OWNER'S MANUAL

MOTORCYCLE 250-B

PREFACE

Thank you for choosing the motorcycle. May you enjoy riding all time.

The manual contains the necessary instructions and guidance with respect to the operation and maintenance of the motorcycle, and BE SURE TO READ IT CAREFULLY BEFORE YOU RIDE THE MOTORCYCLE. Proper operation and maintenance can guarantee a safe riding to minimize troubles of the motorcycle and keep it in a sound condition, which can extend the engine service life.

IMPORTANT NOTICES

● **Operator and Passenger**

This motorcycle is designed to carry the operator and one passenger. The maximum load weight of the motorcycle must not exceed 150kg.

● **On-road**

This motorcycle is designed for on-road use.

Pay special attention to statements preceded by the following words:

⚠**WARNING:** ***Indicates a strong possibility of severe personal injury or death if instructions are not followed.***

⚠**CAUTION:** ***Indicates a possibility of equipment damage if instructions are not followed.***

NOTE: Gives helpful information.

Environmental Protection (EP) : Indicates special precautions that must be taken to meet environment protection laws and regulations. Improper use of a motorcycle may cause environment pollution.

If the operator fails to follow safe operating and maintenance practices, the Co. will not take any responsibility to any injury or damage occured.

This manual should be considered as a permanent part of the motorcycle and should remain with the motorcycle when resold.

CONTENTS

MOTORCYCLE SAFE RIDING

SAFE RIDING RULES

⚠WARNING Motorcycle riding requires special efforts on your part to ensure safety. Know these requirements before you ride.

- Always make a pre-ride inspection before you start the engine. You may prevent accident or equipment damage.
- Most countries require a special motorcycle riding test or license. Make sure you are qualified before you ride. NEVER lend your motorcycle to an inexperienced rider.
- Make yourself conspicuous to help avoid the accident that wasn't your fault:
- Wear bright or reflective clothing.
- Don't ride in another motorist's "blind spot".
- Don't speedily cross another's way.
- Obey all national and local laws and regulations.
- Obey the speed limits, and NEVER travel faster than conditions warrant.
- Signal before you make a turn or lane change to draw other motorists' attention.
- Use extra caution at intersections, parking lot entrances and exits.
- Always remember to ride with both hands and keep both feet on the rider footrest while the passenger grasps the handrail with both feet on the rear footrest.

PROTECTIVE CLOTHS

- For the safety sake, always wear a helmet, a face shield, dust glasses and protective clothing. Your passenger needs the same protection.
- The exhaust system becomes hot during operation, and it remains hot for a while after stopping the engine. Take care not to touch the exhaust system while it is hot. Wear clothing that fully covers your legs.
- Do not wear loose clothing that could catch on the control levers, wheels, etc.

REFITTING

⚠WARNING Arbitrarily refitting the motorcycle or removing the original parts may make riding unsafe, and is illegal also. The user must obey all national and local laws and regulations in relation to vehicle and traffic. If you have a good proposal concerning refitting of the motorcycle, please write us. The refitment can be done with permission of the Co. Otherwise, the user will take the consequences.

LOADING

⚠WARNING Addition of accessories and cargo may reduce the motorcycle's stability, performance and safe operating speed.

- Keep cargo and accessory weight lower and close to the center of the motorcycle. Load weight equally on both sides to minimize imbalance. As weight is located further from the motorcycle's center of gravity, handling is proportionally affected.
- Adjust tyre pressure and rear suspension to suit load weight and riding conditions.
- Make sure that cargo is fastened on the vehicle.
- Do not attach items to the handlebars, fork or fender. Otherwise, unstable handling or slow steering response may occur.
- The maximum load weight of the motorcycle is 150kg. Please do not overload.

ACCESSORIES

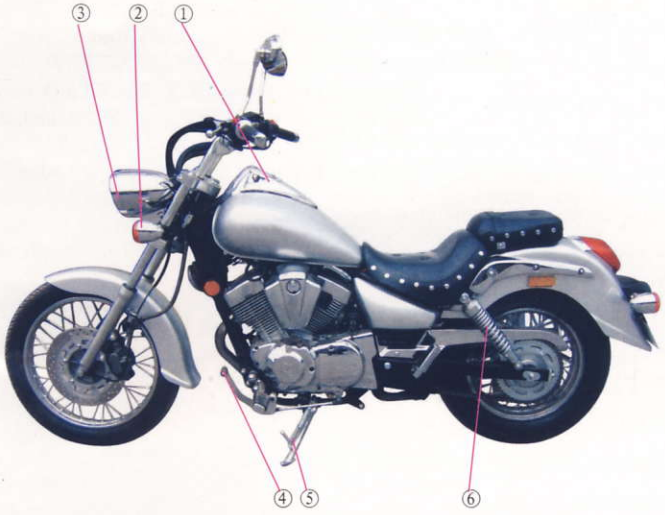
Genuine accessories of the Motors have been specifically designed and tested on the motorcycle. Beacuse the factory cannot test all other accessories, you are personally re-sponsible for selection, installation and use of acces sories not produced by the Co. Al-ways follow Safe Riding Rules and these below:

- Carefully inspect the accessory to make sure that it does not obscure any lights, reduce ground clearance or banking angle, or limit suspension travel, steering travel or control operation.
- Do not install other cooling equipment for the engine.
- Do not add electrical equipment that will exceed the motorcycle's electrical system capacity.

