

Owner's Manual

TABLE OF CONTENTS

1. Name of Each Parts.....	(4)
2. Intelligent lock function.....	(8)
3. Pre-operating Checks.....	(13)
4. Daily inspection before each riding.....	(18)
5. Periodic Maintenance.....	(19)
6. Specifications	(21)
7. Electrical Circuit Diagram.....	(22)

FORWARD

Thanks for and congratulations on your reasonable choice of our company's motorcycle. With the delicate and elegant design based upon the adoption of the-state-of-the-art technology, this motorcycle can serve you well and assist you in your daily transportation and exhilarating riding sports through its reliable performance.

The proper maintenance and care that your motorcycle requires are outlined in this manual. The following instructions in detail can guarantee a long trouble-free operating life for your motorcycle. Our company has well-established service network and can make you have access to the best possible service in fittings or spare parts supply and other aspects.

Please contact your authorized dealer or qualified mechanic if any problem occurred to your motorcycle anytime and anywhere all over the world. We are always ready to provide highly coordinated service for you.

All information, illustration photographs and specifications contained in this manual are based on the latest product information available at the time of publication. Due to improvements or other changes, there may be some discrepancies in this manual, our company reserves the right to make changes at any time for your convenient maintenance of this motorcycle. We hope you will have a pleasant experience with our products and thanks again for choosing our motorcycle.

SAFE RIDING RECOMMENDATION FOR MOTORCYCLE RIDERS

SAFE DRIVING TIPS

Motorcycle riding requires that some extra precautions be taken to ensure the safety of the rider and passenger. Before use, perform daily inspection.

1. Mis-inspection or inappropriate inspection before your riding each time may damage the parts and cause accidents.
2. Do not permit anyone to tun your motorcycle without a license.
3. Make yourself well-identified to avoid collision with other vehicles.Do not follow other vehicle too closely.
4. Comply with traffic regulation strictly and never exceed speed limit.
 - Riding this motorcycle at excessive speed would increase your chances of losing control of the motorcycle.
 - Alkeep use the signals or horn when you intend to change lanes or make a turn.
5. Keep both hands on the handgrips and both feet on the footrests at all times while riding. Passenger should keep feet on the passenger footrests, to avoid any injuries resulted from accidents.
6. Balance the load between the left and right side of the motorcycle to ensure safety and stability. Make sure luggage is fastened securely.

PROTECTIVE APPAREL

1. Make sure the rider wears a helmet, eye protection, and protective clothing (gloves, leather or heavy cloth pants, long sleeved shirt or jacket, boots) as well as the passenger.
2. Do not be touched on muffler because it is hot. Make sure to wear protective clothing or boots.
3. Loose fancy clothing can be uncomfortable and unsafe in terms of riding your motorcycle.

MODIFICATION TO YOUR MOTORCYCLE

Tampering with modification to this motorcycle is prohibited.

Modification of the motorcycle, or removal of original equipment may render the vehicle unsafe or illegal.

LOADING

Balance the load between the left and right side of the motorcycle to ensure safety and stability. Carrying a load on the motorcycle, mount it as low as possible and as close as possible to the machine. An improperly mounted load can create a high center of gravity, which is very dangerous and creates serious stability problems and reduces safety factors.

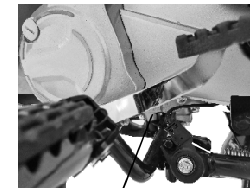
FRAME NO. & ENGINE NO.

The frame and/or engine serial numbers are used to register the motorcycle. They are also to assist your dealer in terms of ordering parts or referring to special service information.

The frame number is stamped on the left upside of the steering head tub.

The engine serial number is stamped on the left upside of the crankcase assembly (see Fig.1)

Please write down the serial numbers for your future reference.



