OWNER'S MANUAL

PREFACE

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

The manual contains the necessary instructions and guidance with respect to the operation and maintenance of the inotorcycle, and BE SURE TO READ IT CAREFULL,Y 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. Your dealer will provide you with technical inquiry and after-sales service.

This publication includes the latest information available at the time of printing. However, there may be minor differences between the actual product and illustrations and text in this manual. All rights reserved. The manual is subject to change without notice.

Please check carefully the product nameplate, VIN record and engine code in the motorcycle, which you have bought, and they are helpful for you to get thc motorcycle a registration plate and for future inquiry.

IMPORTANT NOTICE

Operator and passenger

This motorcycle is designed to carry the operator and a passengei Nevei exceed the maximum weight capacity as specified in the manual.

Maximum load

150 kg including 5 kg for rear carrier

On-road use

This motorcycle is designed to be used on roads only.

READ THIS OWNER'S MANUAL CAREFULLY

Pay special attention to statements preceded by the following words

⚠WARNING

A warning is used to alert the user to fact that hazardous operating and maintenance procedures may result in injury to or death of personnel if not strictly observed.

CAUTION

A caution is used to alert the user to fact that hazardous operating and maintenance procedures may result in damage to or destruction of equipment if not strictly observed.

NOTE

A note is used to give helpful information.

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

CONTENTS

MOTORCYCLE SAFE RIDING

⚠WARNING

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

SAFE RIDING RULES

1.Always make a pre-ride inspection before you start the engine. You may prevent accident or equipment damage.

2.Many accidents involve inexperienced riders. 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.

3.Many automobile/motorcycle accidents happen because the automobile driver does not "see" the motorcyclist.

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".

4.Obey all national and local laws and regulations

Excessive speed is a factor in many accidents Obey the speed limits, and NFVER travel faster than conditions warrant

Signal before you make a turn or lane change to draw other motorists' attention.

5.Don't let other motorists surprise you.

Use extra caution at intersections, parking lot entrances and exits, and always remember to ride with both hands and keep both feet on the rider footrests.

6.Riding in wet days, brake distance should be two times that in *dry* days.

PROTECTIVE CLOTHS

1.Most motorcycle accident fatalities are due to head injuries. ALWAYS wear a helmet. You should also wear a face shield and protective clothing.

2.The exhaust system becomes hot during operation, and it remains hot for a while after stopping the engine. Be careful not to touch the exhaust system while it is hot. Wear clothing that fully covers your legs.

3.Do not wear loose clothing that could catch on the control levers, kick-starter, footrests or wheels.

REFITTING

⚠WARNING

Refitting of the motorcycle, or removal of original parts, may make the vehicle unsafe or illegal. Obey all national and local equipment regulations.

LOADING AND ACCESSORIES

⚠WARNING

To prevent an accident, take extreme care when adding accessories and cargo and riding with them. Addition of accessories and cargo may reduce a motorcycle's stability, performance and safe operating speed. Remember these performances may be reduced by installation of the accessories not produced by the company, improper loading, worn tyre and overall motorcycle conditions, poor road or weather conditions. These general guidelines may help you decide whether or how to equip your motorcycle, and how to load it safely.

Loading

The maximum load weight of the motorcycle is 150kg

1.Keep cargo and accessory weight low 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.

2 Adjust tyre pressure and rear shock absorber to suit load weight and nding conditions

3 Vehicle handling and stability can be adversely affected by loose cargo Recheck cargo security and accessory mounts frequently

4 Do not attach large or heavy items (such as a sleeping bag or tent) to the handlebars, fork, or fender. Unstable handling or slow steering response may produce.

Accessories

Genuine accessories of the company have been specifically designed and tested on the motorcycle. Because the factory cannot test all other accessorres, you are personally responsible for proper selection, installation, and use of accessories not produced by the company Always follow the gurdelines under Loading, and these below.

1.Carefully inspect the accessory to make sure that it does not obscure any lights, reduce ground clearance and banking angle, or limit suspension travel, steering travel or control operation

2 Large fork-mounted fairings or windshields, or pooily designed or improperly mounted fairings can produce aerodynamic forces that cause unstable handling Do not install fairings that decrease cooling air flowing to the engine

3 Accessories may increase the time that hands or feet operate controls, resultrng in increased reaction time in an emergency

4 Do not add electrical equipment that will exceed the motorcycle's electrical system capacity

5 This motorcycle was not designed to pull a sidecar or trailer Handling may be seriously impaired if so equipped

DESCRIPTION

PARTS LOCATION (Fig. 1)

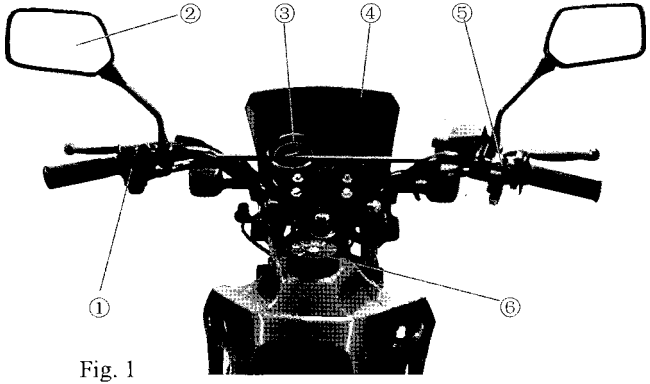


Fig. 1

@Handlebar controls, LH ② Rear-view mirror ③ Meter
④ Farrrng ⑤ Handlebar controls, RH ⑥ Fuel filler cap

PARTS LOCATION (Fig. 2)