GENERAL INFORMATION

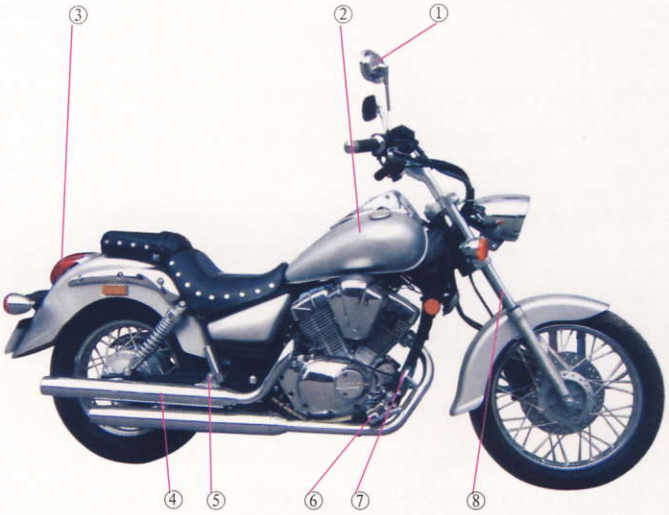
PARTS LOCATION (Fig. 1-2)

Fig. 1 (Left-view)



① Meter ② Fr. winker ③ Headlight ④ Gearshift pedal
⑤ Side stand ⑥ Rr. shock absorber

Fig. 2 (Right-view)



① Rearview mirror ② Fuel tank ③ Taillight ④ Exhaust muffler
⑤ Pillion footrest ⑥ Driver footrest ⑦ Rr. brake pedal
⑧ Fr. shock absorber

VIN RECORD (Fig. 3-5)

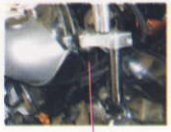


Fig. 3 VIN

Fig. 4 Engine code

Fig. 5 Nameplate

VIN: ☆ □□□□□□□□□□□□□□□□□ ☆

Engine code: ☆ □□□□□□□ ☆

Please fill the VIN and engine code of your motorcycle in the blank below. They will help order spare parts and find out the vehicle when stolen.

NOTES

① The VIN is stamped on the right of the steering stem (Fig. 3).

② The engine code is stamped on the bottom-left of the crankcase (Fig. 4).

③ The vehicle nameplate is fixed on the left of the steering stem (Fig. 5).

FUEL AND ENGINE OIL (EP)

Fuel Selection

Fuel is a key factor in deciding the exhaust emissions from the engine, so selection of fuel must follow the rules below. Selected fuel must be unleaded gasoline with octane No. RQ-93 or higher. Using improper fuel could reduce performance, shorten the engine's service life.

Engine Oil Selection (Fig. 6)

The quality of the engine oil plays a vital role in deciding the engine performance and service.

Engine oil must be selected in accordance with rules below and other oils, such as ordinary engine oil, gear oil and vegetable oil, are forbidden to be used. The vehicle has been filled with engine oil SAE15W/40-SE before being delivered. The lubricant is only suitable at a temperature range within −10℃～+40℃. If other motor oilis to be used instead, the alternative must be technically equivalent in every respect. Viscosity varies with regions and temperatures, so the lubricant has to be selected according to our recommendation.

If there is no gasoline engine oil SAE15W/40-SE, the engine oil No. HQB-10 (or HQB-6 in regions where the temperature is lower than −10℃) can be used instead.

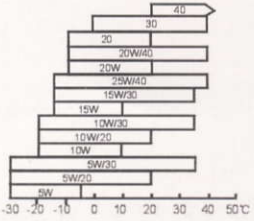


Fig. 6

CONTROLLING PARTS

METER AND INDICATORS (Fig. 7)

① Speedometer

② Odometer

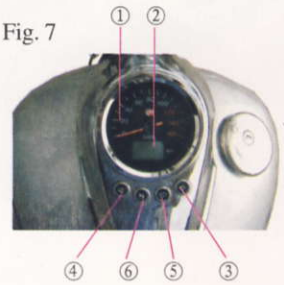
③ Right turn signal indicator "➔"

④ Left turn signal indicator "➔"

⑤ Hi-beam indicator "≡D"

⑥ Neutral indicator "N"

Fig. 7



IGNITION SWITCH AND STEERING LOCK (Fig. 8)

Ignition Switch

The switch is equipped with 2 keys including a spare one.

"⊗" OFF: Engine and lights cannot be operated and the key can be removed.

"○" ON: Engine and lights can be operated, neutral light is lit and the key cannot be removed.

Fig. 8 Steering lock

Parking

Insert the key into the lock core, and press it while turning counterclockwise to "P" position, then remove the key. In this case, the taillight and parking light will glow, and engine and other lights cannot be operated. To cancel the condition, turn the key clockwise to other position.

NOTE When the vehicle is not kept in use, always set the switch to "OFF" and remove the key.

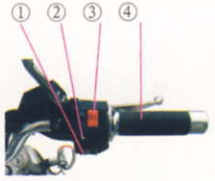
Steering Lock

To lock the steering head, turn left the steering bar as far as it will go, turn clockwise the ignition key until locking the steering bar, at last remove the key. To unlock the steering head, turn the key counterclockwise.

RIGHT HANDLEBARCONTROLS (Fig. 9)

Starter Button

Depress the button "⚷" to start up the engine.



① Starter button
② Lighting sw.
③ Emergency sw.
④ Throttle grip

Fig. 9

Lighting Switch

The 3-position switch functions as follows:

☼ :The headlight, taillight and meter lights are bright.

P≡ : The parking light, tailight and meter lights are bright.

● : (OFF) The headlight, taillight, parking light and meter lights are off.

Emergency Switch

In an emergency, depressing the switch to "⊗" will stall the engine at once. In normal riding cases, always set the switch at "○".

Throttle Grip

The grip is used to control engine power. Turning in the grip will increase fuel supply, while turning out it will decrease fuel supply.

LEFT HANDLEBAR CONTROLS (Fig. 10)

Headlight Dimmer Switch

Push the switch to "≡D" to select high beam.

Push the switch to "≡D" to select lower beam.

Turn Signal Switch

Move the switch to "←" to signal a left turn, to "→" to signal a right turn.

Horn Button

Press the button " " to sound the horn.

