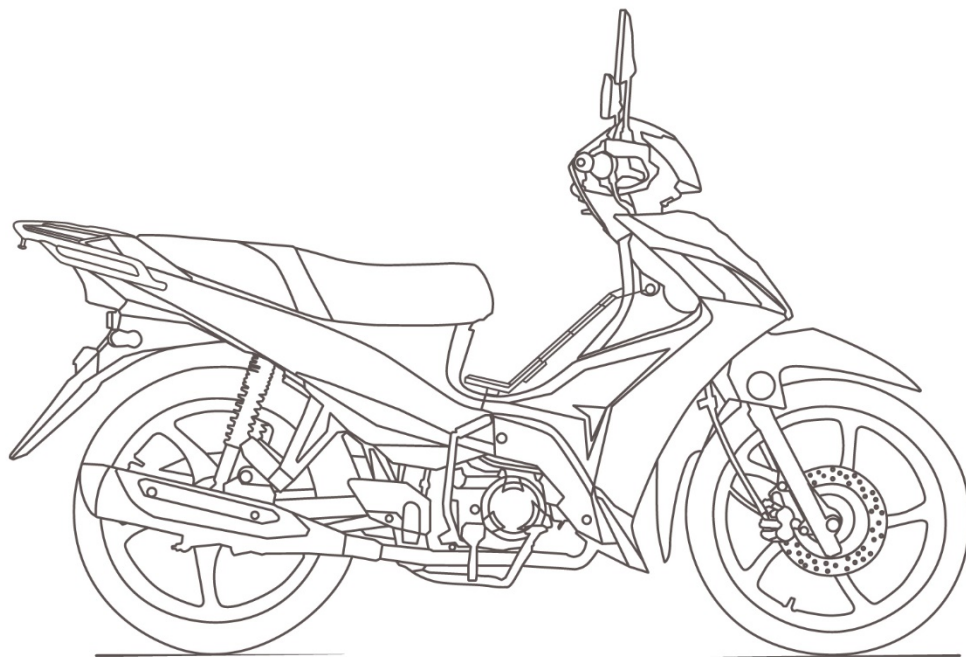


CK110

USER MANUAL



KEEWAY

Foreword

Thank you for choosing CK110 motorcycles, and we will design, test and manufacture this type of motorcycles with the advanced technologies to provide you with happy and safe riding experience. After you know well about all key points in the Manual, you will feel that driving a motorcycle is the most exciting sport and experience.

This Manual summarizes the proper maintenance methods for motorcycles. Your motorcycle will be durable and free from faults as long as you follow the regulations. The dealer owns professionally trained technical personnel and will provide you with high quality service.

All the photos and specifications in the manual are prepared according to the latest products. Otherwise, the products are subject to continuous update, there may be some differences between your motorcycle and the manual. The dealer will give you correct guidance at any time.

Notes

Knowledge about Motorcycle Running-in

The initial mileage of 500km is the most important in the entire work life of motorcycle. During this period, proper running-in can guarantee the longest work life and the best work performance. It is particularly important to avoid long-term high-speed running for it may cause overheat of engine parts.

Danger/Warning/Attention

Please read the manual and keep the key points in mind. Words such as "Danger", "Warning" and "Attention" are used to emphasize the degree of precautions, and please understand the definition of each word carefully.

Danger - the suggestive matters involve personal safety of the driver, and neglect of this item may cause injury.

Warning - the suggestive matters refer to operation precautions concerned with running of motorcycles to avoid damaging the motorcycle.

Attention - the suggestive matters are special explanations for the ease of maintenance or more explicit important descriptions.

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Notice to the User

The user shall regard the "User's Manual" as a permanent part of the motorcycle and keep it properly for future reference. Even if the motorcycle is to be transferred to others, the Manual shall be transferred to the new owner together with the motorcycle.

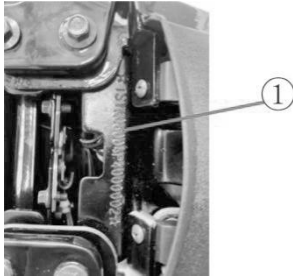
Compilation method of product model number

Preparation method for product model is as follows:

Description of product configuration

There are multiple configuration modes of motorcycles as specified in the Manual. Illustrations in the Manual show one or several configuration modes only instead of all of them. Specific configuration is subject to the material object.

Serial number location



①Vehicle identification number(VIN)



②Engine number

Vehicle identification number (VIN) and engine number are used for motorcycle registration. During ordering of accessories or entrusting for special services, the dealer will provide you with better service based on this number.

Vehicle identification number (VIN) ① is stamped on the seat-lock holder and can be seen only after the seat is

opened. Product nameplate ② is fixed on the front main chassis tube and can be seen only after the side cover is removed. Engine number ③ is printed on the left side of the engine crankcase. Please write the number below for future reference.

Vehicle identification number (VIN)	
Engine number	

Refitting

Random motorcycle refitting or disassemble of the original vehicle devices cannot guarantee driving safety of the motorcycle and is illegal. The user will lose the right of quality assurance in case of private motorcycle refitting.

Notice for Safe Driving

For your driving safety, please abide by the following items:

Safety helmet

Select a helmet that conforms to the safety quality standard, and this is the most important thing for safety protection for head injuries are the most serious car accident. Please do wear a safety helmet and protective glasses.

Driving dress

Loose or unusual clothes will make you uncomfortable and unsafe during driving, so please select high quality tight-fitting clothes as far as possible.

Inspection before driving

Read the Section "Inspection before Driving" carefully and conduct inspection item by item. Please do not forget it for it can guarantee the safety of the driver and passengers.

Knowing well about your motorcycle

Your driving skills and mechanical knowledge are the basis of safe driving. Practice driving in a non-public road until you know well about the mechanical property and operating method of the motorcycle. Remember! Practice makes perfect.

Understanding your own driving skill

Drive the motorcycle in your own mastered range at any time. Understand the limit of your own skill and do not force yourself, so as to avoid accidents.

Attention to driving in rainy days

Pay special attention to driving in rainy days, and keep in mind that the braking distance will be much longer than in sunny days. During driving, keep away from the pavement marked with oil paint, well lid and pavement stained with oil to avoid slip, and drive carefully when passing by any railway crossing, metal bars and bridge. Reduce the driving speed if the road condition is uncertain.

Speed limit

Avoid high speed of motorcycle or engine at any time, so as to avoid accidents.

Special warning

Please pay attention to the following matters and similar matters. Any violation will cause damage to the components & parts of the vehicle or even casualties.

Danger:

- Please do retract the side stand before driving, so as to avoid casualties due to overturn of the vehicle during steering
- Please do check whether the front/rear braking system works well before driving. Please carry out an immediate service in case of any fault

Warning:

Non-professionals are not allowed to pull out the fuel pipe to discharge fuel, so as to prevent the vehicle from being damaging by open fire; do not make the motorcycle muffler touch any foreign matters, so as to avoid fire accidents; avoid fire risks in the place to use/store the motorcycle.

Use original components & parts produced by the manufacturer for replacing those during maintenance. If not, especially for electrical components & parts, the motorcycle may be damaged or even burnt out.

Please do not add accessories randomly, especially electrical components & parts, for improper wiring or overload may cause burning-out of the vehicle.

Maintenance of muffler

To improve the service life of the muffler, dirt on the muffler surface and tail shall be removed in time to ensure smooth venting of the muffler and avoid rusting and color change.