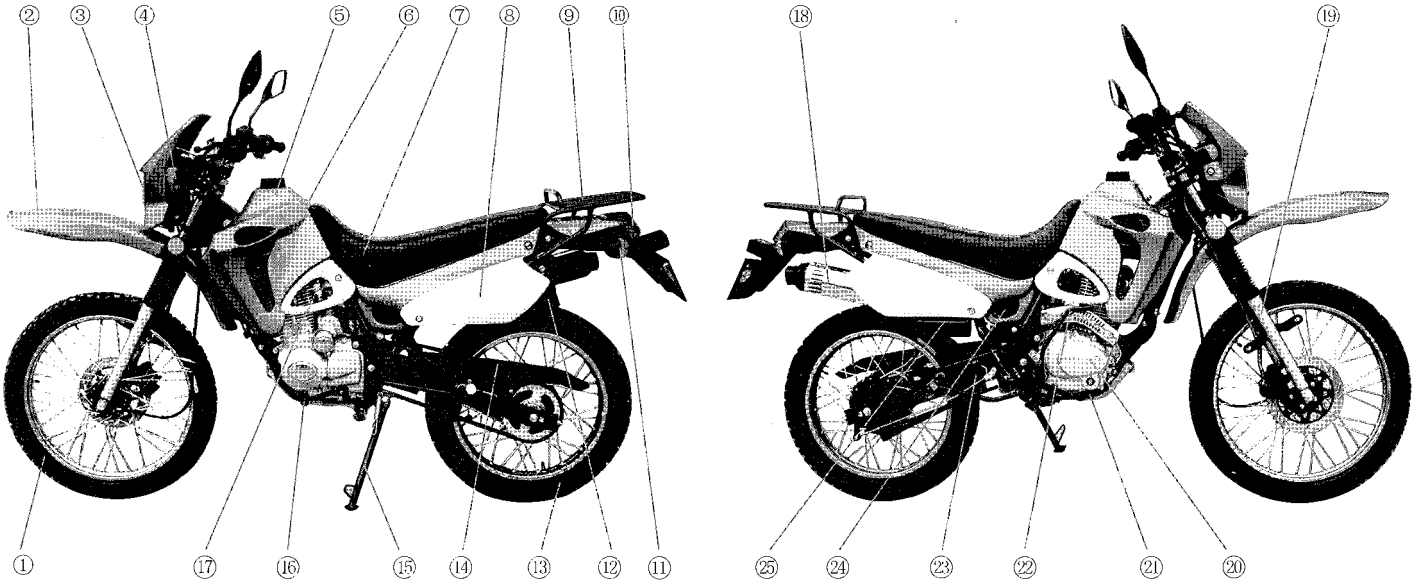


Fig 2

① Front wheel @Front fender ③ Headlight ④ Front winker ⑤ Fuel tank ⑥ Ornament cover of fuel tank ⑦ Seat ⑧ Side cover, LH ⑨ Rear carrier ⑩ Taillight ⑪ Rear winker ⑫ Battery ⑬ Rear wheel ⑭ Chaincase ⑮ Side stand ⑯ Gearshift pedal ⑰ Carburetor ⑱ Exhaust muffler ⑲ Front shock absorber ⑳ Engine ㉑ Rear brake pedal ㉒ Kick-starter ㉓ Rear fork ㉔ Rear shock absorber ㉕ Tool box

VIN RECORD (Fig. 3,4 & 5)

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 once stolen.

VIN

Engine code ☆ ☆

Fig. 3 VIN

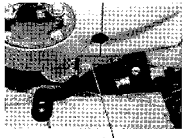


Fig. 4 Engine code

Fig. 5 Nameplate

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 crankcase (Fig. 4).
③ The vehicle nameplate is fixed on the left of the steering stem (Fig. 5).

INSTRUMENTS AND INDICATORS (Fig. 6)

① Turn signal indicator
② Hi beam indicator
③ Neutral indicator " N
④ Odometer
⑤ Trip meter
⑥ Speedometer

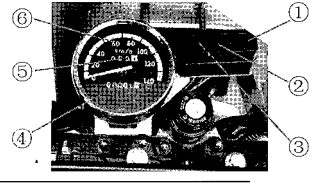


Fig. 6

S/N	Description	Function
①	**Turn signal indicator**	Flashes when either turn signal is operated.
②	**Hi beam indicator**	Lights when the headlight is on high beam.
③	**Neutral indicator**	Lights when the transmission is in neutral.
④	**Odometer**	Shows accumulated mileage.
⑤	**Trip meter**	Shows mileage per trip.
⑥	**Speedometer**	Shows riding speed in km/h.

IGNITION SWITCH (Fig. 7)

The ignition switch is located on the right side of the instruments. It is of a 2-position, key-operated type, and functions as follows

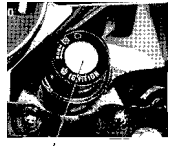
⊗ (OFF): Engine and lights cannot be operated and the key can be removed.

◯ (ON): Engine and lights can be operated and the key cannot be removed.

Note

Remove the key to prevent unauthorized vehicle use.

Fig.7



Ignition switch

LEFT HANDLEBAR CONTROLS (Fig. 8)

Headlight Dimmer

Set the dimmer to ≡D to select high beam, or to ≡D to select low beam.

Turn Signal Switch

Move the switch to ⇦ (L) to signal a left turn and to ⇨ (R) to signal a right turn. Set the switch to ◍ turn off either of winkers during normal riding or after turning.

Horn Button

Press the button ⌓ to sound the horn.

Light Switch

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

☼ :The parking light, taillight and instrument lights are bright.

◍ :The parking light, headlight, taillight and instrument lights are off.

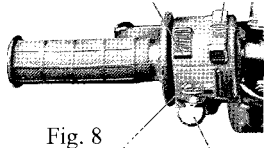


Fig. 8

RIGHT HANDLEBAR CONTROLS (Fig. 9)

Emergency Switch

In an emergency, depressing the switch to ⊗ (OFF) will stall the engine at once; in normal riding cases, always set the switch at ◯ (ON).

Starter Button

Depress the button ⚡ to start up the engine.

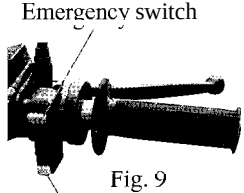


Fig. 9

FUEL AND FUEL TANK (Fig. 10)

Gasoline Selection

Fuel is a key factor in deciding the exhaust emissions amount from the engine, so selection of fuel must follow the rules below.

Selected fuel must be unleaded or low-leaded gasoline with the octane No. RQ-90 or higher.

Fig. 10

Fuel filler cap

Fuel Tank

The fuel tank capacity is 8.5L including the reserve supply of 2.3L.

To open the fuel filler cap, insert the key into its slot, and turn it clockwise it through 90" , then open the cap. To close the cap, just put it to position.

NOTE

The fuel filler cap can be closed surely when the key is inserted into its slot only. If the cap is closed improperly, the key cannot be removed.

⚠**WARNING**

- Gasoline is extremely flammable and is explosive under certain conditions. Add gasoline in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where gasoline is stored or where the gasoline tank is filled with gasoline.
- **Before** fill the gasoline tank, make sure to filter gasoline first.
- **Do** not overfill the tank (there should be no gasoline in the filler neck). After filling, make sure the gasoline filler cap is closed securely.
- **Be** careful not to spill gasoline when filling the tank. Spilled gasoline or gasoline vapor may ignite. If any gasoline is spilled, make sure the area is dry before starting the engine.
- **Avoid** repeated or prolonged contact with skin or breathing of vapor.
- **KEEP** OUT OF REACH OF CHILDREN.