(2)Engine NO

Fig.1

1. NAME OF EACH PARTS

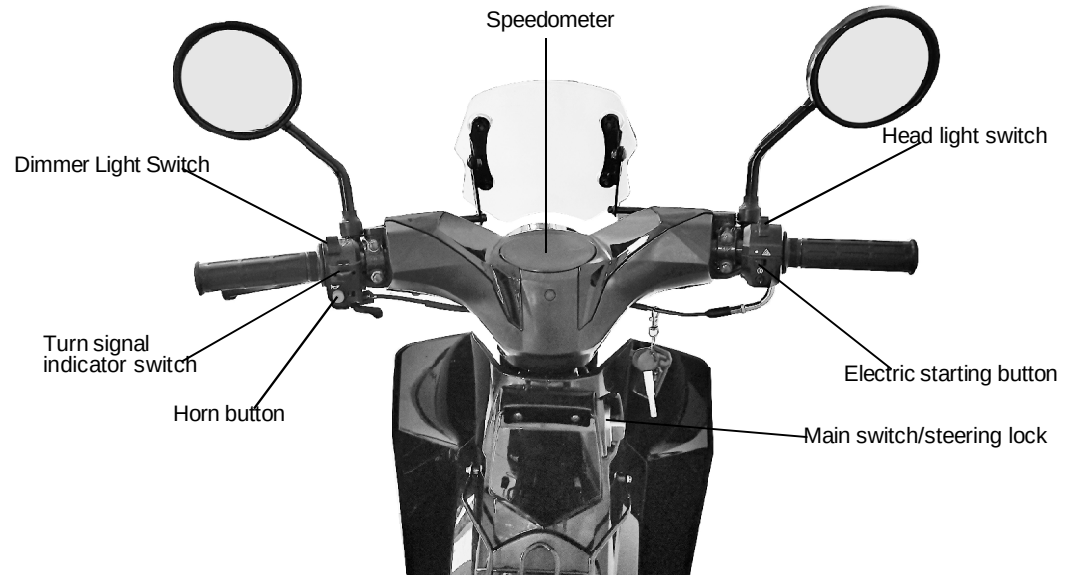


Fig. 2

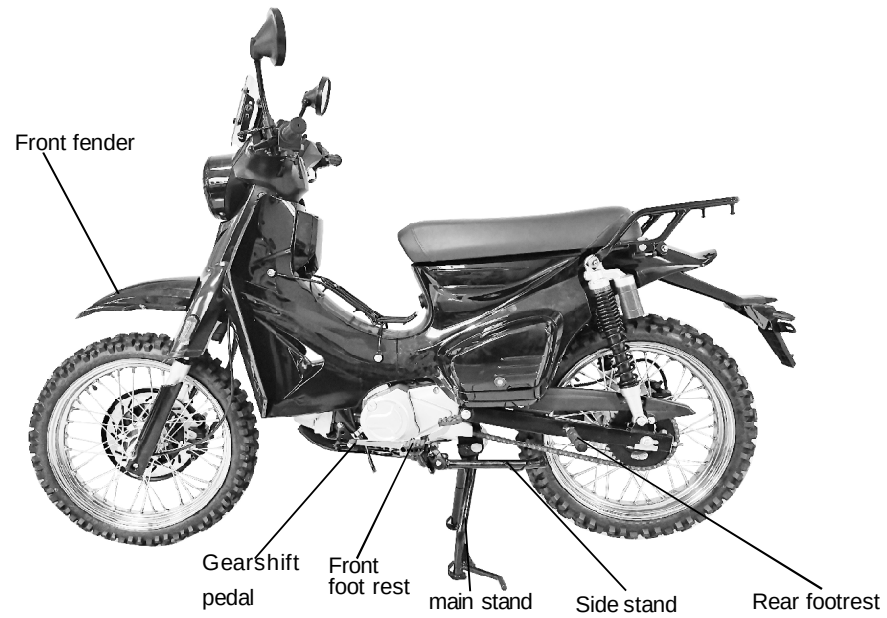


Fig. 3

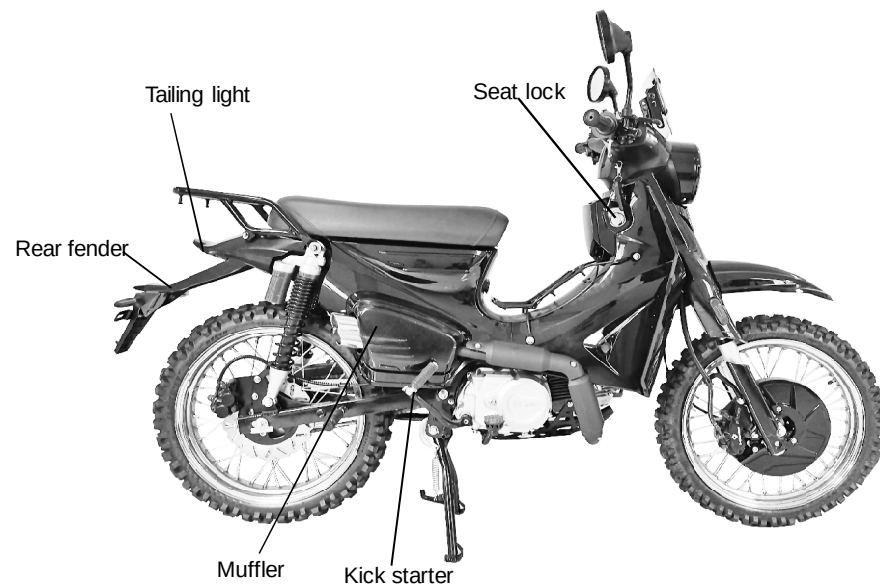


Fig 4

Instrument panel



The Instrument panel can display the working status of the motorcycle.

No.	Description	Function
1	Speedometer	It indicates the road speed in kilometers and miles per hour.
2	Neutral indicator lamp	The neutral indicator lamp will come on when the transmission is in neutral. The lamp will go out when you shift into any gear other than neutral.
3	Gearshifting indicator lamp	The lamps will be lit when the engine is in each gear.
4	Left turn signal indicator lamp	When the turn signal is being operated to the left, the left indicator will flash at the same time with sound of clicks.
5	High beam indicator lamp	The high beam indicator lamp will come on when the headlamp high beam is turned on: the switch is on HI position.
6	Fuel meter	It indicates the remaining fuel amount in the fuel tank.
7	Odometer	It registers the total distance that the motorcycle has been ridden.



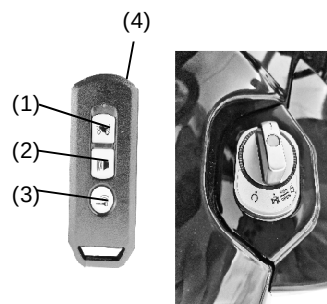
Ignition switch



2. Intelligent lock function

(1) Car search function

The smart lock knob handle is not in the ON position. Press the car search button once, and the system will emit three beeps. The turn signal will flash synchronously three times, informing the owner of the car's location; When there is no alarm, press and hold the car search button for 2 seconds, and the system will beep twice to enter the mute function. At this time, there will be no sound when the alarm is triggered; In the alarm state, press the car search button once to pause the alarm; Turn the smart lock knob handle to the ON position, then to other positions to enter the audible alarm state.



(2) Defense key

The handle of the smart lock knob is not in the ON position. Press the security button once, and the system will beep. The direction lights will flash synchronously once, and the system will enter the security state; Within the sensing range, the system only enters the defense state and does not execute the alarm function when vibration is triggered; When the knob handle is not in the ON position and there is no alarm, press and hold the security button for 2 seconds, the system will beep twice, the direction lights will flash synchronously twice, and the seat cushion lock (electromagnetic seat cushion lock) will be activated.

(3) Induction key

The smart lock is within the sensing range. Pressing the smart lock knob handle can rotate the smart lock knob handle within 5 seconds; The smart lock knob handle is not in the ON position. Press the sensing button once, and the system will make two beeps. The smart lock panel indicator light will light up for 5 seconds (optional panel indicator light), and the smart lock knob handle can be rotated within 5 seconds; In the alarm state, press the sensing button once to pause the alarm; The handle of the smart lock knob is not in the ON position. Press and hold the sensing button for 2 seconds to turn off the sensing function (the system beeps once), then press and hold the sensing button for 2 seconds to turn on the sensing function (the system beeps twice), and repeat this process.