It's forbidden to grip the throttle at a high speed in same position for a long time; it's forbidden to drive the motorcycle under high load in a lower gear for a long time; after the motorcycle is started and fully warmed up, the choke valve handle shall be back in original place; the valve clearance, the carburetor and the air filter shall be properly maintained or adjusted; it's forbidden to add a wind deflector or other decorations in front of the engine or muffler; during dismantling or installation of the muffler, the muffler sealing gasket shall be properly installed to avoid muffler color change due to abnormal use or maintenance.

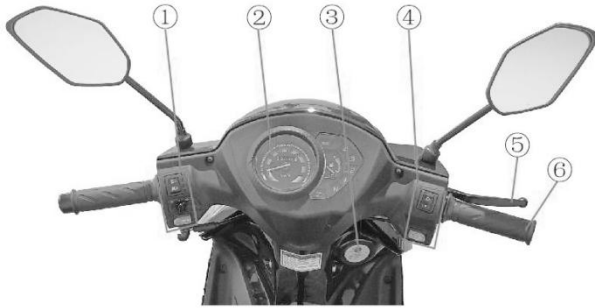
Danger:

- Do not touch the muffler when the engine is running or stopped just now for its temperature is excessively high.

Warning:

- Since there is a catalytic converter (catalytic agent) in the muffler, anti-rust oil or engine oil will cause a failure of the catalytic converter. Therefore, it's not allowed to add anti-rust oil or engine oil in the muffler.
- Non-unleaded gasoline will shorten the service life of the catalytic converter.
- It's forbidden to directly flush the muffler with cold water during warming-up of the motorcycle.

Installation site of the components & parts



- 1. Left Handle Bar Switch Assy
- 4. Right Handle Bar Switch Assy
- 7. Air Filter
- 10. Side stand

- 2. Speedometer
- 5. Front Brake Handle
- 8. Fuel Tap
- 11. Main stand



- 3. Ignition Lock
- 6. Throttle grip
- 9. Shift lever



12. Kick start lever
15. Rear brake pedal

13. Front footrest

14. Oil level dipstick

Operation

Key

The motorcycle is equipped with two keys. Please keep one key properly for standby.

The anti-theft switch ①

Power off the motorcycle, press the button to enable the anti-theft mode. If the motorcycle detects vibration, it will trigger an anti-theft alarm and emit an alarm tone, the light will flash correspondingly.

When the motorcycle is powered on, press the button to enable the anti-theft mode, the horn and light are activated at the same time and the alarm is emitted continuously.

Anti-theft cancel switch ②

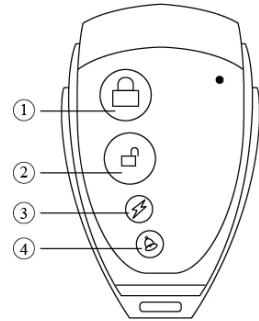
Press the button to cancel the anti-theft mode.

Remote start switch ③

When the motorcycle is powered on and the gear is in neutral state, press the button to start the engine.

Vehicle tracking switch ④

Press the button, the horn will sound and light will flash eight times synchronously, to remind the owner of the location of the motorcycle.



Ignition lock

Three positions of the ignition lock:

"ON" position

The ignition circuit is connected, and ignition starting is allowed at any time. The key shall not be removed in this position.



"OFF" position

The ignition circuit is disconnected, and the engine cannot be started. The key can be removed.

"LOCK" position

To lock the steering mechanism, turn the handle bar to the ultra-left side, press the key to the bottom in "OFF" position, and then rotate it anticlockwise to "LOCK" position.

Danger:

● Before the ignition lock is turned to "LOCK" position, park the motorcycle stably, and then support the motorcycle with the center stand.

● Do not push or move the motorcycle when the steering mechanism is locked, or it may be out of balance.

Seat lock

Seat lock is on the left cover. After inserting the key, rotate the key clockwise to unlock the seat. To lock the seat, push the seat until the seat lock is latched in the locking position.



Instrument panel

Odometer ①

The odometer records the total mileage of the motorcycle till now.

Speedometer ②

The speedometer indicates the running speed, kilometers per hour.

Winker indicator light ③

When the winker switch (see the details of "Left hand bar switch assy") is turned to the left or right side, the winker indicator light (left or right) will be on



accordingly.

Fuel gauge ④

When the pointer points "E" in the red zone, it means that fuel in the fuel tank is insufficient or has been used up, and the vehicle shall be refueled in the neighborhood as soon as possible. When the pointer points "F" in the red zone, it means that the fuel tank is full.

Gear position light ⑤

Panel gear position light shows the current gear position. There are 4 positions, i.e. 1, 2, 3 and 4 which will be lightened by turns during shift. When the gear is turned to neutral position, the gear position lights will all be off, while the neutral position light will be on.

High-beam indicator light ⑥

During use of the high beam, the high-beam indicator light will be on.

Neutral position light ⑦

When the transmission is in the neutral position, the neutral position light will be on. The light is off in other gear position.

Left handle bar switch assy

Headlight dimmer switch ①

When the headlight dimmer switch is switched to "  " position, the high beam and the high-beam indicator light on the panel are all on.

When the switch is turned to "  " position, the dipped headlight is on, and the high beam and high-beam indicator light are off.

Attention:

- Use the dipped headlight when driving in downtown or meeting vehicles.



Winker switch ②

When the winker switch is turned to "  " position, the left winker flickers, and the winker indicator light on the panel will flicker accordingly. When it is turned to "  " position, the right winker flickers, and the winker indicator light on the panel will flicker accordingly. To turn off the winker, just press the switch inwards once and then loosen it.

Danger:

● Send turn signals before lane or direction change during driving. After lane or direction change, please turn off the winker.

Horn button ③

Press the horn button, and the horn will peal.

Right handle bar switch assy

Front brake handle ①

Hold the front brake handle tightly, and the front wheel is braked and the brake light at the tail is on.

Throttle control handle ②

Throttle control handle is used to control the engine speed.

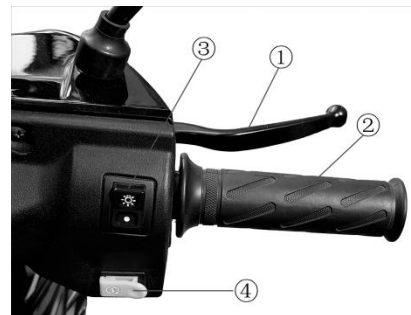
Turning towards yourself means speed-up, and the opposite direction means slowdown.

Light switch ③

"  " position: light up the front lamp.

"  " position: light up meter lamp, city light and tail lamp.

" ● " position: for daytime driving.



Electrical starting button ④

Press this button to connect the starting circuit. Before start, keep the gear in the neutral position and make sure the ignition lock is in “ON” position.

Danger:

●For continuous electrical starting, each starting duration shall not exceed 5s. The interval between two starting times is about 10s. The reason is that a large amount of discharge will cause abnormal heat of the circuit and the motor. Try to start it several times, and check the fuel supply system and the starting circuit system if starting still fails. (Please refer to the Section "Troubleshooting".)

●Do not directly flush the electrical components, especially the handle bar switch.

Choke valve handle

For the ease of starting, the motorcycle is equipped with a carburetor choke valve system.

When the engine is in cold state, pull the choke valve handle outwards to the bottom, and slightly throttle up the engine to start it. After starting, push the handle inwards for a half, slightly throttle up the engine to warm up it to the sufficient temperature, and push the handle back in original place after sufficient warming-up.

When the engine is in warming-up state, it's not necessary to apply that system for starting.

Fuel tank

The fuel tank can be seen only after the seat is opened. Open the fuel tank cover, hold the cover tightly, rotate it anticlockwise until the cover is loose, and then take down it. To install the cover, put the cover on the fuel tank port, and rotate it clockwise to the bottom.



