side stand is returned to the upright position.

Do not shift gears or decelerate while turning. Slow down to a safe speed before turning.

Do not shift into a low gear while turning.

It is dangerous to drive a motorcycle with one hand. During driving, be sure to keep your feet planted on the foot pegs and your hands on the handlebars. In any event, never free your 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 the "  " position. Insert the ignition key in the ignition switch and turn it to the ON position. If the transmission is in the neutral position, the neutral indicator lamp is lit.

Warning:

Make it a habit to, engage the neutral gear and firmly pull in the clutch lever before starting the engine. This will prevent it from lurching forward in case of mistaking gear engagement.

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

Note:

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

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

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

A motorcycle not used for a long time and poorly atomizes fuel may result in starting difficulty. In this case, do not rotate the accelerator grip, but repeat starting.

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 starter button; After the engine is started, press the handle half way down (plunger) or push the lever half way in (vacuum) and wait until 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, acceleration may be poor.

Warm engine

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

Warning:

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

Precaution:

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

Start driving the motorcycle

Precaution:

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

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

To change into a higher gear, firstly decelerate a little, release the accelerator and, at the same time, pull in the clutch lever, shift the gear

lever to the next higher gear position and release the clutch grip, slightly rotate the accelerator. In this way, the highest gear can be engaged gradually.

Note:

For high speed driving, always avoid releasing the accelerator suddenly. It is advised to wait a moment when the engine is running at 3000-5000 rpm 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 shall select gears suitable to general conditions but shall 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 shall not be in the red range of the tachometer in any gear.

Driving 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 lock up of the rear wheel. 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 to run in a normal power range. Pay attention that, gear shifting shall 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 to never drive too fast down a slope!

Never allow the engine to run at a very high speed for a long time.

Use of brake and parking method

Rotate the accelerator grip forward to fully close the throttle.

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

Use gear shifting to slow down.

Before the motorcycle is stopped, firmly pull in 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 increase braking distances.

It is dangerous to use front brake or rear brake only. This may cause slipping or loss of control. On a 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 shall be parked on stable and flat ground.

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

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

Remove the key from the ignition switch.

Lock the handlebar for safety.

Chapter 8 Inspection and Maintenance

The following table shows the interval of regular maintenance over 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 driving in a dusty environment, the maintenance shall be carried out more frequently. The parts of the steering stem, shock absorber, bearings and wheels are critical components, and require professional skills to repair. For the best possible safety, it is advisable to have these inspections and maintenance performed by an authorized SSR Dealership.

Precaution:

During regular maintenance, it may be necessary to replace one or more parts. For part replacements, 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 shall be handled by your authorized SSR repair center. For the items without such mark, you can repair these by yourself by following the instructions.

Warning:

After correct break-in of 600 miles, 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	miles	600	2500	5000
	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 Bolts and Nuts		T	T	T
Transmission Oil		R	R	R
*Brake		I	I	I
Front Fork		-	I	I
Tires		I	I	I
Drive Chain		I	I	I
	Clean and lubricate every 1000 km			
*Steering Stem Bearings		I	I	I
*Rear Shock Absorber		-	I	I
*Cylinder Head Nuts and Exhaust Pipe Bolts		T	T	T

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

Lubrication Table

Interval Item	Every 4000 mi or 6 months	Every 8000 mi or 12 months
Throttle Cable	Engine oil	-
Clutch Cable	Engine oil	-
Speedometer Cable	-	Grease
Drive Chain	Lubricate every 500 miles	
*Brake Shift Cam	-	Grease
Throttle Grip	-	Grease
Brake wire	Engine oil	-
Speedometer Gear Case and Wheel Bearings	-	Grease
Brake Pedal	Grease or engine oil	-
*Steering Stem Bearings	Lubricate every two years or every 12000 miles	

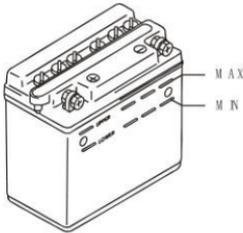
Tools

To help you perform 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 battery box housing 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 a conventional type battery:



Before using, fill with electrolyte to a level between the upper and lower limits. During use, 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 shall be added. If the fluid level drops below the lower limit, fill with

distilled water to the upper limit.

Never use tap water.

Precaution:

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

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

Note:

After the first 500 mi and every 2000 mi, 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 shall be prevented from contacting the skin. During operation, wear safety glasses 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.