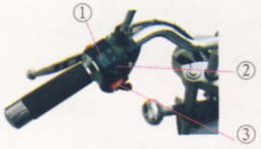


Fig. 10 ① Dimmer sw.
② Turn signal sw.
③ Horn button

Passing Signal Switch "≡D" (Fig. 11)

When passing, press and release the switch, the headlight will wink to warn the vehicles.

CHOKE LEVER (Fig. 11)

The choke lever is located on the left handlebar controls. Push the lever to open the throttle.

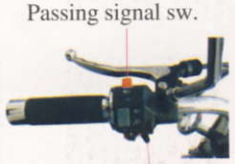


Fig. 11 Choke lever

REFUELING AND FUEL FILLER CAP (Fig. 12)

Lock lid Fuel filler cap

Fig. 12

● Open the lock lid, and insert the ignition key;

● Turn the key clockwise by 90° ;

● Remove the cap.

To reinstall the cap, just depress it onto the tank inlet. The fuel tank capacity is 14 L including the reserves supply of 2 L.

⚠WARNING

● Do not overfill the tank (there should be no fuel in the filler neck). After refueling, make sure the fuel filler cap is closed securely.

● Gasoline is extremely flammable and is explosive under certain conditions. Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where the fuel tank is refueled.

● Before refueling, make sure to filter fuel first. Spilled fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.

FUEL COCK (Fig. 13)

"OFF" "ON" "RES"

Fig. 13

● The fuel cock is located at the left-bottom of the tank. With the fuel cock in "OFF" position, fuel cannot flow from the tank to the carburetor. Turn the cock to OFF whenever the motorcycle is not kept in use.

● With the fuel cock in "ON" position, fuel will flow from the main fuel sypply to the carburetor. With the cock in "RES" position, fuel will flow from the reserve fuel supply to the carburetor. Use the reserve fuel only when the main supply is gone. Refill the tank at the earliest opportunity.

⚠CAUTION After refueling, make sure that the fuel cock is in " ON" position. If it is in " RES " position, you may run out of fuel with no reserve. Correct use of the fuel cock can avoid the state above-mentioned.

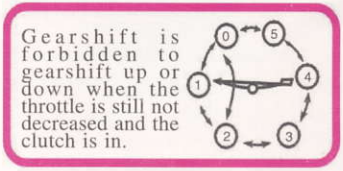
GEARSHIFT PEDAL (Fig. 14 & 15)

The motorcycle is equipped with a 5-speed mesh transmission. The gear indicator shows the gear position at present.

Fig. 15 shows a gear pattern.

Gearshift pedal

Fig. 14



Internaitiona 5-speed

Fig. 15

REAR BRAKE PEDAL (Fig.16)

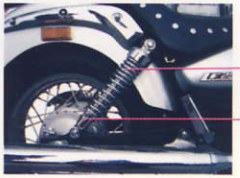
The rear brake will function and the rear stop light will glow when treading the pedal.

Fig. 16 Rr. brake pedal

REAR SHOCK ABSORBER (Fig. 17)

The shock absorber has 5 adjustment positions for different loads or riding conditions. Position I is for light loads and smooth road conditions. Positions II to V increase spring preload for a stiffer rear suspension, and can be used when the motorcycle is heavily loaded or ridden in rugged roads. Use a pin spanner to turn the adjuster to proper position.

NOTE Be sure to adjust shock absorbers both left and right to the same position.



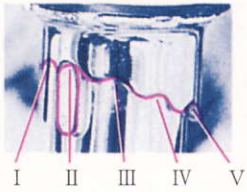


Fig. 17

SIDE STAND (Fig. 18)

When parking the vehicle, turn the side stand clockwise along the frame to position. Before driving the vehicle, set the stand to the initial position.

CAUTION **Be sure to set the stand to position before driving the motorcycle. Otherwise, it may fall over.**

Fig. 18

OPERATION GUIDE

PRE-RIDE INSPECTION

Inspect your motorcycle every time before you ride it. The items listed here will only take a few minutes to inspect, and in the long run they can save time, expense, and possibly your life.

1. Engine oil level - add engine oil if required. Check for leaks.
2. Fuel level - refuel when necessary. Check for leaks.
3. Front and rear brakes - check operation, and adjust free play if necessary.
4. Tyres - check condition and pressure.
5. Battery electrolyte - check that the electrolyte is suitable.
6. Throttle - check for smooth opening and full closing in all steering positions. Adjust or replace it if necessary.
7. Lights and horn - check that headlight, tail/stop light, winkers, parking light, indicators and horn function properly.
8. Drive chain - check condition and slack. Adjust and lubricate if necessary.
9. Fasteners - check that all nuts, screws and bolts are mounted securely.
10. Steering system - check for its smoothness and reliability.

STARTING THE ENGINE

CAUTION Do not start the engine in a narrow area to prevent accidents. Attempting to start the engine with the transmission in gear may result in damage to equipment.

Before starting, confirm the following:

- Make sure the fuel in the tank is enough. Set fuel cock to "ON" position.
- Insert the ignition switch and turn it to "◯" position.
- Move the gearshift pedal into NEUTRAL to light up the indicator "N" (green).
- Set the choke lever to the fully closed position if the engine is cold.
- With the throttle slightly open (less than 1/8 of its entire opening), oper ate the starter so as to start the engine. Then push choke lever to half-open position.
- Warm up the engine entirely at an idle speed of 1300r/min until it works normally, and then push the choke lever to its fully open position.

NOTE

Do not use the electric starter for more than 5 seconds at a time. Release the starter button for approximately 10 seconds before press ing it again.

BREAKING-IN

Help assure your motorcycle's future reliability and performance by paying extra attention to how you ride the first 1000km. During this period avoid full throttle riding, be sure to drive at a speed no more than 80% of each gear and to continually changing speed. After the break-in period, be sure to conduct maintenance so as to make compensation for initial wear. The service life will be extended obviously through such maintenance.