Danger:

- During refueling, the fuel level shall not exceed the limit rod at the port, or fuel will spill after heating and swelling.
- Shut down the engine before refueling, and turn the ignition lock to "OFF" position. Do not get close to smoke or fire.
- Do not make the nozzle excessively stretch into the fuel tank, or the fuel sensor may be damaged.

Fuel Switch

The motorcycle is equipped with a manual fuel tap with two positions:

"ON" position

Under general running conditions, the handle is kept in this position, and when the oil level in the carburetor decreases, fuel is supplied to the carburetor float chamber through the switch.

"OFF" position

Turn the handle to this position for a long flame-out time.

Warning:

If the fuel switch handle is usually in "ON" position after flame-out, the carburetor may be excessively filled with oil, or even the fuel may flow into the engine. If the engine is started under this state, the engine may be seriously damaged.

Shift lever

Operation of the shift lever is shown in the figure. After a gear position is selected, the shift lever will restore to the original position for the next shift.

For parking, the 4th gear can be directly shifted to the neutral position; during driving, the 4th gear cannot be directly shifted to the neutral position; if it is necessary to shift the gear to the neutral position, shift the gear from the higher position to the lower position successively till the neutral position.



Before shifting to a low gear, slow down properly, step on the rear foot bar of the shift lever, and slightly increase the engine speed before automatic reset of the shift lever.

Before shifting to a high gear, speed up properly, step on the front foot bar of the shift lever, and slightly decrease the engine speed before automatic reset of the shift lever.

Follow the above key points for gear shifting to reduce unnecessary wear of the drive system components and the rear tire.

Starting lever

This type of motorcycle is equipped with a recoil starting lever on the right side of the engine.

Rear brake pedal

Step on the rear brake pedal, and the rear wheel brake will work and the brake light will be on.

Helmet hook

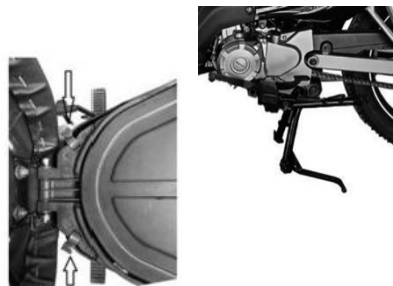
The method to use the helmet hook: unlock the seat with the key, hook the retaining ring with the helmet hook, put down the seat, lock it and pull out the key.

Attached tools

The attached tools are put in the storage box under the seat. You can open the seat to take them out.

Stand

The motorcycle is equipped with center stand and side stand. When using the center stand, step on the center stand foot bar, hold the handle bar with the left



hand, hold the rear handrail with the right hand, and pull up the motorcycle backwards to support the motorcycle stably.

Danger:

● Before driving, check whether the stand is turned to the upper limiting position and whether it is loose or shakes. Do not stop it in any other positions.

Notice for use of fuel and engine oil

Fuel oil

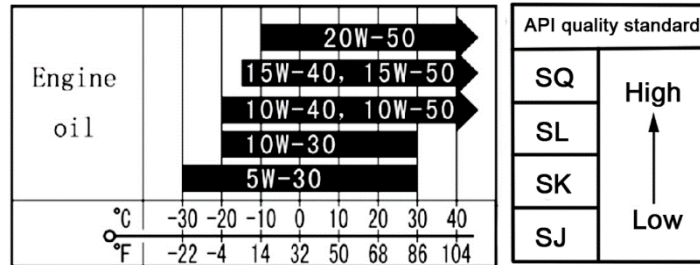
90~97# unleaded gasoline must be used.

Warning:

Non-unleaded gasoline will shorten the service life of the spark plug and the catalytic converter (catalytic agent) of the muffler. Unclean fuel will block the oil way to cause abnormal running of the engine.

Engine oil

High-quality four-stroke engine oil can prolong the service life of the engine. Please use the "four-stroke engine oil" carefully and specially prepared for this type of motorcycle. It is available in the repair shop of each franchised dealer, or PISG engine oil (viscosity: SAE10W-40) of standard brand can be used, or appropriate substitute can be selected based on the Table below according to local climatic conditions.



Attention:

● Please properly dispose waste engine oil to avoid polluting the environment. We suggest you putting waste oil in the sealed container and sending it to the local recycle center. Do not pour it into any dustbin or directly on the ground.

Running-in of the new motorcycle

Proper running-in of the new motorcycle can prolong the service life of the motorcycle and give full play to the performance of the new motorcycle. The correct running-in method is listed below.

Recommended throttle opening degree

Do not adopt the max. throttle opening degree during running-in of the new motorcycle. Please adopt the throttle opening degree of $\leq 3/4$ and avoid speeding up during driving.

Engine gear and speed

Change the engine gear and speed frequently, and do not keep running at a certain gear or speed constantly. During running-in, throttle up the engine properly to realize complete running-in.

Avoid running under the fixed low speed.

If the engine is running under the fixed low speed (light load), poor fit will be caused due to more serious wear of parts. The engine can be sped up under all speeds as long as the recommended throttle opening degree is not exceeded (no more than 3/4). In the initial 500km, do not exceed the throttle opening degree of 3/4.

Before driving, circulate engine oil.

In warming-up or cold state, the engine shall be provided with sufficient idle running time before starting. The purpose is to make engine oil flow to all the lubrication positions.

Primary routine maintenance inspection

Service for the initial 1,000km of the motorcycle is most important. During running-in, running-in of all engine components & parts is completed. Therefore, during this service, adjust each component and part, tighten all fasteners, and replace engine oil polluted by wear debris. Carefully carry out a service for the initial 1,000km of the motorcycle to give full play to the best performance of the motorcycle and prolong its service life.

Inspection before driving

Please carefully check each item before driving. Do not neglect the importance of these inspections. Before driving, please complete all inspections and necessary repairs.

Check Items	Key inspection points
Handle bar	(1) Stability (2) Flexibility (3) No axial end-play or looseness
Brake	(1) Brake shoe wear within the limited range (2) Proper free stroke of the brake handle and the brake pedal (3) No "Sponge" feeling for inflexible braking (4) No brake drag
Tire	(1) Proper tire pressure (2) Proper tread depth (3) No crack or wound
Fuel amount	Sufficient fuel amount for the planned mileage
Lights	Headlight, front position light, taillight/brake light, instrument light and winker can all be turned on normally
Indicator lights	High-beam indicator light, neutral position light, winker indicator light and gear position light can all be turned on normally.
Horn	Functions are normal.

Brake lever	Functions are normal.
Engine oil	Oil level is normal.
Throttle	(1) Throttle cable clearance is proper (2) Fueling is smooth. Fuel can be returned quickly.
Driving chain	(1) The degree of tightness is proper. (2) Lubrication is appropriate.

Key points in driving

Danger:

- If it is the first time that you drive this type of motorcycle, we suggest you finding a non-public road for practice driving until you know well about the methods to control and operate the motorcycle.
- Driving with a single hand is the most dangerous thing, so please hold the handle bar tightly and put your feet on the foot bar. Do not make your hands leave the handle bars during driving in any case. Reduce the speed to the safe value before turning.
- The pavement is wet and smooth, and tire friction is small. Braking capacity and turning capability decrease, so the speed must be reduced in advance.
- Transverse wind usually occurs at the tunnel exit, in the valley or when you are overtaken by oversize vehicles, so you must be careful and clam and slow down during driving in that case.
- Follow traffic rules and the limited speed.