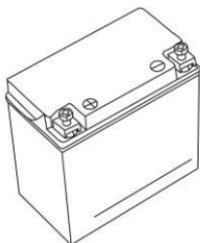
④ Keep out of reach of children.

2. Electrolyte filling

Before filling electrolyte, remove the battery from the vehicle.

Check if the electrolyte conforms to specification requirements.

Directions for use of maintenance-free battery:



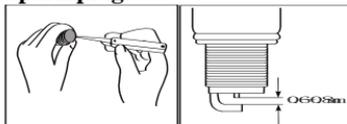
No electrolyte filling is necessary before and after battery use. To prolong the service life, fully recharge it before using.

Note:

No matter what type it is, the battery may discharge and power may drop after long storage times. After removing it from the vehicle and fully recharging 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 500 mi and every 2000 mi thereafter, clean off any carbon deposits from the 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 the spark plug every 4000 mi.

When cleaning off carbon deposits, observe the color of the ceramic tip of the spark plug. The color can tell you if the standard spark plug suits your usage. If a standard spark plug looks wet or very dark, it may be better to use a spark plug with a lower heat value. A normal working spark plug shall be light gray or cotton yellow. If a spark plug is very white or even glowing, it means the spark plug was overheated. Replace it with a spark plug of higher heat value.

Precaution:

Spark plug shall not be over tightened to prevent the threads of the cylinder head from being damaged. When spark plug is

removed, prevent any impurities from getting into the engine through the 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 of 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 brands of 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:

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

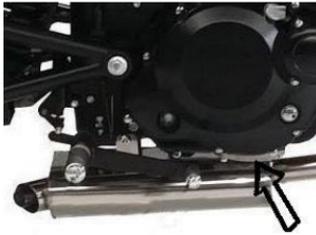
Replacement of engine oil and oil filter

Replace the engine oil and oil filter after the first 500 mi and every 2000 mi thereafter. Oil replacement shall 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 using a rear stand.
2. Remove the oil filler cap.



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



4. Tighten the oil drain plug and fill it with fresh engine oil, pour 1400 ml into the oil filler, before gently tightening the filler cap.

Note:

If only the oil is changed without replacing the filter, the volume of fresh oil is 1100 ml.

5. Start the engine and allow it to idle for several seconds.

Precaution:

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

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

Precaution:

Please use the engine oil recommended in "Instructions on fuel and engine oil".

Brake

This unit is equipped with a front disk brake and rear disk brake system.

Check the brakes after the first 500 mi and every 2000 mi thereafter.

Correct braking operation is very important to safe driving. Be sure to carry out regular inspections of the brake system by a qualified mechanic or service dept.

Warning:

Brakes are related to personal safety and shall be kept in good working order.

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

Front brake

For the brake, the distance between natural status to braking action is known as "free play". The free play of the brake lever measured at lever bracket shall be 5-10mm.



The hydraulic brake system shall be checked everyday, as follows:

- 1、 Check for leakage at the front wheel brake system.
- 2、 Check for any leakage or crack in the brake fluid hoses.
- 3、 The front brake lever shall have a certain back spring force.
- 4、 Check the wear conditions of the front wheel brake lining.



Precaution:

The braking systems are made using high pressure lines. For your safety, the replacement of the brake lines and hydraulic

brake fluid shall 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 brake fluid. It shall not be mixed with silicate or petroleum fluids. 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 DOT 3/4 brake fluid shall be used. Pay attention not to splash hydraulic brake fluid onto paint or plastic surfaces, 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 shall be considered

as an import item in regular maintenance.

Brake rotors



It is essential to check the front and rear brake rotors to make sure they are not below the minimum thickness. If wear exceeds the mark, the brake rotor and pads shall be replaced with new ones.

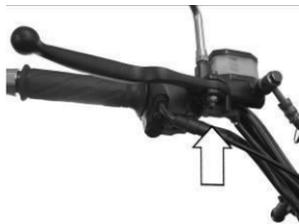


Warning:

Do not drive immediately after replacing a new brake rotor or brake pads. Press the braking grip several times to allow the

brake pads are fully extended, the grip spring force restored, and the brake fluid is circulated smoothly.

Front brake light switch



The front brake light switch is located below the master cylinder. To adjust, 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 grip is fully pressed.

Rear brake

Adjustment of rear-wheel brake

Refer to the paragraphs for front brake disk brake for maintenance.

