This manual should be considered a permanent part of the motorcycle and should remain with the motorcycle when resold or otherwise transferred to a new owner or operator. The manual contains important safety information and instructions which should be read carefully before operating the motorcycle.

BATTERY INITIAL CHARGING

1. BATTERY INITIAL CHARGING

Initial charging of the battery is required after filling electrolyte to improve the battery durability.

2. BATTERY INSTALLATION

① Fill the electrolyte to the battery.

②Set the battery upright for 30 minutes.

③ Charge the battery by standard charging. This is necessary for reliability of the battery.

④ Install the battery to the motorcycle.

※STANDARD FIRST CHARGE TIME : 1.0 A for 9 hours

⚠ CAUTION

Do not use the battery without the battery initial charging. Otherwise the battery service life may be shortened.

⚠ WARNING

Please use battery ignition system to start the motorcycle.
Do not permit to start or operate the motorcycle without the battery otherwise the electrical system will be damaged.
Always start or ride the motorcycle with the correct battery installed and connected.

FOREWORD

Thank you for choosing QH125GY series motorcycles. We design, test and produce this motorcycle using the latest technology to provide you with a happy, enjoyable and safe riding experience.

Motorcycling is one of the most exhilarating sports. To ensure your safety, please read this instruction carefully and familiarize yourself with the requirements before you drive a motorcycle.

The proper care and maintenance that your motorcycle requires is out- lined in this manual.

By following these instructions explicitly you will ensure a long trouble-free operating life for your motorcycle. The dealer has experienced technicians who are trained to provide your machine with the best possible service with the right tools and equipment.

Operative norm:

Q/370100JQH003—2020

All information, illustrations 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 between information in this manual and your motorcycle.

Our company reserves the right to make changes at any time without notice and has no obligation to make the same or similar changes to previously manufactured or sold motorcycles.

Please note that this manual applies to all specifications for all respective destinations and explains all equipments. Therefore, your model may have different standard features than shown in this manual.

IMPORTANT

BREAK-IN INFORMATION FOR YOUR MOTORCYCLE

The first 1,600 km (1,000 miles) are the most important in the life of your motorcycle.

During this period, the correct break-in, not only can guarantee the longest service life of the vehicle, but also can give full play to the performance of the new car.

QINGQI KR parts are manufactured of high quality materials, and manufactured parts are finished within the close tolerances. Proper break-in operation allows the machined surfaces to polish each other and mate smoothly.

Motorcycle reliability and performance depend on special care and restraint exercise during the break- in period. It is particularly important not to perform operations that can cause engine parts to overheat

Please refer to the BREAK-IN section for specific break-in recommendations.

WARNING / CAUTION / NOTE

Please read this manual and follow its instructions carefully.

To emphasize special information the words 『WARNING』, 『CAUTION』 and 『NOTE』 have special meanings.

Information following these signal words should be carefully reviewed.

⚠ WARNING

The personal safety of the rider may be involved. Disregarding this information could result in injury to the rider.

⚠ CAUTION

These instructions point out special service procedures or precautions that must be followed to avoid damaging the machine.

NOTE

This provides special information to make maintenance easier or important instructions clearer.

⚠ WARNING

Noise Control System (muffler assembly)

TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED

Owners are warned that the law may prohibit :

(a) The removal or rendering inoperative by any person other than for the purpose of maintenance, repair or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its any sale or delivery to the ultimate purchaser or while it is in use.

(b) The use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

MAINTENANCE :

The exhaust system of this motorcycle requires no periodic maintenance.

The engine should be adjusted to the manufacture's specifications and the spark plug should be kept in good condition. Running the engine with incorrectly operating spark plug or misadjusted fuel injection system may cause permanent damage to the catalyst and to the noise control system.

CONSUMER INFORMATION

SAFE RIDING RECOMMENDATION FOR MOTORCYCLE RIDERS

Motorcycle riding is great fun and an exciting sport. Motorcycle riding also requires he/she to take some extra precautions to ensure the safety of the rider and passenger.

These precautions are :

⚠ WARNING

- **Before first use of the motorcycle read this owner's manual carefully to become familiar with the motorcycle features, and safety and maintenance requirements. Review all instructions, requirements and warnings.**
- **Before the rider's first use of the motorcycle, make sure that he / she is familiar with the location and operation of all controls, and has been instructed in the proper operation of the motor- cycle.**
- **For first use of the motorcycle, find a level, open area for the rider to use to become familiar with the operation of controls and the operating and handling characteristics of the motorcycle.**

⚠ WARNING

- Before each use, perform daily inspections with the rider.
- The specific inspection items are listed in the user manual pre-driving inspection section.
- Make sure the rider wears a helmet, eye protection, and protective clothing (gloves, leather or heavy cloth pants, long sleeved shirt or jacket, boots).
- Permit use only by two persons.
- This motorcycle is designed for use only by one rider and one passenger.
- Do not permit anyone to operate the motorcycle under the influence of alcohol or other drugs. It may cause damage to the motorcycle and alter handling characteristics.
- Observe periodic maintenance requirements. Your authorized dealer is trained and equipped to perform this ser- vice.
- Drain gasoline from the fuel tank prior to transporting the motorcycle.
- Caution the rider and others near the motorcycle not to get close to or touch any moving parts or any heated areas such as the engine and exhaust system.

⚠ WARNING

Do not make any modifications to the motorcycle.
Modifications may make the motorcycle unsafe or illegal in your state.

⚠ WARNING

The motorcycle is equipped with the side stand ignition interlock sys- tem.