(4) Spare key

When the smart lock fails (due to the motorcycle battery running out of power or a wiring fault), the spare key provided with the vehicle can be used to unlock the smart lock and drive (push).

Remote control distance: greater than or equal to 100 meters (in open areas without signal interference).

Power saving mode: If no button on the remote control is operated for 15 consecutive days, the sensing function will enter sleep mode (battery saving mode); To activate the sensing function, simply press any key on the sensing remote control.

Charging function: When the remote control battery is low, place the remote control in the designated sensing area to activate the smart lock (charging function is optional).

Code matching method: Insert the spare key, rotate the knob handle continuously from the OFF position to the ON position at a regular speed, repeat 4 times, and stop at the ON position for the 5th time. The smart lock system will prompt a "beep" sound. Press any button on the remote control (with a sound prompt) to match the remote control (up to two remote controls can be matched). After matching, rotate the knob handle from the ON position to the OFF position.

SWITCHES ON STEERING BAR

1. Dimmer Light Switch (1)

When the dimmer switch is in the "D" position, the headlamp high beam and high beam indicator lamp on the instrument panel come on. When the dimmer switch is in the "L" position, the headlamp low beam comes on and the high beam lamp is off.

2. Turn Signal Indicator Lamp (2)

When the turn signals are being operated either to the right or to the left, the indicator will flash at the same time with sound of clicks.

3. Horn switch (3)

Press the switch to operate the horn.

4. Head Light Switch (4)

"☉" position: The headlamp, front parking lights and tail lamp come on.

"P" position: The front parking lights, and tail lamp come on.

"●" position: All lamps go off.

5. Electric Starter Button (5)

To start the engine, turn the ignition switch to ON position. Apply tightly the front or rear lever and press the electric starter button.

WARNING

If the engine can not be started within 5 seconds by normal operating means, please restart it 10 seconds later after the battery voltage restored.

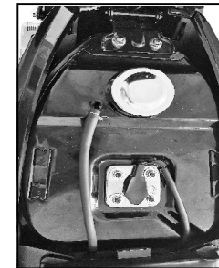
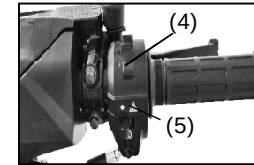
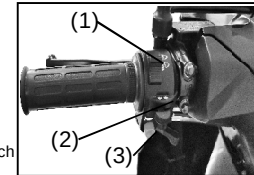
SEAT

To open the seat, insert the ignition key into the lock and hold the rear lower part of the seat and lift. To lock the seat, put the seat down.

WARNING

Don't leave the ignition switch key in tool box, otherwise you can not take out the key if the seat is put down.

- (1) Dimmer Light Switch
- (2) Turn signal indicator switch
- (3) Horn
- (4) Head Light Switch
- (5) Electric starting button



Helmet Hanger

Open the seat lock with ignition key and lift the seat. Hang the helmet on the hanger and lock the seat.

WARNING

Don't hang the helmet on the steering bar when driving the motorcycle, which may obstacle operation, resulting in damage of parts and causing accidents.

FUEL TANK

The fuel gauge indicates the remaining amount whenever the ignition switch is "ON" or "OFF"

For checking the remaining amount of fuel, hold the motorcycle vertically and set the ignition switch "ON".

Refilling fuel is required when the gauge indicates in "E" position.

WARNING

·Spilling gasoline can damage the pointed surfaces.

·Be careful not to spill any fuel when filling the fuel tank. Wipe spilled gasoline up immediately.

- Make sure to stop the engine when refueling.

- Keep away from fires, sparks and other fire sources as it could create a fire disaster.

Recommended fuel: **Gasoline No.90**

ENGINE OIL LEVEL

Long engine life depends much on the selection of quality oil and the periodic changing of the oil.