FUEL COCK (Fig. 11)

The fuel cock has three positions:

OFF ( )

With the fuel cock in (OFF) position, fuel cannot flow from the tank to the carburetor.

Turn the cock OFF whenever the motorcycle is not in use.

ON ( )

With the fuel cock in (ON) position, fuel will flow from the main fuel supply to the carburetor.

RES ( )

With the fuel 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 as soon as possible after switching to RES.

Fig.11

⚠**WARNING**

- **To** avoid running out of fuel that may result in a sudden stop. learn how to operate the fuel cock when riding the motorcycle.
- **Be** careful not to touch any hot engine parts while operating the fuel cock.

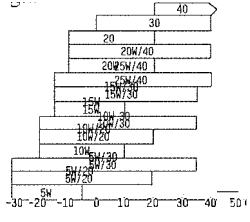
NOTE

Remember to check that the fuel cock is in ON ( ) position each time you ride.

If the cock is left in **RES ( )** position, you may run out of fuel with no reserve.

LUBRICATING OIL

Fig.12



The quality of the lubricating oil plays a vital role in deciding the engine performance and service life. Lubricating oil must be selected in accordance with the rules below and other oils, such as ordinary engine oil, gear oil and vegetable oil, are forbidden to be used.

Lubricating oil recommended: gasoline engine oil Class SAE15W/40-SE or Class SE, SF, SC from API Service Classification.

The vehicle has been filled with the engine oil Class SAE15W/40-SE before being delivered, and the lubricant is only suitable at a temperature range

from -10℃ to 40°C. If other motor oil is 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 (see Fig.12). If there is no gasoline engine oil Class SAE15W/40-SE, the gasoline engine oil No. HQB-10 (or No. HQB-6 in regions where temperature is lower than -10℃) can be used instead.

Before replacing the lubricant, please drain the oil out completely remaining in the crankcase, and clean the inside by cleansing kerosene, then fill new one

TYRES

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

Check tyre pressure frequently and adjust if necessary.

Select the right replacement tyres in accordance with the specifications shown in the table 1.

Table 1

SPECIFICATIONS OF TYRE			
Cold tyre pressure (kPa)	Rider	Front: 175	Rear: 200
	Rider and a passenger	200	225
Tyre size		Front: 2.75-21-4PR	Rear: 4.10-18-4PR

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 dealer for change of damaged tyres or punctured inner tubes.

⚠WARNING

- **Do not attempt to patch a damaged tyre or inner tube. Wheel balance and tyre reliability may be impaired.**
- **Improper tyre inflation will cause abnormal tread wear and create a safety hazard. The tyre pressure less than the rated value may result in the tyre slipping on the ground or coming off from the rim, even the vehicle being out of control.**
- **Operation with excessively worn tyres is hazardous and will adversely affect traction and handling.**
- **The use of tyres other than those listed on the table 1 may adversely affect handling.**

When the tread depth in the middle section of tyres reaches the limits in table 2 below, please replace tyres.

Table 2

Tread depth limits			
Front tyre	1.5mm	Rear tyre	2.0mm

OPERATION GUIDE

PRE-RIDE INSPECTION

⚠WARNING

If the Pre-ride Inspection is not performed, severe personal injury or vehicle damage may result.

Inspect your motorcycle every day 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-fill fuel tank when necessary. Check for leaks.
3.Front and rear brakes-check operation and if necessary, adjust free play.
4.Tyres-check condition and pressure.
5.Drive chain-check condition and slack. Adjust and lubricate if necessary.
(,.Throttle-checkfor smooth opening and full closing in all steering positions.
7.Lights and horn-check that headlight, tail/brake light, turn signals, indicators and horn function properly.
8.Battery electrolyte-check that the electrolyte level is suitable.
9.Fastener-check that all nuts, screws and bolts are mounted securely.
10.Steering system-check for its smoothness and reliability.

Correct any discrepancy before you ride. Contact your dealer for assistance if you cannot correct the problem

STARTING THE ENGINE

Always follow the proper starting procedure described below

⚠WARNING

@Neverrun the engine in an enclosed area. The exhaust contains poisonous carbon monoxide (CO) gas that can cause loss of consciousness and lead to death.

@Attemptingto start the engine with the transmission in gear and the clutch engaged may result in injury or damage.

Preparation

Before starting, insert the ignition key, turn the ignition switch to ON and confirm the following:

- The transmission is in NEUTRAL (neutral indicator light ON)
- The fuel cock lever is at (ON)
- The fuel in the fuel tank is enough

Starting Procedure

1 Close the choke in case of cold engine

2 With the throttle slightly open, operate the kick-starter Kick from the top of the stroke through to the bottom with a rapid, continuous motion so as to start the engine.

You may start the engine by the starter button With the throttle closed and the clutch is disengaged, push the starter button. Release the starter button as soon as the engine starts

3 Warm up the engine by operating the choke and throttle until the engine runs normally.

NOTE

Starting up the engine in regions with especially low air temperature, pedal the **kick-starter** several times first to run the crankshaft while the ignition switch should be at (OFF).

CAUTION

Don't violently tread the kick-starter to avoid being an injury to your foot or damaging the engine case due to its rebound. Never operate the start b**utton and kick-starter simultaneously.**

BREAKING-IN

Help assure your motorcycle's future reliability and performance by paying extra attention to how you ride during the first 1000km.

During this period, avoid full-throttle riding and loading the engine heavily, and be sure to keep changing speed.

(1) 0-150km Breaking-in

During the driving, be sure that the opening of the throttle don't exceed one-fourth of its total opening. Stall and cool the engine for five to ten minutes every one-horn's drive. Be sure to gearshift often.

(2) 150-500km Breaking-in

During the driving, do not open the throttle over half of its total opening. Driving with fully open throttle is forbidden.

(3) 500-1000km Breaking-in

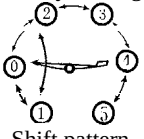
During the driving, be sure not to open the throttle over three-fourths of its total opening.

NOTE

After the **breaking-in** period, be sure to conduct maintenance according to the Maintenance Schedule so as to make in compensation for slight wear. The service life of the engine will be extended obviously through such maintenance.

IUDING (Fig. 13)

Fig. 13



Shift pattern

⚠WARNING

Review "Motorcycle Safe Riding" before you ride.