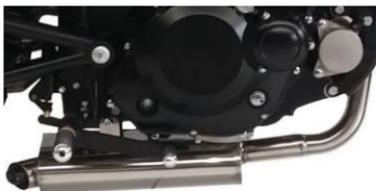
Rear brake light switch



The rear brake light switch is located at the right side of

chassis. Adjust the 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 pressure.

Muffler



Please keep away from the motorcycle muffler after a long time driving, to avoid being burnt.

Fuse



The fuse box is located inside the tank under the seat. A fuse is provided for the entire electrical system. In case of any trouble to electrical system, check the fuse first. If the fuse is blown, replace it with the spare fuse (15A) in the fuse box.

Precaution:

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

Replacement of bulbs

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

Precaution:

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

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

Air filter

If the air filter element is clogged by dust, the output power may be reduced and the intake

resistance may increase; the fuel consumption will also increase. Therefore, the air filter element shall be checked and cleaned every 2000 mi, as follows.

Precaution:

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

- 1、 Loosen the air filter clamp.
- 2、 Remove the filter element.



- 3、 Use compressed air or a dry brush to clean the filter element.
- 4、 Do the opposite to reinstall the air filter.

Precaution:

- While cleaning the filter element, check for any damage to the filter element and replace if necessary.
- Never start the engine without the filter element installed, or engine wear may

be increased.

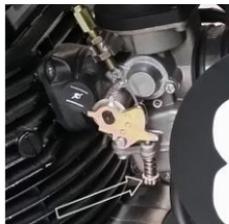
Clean the foam type filter as follows:



Carburetor

A properly adjusted carburetor ensures the best possible engine performance. Before leaving the factory, the carburetor has been adjusted to the best condition. Any unnecessary adjustment shall be avoided. Please note that, there are two adjustments for the carburetor, i.e., throttle cable free-play and idle speed. Carry out adjustments after the first 500 mi and every 2000 mi thereafter, as follows.

Adjustment of carburetor idle speed RPM



- 1、 Start the engine and allow it to fully warm up without a load.
- 2、 Close the throttle. Rotate the idle adjusting screw to keep the engine running at 1400 ± 100 rpm.

Precaution:

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

Adjustment of throttle cable free-play



①Locking nut ②Adjuster

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

Precaution:

After throttle free-play adjustment, check the operation of the throttle grip. Engine idle speed shall not increase due to the

adjustment, and the grip shall return to the closed position automatically.

Adjustment of valve clearance

The valve clearance shall be checked and adjusted after the engine has thoroughly cooled.

1. Remove the fan guard and cylinder head cover.
2. Turn the flywheel rotor counterclockwise to align the T mark of the rotor with the vertical line projected on the right case cover. Make sure that the piston is at top dead center of the compression stroke.
3. Insert a clearance gauge between the adjusting screw and valve stem to ensure a proper clearance of the exhaust valve.
4. Standard valve clearance

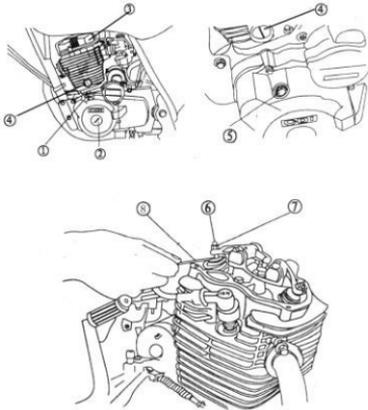
Intake valve clearance:

0.04-0.05mm

Exhaust valve clearance:

0.05-0.06mm

5. To obtain a proper valve clearance, loosen the adjusting nut and then turn the mating screw. Tighten the adjusting nut upon completion of adjustment and measure the clearance until it meets the criteria.



Note:

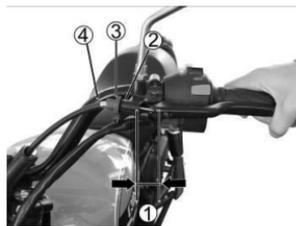
As the valve clearance imposes a marked impact on engine performance, inspection and adjustment shall be severely observed at the regular time intervals specified in the Scheduled Maintenance guide.

The valve clearance increases with the passage of time and thus affects engine performance by producing loud noise and abnormal suction/exhaust processes. Therefore periodic adjustment, preferably done by a professional mechanic with special tools, of valve clearance is essential. To obtain the optimal valve clearance, the adjustment is recommended to be finished by a professional mechanic or an authorized SSR dealership.

Valve clearance adjustment is essential for new motorcycles on the completion of their first 500 mi.