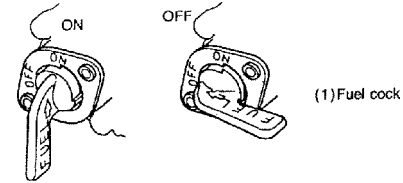
Daily oil level checks and periodic changes are two of the most important maintenances to be performed.

Refuel with oil if the engine oil level is below the Lower line mark. Never operate the motorcycle if the engine oil level is below the Lower line mark in the engine oil level lens. Never fill the engine oil above the Upper line mark.



WARNING

1. When refilling oil, stop the engine and turn the ignition key to OFF position to switch off power so as to avoid fire.
2. Engine oil and exhaust pipes can be hot enough to burn you. Don't put cloth strips around the oil tank to prevent fire caused by hot engine.



FUEL COCK

There are two positions in the fuel cock:

- (1) ON position: when the fuel cock lever is in the "ON" position, fuel can flow in carburetor and the engine can be started.
- (2) OFF position: when the fuel cock lever is in the "OFF" position, fuel cannot flow in carburetor, the engine cannot be started.

BRAKES

FRONT DISC BRAKE

This motorcycle is equipped with front disc brake . Properly operating the brake systems are vital to safe riding. Be sure to perform the brake inspection requirements as schedules. The brakes should be inspected at periodic inspection by qualified dealer. Be sure to check the brake fluid level in the master cylinder. If the level was found to be lower than the lower mark while holding the motorcycle upright, replenish with the proper brake fluid that meets our company's requirements. As the brake pads wear, the fluid level will drop to compensate for the new position of brake pads.

Replenishing the master cylinder to considered normal periodic maintenance.

Inspect the brake pads regularly and make sure there is no wear on the pads.

(1) Front Brake Lever

The front brake lever is located on the right handlebar, pull it towards the handlebar to activate the front brake.

(2) Rear Brake

The rear brake pedal is located on the right side of motorcycle. Depress the pedal to apply the rear brake.



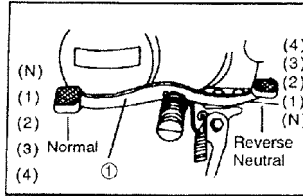
CAUTION

Properly operation of the brake system is vital to safe riding. Be sure to perform the brake inspection requirements as schedules. Make sure the play in the brake and pedal should be correct. Adjust the clearance by screwing in or out the brake adjusting nut.

3. PRE-OPERATING CHECKS

Read the Traffic safety regulation carefully and thoroughly before starting to drive your motorcycle.

1. Warm up the engine fully to run it evenly. Make sure the transmission should be non-circulation system.
2. When the engine is at idling speed, depress the front of the shifting lever to select the first gear.
3. When the motorcycle operates smoothly and stably, slow down the engine, re-depress the front of the shifting lever to select the second gear. To select the higher gears according to the same procedure.
4. When the fourth gear is selected, slow down the engine, depress the rear of the shifting lever to change to the third gear. To select the lower gears according to the same procedure.



5. Operate the throttle and brakes smoothly.
6. Apply the front and rear brakes evenly and at the same time. Never apply brakes strongly to lock the wheel, or the braking effectiveness will be decreased and will lose of control.

DRIVE CHAIN ADJUSTMENT

The chain may require more frequent adjustment than it is with periodic maintenance depending upon your riding conditions. For maximum safety, inspect, adjust, and maintain the chain properly before each ride.

Turn the wheel several times to have the chain in the tightest position, and then check and adjust the slack of drive chain.

- 1) Hold the motorcycle vertically.
- 2) Adjust the slack in the drive chain by adjuster as the lock nut turning toward the left and right.
- 3) For alignment of the rear sprocket and the front sprocket, there are reference mark on the same position. After aligning and adjusting the slack in the drive chain to 10~20mm, retighten the axle nut securely and perform a final inspection.
- 4) Add a little lubrication oil.

NOTE:

The drive chain should be inspected every time before riding. Excessive chain slack could cause the chain to come off the sprockets and result in accident or serious engine damage.

Be careful not to touch the muffler when it is hot: a hot muffler can burn you.