1.After the engine has start. warm up the engine fully.

2.While the engine is idling, pull in the clutch lever to disengage the clutch and tread the gearshift pedal to shift into 1st (low) gear.

3.Slowly release the clutch lever to engage the clutch and at the same time gradually increase engine speed by opening the throttle.

Coordination of the throttle and clutch lever will assure a smooth and positive start.

4.When the motorcycle attains a steady speed, close the throttle, close the throttle and pull in the clutch lever, and than shift to 2nd gear by treading

the gearshift pedal.
This sequence is repeated to progressively shift to 3rd , 4th and 5th (top) gears.
5.Coordinate the throttle and brakes for smooth deceleration.
6.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 of the engine, drive chain or other parts may result.

⚠WARNING

@Independentuse of only the front or rear brake reduces stopping performance. **Extreme braking** may cause either wheel to lock, reducing **control** of the motorcycle.

@Whenpossible, reduce speed or brake before entering a turn; closing **the** throttle or braking in mid-turn may cause **wheel** slip. Wheel slip will reduce control of the motorcycle.

@Whenriding in wet or rainy conditions, or on loose surfaces, the ability to maneuver and stop will be reduced. All of your actions should be smooth under these conditions. Rapid acceleration, **braking** or turning may cause loss of control. For your safety, exercise extreme caution when braking, accelerating or turning.

@Whendescending a long, steep grade, use engine compression braking by downshifting, with intermittent use of both brakes. Continuous brake application can overheat the brakes and reduce their effectiveness.

@Ridingwith your foot resting on the brake pedal or your hands on the brake lever may actuate the brake light, giving a false indication to other drivers. It may also overheat the brake, reducing effectiveness.

PARKING

1.Close the throttle and pull in the clutch lever to disengage the clutch while applying both the front and rear brakes until stopping the inotorcycle fully.
2.After stopping the motorcycle, shift the transmission into neutral, turn the ignition switch OFF (⊗)to stall the engine; turn the fuel cock OFF (8) .
3.Use the side stand to support the motorcycle while parked.

CAUTION

Park the motorcycle on firm, level ground to prevent it from falling over.

MAINTENANCE

The Maintenance Schedule specifies how often you should have your motorcycle served, and what things need attention. It is essential that your motorcycle be served as scheduled to retain its high level of safety, dependability, and emission control performance.

These instructions are based on the assumption that the inotorcycle will be used exclusively for its designed purpose. Sustained high speed operation, or operation in unusually wet or dusty conditions, will require more frequent service than specified in the MAINTENANCE SCHEDULE. Consult your dealer for recommendations applicable to your individual needs and use.

MAINTENANCE SCHEDULE

The following Maintenance Schedule specifies all maintenance required to keep your motorcycle in peak operating condition. Maintenance work should be performed by properly trained and equipped technicians

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

C: CLEAN R: REPLACE A: ADJUST L LUBRICATE

*THESE ITEMS 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 BE SERVICED ONLY BY YOUR DEALER

NOTES

1.Service more frequently when riding in unusually wet or dusty areas.
2.At higher odometer readings, still follow the frequency interval established here.

MAINTENANCE SCHEDULE

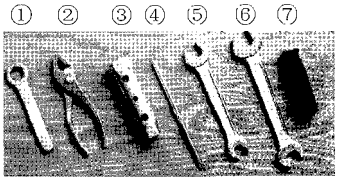
S/N	ITEM	Fist 1000km	ODOMETER READJNG or PERIOD (Note 2) 4000km or 6 months	8000km or 12 months	12000km or 18 months	Remarks
'	Fuel line system		1	I	1	*
2	Fuel filter	I	I	I	I	*
3	Throttle operation system	I	1	I	I	*
4	Carburetor choke		I	I	I	* Note 1
5	Air cleaner		C	C	C	
6	Spark plug		I	I	I	
7	Lubricating oil	R	R, every 2000km			Every year
8	Lubricating oil gauze		C	C	C	
9	Engine idle speed	I	I	I	I	*
10	Drive chain		R, every 5000km			
11	Valve gap					
12	Brake shoe/pads wear	I	1	I	I	Every year
13	Brake system	I	I	1	I	
14	Brake light switch	I	I	1	I	*
15	Clutch	I	I	I	I	
16	Side stand		I	I	I	
17	Suspension	I	I	I	I	*
18	Nuts, bolts, fasteners	I	I	I	I	*
19	Wheels/spokes	I	I	I	1	**
20	Steering head bearing	1			1	**

TOOL KIT (Fig. 14)

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

① Ring spanner, 24
② Slip-joint pliers, 125
③ Spark plug wrench
④ Double-end screw driver
⑤ Open-ended spanner, 10×12
⑥ Open-ended spanner, 14×17
⑦ Screw driver handle

Fig.14



CHECK AND CHANGE OF LUBRICATING OIL (Fig. 15)

Check of Lubricating Oil Level

Check the lubricating oil level each day before riding the motorcycle.

The level must be maintained between the upper and lower level marks on the dipstick.

1.Start the engine and let it idle for a few minutes.

2.Stop the engine and put the motorcycle on a level ground.

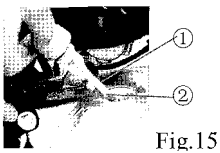


Fig.15
① Upper level mark
@Lower level mark

3 After a few minutes, remove the dipstick/oil filler cap, wipe it clean, and reinsert the dipstick without screwing it in, then remove the dipstick. The oil level should be between the upper and lower level marks on the dipstick.

Change of Lubricating Oil

Lubricating oil quality is the chief factor affecting the engine service life. Change the oil as specified in the maintenance schedule.

NOTE

Change the lubricating oil with the engine at normal operating temperature and the motorcycle on the level ground to assure complete and rapid draining.

1.To drain the oil, place an empty oil tray under the engine, and turn off the drain plug on the bottom of the engine housing.

⚠WARNING

A warmed-up engine and the oil in it are hot; be careful not to burn yourself.

2.Tread the kick-starter pedal several times so as to help empty the oil

thoroughly.
3.Reinstall the drain plug well.
4.Remove the dipstick/oil filler cap; add specified lubricating oil.
5.Install the dipstick/oil filler cap.
6.Restart the engine and let is idle for a few minutes, and then stall it. Recheck the lubricating oil level. Add more oil if necessary. Check that the oil level is at the upper level mark on the dipstick with the motorcycle upright on firm, level ground. Make sure there are no oil leaks.

CAUTION

Running the engine with insufficient oil can cause serious engine damage.