Adjustment of clutch cable

The clutch adjustment is made by adjusting the tension of the clutch cable for the clutch lever. Before feeling the gear disengagement by pulling in the clutch lever, the wire clearance measured at the clutch lever shall be 4 mm. If the clutch cable clearance is found incorrect, carry out adjustment as follows.



Loosen nut (2) and rotate the

clutch adjuster (3) clockwise to the stop. Loosen the clutch cable adjusting ring lock nut (6), and rotate the cable tensioning ring (5) back and forth, until the grip clearance is about 4 mm. The clutch adjuster bolt (3) can be used for fine tuning. After the adjustment is completed, tighten the lock nut (2) and (6), and cover them with the rubber sleeve (4).

Adjustment of drive chain



- ① Adjusting bolt ② Lock nut
③ Mark ④ Rear wheel shaft nut

To adjust:

- 1、 Park the motorcycle with the central stand.
- 2、 Loosen rear axle nut.
- 3、 Loosen the locking nut.
- 4、 Rotate the adjusting bolt left

and right to adjust the chain.

Note:

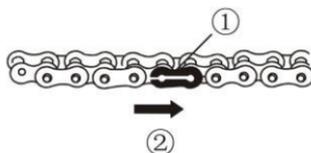
When a new chain is installed, it is necessary to check both sprockets. Replace if necessary.

The tension of the drive chain shall be adjusted every 500 mi, to keep a slack distance of 20 - 30 mm in the midpoint of the two sprockets.



Precaution:

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



- ① Chain connector clip
② Direction of rotation
- Cleaning and lubrication of drive chain

Dirt on the drive chain may intensify the wearing of the chain

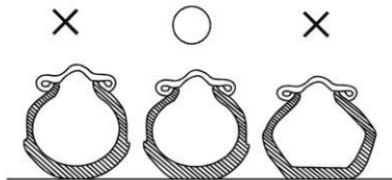
and sprockets. Therefore, clean the drive chain every 500 mi with chain cleaner, and lubricate it with special a chain lubricant.

Tires

Check the tire air pressure and tread pattern after the first 500 mi and every 2000 mi thereafter. Besides regular inspections, make it a habit to check the tire air pressure from time to time, to ensure maximum safety and long tire life.

Tire pressure

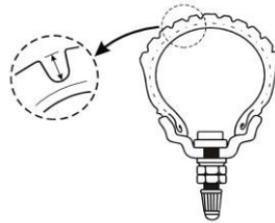
Low tire pressures may intensify tire wear and badly affect the driving stability, causing difficulties in turning. Too high tire pressures may reduce the contact area between the tires and road surface, causing wheel-slip and even loss of control. It is necessary to always keep the tire pressure within the specified limit. Tire pressure adjustment shall be made when the tire is cold.



Tread pattern

When driving a motorcycle

with over-worn tires, the driving 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 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 strongly encouraged to use the standard tire.

Correct tire inflation pressure is very important for normal vehicle performance and driving 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 points below:

Use special purpose lubricant

Use unleaded gasoline

Observe any abnormal engine noise

Chapter 10 Troubleshooting

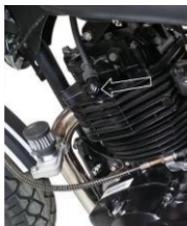
If the engine cannot be started, check the following items to locate the cause.

- 1、 If there is fuel in fuel tank.
- 2、 If fuel flows from fuel valve to carburetor.
- 3、 Disconnect the fuel pipe from the carburetor and turn the fuel valve to the 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:

Collect fuel it in a vessel. Keep fuel away from the hot engine and exhaust pipe. During the operation, keep the fuel away from any flame or heat source.

Smoking is strictly prohibited during fuel system inspection. Carry out the work in an open well ventilated environment.



- 1、 Remove the spark plug and connect it with the high voltage cable.
- 2、 Turn the ignition switch to the ON position and the engine shutdown switch to "○" position. Touch the spark plug to the engine, and start the engine. If the ignition system is in working order, there shall be blue sparks jumping over the spark plug gap; If there is no spark, contact your local dealership for repair.

Warning:

Do not make the above check with the spark plug fixed near the carburetor to avoid fire hazard by igniting the vaporizing fuel in the 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 serious electric shock, any person suffering from heart diseases shall not do the check.

Engine shutdown

- 1、 Check the fuel volume in fuel tank.
- 2、 Check spark from the ignition system.
- 3、 Check no-load operation of the engine.