RIDING

- Start the engine and warm up it.
- While the engine idling, pull in the clutch lever and push down the gear shift pedal to shift into low (1st) gear.
- Slowly release the clutch lever and at the same time gradually increase engine speed by opening the throttle.
- When the motorcycle attains a steady speed, close the throttle, pull in the

clutch lever and shift to 2nd gear by treading the gearshift pedal.
This sequence is repeated to progressively shift to higher gears.

● Coordinate the throttle with brakes for smooth deceleration.

●Both front and rear brakes should be used at the same time and should not be applied strongly enough to lock the wheel, or braking effectiveness will be reduced and control of the motorcycle be difficult.

CAUTION

It is forbidden to gearshift up or down when the throttle is still not decreased and the clutch is in. Otherwise, damage to the engine, chain and other parts may occur. Make sure the gearshift pedal is operated gently and exactly. Riding with your foot resting on the brake pedal may suddenly change a speed and/or damage the driving mechanism.

BRAKING AND PARKING

To stop the motorcycle, close the throttle and disengage the clutch by pulling in the clutch lever, then smoothly operate the front and rear brakes until stopping the motorcycle.

Shift the transmission into neutral, turn the emergency switch to "⊗" position. Then set the fuel cock to "OFF" position, support the motorcycle with the center or side stand. After parking, turn the ignition switch to "⊗" position and lock the steering lock, followed by removing the key.

MAINTENANCE

TOOL KIT (Fig. 19)

Some roadside repairs, minor adjustments and parts replacement can be performaced with the tools available in the kit.

① Screw driver grip
② Double-end screw driver stem
③ Spark plug wrench
④ Slip-jointed pliers
⑤ Open-ended spanner, 8 × 10mm
⑥ Open-ended spanner, 12 × 14mm
⑦ Open-ended spanner, 13 × 15mm
⑧ Open-ended spanner, 17 × 19mm
⑨ Allen key, #5
⑩ Allen key, #6
⑪ Allen key, #8
⑫ Tool bag

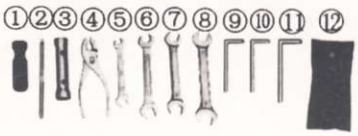


Fig.19

MAINTENANCE SCHEDULE

Maintenance work should be performed in light of Maintenance Schedule. Letters in the table indicate as follows:

I: INSPECT AND CLEAN, ADJUST, LUBRICATE OR REPLACE IF NECESSARY

C: CLEAN R: REPLACE A: ADJUST L: LUBRICATE

＊ The item should be serviced by your dealer, unless the owner has the proper tools and is mechanically qualified. Refer to the manual.

＊＊ In the interest of safety, we recommend these items should be serviecd only by your dealer.

NOTES: ①Clean more frequently when riding in unusual wet or dusty areas.

②At higher odometer readings, still follow the frequency intervals established in this manual.

REGULAR SERVICE / ITEM		ODOMETER READING, km (Note ②)					
			First 1,000km	4,000km	8,000km	12,000km	Remarks
*	Fuel line system			I	I	I	
*	Fuel filter		C	C	C	C	
*	Throttle operation		I	I	I	I	
*	Carburetor choke			I	I	I	
	Air cleaner element	Note ①		C	C	C	
	Spark plug		I	I	I	I	
*	Valve clearance		I	I	I	I	
	Engine oil	Yearly	R	Every 2,000km-R			
	Engine oil strainer	Yearly-R			C		
*	Cam chain slack		A	A	A	A	
*	Engine idle speed		I	I	I	I	
	Drive chain		I, L	I, L	I, L	I, L	
	Battery	Monthly	I	I	I	I	
	Brake shoes/pad wear			I	I	I	
	Brake system		I	I	I	I	
*	Brake light switch		I	I	I	I	
*	Headlight adjustment		I	I	I	I	
	Clutch		I	I	I	I	
	Side stand			I	I	I	
*	Suspension		I	I	I	I	
*	Nuts, bolts, fasteners		I	I	I	I	
**	Wheels/spokes		I	I	I	I	
**	Steering bearings		I			I	

ENGINE OIL (EP)

Check of Engine Oil (Fig. 20)

Check the engine oil level before every use.

- Place the motorcycle on a level ground and keep it in vertical position. Then start the engine and run at idle for a few minutes.
- Stop the engine so as to let the oil level be stable. Check the oil level throught the sight glass located at the lower of the right crankshaft case.
- The level must be maintained between the upper and lower level marks. Add the engine oil if necessary

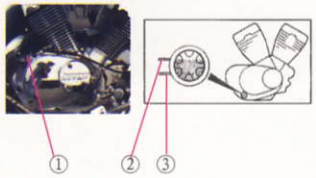


Fig. 20
① Oil filler cap
② Upper level mark
③ Lower level mark

CAUTION **Running the engine with insufficient oil can cause serious damage to the engine.**

Change of Engine Oil (Fig. 21)

- It is better to drain when the engine is still warmed.
- Place an empty container under the engine, unscrew the drain plug.
- Tread the kick-starter pedal several times so as to help empty the oil thoroughly.
- Reinstall the drain plug, and tighten it up.

※ Pour approx. 1L of SAE15W/40-SE into the crankcase. Restart the engine, keep it idle for a few minutes, and then stall it. Recheck the oil level, and add oil if necessary.

Fig. 21 Drain plug

CAUTION **When running in very dusty conditions, oil changes should be performed more frequently than specifed in the maintenance schedule.**

CLEAR AWAY CARBON DEPOSIT (EP)

Clear away carbon deposit around the spark plug and piston ring, on the piston top, inthe piston ring slot and combustion chamber regularly.