(1) KICK STARTER

This motorcycle is equipped with electric starter and kick starter. Applying the kick-starter, start the engine by depressing starter lightly away from the engine until teeth engage. You can start the engine in any gear when the clutch disengages. It is advisable that the transmission be in neutral before starting the engine.

(2) ELECTRIC STARTER

Press the Start button with right hand, the engine will be started in seconds.

ENGINE BREAK-IN

Operate your motorcycle to achieve maximum life and engine power performance from your new motorcycle during the engine break-in period.

The table below shows the maximum engine speed recommendation during the break-in period.

0-160km	Below 35km/h
160-800km	Below 45km/h
800-1600km	Below 55km/h

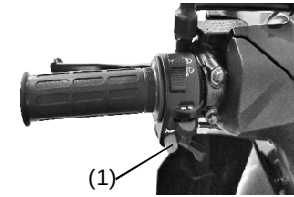
THROTTLE

Turn the throttle grip to check the operation and correct slack of throttle: 2-6mm. Make sure that the throttle snaps closed when released. Adjust the throttle if necessary. Loosen the lock nut.

Adjust the cable slack by cable adjuster in or out to obtain the correct slack 2~6mm.

After adjusting the slack, tighten the lock nut.

Turn the throttle grip to see if it operates properly and the play is normal. Make certain the throttle snaps closed when released. Free travel of the grip is 2-6mm. If adjustment is required, loosen the nut first, turn the adjusting threaded



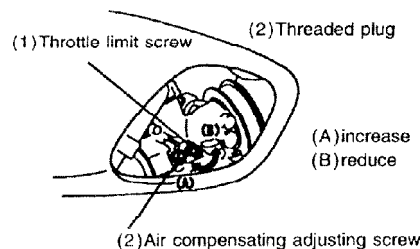
(1)Chock
(A)ON
(B)OFF



(1)Adjustable nut (2)Threaded plug

pipe, then tighten the nut when it is satisfactory.

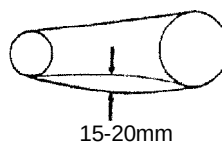
CARBURETOR IDLE ADJUSTMENT



1. Start up the engine and let the engine run for 2-3 minutes to warm up fully..
2. After engine has warmed up, turn the adjusting screw (2) properly. Unscrew the screw by one and a half turn.
3. Turn the throttle limit screw to keep the engine running at the speed of 1400 ± 100 rpm.
4. Turn the screw to A or B position to increase or reduce the idling speed.

DRIVE CHAIN

The chain may require more frequent adjustment that it is with periodic maintenance depending upon your riding conditions. Check the tension condition of the drive chain with both tires touching



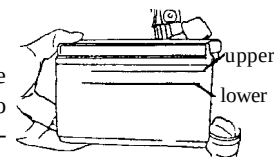
the ground. The correct drive chain slack should be 15-20mm. Adjust if necessary.

Battery maintenance

1. Using new battery

1.1 Adding electrolyte

1.1.1 Inspect battery appearance and make sure that there are no cracks, cuts on it and no damages on the battery terminal.



1.1.2 Open the plug for filling the electrolyte.

1.1.3 The specified electrolyte is stored in a bottle.

Open the bottle and connect with plastic hose, and then fill the electrolyte into the battery up to UPPER LEVEL. After filling electrolyte, wait for 20 minutes. Refill to UPPER LEVEL if electrolyte level goes down.

NOTE: Do not overfill electrolyte over the UPPER LEVEL.

1.1.4 The motorcycle can start off after 30 minutes after filling electrolyte. It is best to charge the battery for 3 to 5 hours before using as it can ensure maximum performance and extend battery life, especially in winter or kept for a long time.

1.1.5 Fasten plug. Mop up the spilt electrolyte.

1.2 Installation

1.2.1 Connect the battery exhaust hose with battery. Make sure the connection correctly without any damage or it may result in explosion of battery, split electrolyte to damage your clothes and motorcycle.

1.2.2 When assemble,(+)positive terminal first(with red mark), then (-)negative terminal.

NOTE: Make sure install positive and negative terminal correctly. Incorrect installation of the battery will reserve the terminal position resulting in ignition switch and possible regulator/rectifier electrical system damage.