Engine starting

Check whether the fuel tap is in the “ON” position, insert the key into the keyhole of the ignition lock, and rotate it to "ON" position clockwise. Make sure the neutral position light on the panel is on when the motorcycle is in the neutral position.

Warning:

- Develop a habit to turn the transmission to the neutral position during starting, return the throttle to the original place and use the front and rear brakes for braking. Avoid rushing out due to a wrong gear position.

When the engine is in cold state

Pull the choke valve handle outwards to the bottom, and slightly throttle up the engine to start it. Press the electric starting button, push the choke valve handle inwards halfway after starting, slightly throttle up the engine to warm up it fully,

and push the handle back in original place after warming-up.

Attention:

● The colder the weather is, the longer the time needed for warming-up of the engine will be. Driving after sufficient warming-up of the engine can reduce engine wear.

When the engine is in warming-up state

Turn the throttle to the opening degree of $1/8 \sim 1/4$, and press the button to start the engine. When the engine is in warming-up state, it's not necessary to apply the carburetor choke valve for starting.

Danger:

● Do not operate the engine in any room with poor ventilation or without ventilation installation. The reason is that CO gas discharged by engine is toxic. Do not operate the motorcycle engine if unattended.

Warning:

Avoid long-time idle running of the engine when the motorcycle is not driven. Long-time idle running is easy to damage the internal parts due to engine overheat.

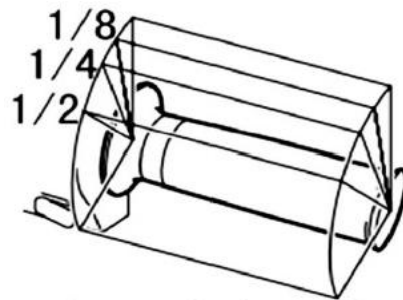
Riding

Turn off the throttle, and step on the shift lever and engage a low gear. Rotate the throttle towards the speed-up direction to engage the clutch, and the motorcycle will start running.

To change the gear, please refer to the Section "Shift lever".

Danger:

● Before starting of the motorcycle, turn the side stand to the upper limiting position. Do not stop it in any other positions.



● Before driving, please do wear the helmet, protective glasses and striking clothes, and do not drive the motorcycle after drinking or taking drugs.

● In case of slippery road or poor vision, please slow down.

Use the transmission

The transmission can enable the engine to operate stably within the normal speed range. The gear ratio is carefully selected to adapt to the engine characteristics. The driver shall select the most appropriate gear according to the driving conditions and shall not drive under high speed in a low gear. Lower the gear for slowdown and heighten it for speed-up so as to ensure that the engine can operate within the normal speed range.

Warning:

● Avoid high engine speed in any gear.

Uphill driving

When climbing a steep slope, the motorcycle will be short of power and slow down. Turn to a lower gear to make the engine operate within the normal power range. At this moment, shift the gear quickly to avoid excessive speed reduction.

During downhill driving, you can utilize running of the engine for assistance in braking easily by shifting the gear to a lower gear.

Remember to avoid high engine speed.

Warning:

● Do not turn off the ignition lock or shut down the engine for coasting down the slope, so as to avoid lowering the service life of the catalytic converter (catalytic agent) in the muffler.

Braking and parking

1. Rotate the throttle control handle outwards to completely close the throttle.
2. Meanwhile, use the front and rear brakes for braking.

3. Shift to the low gear and reduce the speed.
4. Shift the gear to the neutral position and park the motorcycle stably. In the neutral position, the neutral position light on the panel is on.
5. If the motorcycle is to be parked on a gentle slope with the side stand, engage a low gear to make the motorcycle head face towards the upper slope as far as possible, so as to avoid motorcycle overturn due to rotation of the side stand. However, do not forget to shift the gear to the neutral position for restart.
6. Turn the ignition lock to "OFF" position to stop the engine.
7. Turn it to "LOCK" position to lock the head lock, and pull out the key.

Danger:

- In case of a high motorcycle speed, the brake distance shall be increased accordingly. Please do estimate the distance between the vehicle and object in front of you and determine whether it is enough to make you brake your motorcycle.
- It's very dangerous to use the front brake or rear brake only, which will cause a vehicle slippage and make it out of control. Please use the braking system carefully and gently on a wet/smooth road or when making a turn. Emergency braking on a rough or smooth road will make the motorcycle out of control.

Warning:

- An inexperienced person only uses the rear brake pedal for braking in most cases, and this will accelerate wear of the braking system, while the braking distance will be longer and longer.

Inspection and maintenance

The Table below shows the necessary inspection items for periodic maintenance, and the cycle is subject to the months of use or the mileage, whichever comes first. Inspection shall be subject to the items specified in the Table below every time.

If your motorcycle once was used under bad conditions, i.e., constant driving at full throttle or in a sandstorm, conduct a special service after driving to maintain the reliability of the motorcycle. At this moment, the dealer can provide you with further consultation. The steering system, the shock absorber and the axle are particularly critical parts needing specialized techniques and careful maintenance. To ensure safety, we suggest entrusting this work to the dealer.

Danger:

- The maintenance items for the initial mileage of 1,000km of a new motorcycle must be followed so that your motorcycle can work reliably with excellent performance.
- Observe the current periodic maintenance and check whether it totally follow the Manual and is conducted carefully.

Warning:

- The maintenance for the initial mileage of 1,000km shall be conducted by the method specified in the Manual. Special attention shall be paid to "Danger" and "Warning" in that section.
- Parts may be replaced during periodic maintenance. Please use the original parts for replacing relevant parts.
- No matter whether you are a mechanical expert or experienced in vehicle repair, the items marked with "*" in the table must be carried by the dealer. For those items without a mark, you can conduct inspection as per the Manual.

Attention:

- Wastes generated during maintenance such as cleaning agent and used oil shall be disposed properly to avoid polluting the environment.

Periodic Maintenance Table

Inspection cycle Inspection items	Kilometers	The initial 1,000km	3,000km	6,000km	9000km	12000km
	Months	The initial 3 months	6 months	12 months	18 months	24 months
*Battery		I	I	I	I	I
*Air filter		I/C	I/C	I/R	I/C	I/C
*Muffler bolts and nuts		I/A/L	I/A/L	I/A/L	I/A/L	I/A/L
*Bolts and nuts of the cylinder cover and body		I/A/L	I/A/L	I/A/L	I/A/L	I/A/L
*Camshaft driving chain		I/A/L	I/A/L	I/A/L	I/A/L	I/A/L
*Valve clearance (cold state) Inlet/outlet: 0.03~0.07mm		I/A	I/A	I/A	I/A	I/A
Spark plug		I	I	I	I	I
		Replaced per 10,000km				
Engine oil		Replaced for the initial 1,000km, and per 3,000km after that				
*Engine oil filter screen		Cleaned per 12,000km				
Carburetor (idle speed)		I	I	I	I	I
Throttle cable clearance		I	I	I	I	I
*Fuel pipe, secondary air hose		I	I	I	I	I

	Replaced every four years				
*Fuel filter	I	I	I/R	I	I
Driving chain	Inspect, clean and lubricate per 1,000km				
*Brake	I	I	I	I	I
*Brake fluid	Replace every two years				
Tire	I	I	I	I	I
*Steering mechanism	I	I	I	I	I
*Front & rear shock absorbers	I	I	I	I	I
Lighting and signal	I	I	I	I	I
*Mounting bolts and nuts for the vehicle body and the engine	I/A/L	I/A/L	I/A/L	I/A/L	I/A/L

I: Inspect (clean, adjust, lubricate, replace, if necessary) C: Clean A: Adjust L: Lubricate R: Replace

Attention:

- During inspection according to the items in the Table, carry out further work such as cleaning, lubrication, fastening, adjustment or replacement when necessary.
- For long-time driving under poor road conditions and high power, the inspection frequency shall be increased.
- Item marked with "*" must be handled by professional service personnel from the dealer.