SPARK PLUG (EP) (Fig. 22)

Spark Plug Type: A7TC

Check and Replace

- Disconnect the spark plug cap from the spark plug. Clean any dirt from around the spark plug base. Remove the spark plug by the special wrench.
- Inspect the electrodes and center porcelain for deposits, and clean with a wire brush. If the spark plug is damaged, replace it.
- Check the spark plug gap which should be 0. 7 ± 0.1mm, and adjust by bending the side electrode if necessary.

Fig. 22

AIR CLEANER (EP) (Fig. 23)

The air cleaner must be cleaned and then soaked in clean oil at least once every 4000km's drive. Riding in very dusty area, the job should be done more often. See your dealer for further information.

- Remove the right side cover. Loosen off screws. Remove the air cleaner cover. Take the element out of the housing.
- Wash the element in cleansing solvent and dry it.
- Soak the element in gasoline engine oil SAE15W/40-SE until saturated, and squeeze out the excess oil.
- Reinstall all the removed parts well in the reverse order of removal.

Fig. 23 Air cleaner

VALVE CLEARANCE

Excessive valve clearance will cause noise and eventual engine damage. Little or no clearance will prevent the valve from closing and cause the damage to valve and loss of power. Check valve clearance when the engine is cold at the specified intervals.See your dealer for this service.

EXHASUT MUFFLER (EP)

Clear away regularly carbon deposit in the exhaust pipe; check the exhaust pipe inside for crack and washer damage, and repari or replace if necessary

ELECTRONIC-CONTROLLED AERATION SYSTEM (EP)

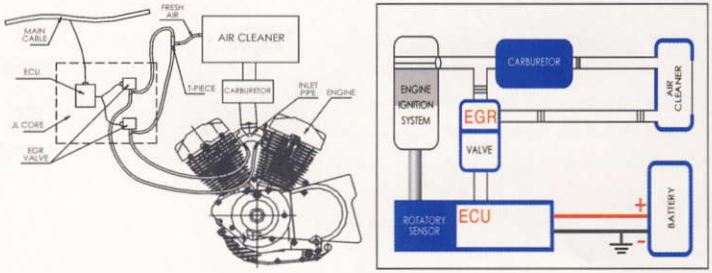
WORKING PRINCIPLE (Fig.24)

Based on advanced thin combustion in the gasoline engine and electronic-controlled theory, adjust the dutycycle of EGR valve at real time by collecting rotatory signal with ECU and control the air flow through EGR valve, as a result, achieving dynamic adjustion of aeration, controlling air/fuel mixture from the carburetor and improving fuel supply of carburetor.

FEATURES

1. By adopting electronic-controlled technology, the engine can run at an optimal air/fuel mixture so as to make it not only more powerful, lower fuel consumption, but also lower exhaust emissions.

2. The electronic-controlled system consists of an ECU, an EGR valve and lines etc, is characterized by easy installation and reliable performance.



SCHEMATIC DRAWING OF JL CORE TECHNICAL SYSTEM

Fig. 24

OPERATION OF THROTTLE (Fig. 25)

- Check for smooth rotation of the throttle grip from the fully open to the fully closed position at both full steering position.
- Measure the throttle grip free play at the throttle grip flange. The standard free play should be approx. 2-6mm.To adjust the free play, loosen the locknut, turn the adjuster. Adjustment over, fasten the locknut.

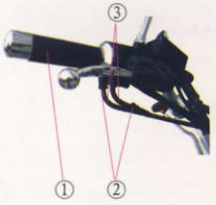


Fig. 25
① Throttle grip
② Locknut
③ Adjuster

IDLE SPEED OF CARBURETOR (EP) (Fig. 26)

● The carburetor is mounted between the engine and the air cleaner.

NOTE

The carburetor has been set accurately in factory. The user only needs to adjust idle speed after the engine is warmed up.

● Adjust idle speed with the throttle stop screw to set idle speed at about 1300r/min. Turn the screw in direction A will increase idle speed, in direction B decrease idle speed.

●When the engine has no idle speed or runs at a decreased speed, set the throttle stop screw in the middle between the two limit positions to help mix air and fuel.

● Make a trial, and readjust the throttle stop screw, if necessary.

Throttle stop screw

Fig. 26

CHECK LEAKS ALONG AIR SUPPLY LINE (EP)

Check regularly air supply line, specially such as the joint between the muffler and engine, the joint between the air cleaner, carburetor and inlet pipe, etc. for leakage, and repair or replace damaged parts once there are some troubles to assure a normal air supply.

ADJUSTMENT OF CLUTCH (Fig. 27)

●Measure the clutch lever free play at the clutch lever flange. The free play should be 10～20mm. Adjustment of the clutch should be done with the engine stalled.

●Turn loose the locknut at the clutch cable holder located on the crankcase, and then make adjustment by screwing in or out the corresponding adjusting nut. After adjustment, tighten up the locknut.

① Locknut
② Clutch cable holder
③ Boot

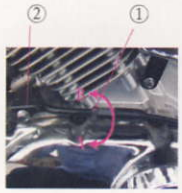


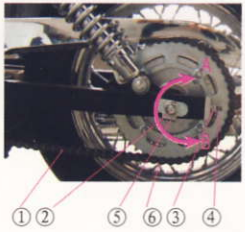
Fig. 27

DRIVE CHAIN (Fig. 28)

Check

Check the drive chain for wear and slack. Lubricate the chain if it seems to be dry.

Slack should be 10-20mm. Support the motorcycle with the center stand, check slack in the lower chain run midway between the sprockets.



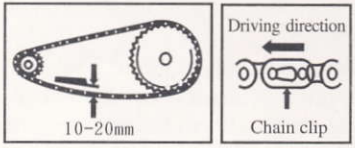


Fig. 28

① Chain ② Rear axle locknut
③ Nut ④ Adjusting bolt
⑤ Index mark ⑥ Chain clip

Adjustment

Loosen the rear axle nut and locknut, turn both adjusting bolts until the chain slack meets the standard, and make sure left and right adjusters align with the same index marks. After checking, tighten up the rear axle nut with a torque of 50 ~ 60N.m.