1.2.3 Fasten bolts and add butter or Vaseline on the bolts, nuts and terminals or to prevent them from rusty or poor lead connection.

2.Using and maintenance

2.1Do not start the engine for more than 5 seconds. If the engine can not operate after several attempts, check oil supply system , starter and ignition system.

2.2The following operation will cause the battery self electric discharge or insufficient charging to shorten its useful life:

- (1)Starting the engine frequently in a short distance;
- (2)Riding this motorcycle at low gear in long time;
- (3)Squeezing brake lever or depressing the rear brake pedal when riding to have brake lamp lit too often.
- (4) Installing extra electrical system or replacing excessive power bulb.

2.3 Recharge the battery at once when: hard to start off, lamp light dim and horn not operated.

2.4Check the electrolyte level every 1-3 months. Re plenish electrolyte up to UPPER LEVEL with pure water or distilled water when level is below the LOWER LEVEL.

NOTE: Never overfill electrolyte over the UPPER LEVEL.

Recharge the battery after refill with water.

2. 5 When keep for a long time, charge the battery at once and recharge once every month.

2.6 Charge the battery

2.6.1 Charge the battery with our company's supplied charger. Charge battery indoors and where there is ventilation and keep the battery away from fires.

2.6.2 Two charging methods: Standard charging and High-Speed charging. The standard charging is preferable as it can extend battery life.

Standard charging:electrical current: 0.7-0.8A;time:5-15 hours
High- Speed charging:electrical current: 7-8A; time: utmost 30 minutes

2.6.3 If electrolyte temperature is over 45° C , stop charging immediately. Recharge battery after it is cooled. Stop charging when there is much vapor in the battery. Press or fasten the plug and mop up split electrolyte.

3. Notes

3.1 Incorrect using and charging will lead to explosion. Keep the battery away from fires. Make sure to check and install positive and negative terminal correctly to avoid explosion.

3.2 Electrolyte may be harmful as it contains sulfuric acid. if swallowed or if it comes in contact with skin, eyes and clothes. If electrolyte is swallowed, drink plenty of water or milk and contact your doctor immediately.

3.3 Place the electrolyte where children are not likely to touch.

3.4 Do not install un-recommended anti-theft alarm as dam

age may result to the electrical system, battery, ignition system or regulator/rectifier. It is advisable that install the anti-theft alarm supplied by our company.

SPARK PLUG

Remove the carbon deposits periodically from the spark plug with a piece of hard wire or pin.

Readjust the spark plug gap to 0.6-0.7mm by using a spark plug gap thickness gauge. Replace with a new specified spark plug: A7RTC and readjust to correct spark plug gap.

CLEAN AIR CLEANER ELEMENT

If the air cleaner element is polluted, will occur to starting go out, output insufficiency and combustion efficiency decline.

1. Remove the screws on the air cleaner.
2. Pull up the air cleaner cover, and the air cleaner element.

Clean the air cleaner element for the following:

- 1) Clean with specified cleaning oil. Immerse the element into engine oil (SEA80-90).
- 2) Take out the oiled element and squeeze the excessive oil to dry it.
- 3) Reinstall the element into the air cleaner.

NOTE:

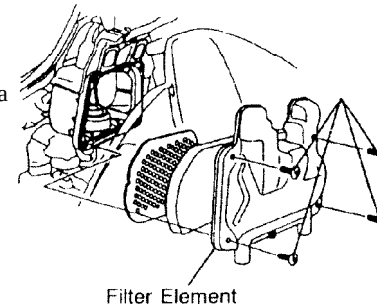
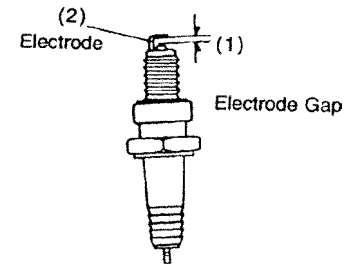
Carefully examine the air cleaner element for tears during cleaning. Replace it with a new one if it is torn.