Periodic Lubrication Table

Lubrication items	Lubrication cycle	
	6,000km or 6 months	12,000km or 12 months
Accelerator cable	Engine oil	Engine oil
Throttle control handle	Lubricating grease	Lubricating grease
Speedometer flexible shaft	Lubricating grease	Lubricating grease
Speedometer gearbox	Lubricating grease	Lubricating grease
Driving chain	Inspect, clean and lubricate per 1,000km	
*Brake pedal shaft	Lubricating grease or engine oil	Lubricating grease or engine oil
*Brake camshaft	Lubricating grease	Lubricating grease
*Steering mechanism	Apply lubricating grease every two years or 20,000km.	
*Rear cradle bearing sleeve	Apply lubricating grease every two years or 20,000km.	

Attention:

- Item marked with "*" must be handled by professional service personnel from the dealer.

Battery

Maintenance-free batteries do not require the addition of electrolyte. If damaged, please replace them directly.

Warning:

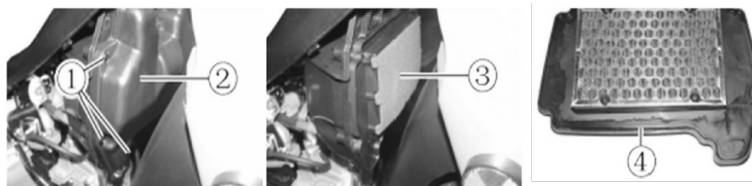
- Do not add electrolyte after the battery comes into use.
- Do not bend, block or change the battery breather pipe. Make sure that one end of the pipe is closely connected with the battery and that the other end is kept unblocked.
- For connecting the battery, connect the positive pole of the battery with red wire, and then connect the negative pole of the battery with black wire. Reverse connection will damage the charging system and the battery.

Attention:

- Please properly dispose waste battery and electrolyte to avoid polluting the environment. We suggest you sending waste battery and electrolyte back to the local recycle center. Do not discard it into any dustbin or directly on the ground.
- The battery shall be inspected periodically, and if the voltage is lower than 12.5V, we suggest charging the battery.

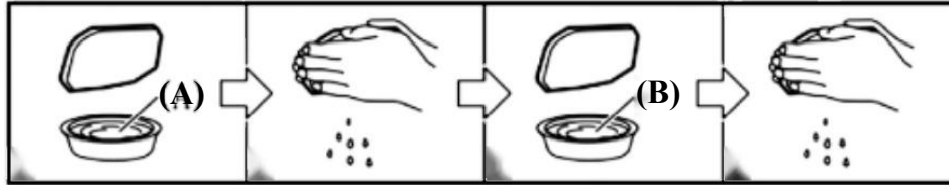
Air filter

The filter element of the air filter is fabricated with expanded plastic. If the air filter is blocked by dust, the intake resistance will increase, the output power will decrease, and the oil consumption will increase.



Warning:

- For driving under dust conditions, the frequency of cleaning or replacing the filter element shall be increased.



Steps to dismantle the air filter:

- (1) Remove the front panel and the left and right wind deflectors.
- (2) Loosen the bolt ① for the front air filter cover.
- (3) Take down the front cover ② of the air filter.
- (4) Take out the filter element ③.
- (5) Take down the filter stand ④.
- (6) Remove dust on the inner wall of the filter shell.
- (7) Pour incombustible washing liquid into a proper container and immerse the filter element in washing liquid.
- (8) Squeeze the filter element with two palms to squeeze out washing liquid. Do not twist it, or it may be cracked.

Warning:

●Do not twist the filter element when clean it; and check whether it is cracked before or during cleaning. Replace the filter element immediately in case of any crack.

(10)Reinstall the cleaned air filter element in the reverse order to that of dismantling. The air filter element must be installed and sealed properly in the specified position.

Warning:

●For driving under dust conditions, it's necessary to shorten the interval for inspecting, cleaning and replacing the filter element. In case of any defects such as blockage, damage and dust, replace it immediately instead of handling during maintenance. Starting of engine without a filter element will intensify engine wear. It's necessary to check the status of the filter element for this simple component will affect the service life of the engine in most cases.

Cleaning of fuel collecting pipe

Check the fuel storage condition of the lower oil collecting pipe of the air filter. Timely discharge fuel in the pipe if any. The method to discharge fuel is as follows:

- (1)Loosen the clamp ①on the fuel collecting pipe.
- (2)Remove the fuel collecting pipe ② together with the clamp ①, and discharge fuel in the pipe.
- (3)Install the fuel collecting pipe ② in the reverse order to that of dismantling.

Attention:

●In case of high humidity in the air, the inspection frequency shall be increased properly.



Spark plug

Remove carbon deposit on the spark plug with a hard wire or steel needle. Then, use a feeler gauge to check the clearance of spark plug electrode, and adjust the clearance to 0.6~0.7mm.

During removal of the carbon deposit, observe the working color at the spark plug electrode, and this color indicates whether the spark plug is applicable. The spark plug that works normally shall be light brown. If the spark plug is wet black, it's better to use a hot plug. If it is white and shines, it means it works under overheat condition. At this moment, it shall be replaced with a cold plug.

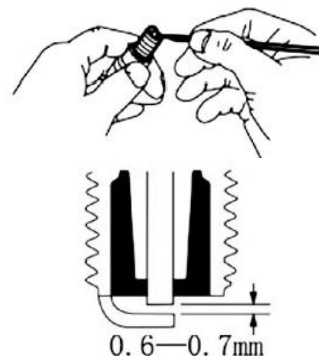
Guidelines for replacing the spark plug

TORCH	Notes
A6RTC	If the standard spark plug is wet, it shall be replaced with this type of spark plug
A7RTC	Standard spark plug
A8RTC	If the standard spark plug is overheated, it shall be replaced with this type of spark plug.

Warning:

● The spark plug shall be free from excessive tightness or random threaded connection, so as to avoid damaging the tread of the spark plug for the cylinder head. Do not make any foreign matters enter in the engine through the spark plug hole during removal of the spark plug.

● The standard spark plug used for this type of motorcycle is carefully selected and suitable for the majority of the working range. If the color of the spark plug is abnormal and different from that of the standard plug, it's better to consult the dealer before replacing the spark plugs in different heat-resisting ranges for improper spark plug may cause serious



damage of the engine

● Selection of other grades of spark plugs may cause serious consequences. Therefore, please consult the dealer before that.

Engine oil

To make the engine durable, it is of great importance to select high quality engine oil and replace oil periodically. The necessary two maintenance tasks are to check the engine oil level every day and replace oil periodically.

Inspection of the engine oil level

Check the engine oil level by the following steps:

1. Support the center stand
2. Start the engine and keep running it for several minutes.

3. Stop the engine, and wait for several minutes. Then, screw out the oil level dipstick, clean it, and insert it. It's not necessary to rotate it. After that, take out the oil level dipstick, observe the oil sign (oil level), and make sure the oil level is between the upper level and the lower level.

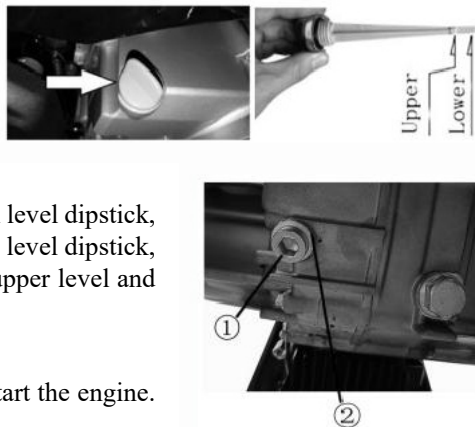
Warning:

● If it is shown that engine oil is at or below the lower level, do not start the engine. Do not add oil to be above the upper level.