NOTE

●Do not add any additive to the lubricating oil.

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

*Please dispose of used engine oil in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local recycling center or service station for reclamation. Do not throw it in the rubbish or pour it on the ground or down a drain.

SPARK PLUG (Fig. 16)

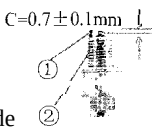


Fig.16
① Side electrode
② Center electrode

Selection

Plug recommended: D7/D8

Check and Replace

1.Disconnect the spark plug cap from the spark plug.
2.Clean any dirt from around the spark plug base.

Remove the spark plug using the plug wrench containing in the tool kit

3.Inspect the electrodes and center porcelain for deposits. erosion or carbon fouling. If the erosion or deposit is heavy, replace the plug. Clean a carbon or wet-fouled plug with a plug cleaner, or use a wire brush.
4.Check the spark plug gap using a wire-type feeler gauge. If adjustment is necessary, bend the side electrode carefully.

The spark plug gap should be 0.6~0.8mm.

Make sure the plug washer is in good condition.

5.With the plug washer attached, turn the spark plug in by hand first to prevent its threads from being damaged, and then tighten up it by the spark plug wrench.
6 Reinstall the spark plug cap.

CAUTION

- **The spark plug must be securely tightened. An improperly tightened plug can become very hot and possibly damage the engine.**
- **Never use a spark plug with an improper heat range. Severe engine damage could result.**
- **When disconnecting the spark plug, avoid contaminants entering the cylinder through the installation hole of the spark plug, or premature wear on the cylinder and piston may produce.**

CLEAR AWAY DEPOSIT CARBON

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

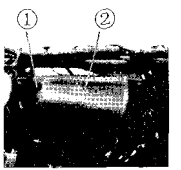
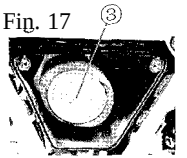


Fig. 17

AIR CLEANER (Fig. 17)

The air cleaner should be serviced at regular intervals as specified in the Maintenance Schedule. Generally. the air cleaner must be cleaned and soaked in oil at least once every 1000km's drive, and more frequently when riding in unusually wet or dusty areas. See your dealer for further information.



① Screw
② Air cleaner housing
③ Element

1.Remove the left side cover of the vehicle.
?.Remove the air cleaner housing cover and take out its filter element.
3.Wash the filter element in clean, nonflammable or high flash point solvent and let it dry.

⚠WARNING

Never use gasoline or low flash point solvents for cleaning the air cleaner. A fire or explosion could result.

4.Soak the filter element in gasoline engine oil Class 15W/40-SE until

saturated, and then squeeze out the excess oil.

5.Install the removed parts in the reverse order of removal.

CAUTION

It is **forbidden** to start the engine without air cleaner installed, or premature **wear** of **the** piston and cylinder may produce.

CHECK LEAKS ALONG AIR SUPPLY LINE

Check leaks regularly along air supply line, and repair or replace related parts once there are some defects to assure a normal air supply.

THROTTLE OPERATION (Fig. 18)

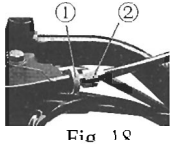


Fig. 18
① Lock nut
② Adjuster

1.Check for smooth rotation of the throttle grip from the fully open to the fully closed position at both full steering positions.

2.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 lock nut and turn the adjuster.

IDLE SPEED (Fig. 19)

The engine must be at normal operating temperature for accurate idle speed adjustment.

NOTE

Do not **attempt to** compensate for faults in other systems by adjusting idle speed. See your dealer for regularly scheduled carbnretor adjustments.

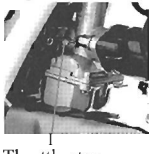
1.Warm up the engine, shift the transmission into neutral and place the motorcycle on it side stand.

2.Adjust idle speed with the throttle stop screw to set idle speed at about 1500r/min.

Turn the throttle slop screw clockwise will increase idle speed while will decrease it turning counterclockwise.

3.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.

Fig.19


Throttle stop screw

4.Run the engine again; readjust the throttle stop screw if necessary.

CAUTION

Since the carburetor is a precision apparatus, don't disassemble it **without** the professional knowledge.

ADJUSTMENT OF CLUTCH (Fig. 20)

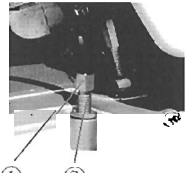


Fig.20
① Lock nut
② Adjusting bolt

Measure the clutch lever free play at the clutch lever flange. The free play should be 10～15mm.

1.To make adjustment, turn loose the lock nut at the lower end of the clutch cable and turn out or in the adjusting bolt.

2.After the adjustment, start the engine and make sure the clutch works well, or readjust the free play.

DRIVE CHAIN (Fig. 21)

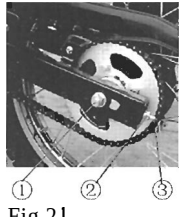


Fig.21
① Rear axle
② Lock nut
③ Adjusting bolt

The service life of the drive chain is dependent upon proper lubrication and adjustment. Poor maintenance can cause premature wear or damage to the drive chain and sprockets.

The drive chain should be checked and lubricated as part of the Pre-ride inspection. Under severe usage, or when the motorcycle is ridden in unusually dusty or muddy areas, more frequent maintenance will be necessary. Chain specification: 428H

Inspection

1.Stall the engine, place the motorcycle on its side stand, and shift the transmission into neutral.

2.Check slack in the lower drive chain run midway betwcen the sprockets. Drive chain slack should be adjusted to keep a vertical movement of 10～15mm.

3.Rotate the rear wheel and then stop. Check the drive chain slack. Repeat this proccdurc several times. Drive chain slack should remain constant. If

the chain is slack only in certain sections, some links are kmked and binding. Binding and kinking can frequently be eliminated by lubrication.

4.Inspect the sprocket teeth for possible wear damage. Replace if necessary.

5.If the drive chain or sprockets are excessively worn or damaged, they should be replaced. Never use a new chain with worn sprockets; rapid chain wear will result.

Adjustment

Drive chain slack should be checked and adjusted, if necessary, every 1,000km. When operated at sustained high speeds or under conditions of frequent rapid acceleration, the chain may require more frequent adjustment. If the drive chain requires adjustment, the procedure is as follows:

1.Place the inotorcycle on its side stand with the transmission in neutral and the engine stop switch off.

2.Loose the axle nut.

3.Loose the lock nuts for the drive chain adjusters.