Note:

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

Table of Engine Troubleshooting

		Trouble	Cause	Remedy
Engine cannot be started or stalls suddenly		No fuel in carburetor	<ol style="list-style-type: none"> 1、 No fuel in fuel tank 2、 Fuel tank valve not opened 3、 Fuel tank valve clogged 4、 Float chamber needle valve hole clogged 5、 Main jet orifice clogged 	<ol style="list-style-type: none"> 1、 Refueling 2、 Open the valve 3、 Clean fuel tank and fuel tank valve 4、 Disassemble and clean the carburetor 5、 Disassemble and clean the carburetor
	There is fuel in carburetor	Sparking normal in high voltage cable and no sparking in spark plug	<ol style="list-style-type: none"> 1、 Oil stained spark plug 2、 Broken spark plug magnetic core or broken electrode 3、 Carbon deposit on spark plug electrode 4、 Incorrect spark plug gap 	<ol style="list-style-type: none"> 1、 Remove, clean and dry it 2、 Replace spark plug 3、 Clean out carbon deposit 4、 Adjust the gap.
		Normal sparking to spark plug, poor cylinder compression	<ol style="list-style-type: none"> 1、 Leaking cylinder head gasket 2、 Loose spark plug 3、 Seized piston ring 4、 Excessively worn piston or broken piston ring 5、 Serious cylinder wear 6、 Leaking intake pipe 7、 Damaged crankshaft seal 	<ol style="list-style-type: none"> 1、 Tighten screw or replace gasket 2、 Tighten spark plug 3、 Clean off carbon deposit in piston ring and ring groove 4、 Replace piston and piston ring 5、 Replace cylinder body 6、 Tighten or replace rubber ring 7、 Replace sealing

Abnormal engine operation	Abnormal noise from engine	<ol style="list-style-type: none"> 1、 Serious worn out cylinder and piston 2、 Serious worn out needle bearings in small and big ends of connecting rod 3、 Premature ignition 4、 Excessive carbon deposits in combustion chamber 5、 Overheated spark plug 	<ol style="list-style-type: none"> 1、 Replace cylinder body and piston 2、 Replace bearing and relate parts 3、 Adjust ignition time 4、 Clean out carbon deposit 5、 Replace spark plug
	Unstable engine operation	<ol style="list-style-type: none"> 1、 Water or dirt in carburetor 2、 Clogged fuel passage 3、 Leaking crankcase 4、 Leaking connection between carburetor and engine 5、 Over-rich or over-thin fuel mixture 	<ol style="list-style-type: none"> 1、 Clean the carburetor 2、 Clean or replace fuel pipe 3、 Replace sealing 4、 Tighten screw 5、 Adjust carburetor

	Overheat engine	<ol style="list-style-type: none"> 1、 Low gear driving over a long time 2、 Over loaded driving or long time driving with heavy load 3、 Over-rich or over-thin gas mixture 4、 Unqualified engine oil or insufficient transmission oil 5、 Slipping clutch 6、 Too tight chain 7、 Unreleased brake 	<ol style="list-style-type: none"> 1、 Change gear position and control time 2、 Control load-carrying and rest from time to time for cooling 3、 Adjust carburetor 4、 Replace with qualified engine oil and fill oil to transmission case 5、 Adjust free play or replace clutch, friction lining and spring 6、 Adjust tension 7、 Adjust brake clearance
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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 a rear stand on solid and flat ground and prevent it from rolling. Turn the handlebars of the 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 a motorcycle 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 the fire hazard may happen when the fuel in the vehicle contacts a naked flame.

Tires

Inflate tires to a 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 battery, check electrolyte level 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 shall be kept clean. Corrosion may happen if electrolyte is splashed to the vehicle body, terminal or wires. In case of corrosion, wash immediately with water and apply a coat of grease after drying off.

Insufficient power may cause difficulty in engine starting, weak horn sound and no turn signal lights. 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 of 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; turn the engine over using the starter and allow the engine to rotate 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 this manual.**
 - 5、 Lubricate all parts that require lubrication according to the manual.**
 - 6、 "Check before driving" as instructed in this manual.**

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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 dealer.

**Motorcycle Owner's Manual Model:
Snake Eyes XF250-GS**



SSR MOTORSPORTS INC.

SSR MOTORSPORTS INC.
12825 ALONDRA BLVD. NORWALK CA 90650
WWW.SSRMOTORSPORTS.COM