Engine oil replacement

Replace engine oil with new oil during warming-up of the engine. Thus, it is easy to discharge old oil in the engine. The replacement sequence is as follows:

- (1) Support the motorcycle with the center stand on the flat road.



- (2) Dismantle the oil level dipstick.
- (3) Screw out the oil drain bolt ① and the sealing washer ② under the engine to discharge old oil.
- (4) Before reinstall the oil drain bolt ①, please check whether the sealing washer ② is installed.
- (5) Screw on the oil drain bolt ①, and do not excessively tighten it.
- (6) Add the required new engine oil of about 0.8L through the oil filler installed with the oil level dipstick, tighten the oil level dipstick and do not excessively tighten it.

Warning:

- Please use engine oil recommended in the Section "Notice for the use of fuel and engine oil".

Warning:

- Carefully check whether oil leaks from any engine component that once was dismantled.
- (7) Start the engine, and keep idle running for several minutes.
 - (8) Shut down the engine, and check the oil level several minutes later. The oil level shall be between the upper level and the lower level.

Engine oil filter screen

Warning:

- It is necessary to take down the right crankcase cover for removal of the filter screen, and whether to replace the filter screen shall be judged by professional technical personnel from the qualified maintenance unit.

Carburetor

Stable vaporization performance is the most basic requirement of the engine on the carburetor. Vaporization performance of the carburetor has been accurately set in the factory. Please do not change the setting. You just need to pay attention to two points, i.e. idle speed and throttle cable clearance.

Idle speed

- (1) Start the engine, and warm it up fully.
- (2) After warming-up of the engine, the throttle returns back in original place. Then, rotate the adjusting screw (as shown in the figure) to keep the engine speed at 1,400~1,600rpm.

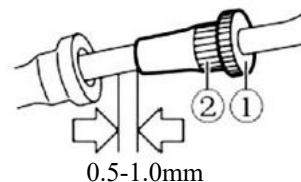
Warning:

- Adjust the idle speed of the engine in full warming-up state only.

Throttle cable clearance

The adjusting part of the throttle cable clearance is located on the lateral lower side of the throttle control handle. Steps to adjust the throttle cable clearance are as follows:

- (1) Loosen the lock nut.
- (2) Rotate the adjusting bolt to adjust the throttle cable clearance and keep it within the range of 0.5~1.0mm.
- (3) Screw down the lock nut after adjusting the clearance.



Danger:

- After adjusting the throttle cable clearance, make sure that the throttle handle can return back to the original location and that the idle speed will not increase. Meanwhile, increase in idle speed is not allowed when the motorcycle head is turned after adjustment.

Fuel filter

The fuel filter is fixed on the frame on the front lower part of the fuel tank. Please carry out periodic inspection, cleaning or replacement, as well as blowing-off with compressed air, and please do replace it if damaged.



Driving chain

Danger:

- To ensure safety, the driving chain shall be checked and adjusted before driving.

Periodic inspection items for the driving chain

1. Loose chain pin
2. Damaged roller
3. Dry or rusted chain link
4. Inflexible chain link
5. Excessive wear
6. Improperly adjusted chain link

Any problem of the driving chain as mentioned above is most likely to be caused by the damaged chain wheel. Meanwhile, the chain wheel shall be inspected for the following items:

1. Excessive wear of the chain wheel or not
2. Fracture or damage of the gear teeth or not
3. Looseness of the chain wheel lock nut or not

Cleaning and lubrication of the driving chain

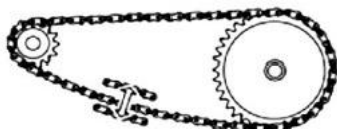
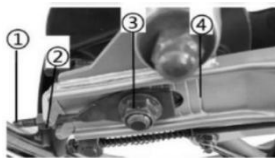
Dirty driving chain will accelerate wear of the chain and damage the chain wheel. Clean the driving chain periodically with washing liquid, and then apply chain oil or new engine oil on it.

Adjustment of the driving chain

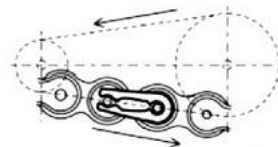
Adjust the driving chain to keep it in normal state. In case of bad driving conditions, increase the frequency of adjustment.

Danger:

● Excessively loose chain will fall off, leading to accidents and severe damage to the engine. Please adjust the driving chain by the methods below.



25mm



1. Support the motorcycle with the center stand.

2. Loosen the rear axle nut ③.

3. Rotate the lock nut ②, adjust the regulator to regulate the looseness degree of the chain according to the marks ④ printed on the left and right sides of the rear wheel fork, and keep the front and rear chain wheels in the same straight line. For the ease of confirmation, make sure the mark ④ positions corresponding to the left and right regulators are consistent on the left and right sides.

4. Align to the mark ④, adjust the chain looseness to 25mm, screw down the rear axle nut ③ and the lock nut ② successively, and conduct the final inspection.

Warning:

● The driving chain is carefully fabricated with special material. Please use the original products for replacing the chain wheel. Using chains of other specifications may cause damage in the early period.

● Driving chain specification is: 428H102

Attention:

●To replace the driving chain, please check the wear condition of the front/rear chain wheel, and replace it when necessary.

●During installation of the driving chain, make sure the opening direction of the lock ring is reverse to the direction of motion of the chain.

●After adjusting the driving chain, check the opening direction of the rear brake lock ring and the free stroke of the pedal. Refer to the Section "Braking system" for the free stroke.

Braking system (brake)

The motorcycle adopts front disc brake rear drum type brake. Proper braking is of great importance to safe driving. Please remember to periodically inspect the braking system, and this inspection work must be completed by the dealer.

Danger:

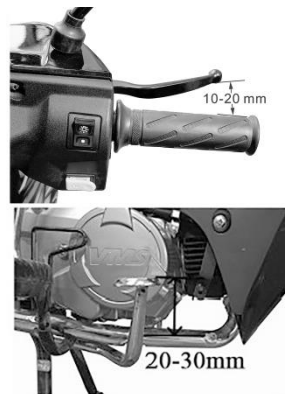
●If the braking system needs repairing, we strongly advise you to hand over the work to a qualified maintenance unit. They are skilled with complete tools and able to carry out the work by the safest and most economical method.

Daily inspection items for the braking system

1. Check the front brake handle and the rear brake pedal and make sure they maintain certain reactive forces.
2. Check the wear condition of the brake shoe.

Front brake (disc brake)**Braking stroke**

The braking stroke of the front brake handle end shall be 10-20mm.



Brake wear limit

The key point to check the front wheel brake pad is to observe whether it is worn to the limit nick. Replace it if it exceeds the nick.

Rear brake (drum brake)

Braking stroke

Measure the movement distance of the rear brake pedal before the brake starts braking. Braking stroke: 20-30mm.

Adjustment of braking stroke

When adjusting the braking stroke, rotate the nut (as shown in the figure) on the rear brake to keep the free stroke in the specified range.

Adjust the free stroke by adjusting the nut. Clockwise adjustment means increase and anticlockwise adjustment means decrease. Adjust it to the ideal braking effect.

After adjustment, loose the brake, rotate the wheel, conduct inspection under the condition that the wheel does not touch the ground, and make sure the wheel is flexible.