4.Turn both adjusting bolts at the same time until both left and right adjusters align with the index mark, and then reinstall the axle nut. Chain slack should be 10~15mm.

5.Check the drive chain slack.

6.Once the drive chain slack is changed, it is necessary to relocate the rear wheel, for adjustment will affect the rear brake pedal free play.

Lubrication

Use engine oil or a connnercially prepared drive chain lubricants in preference to motor oil or other lubricants. Saturate each chain link joint so that the lubricant penetrates between the link plates, pins, bushings, and rollers.

Removal and Cleaning

When the drive chain becomes dirty, it should be removed and cleaned prior to lubrication.

1.With the engine off, carefully remove the chain clip.

2.Clean the drive chain in high flash-point solvent and allow it to dry. Inspect the drive chain for possible wear or damage. Replace any chain that has damaged rollers, loose fitting links, or appears unserviceable.

3.Inspect the sprocket teeth for possible wear or damage. Replace if necessary. Never use a new drive chain on badly worn sprockets. Both chain and sprockets must be in good condition, or the new replacement chain or sprocket will wear rapidly.

4.Lubricate the drive chain.

5.Pass the chain over the sprockets and join the ends of the chain with the master link. For ease of assembly, hold the chain ends against adjacent rear sprocket teeth while inserting the master link.

⚠**WARNING**

The chain clip should be so fitted to make sure that the closed end of the clip faces the driving direction of wheel.

6.Adjust the drive chain and rear brake pedal free play.

CHECK OF FRONT SHOCK ABSORBER

Check for oil leaks and deformation. Pull in the front bake lever to lock the front wheel, and pump the front
shock absorber up and down several times to see that it functions well

CHECK OF REAR SHOCK ABSORBER (Fig. 22)

Fig.22

Check for oil leaks and deformation. Pump it up and down vigorously to make sure that it functions normally and there is no abnormal noise.
The spring preload of the shock absorber may be adjusted in accordance with different load and riding conditions, adjust the shock absorber in the direction of the arrow A will decrease the spring preload while will increase it in the direction of the arrow B.

CHECK AND ADJUSTMENT OF FRONT BRAKE

★ DRUM BRAKE (Fig. 23)

Check

Check the brake cable for kinks or signs of wear that could cause sticking or failure. Lubricate the brake cable with a connnercially available cable lubricant to prevent premature wear and corrosion. Make sure the brake arm,

spring and fasteners are in good condition

Adjustment

The distance the front brake lever moves before the brake starts to engage is called free play

Measured at the tip of the front brake lever, free play should be within 10～20mm.

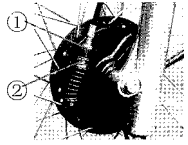


Fig. 23
① Adjusting nut
② Brake arm pin

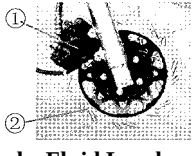
1.Adjustment should be made by using the adjusting nut at the front wheel.

2.Turning clockwise the adjusting nut will decrease free play and turning counterclockwise will increase free play.

3.Apply the brake several times and check for free wheel rotation when release the brake lever.

★ HYDRAULIC DISC BRAKE (Fig. 24)

As the brake pads wear, brake fluid level drops. There is no adjustment to perform, but fluid level and pad wear must be inspected periodically. If the brake lever free play becomes excessive and the brake pads are not worn beyond depth, there is probably air in the brake system and it must be bled. See your dealer for this service.



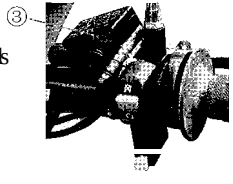


Fig.24
Caliper with brake pads
@Brake disc
@Main cylinder

Brake Fluid Level

⚠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.**

***Keep out of reach of children.**

CAUTION

***Handle brake fluid with care because it can damage plastic and painted surfaces.**

***When adding brake fluid, be sure the brake fluid tank is horizontal before the cap is removed, or brake fluid may spill out.**

●Use only specified brake fluid from a sealed container.

***Never allow contaminants such as dirt or water to enter the brake fluid tank.**

1.Locate the vehicle on a level ground.

2.Through the sight glass on the brake main cylinder to see the brake fluid level; if the fluid level is below the LOWER level mark, specified brake fluid must be add to the brake fluid tank.

3.Turn loose the cover screws and remove the cover, add brake fluid until meeting the standard.

Brake Pads

From the rear of sub-cylinder, check the caliper with brake pads for wear. Should either brake pads be worn to their limit depth, replace both pads as a set as soon as possible, or braking effectiveness and riding safety will be affected adversely.

Other Check

Make sure there are no fluid leaks. Check for deterioration or cracks in the hoses and fitting.

NOTE

●If such adjustment is still unsatisfactory, see your dealer for help.

ADJUSTMENT OF REAR BRAKE (Fig. 25)

1 Support the vehicle on its side stand

2 Measure the distance the rear brake pedal moves before the brake starts to engage

The free play of the rear brake pedal should be 20～30mm

3 If adjustment is necessary, turn the rear brake adjusting nut Turning clockwise will decrease free play while turning counterclockwise will increase free play.

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

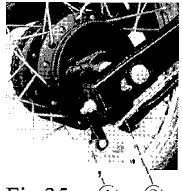


Fig.25
① Adjusting nut
② Rear brake rod

NOTE

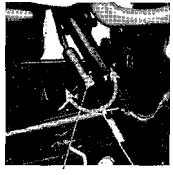
- **Check** the brake shoes for wear, and replace with new one if it is worn to its wear limit.
- **If** such adjustment is still unsatisfactory, see your dealer for help.

EXHAUST MUFFLER

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

ADJUSTMENT OF REAR BRAKE LIGHT SWITCH (Fig. 26)

Fig. 26



Adjusting nut

The rear brake light switch is situated on the right side of the vehicle frame. It should switch on the circuit of the brake light as soon as the rear brake is applied, or make adjustment. If the switch operates too late, turn the nut in the direction of the arrowhead A; if the switch operates to soon, turn the nut in the direction of the arrowhead B.

BATTERY (Fig. 27)

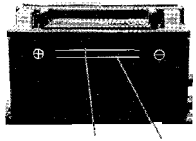


Fig. 27 ① ②
① Upper level mark
② Lower level mark

Battery electrolyte is poisonous, so be sure not to discard it at will. Handle in accordance with national or local environmental protection rules.

Maintain the battery in accordance with the Maintenance Schedule in the manual. The battery electrolyte level should be between the UPPER level mark and LOWER level mark, add proper distilled water to the UPPER level mark.