NOTE Turning the adjusting nut in direction A will increase the chain slack, and in direction B decrease the slack.

※ Check the chain for slack

※ If slack of chain is changed, it is necessary to relocate the rear wheel, for adjustment will affect the rear brake pedal free play.

Lubrication

Pull out the chain clip with pliers, remove the joint and chain. Wash the chain in cleansing solution and dry it in the air. Check the chain including link plates, bushings, and rollers for damage, cracks, wear-out. Replace if necessary. Lubricate the chain, then reinstall and adjust it.

CAUTION The chain clip should be so installed as to make sure that its closed end faces the direction of wheel rotation.

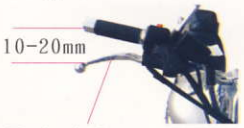
FRONT BRAKE (Fig. 29 & 30)

Check

The front brake cylinder is located on the right handlebar.

When operating the brake lever, the pads equipped with caliper will clamp the brake disc. If any pad is worn to its limit depth, replace both pads as a set on the first opportunity.

Fig. 29



Fr. brake lever

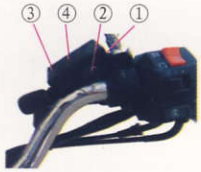
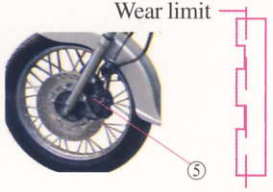


Fig. 30

① Main cylinder
② Sight glass
③ Screw
④ Cover
⑤ Brake caliper



Place the motorcycle on the level ground. Check the brake fluid level through the sight glass. If the fluid level is below the LOWER, loosen the cylinder cover screws, remove the the cover, add brake fluid up to the UPPER level mark.

⚠WARNING Brake fluid may cause irritation. Avoid contact with skin or eyes. In case of contact, flush thoroughly with water and call a doctor if your eyes were exposed. Apply specified brake fluid, or braking effectiveness and riding safety will be affected adversely. Do not allow contaminants such as dirt or water to enter the brake fluid tank.

Adjustment

The free play should be 10-20mm. Adjust it as follows if necessary:

Pump the brake lever, then gently loosen the bleed valve while holding the lever. Take care to tighten up the bleed valve as soon as flowing fluid. Repeat above procedure until the system is completely bled.

Apply the brake several times and check for free wheel rotation after the brake lever is released.

REAR BRAKE (Fig. 31)

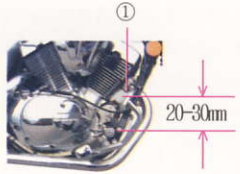
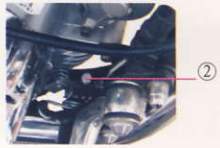


Fig. 31

① Rr. brake pedal
② Adjusting nut



Support the vehicle on its side stand. Measure the distance the rear brake pedal moves the brake starts to engage. The free play should be 20 ~ 30mm. To adjust, turn the rear brake adjusting nut. Turning it clockwise will decrease the free play, and counterclockwise increase the free play. Apply the several times and check for free wheel rotation after the brake pedal is released.

ADJUSTMENT OF BRAKE LIGHT SWITCH (Fig. 32)

The rear brake light switch is located on the right of the vehicle. If the switch operates too late, turn the nut in direction B; if the switch operates too soon, turn the nut in direction A.

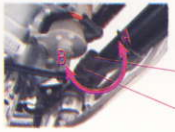


Fig. 32
Rr. brake light sw.
Adjusting nut

HOW TO USE BRAEK WEAR INDICATOR (Fig. 33 & 34)

Should either pads of front brake be worn to the limit depth, replace both pads as a set as soon as possible.

The rear brake is equipped with a brake wear indicator. If the indicator aligns with the reference marks on full application of the brake, the brake shoes must be replaced.

Fig. 33
① Fr. brake disc
② Fr. brake caliper

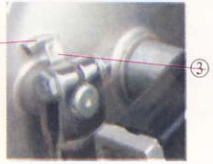


Fig. 34
① Rr. brake panel
② Reference mark
③ Indicator
④ Rr. brake arm

FRONT/REAR SHOCK ABSORBER AND SUSPENSION

Support the motorcycle on the center stand, pull in the front brake lever to lock the front wheel, pump the front/rear shock absorber up and down several times to see that it functions well without noise or leakage. Check the rear fork bushing for proper play by pressing the side of the rear wheel. Make sure that all of the fasteners are tightened securely.

TYRE

Proper air pressure will provide maximum stability, riding comfort and prolong tyre life.

TYRE PRESSURE		
Rider (kPa)	Front tyre: 200	Rear tyre: 225
Rider & passenger (kPa)	Front tyre: 225	Rear tyre: 250
Tyre Size	Front tyre: 3.0-18	Rear tyre: 5.0-15

WARNING **Operation with excessively worn tyres is hazardous and will adversely affect traction and handling.**

NOTE Tyre pressure should be checked before you ride while the tyres are "cold". Check the tyres for cuts, embedded nails, or other sharp objects. Check the rims for dents or deformation. See your deler for change or damaged tyres or punctured inner tubes.

CAUTION Improper tyre inflation will cause abnormal tread wear and create a safety hazard. The tyre presse less than the rated value may result in slipping wheel on the ground or coming off from the rim.

When the tread depth in the middle section of tyres reached limits below, please replace them.

TREAD DEPTH LIMITS			
Front tyre	1.6mm	Rear tyre	2.0mm

FRONT WHEEL (Fig. 35)

Support the motorcycle firmly before removing the front wheel.

Loosen the front axle nut, extract the front axle, and remove the front wheel.

Fig. 35

⚠**CAUTION** The support should be so heigh and fast as to avoid the vehicle turning over.