Brake wear limit

The brake is marked with a wear limit. Check the wear condition according to the following key points:

1. Check whether the brake is adjusted properly.
2. Operate the braking system, and check the indication mark to ensure it is within the allowable range, as shown in the figure.
3. If it is beyond the allowable range, you must tell the maintenance to replace components in the brake for safety.



Indicator line

Tire

Check the tire pressure and tire surface condition during periodic maintenance. To ensure safety and a long service time, conduct frequent inspection besides periodic maintenance.

Tire pressure

Under normal temperatures, measure the tire pressure with the tire gauge, and set the tire pressure as recommended in the Manual. Excessively high or low tire pressure will affect running stability and accelerate tire wear.

Recommended tire pressure under normal temperatures

Recommended tire pressure under different temperatures	summer		winter	
	kPa	kgf/cm ²	kPa	kgf/cm ²
Front wheel	225	2.25	200	2.00
Rear wheel	225	2.25	225	2.25

Warning:

● The tire pressure and tire surface condition are of great importance to the motorcycle's functions and safety. Please check the tire pressure and tire surface condition frequently.

Tire surface condition

There are several wear marks on the tire circumference, as well as the nearby wear mark (lug boss in the tread groove). Make sure the tread depth is sufficient, and please replace the tire if worn to this point.

Visually check the wear condition of the tire and the damage condition of tire surface (puncture or crack). Please replace

the tire in case of excessive tire wear or damage of tire surface for it will affect running stability.

Tire spec.

To replace the tire, make sure the specification of the replacing tire is consist with that specified in the Manual. Using tires of different specifications will affect the motorcycle's maneuverability.

Danger:

- Tire standard for this type of motorcycle: front wheel: 2.50- 17; rear wheel: 2.75- 17.
- Using tires out of standard will cause problems. We sincerely suggest selecting standard tires.

Lighting and signal

Refer to the Section "Inspection items before driving" for lighting and signal inspection.

Front brake switch

The front brake switch is arranged on the front brake handle. The brake light will be on after when tightly holding the handle.

Rear brake switch

The rear brake switch is located on the rear upper part of the rear brake pedal. Loose the nut, move the rear brake switch up and down to turn on the brake light before stepping on the pedal and feeling slight pressure, and then tighten the nut.

Bulb replacement

Refer to the "Specification Table" for the rated power of each bulb. For replacing the damaged bulb, please use the bulb of the same rated power and specification. Using bulbs of different rated powers and specifications may cause overload of the electrical system and early damage of the bulbs.



Danger:

● It's not allowed to use bulbs of specifications different from those specified in the "Specification Table", or the headlight and other electrical components and parts may be damaged.

Warning:

● Replace the bulb by the dealer.

● Keep the bulb clean and free from dust, or the service life of the bulb will be shortened. When replacing the bulb, use clean cloth to remove grease and dust on it.

Fuse

Fuse is located on the battery and can be seen after the seat and battery box cover are opened. In case of sudden flame-out or a circuit failure, check the fuse first.

Danger:

● Do not use other fuses beyond the range of regulated specifications. Otherwise, it will cause adverse impact on the electrical system, or even lead to a fire accident, light burning-out or loss of engine power, which is extremely dangerous.

Warning:

● Please select the fuse of rated power (15A), and do not use other substitutes like aluminum foil or steel wire. Frequent fusing in a short time refers to a circuit failure. In this case, please tell the dealer to troubleshoot it immediately.

Trouble shooting

If the engine fails to start, please conduct the following inspections to find out the cause.

1. Check whether fuel in the fuel tank is sufficient.

2. Pull the fuel feed pipe out from the carburetor, turn the fuel tap to the ON position, and check whether fuel can flow out smoothly.

Danger:

- Do not make fuel flow onto the ground, and please store it in a container. Keep fuel away from high-temperature engine and muffler. Keep away from any smoke, fire and heat sources during this inspection.

3. If you make sure the fuel can reach the carburetor, the next step is to check the ignition system.

4. Take down the spark plug, and connect it to the high-voltage wire.

5. Fix the spark plug on the motorcycle body, turn the ignition lock to "ON" position and press the electric starting button. If the ignition system is normal, there will be blue spark between two spark plug electrodes. If there is no spark, tell the dealer to repair it.

Danger:

- Do not fix the spark plug nearby the spark plug hole for the above-mentioned inspection. This is because combustible mixture in the cylinder may be ignited by spark.

- To reduce possibility of electric shock, it's better to make the metal part of the spark plug shell cling to the unpainted metal part of the motorcycle body. To avoid accident due to electric shock, every person with heart disease or wearing a cardiac pacemaker shall not be involved in this inspection work.

Warning:

- Before troubleshooting, it's better to consult the dealer. The dealer will try to solve the problem for you.

Transportation

Fuel must be discharged before transportation of the motorcycle. This operation must be done in a place with good ventilation. Fuel is easy to burn and will cause explosion under certain conditions. Please do discharge fuel in a place with good ventilation after the engine stops working. No open flame is allowed during fuel discharge and storage or refueling. Fuel discharge sequence is as follows:

1. Stop the engine, and pull out the key for the ignition lock.
2. Adopt siphon or other appropriate methods to discharge fuel into an appropriate container.
3. Put the end of the carburetor drain pipe into an appropriate container.
4. Loosen the drain screw, discharge fuel in the carburetor, and then tighten the drain screw.

Warning:

● During transportation of the motorcycle, please drain fuel from the fuel tank and the carburetor. Put the motorcycle in a normal ride position during transportation to avoid leakage of engine oil and battery electrolyte.

Storage method

If the motorcycle will keep unused for a long term in winter or other seasons, use appropriate materials and equipment for special maintenance of the motorcycle. For this purpose, we suggest entrusting the dealer for the special maintenance. If you prefer doing such maintenance work by yourself, please follow the following rules.

Motorcycle

- Support the motorcycle with the center stand and wipe the motorcycle thoroughly.

Fuel oil

- Adopt siphon or other appropriate methods to drain fuel from the fuel tank, loosen the drain screw of the carburetor, drain fuel from the carburetor, and tighten the drain screw.

Battery

- Remove the battery from the motorcycle.

Attention:

- Remove the wire at negative terminal (-) first and then the wire at positive terminal (+).
- Use detergent of low concentration to wash the outside of the battery, and remove rust on the terminal and wiring joint.
- Store the battery in a room with temperature of above 0°C.
- Fully charge the battery, and charge it again every three months.

Tire

- Inflate tires to the recommended pressure in the Manual.

Exterior

- Apply rubber protection agent on all rubber parts.
- Apply anti-rust agent on unpainted surfaces.
- Apply wax on painted surfaces.

Procedure to be repeated

- Clean the entire motorcycle.
- Install the battery again.

Warning:

- Connect the wire at positive terminal (+)first and then the wire at negative terminal (-).
- Take down the spark plug. Start the engine, run it several times, and then install the spark plug. Adjust the tire pressure as stated in the tire section of the Manual.
- Carry out lubrication work as stated in the lubrication section of the Manual.
- Carry out "Inspection before driving" as per the Manual.

Instructions for use of battery

Starting of a new battery

Adding electrolyte

Check the battery appearance, and make sure that the shell is free from any scar or crack and that the terminals are free from skew or deformation.

Pull out the sealing rubber cap at the battery vent, and take down the vent plug.

Take out electrolyte provided together with the battery, cut and open the electrolyte bottle neck, connect the plastic conduit, and slowly inject electrolyte into each injection hole until it reaches the upper level. 30min later, if the level declines, resupply it to the upper level. Attention: do not exceed the upper level.