CAUTION

When the motorcycle is to he stored for an extended period of time, remove the battery from the motorcycle and charge it fully, and then store it in a cool, dry place. If the battery is to be left in the motorcycle, disconnect the negative lead from the battery terminal first and then come to the positive lead.

⚠WARNING

- **The** battery gives off explosive gases; keep sparks, flames and cigarettes away. Provide adequate ventilation when charging or using the battery in an enclosed space.
- **The** battery contains sulfuric acid (electrolyte). Contacting with skin **or eyes may cause severe burns. Wear protective clothing and a face shield.**

  If electrolyte gets in your skin, flush with water.

  If electrolyte gets in your eyes, flush with water for at least 15 minutes and call a physician immediately.
- **Electrolyte** is poisonous.

  If swallowed, drink large quantities of water or **milk** and follow with milk of magnesia or vegetable oil and call a physician.
- **Keep** out of reach of children.

FUSE (Fig. 28)

Fig. 28 Fuse

The vehicle is equipped with a fuse rated 15A. It will blow to protect the circuit in the case of troubles such as a short circuit or an overload trouble. After the trouble is remedied, replace the fuse with a new one.

TROUBLESHOOTING

If the vehicle has some troubles. see your dealer for help.

CAUTION

Do not dismantle or maintain the vehicle without the professional **knowledge.**

CLEANING

Clean your motorcycle regularly to protect the surface finishes and inspect for damage, wear, and oil or brake fluid leakage.

CAUTION

High-pressure water (or air) can damage certain parts of the motorcycle. Avoid spraying high-pressure water at the following areas:

Wheel Hubs, Ignition Switch, Carburetor. Instruments, Handlebar Switches,

Muffler Outlets, Under Fuel Tank, Drive Chain, Under Seat and so on.

1.Wash the vehicle completely with a great deal of water.

NOTE

Clean the headlight lens and other plastic parts using a cloth or sponge **d**ampened with a solution of **mild** detergent and water.

2.Dry up the motorcycle, start the engine, and let it run for several minutes.

⚠**WARNING**

- **Braking efficiency may be temporarily** impaired immediately after washing the **motorcycle.**
- Anticipate longer stopping distance to avoid a possible accident.

3.Test the brakes before riding the motorcycle. Several applications may be necessary to restore normal braking performance.

4.Lubricate the drive chain immediately after washing and drying the motorcycle.

STORAGE GUIDE

Some measures should be taken for storing a long term-unused vehicle so as to reduce the bad influence on its performance. Before the storage, make necessary maintenance to ensure the vehicle high performance after-storage.

Storage

1.Clean and dry up the vehicle and wax its surface.

2.Empty the gasoline inside the fuel tank and carburetor, spray some anti-rust agent.

3.Drive off the spark plug to fill a little of engine oil (about 15～20millilitre) into the cylinder; turn off the engine stop switch and tread the kick-pedal several times to scatter evenly the oil inside the cylinder, and then reinstall the spark plug.

⚠**WARNING**

Gasoline is extremely flammable and is explosive under certain conditions. Perform this operation in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where gasoline is drained or stored and where the fuel tank is refueled.

4.Clean and oil the drive chain.

5.Dismantle the battery and store in a dry, cool and well-ventilated place without being shone directly.

CAUTION

When dismantling the battery, dismantle the negative lead first, and then the positive lead. When installing, the procedure is just opposite. During the operations above, the ignition switch must be turned off.

6.Clean and oil all the controlling cables.

7.Seal the muffler outlet with plastic cloth to prevent the former from moisture.

8.Cover the motorcycle (don't use plastic or other coated materials) and store in an unheated area, free of dampness. Do not store the motorcycle in direct sunlight.

REMOVAL FROM STORAGE

1.Take off the cover shielding the vehicle and clean it.

2.Charge the battery as required. Install the battery.

3.Clear away the antirust agent inside the fuel tank, and fill fresh gasoline instead.

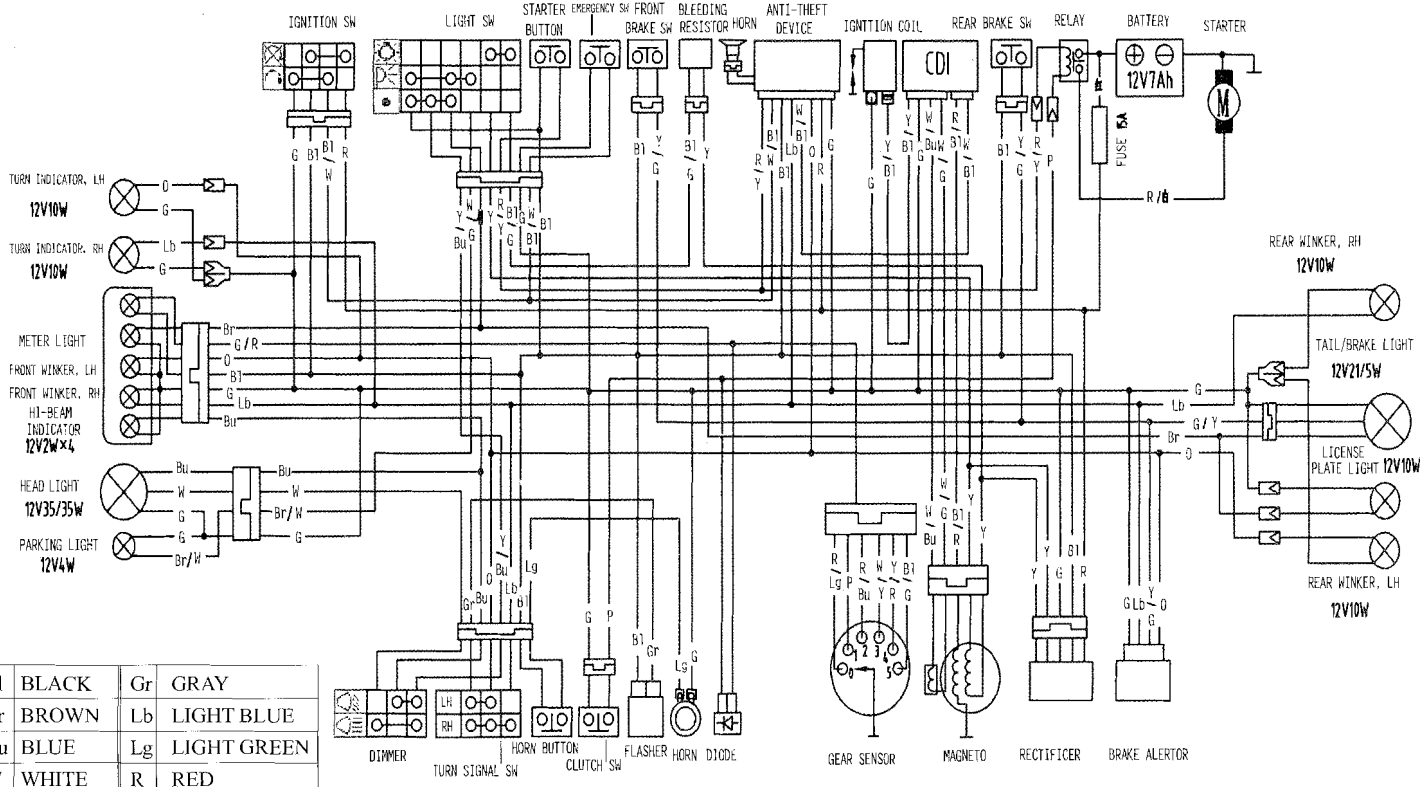
4.Perform all Pre-ride Inspection checks. Try the motorcycle at low speeds in a safe riding area away from traffic.