Assemble the element completely or damage severely the engine. Be careful not to allow water to go inside the air cleaner element.

TIRES

Inspect the tire pressure and the tire thread depth periodically.

Inspect frequently the tire pressure for the safety and the tire life.



Insufficient air pressure in the tires not only hasten tire wear but also seriously affects the stability of the motorcycle. Under-inflated tires make smooth cornering difficult and over-inflated tires decrease the amount of tire in contact with the ground which can lead to skids and loss of control. Be sure that the tire pressure is within the specified limits at all times.

Make sure there is no cracks, cuts, nails or any damages on the tires. Replace with new tires if necessary.

Tire size:

Front: 2.25-17

Rear: 2.50-17

4. DAILY INSPECTION BEFORE EACH RIDING

Be sure to inspect the following items before each riding:	
ITEM	INSPECTION
Brakes	Inspect operation and adjust if necessary.
Fuel tank	Inspect the oil level. Replenish if necessary.
Transmission	Make sure transmission is in normal operation.
Drive chain	Inspect its alignment. Adjust and lubricate if necessary.
Throttle	Inspect its normal operation and adjust to the correct play.
Wheels and tires	Inspect tire pressure and tighten axle nuts.
Fittings/fasteners	Tighten if necessary.
Lights/signals	Make sure its normal operation.

TOOL KIT

To assist you in the performance of periodic maintenance, a tool kit is supplied. The tool kit consists of the following items.

- Spanner 8*10mm
- Compose driver
- Spanner 12*14mm
- Driver handle
- Pliers
- Cross screwdriver
- Spark plug spanner

5. PERIODIC MAINTENANCE

Item	Month					
	1	4	6	8	12	18
Oil pipe		I	I	I	I	I
Throttle		C	C	C	C	C
Choke		I	I	I	I	I
Air cleaner		C	C	R	R	R
Spark plug		I	R	R	I	I
Transmission oil	R	R	R	R	R	
Idling speed	I	I	I	I	I	I

ECU

ECU Receive and process sensor signals, control each sensor to correction action items.



Cylinder temperature sensor

Cylinder temperature sensor. Reflects the engine cylinder temperature.



Lambda sensor

Lambda sensor . Reflects the vehicle exhaust .Provide feedback to the closed loop system



solenoid valve(IAC)

receive the EUC signals, control the solenoid valve.

Electronic carburetor

1 Provides the mixture of air and fuel for the engine
2. The fuel evaporates into the engine through the carburetor



6.SPECIFICATIONS

Model Specification Item	50	Model Specification Item	50
L*W*H(mm)	1880 × 750 × 1070	Spark plug(mm)	0.6~0.7
wheelbase(mm)	1250	Valve clearance(in/exhaust)mm	0.05 ± 0.02
Ground clearance(mm)	150	Start mode	Elec / kick start
Start time(S)	< 15	Clutch type	Oil multi-plate type
Dry mass(kg)	95	Lubricating method	Pressure splash
Max loading(kg)	150	Lubricating oil capacity(L)	0.8
Max speed(km/h)	56	Tire size (front/rear)	90/80-17/110/70-17
Min fuel consumption(L/100Km)	≤ 1.2	Tire pressure(front/rear)Kpa	225/250
Brake (front/rear)	dise/dise	Handle bar twinning angle lie type	< 45°
Fuel tank capacity(L)	4.2	Climbling capacity	> 14°
Fuel	93#	Transmission type	Primary ratio
Model of engine	136FMA		1 st gear
Engine type	4-Stroke/single cylinder/air colled		2 st gear
Bore * stroke (mm)	35.8 × 49.5		3 st gear
Compression ratio	10.8:1		4 st gear
Displacement (ml)	49.5		5 st gear
Max power(kw/r/min)	2.5kw/8000r/min	Spark plug	A7RTC
Max torque N•m(r/in)	3.0Nm/5000r/min	ignition	C. D. I.
		headlamp	12V-35W/35W

ELECTRICAL CIRCUIT DIAGRAM