30min after adding electrolyte, the battery can be installed for starting. If possible, charge the battery for 3~5h before use so as to realize better starting performance and prolong the service life of battery. After long- time storage in winter or battery delivery, the battery shall be charged for 3~5h.

Compact (screw down) the vent plug, flush away electrolyte on the battery surface with clean water, and dry it with cloth.

Installation

When installing the battery vent pipe, be careful not to bend or flatten the vent pipe, or the battery may burst and electrolyte may spill out to corrode clothes and the motorcycle during driving.

Connect the positive (+) wire (red) first and then the negative (-) wire, and avoid reverse connection, or the igniter, the stabilized rectifier and other electric parts will be damaged.

After tighten the bolt, apply grease or Vaseline on the bolt, nut and terminal to avoid poor contact caused due to rusting.

Use and maintenance

Electric starting duration shall not exceed 5s. If electric starting fails for several times, check the fuel supply system,

starting system and ignition system.

The following cases will cause over-discharge or under-charge of battery and shorten its service life:

- Frequent electric starting, short driving distance
- Long-time driving at low speed
- Brake handle held tightly or brake pedal stepped on to make the brake light normally on during driving · Additional electrical accessories installed or high-power bulb used

In case of starting difficulty, light dimmed or low horn sound, recharge the battery immediately.

Check the electrolyte level every 1~3 months, and if the level is lower than the lower level, add distilled water or purified water to reach the upper level. Attention: do not add electrolyte. It's better to recharge the battery after that.

Please recharge the battery before storage of the motorcycle that will remain unused for a long term, and recharge the battery once in a month.

Charging

Please use the special battery charger for the motorcycle. Before charging, please take down the vent plug. Keep indoor air ventilation during charging, and avoid open fire.

The charging method is classified as standard charging and quick charging. Please adopt standard charging method to prolong the service life of the battery.

Stop charging if the electrolyte temperature exceeds 45°C, and continue to charge the battery after cooling. Finish charging after a large number of bubbles generated in the battery. Compact (screw down) the vent plug, and clean and wipe-dry the battery.

Notes

● Explosive gas will be generated during use and charging of the battery, so keep off open fire and avoid short circuit of positive and negative poles as well as looseness of positive and negative terminals, so as to prevent battery explosion.

●Electrolyte contains strong acid, so please prevent it from splashing into your eyes or on your skin and clothes. Once you touch it, please use plenty of clean water for washing. If you swallow it by mistake, drink plenty of water or milk immediately and go to the hospital.

●Please put electrolyte in a place not accessible to children.

●Installation of a burglar alarm will affect the battery to a certain extent. It is recommended to use the burglar alarm recommended by the dealer for using, other burglar alarms may cause abnormal operation of the electrical system or even damage to the battery, igniter, stabilized rectifier, etc.

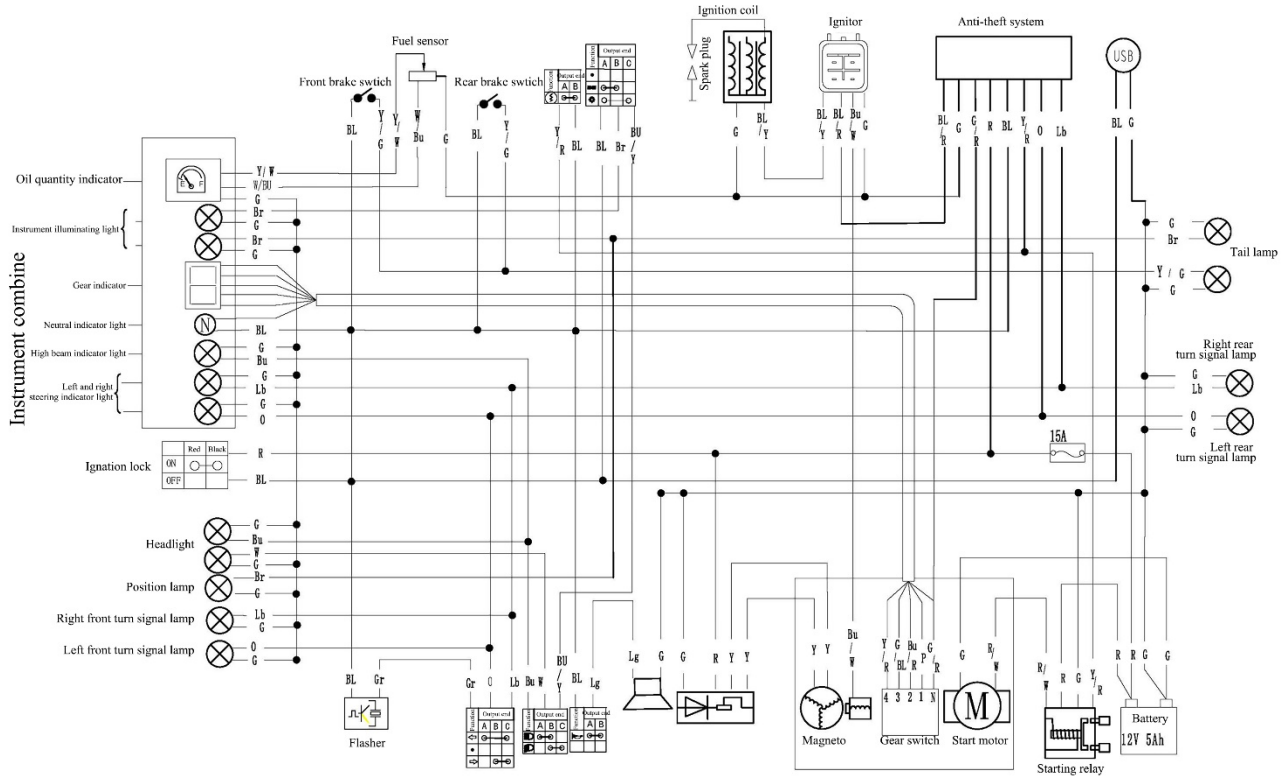
Specification table

Specification table	
Size and weight	
Length	1940mm
Width	670mm
Height	1070mm
Wheelbase	1240mm
Ground clearance	140mm
Curb weight	95kg
Max load	150kg
Engine	
Type	Single cylinder, air cooling, four-stroke
Cylinder Bore	52.4mm
Stroke	49.5mm
Displacement	107ml
Compression ratio	9.1:1
Starting system	Electric/kick start
Lubrication method	Combined pressure and splashing

Power	5.3kw at 8000rpm
Transmission system	
Clutch	Wet automatic centrifugal
Transmission	Constant mesh, rotary
Primary gear ratio	4.059(69/17)
Final gear ratio	2.571(36/14)
Gear ratio	
First gear	2.833(34/12)
Second gear	1.705(29/17)
Third gear	1.238(26/21)
Fourth gear	0.958(23/24)
Traveling system	
Turning radius	3.75m
Spec. of the front tire	2.50-17
Spec. of the rear tire	2.75-17
Electric system	
Ignition method	C.D.I. (Capacitor discharge ignition)
Spark plug model	A7RTC

Battery spec	12V.5Ah
Fuse Spec.	15A
Headlight spec.	12V 35W/35W
Spec. of the front position light	12V 5W
Spec. of the taillight/brake light	12V 10W
Spec. of the wipers	12V 10W(front winker); 12V 10W(rear winker)
Volume	
Fuel tank capacity	3L
Engine oil replacement amount	0.8L (Normal)/1.2L (New vehicle/replace the oil filter)

Circuit diagram



KEEWAY

CK110



Keeway.com