SPECIFICATIONS

	125GY-3A	150GY-3A
DIMENSIONS AND PERFORMANCE		
Length (mm)	2245	2245
Width (mm)	830	830
Height (mm)	1190	1190
Ground clearance (mm)	250	250
Wheel base (mm)	1360	1360
Steering bar angle (°)	45	45
Min. turning circle diameter (mm)	3750	3750
Top speed (km/h)	80	90
Economic consumption of fuel (L/100km)	≤ 2.1	≤ 2.2
Grade ability (°)	≥ 23	≥ 23
Dry weight (kg)	118	118
CAPACITIES		
Engine oil box (L)	1.1	1.1
Fuel tank (L)	8.5	8.5
Passenger capacity	Operator and a passenger	
Maximum weight capacity (kg)	150	150
ENGINE		
Model	156FMI	162FMJ
Type	4-stroke, single cylinder with air-cooled	
Compression ratio	9.0:1	9.0:1
Displacement (ml)	124	149.4
Max. power output (kW/r/min)	8.519500	10/9500
Max. torque (N·m/r/min)	7.617500	11/7500
Start mode	Kick-starter/Electric starter	
Spark plug	D7/D8	

Spark plug gap (mm)			0 6~0 8	
Ignition system			CDI	
CHASSIS AND SUSPENSION				
Front tyre size & pressure			2.75-21(4PR) 200kPa	
Rear tyre size & pressure			4.10-18(4PR) 225kPa	
Front brake type			Hydraulic disc or Drum	
Rear brake type			Drum	
POWER TRANSMISSION				
Clutch type			Wet multi-plate	
Primary reduction		3.333	4.055	
Gear ratio				
	1st	2.769		2.769
	2nd	1.882		1.882
	3rd	1.400		1.400
	4th	1.130		1.130
	5th	0.960		0.960
	6th			
	Final reduction	3.286		2.706
ELECTRICAL EQUIPMENT				
Battery			12V-7Ah	
Magneto			Permanent magnetic	
Fuse			15A	
Horn			12v	
Headlight			12V-35W/35W	
Turn signal light			12V-10W	
Tail/brake light			12V-5W/21W	
Instrument light			12V-3W	

ELECTRIC DIAGRAM



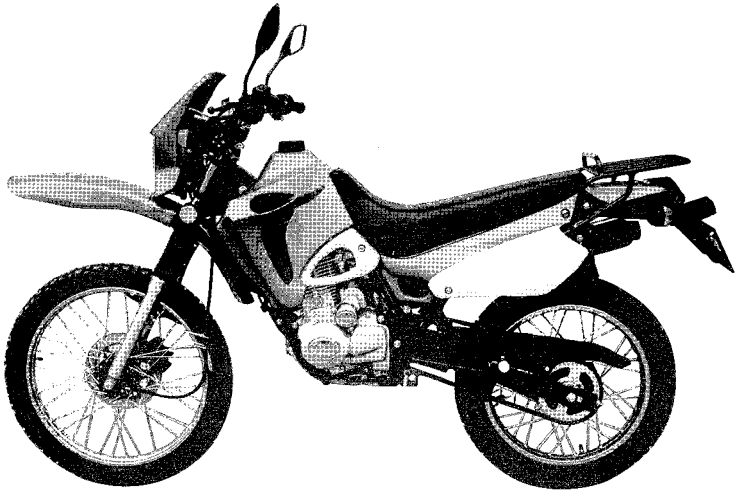
Bl	BLACK	Gr	GRAY
Br	BROWN	Lb	LIGHT BLUE
Bu	BLUE	Lg	LIGHT GREEN
W	WHITE	R	RED
G	GREEN	O	ORANGE
Y	YELLOW	P	PINK

ADDITIONAL INSTRUCTIONS

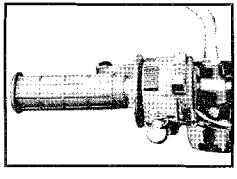
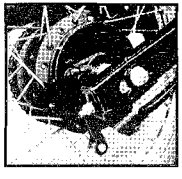
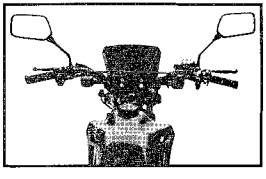
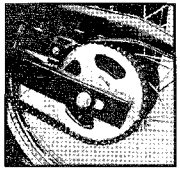
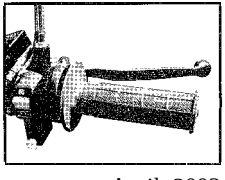
With the exception of engine,motorcycle 2 is subject to the enterprise standard

	TD150L	TD200L
Engine Model	162FMJ	163FML-2F5
Bore × Stroke	62 X 49.5mm	63.5 X 62.2mm
Displacement	149.4ml	197ml
Max.Power	10Kw/9500r/min	12Kw/8000r/min
Max.Torque	11N • m/7500r/min	14.5N • m/6500r/min
Top Speed	90Km/h	100Km/h
Primary Reduction	4.055	3.333
Gear Ratio		
1st	2.769	2.769
2nd	1.882	1.882
3rd	1.400	1.400
4th	1.130	1.130
5th	0.960	0.960
Final Reduction	2.706	3.294
Chain	08MC-126	08MC-130

OWNER'S MANUAL



OWNER'S MANUAL

April, 2003