REAR WHEEL (Fig. 36)

Support the motorcycle, unscrew the rear brake adjusting nut, take the link out of the brake arm. Loosen the lock nuts at both sides of the rear wheel, then loosen the rear axle nut and adjusting bolt.

Take out the chain clip by pliers, remove the chain and rear axle nut, retract the rear axle, at last, remove the rear wheel.

NOTES

Installation shall be done in the reverse order of removal.

Tightening torque of rear axle nut: 50-60N. m Adjustment of rear brake and chain: refer to related items in the manual.

Fig. 36

⚠**CAUTION** The support should be so heigh and fast as to avoid the vehicle turning over.

FUSE (Fig. 37)

The fuse is positioned behind the left cover near the battery stay. The fuse will blow to protect the circuit automatically in the case of troubles such as a short circuit or an overload trouble. After the troubleshooting, fit a new fuse available in the fuse box.

Fig. 37

BATTERY (EP) (Fig. 38)

The battery is located behind the left cover of vehicle. Maintain it in accordancde with the Maintenance Schedule in the manual. The battery electrolyte level should be between theUPPER level mark and LOWER level mark. Should battery electrolyte level be below the LOWER level mark, add proper distilled water to the UPPER level mark. Becareful not to exceed the UPPER mark when adding distilled water, otherwise, overflowing electrolyte may cause corrosion.

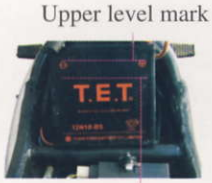


Fig. 38

⚠**ATTENTION** Be sure not to discard the battery electrolyte or used battery. Handle in accordance with national or local environmental protection rules. Avoid entering water around the battery when washing the vehicle.

⚠**WARNING** If the battery is to be removed, disconnect the negative lead "–" from the battery terminal first, and then the position lead "+". Connection should be done in the reverse order of removal. Do not touch the positive lead with the vehicle body to prevent short-circuiting. The leads should be tightened securely, or spark may occur to cause a fire.Make sure that the duct of battery keeps unblocked, or the battery may be explosive under certain conditions. The battery, in addition, should be equipped with an exhaust pipe, otherwise, overflowing electrolyte (sulfuric acid) may erode the vehicle body, main cable, even causing a fire by short-circuiting.

⚠**CAUTION** The battery contains sulfuric acid (electrolyte). Contacting with skin or eyes may cause severe burns. If such case occurs, flush with water for at least 5 minutes and call a physician immediately. Please protective clothing and a face shield. Keep out of reach of children. Do not use a new battery until taking a 30-minute wait after adding liquid. If the engine fails to be started with the electric starter and the neutral light is dim, use the kick-starter to start the engine. For prolonging the service, please start the engine using the kick-starter when the air temperature is lower. Charge the battery at a rate less than 1A for 10-15 hours if necessary. For further details, refer to Operating Instructions of Battery.

TROUBLESHOOTING, STORAGE AND OPTIONAL PARTS

TROUBLESHOOTING

If the engine fails to start, do checks as follows:

1. Is there enough fuel in the tank?
2. Is fuel reaching the carburetor from the tank cock?
3. Disconnect the fuel line from the carburetor, set the tank cock to “ ” position,and see if fuel flows out?
4. If OK, check the ignition system.

⚠CAUTION Do not allow fuel to flow at will. Fuel should be collected in the retainer.Do not smoke or allow flames or sparks in the area where the engine is subjected to the check.

5. Remove the spark plug from the cylinder head, and connect it with the spark plug cap.
6. Fix the spark plug on the vehicle body. Turn the ignition switch on, set the emergency switch to “ ○ ” position. Press the start button, and see if there are sparks at the electrode gap of the spark plug. If there are no sparks, see your dealer for help.

⚠CAUTION

Do not conduct the said check by fixing the spark near to the cyliner head. Otherwise, gas in the cylinder may ignite by sparks.

For safety’s sake, it is better to connect the metal portion of spark plug outer housing with bare metal of vehicle body.

CLEANING AND STORAGE

Cleaning

1. Check if the spark plug and inlets are installed or pluged securely before cleaning the vehicle.
2. Hose the vehicle completely.
3. Dry the motorcycle using a soft cloth or sponge.
4. Lubricate the drive chain immediately after washing and drying to prevent surfaces from getting rusty.
5. Start the engine, and allow it to run for several minutes.

CAUTION High-pressure water can damage certain parts such as wheel bearings, front fork, brakes, seal of transmission, electric equipment, etc. Prevent the muffler from getting in water, the spark plug from being wetted down when washing the vehicle.

Storage

Take some measures as following when subjecting the vehicle to 60-day or more storage.

1. Empty fuel inside the fuel tank, carburetor and other pipes.
2. Drive off the spark plug, pour a bit of engine oil SAE15W/40-SE into the engine. Turn off the emergency switch and operate the starter button several times to scatter evenly the oil inside the cylinder.
3. Remove the drive chain, clean and oil it.
4. Lubricate all of the controlling cables.
5. Block up the vehicle frame so that both the wheels clear the ground.
6. Seal the muffler outlet with a plastic bag to prevent the former against moisture.
7. Coat all surfaces of bare metal with a thin layer of rust-resisting oil if the motorcycle is stored in moist and salty regions.
8. Dismantle the battery and store in a dry, cool and well-ventilated place. Charge the battery monthly in course of storage.

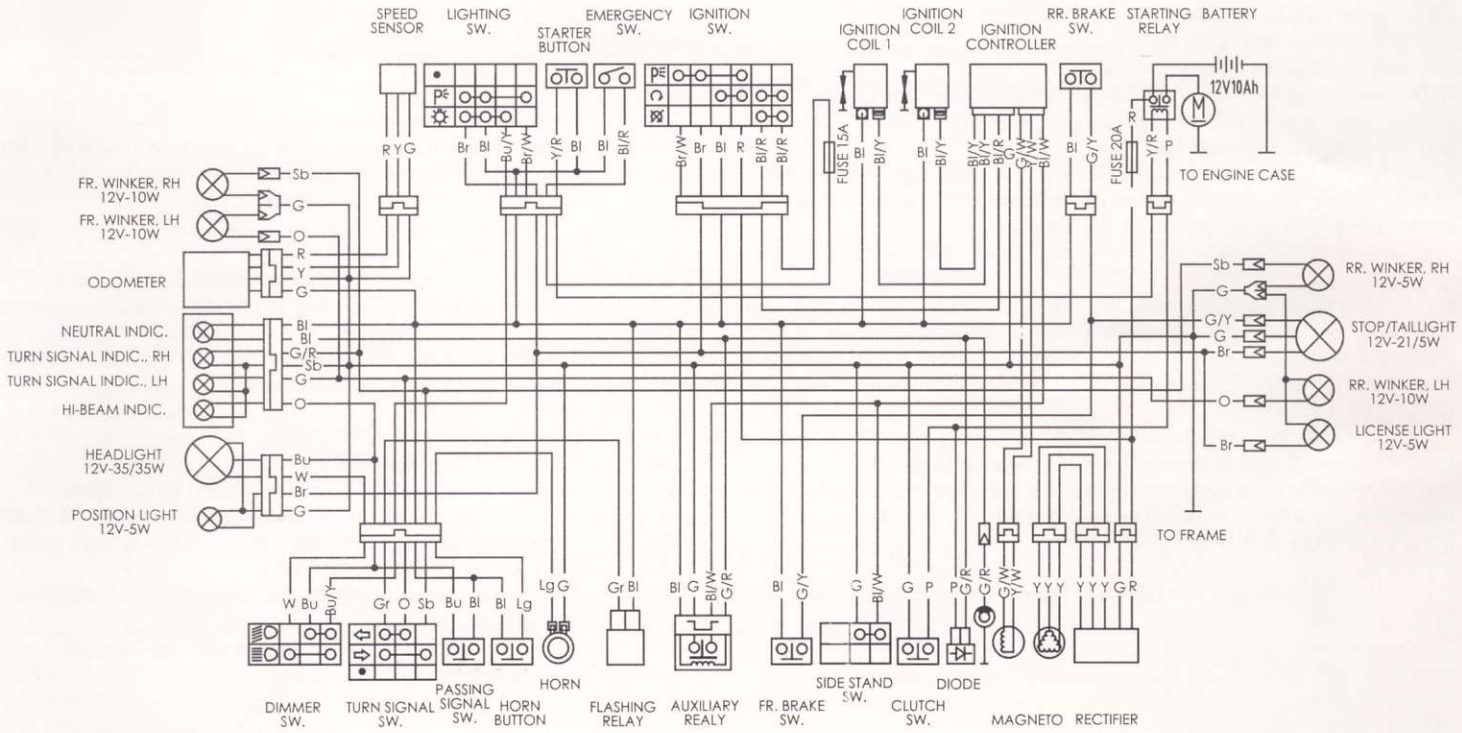
REMOVAL FROM STORAGE

After long-term storing the motorcycle, check, adjust and service it according to requirements stated in the manual to make sure the motorcycle functions properly. Try the vehicle at low speed in a safe riding area away from traffic.

ANTI-THEFT DEVICE (Optional)

1. Before using the remote-controller, be sure that the vehicle is in neutral and the ignition switch is turned off.
2. Electric starting by the remote-controller only warms up the engine, and the engine will stop automatically in 2.5 minutes.
3. Don’t apply both the front and rear brakes after starting the engine by the remote-controller and before turning on the ignition switch, otherwise, the starting motor will run once more.
4. Don’t ride without the key to insure that the function of anti-theft is reliable enough.

ELECTRIC DIAGRAM



SPECIFICATIONS

Vehicle Model	250-B
1. DIMENSIONS AND PERFORMANCE	
Overall dim.(L × B × H)	2250 × 850 × 1140 mm
Steering bar angle	43°
Ground clearance	150 mm
Turning circle dia.	4800 mm
Wheelbase	1495 mm
Kerb weight	163 kg
Max. weight capacity	150 kg
Top design speed	⩾ 100 km/h
Econ. speed fuel cons.	⩽ 2.26 L/100 km
Grade ability	⩾ 20°
Front tyre size/pressure	3.0-18/200kPa
Rear tyre size/pressure	5.0-15/225kPa
Front shock absorber	Telescopic type hydraulic drive
Rear shock absorber	Coil spring-dampened
Front brake type	Disc
Rear brake type	Drum
Fuel tank capacity	14 L
2. ENGINE	
Model	2V49FMM
Type	Twin-cylinder, 4-stroke, air-colled
Bore × Stroke	49 × 66mm
Displacement	248.9 ml
Compression ratio	10.0:1
Starting mode	Electric-starter
Ignition system	TCI
Max. power, kW/r/min	13/8000
Max. torque, N · m/r/min	19/6000
Engine oil	SAE15W/40-SE
Engine oil capacity	1.2 L
Lubrication	Press/splash
Fuel	Unleaded gasoline with RQ-93 or higher
Clutch type	Wet multi-plate
Transmission	5-speed, constant mesh
Primary reduction ratio (IP)	3.130
Gear ratio, 1st (I_1)	2.642
2nd (I_2)	1.684
3rd (I_3)	1.260
4th (I_4)	1.000
5th (I_5)	0.821
Final reduction ratio (IF)	2.812
3. ELECTRIC EQUIPMENT	
Battery	12V10Ah
Spark plug	A7TC
Headlight	12V-35W/35W
Winker	2V-10W
Tail/stop light	12V-5W/21W
Horn	12V
Odometer light	12V-3W
Fuse	20A