If the transmission is in neutral or the side stand up, you can only start the engine by squeezing the clutch lever.

This side stand ignition interlock system prevents the motorcycle from being started with side stand down.

Make sure that the side stand ignition interlock system is working properly before riding.

⚠ CAUTION

The position lamp, meter lamp, tail lamp and license plate lamp on this motorcycle always comes on when the ignition switch is turned to the "○" position.

⚠ WARNING

- Do not run the engine indoors or where there is little or no ventilation. Exhaust gases contain carbon monoxide, a potentially lethal gas that is colorless and odorless.
- Never leave the motorcycle running while unattended, even for a short time.

⚠ WARNING

Always open the throttle gradually to prevent front wheel lifting. Failure to observe this precaution may result in loss of control and an accident.

⚠ WARNING

Keep both hands on the handgrips at all times when riding. Removing your hands from the handgrips reduces your ability to control the motorcycle and could result in an accident.

⚠ WARNING

While operating the motorcycle, the rider should keep both feet on the footrests at all times to avoid injuries resulting from accidents. Moving the rider's feet from the footrests reduces the rider's ability to control the motorcycle and could lead to an accident.

⚠ CAUTION

When storing for long period :

1. Supply enough the fuel in the fuel tank.
2. Remove the battery from the motorcycle.

⚠ WARNING

Do not turn the ignition switch to its "⊗" position or the steering lock to "🔒" position or the engine stop switch to its "⊗ " position while riding the motorcycle.

⊙ WEAR A HELMET

⚠ WARNING

Motorcycle safety equipment starts with a quality safety helmet. One of the most serious injuries that can happen is a head injury. ALWAYS wear a properly approved helmet. You should also wear a suitable eye protection.

⊙ RIDING APPAREL

⚠ WARNING

Loose clothing can be uncomfortable and unsafe when riding a motorcycle.

Use good quality motorcycle riding apparel when riding your motorcycle.

⊙ INSPECTION BEFORE RIDING

⚠ WARNING

Review thoroughly the instruct ions in the "INSPECTION BEFORE RIDING" section of this manual.

Do not forget to perform an entire safety inspection to ensure the safety of the rider and its passenger.

⊙ FAMILIARIZE YOURSELF WITH THE MOTORCYCLE

⚠ WARNING

Your riding skill and mechanical knowledge from the foundation for safe riding practices.

We suggest that you practice riding your motorcycle in a non-traffic situation until you are thoroughly familiar with your machine and its controls.

Remember practice makes perfect.

⊙ **KNOW YOUR LIMITS**

⚠ WARNING

Driving speed depends on the conditions on the ground, your own skills and the weather.
Ride within the boundaries of your own skill at all times. Knowing these limits and staying within them will help you to avoid accidents.

⊙ **BE EXTRA SAFETY CONSCIOUS ON BAD WEATHER DAYS**

⚠ WARNING

Riding on bad weather days, especially wet ones, requires extra caution.
Braking distances double on a rainy day. Stay off of the painted surface marks, manhole covers and greasy appearing areas as they can be especially slippery. Use extreme caution at railway crossings and on metal gratings and bridges.
Whenever you have a doubt about road condition, slow down!

ACCESSORY INSTALLATION AND PRECAUTION SAFETY TIPS

In addition to the special accessories provided by our company, for other motorcycle accessories sold on the market, our company cannot guarantee the quality of these accessories and whether it is suitable for your vehicle. Users are kindly requested to purchase carefully.

Installing inappropriate parts can damage your vehicle or cause it to run unsafe. Before you plan to use these accessories, be sure to consult the dealer where you purchased the vehicle. They can assist you in selecting the right quality accessories and guide you in the correct assembly on your motorcycle.

Take care when selecting and installing accessories for your motorcycle, and we have developed some general guidelines to help you when you need it.

⚠ WARNING

Improper accessories or modifications can make your motorcycle unsafe and can lead to an accident.
Never modify the motorcycle with improper or poorly installed accessories. Follow all instructions in this owner's manual regarding accessories and modifications.
Use genuine accessories or equivalent designed and tested for your motorcycle. Consult your dealer if you have any questions.

1. In case that additional weight or aerodynamic affecting accessories are installed, they should be mounted as low as possible, as close to the motorcycle and as near the center of gravity as is feasible. The mounting brackets and other attachment hardware should be carefully checked to ensure that it provides for a rigid, unmovable mount. Weak mounts can allow the shifting of the weight and create a dangerous, unstable condition.

2. Inspect for proper ground clearance and bank angle. An improperly mounted load could critically reduce these two safety factors. Also determine that the "load" does not interfere with the operation of the suspension, steering or other control operations.

3. Accessories fitted to the handle- bars or the front fork area can create serious stability problems. This extra weight will cause the motorcycle to be less responsive to your steering control. The weight may also cause oscillations in the front

end and lead to instability problems. Accessories added to the machine should be as light as possible and kept to a minimum.

4. The motorcycle may be affected by a lifting condition or by an instability in cross winds or when being passed or passing large vehicles. Improperly mounted or poorly designed accessories can result in an unsafe riding condition, therefore caution should be used when selecting and installing all accessories.

5. Certain accessories displace the rider from his or her normal riding position. This limits the freedom of movement of the rider and may limit his or her control ability.

6. Additional electrical accessories may damage the existing electrical system. Severe overloads may damage the wiring harness or create a dangerous situation due to the loss of electrical power during the operation of the motorcycle.

7. When 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 makes the motorcycle difficult to handle. The size of the “load” can also affect the aerodynamics and handling of the motorcycle.

Balance the load between the left and right side of the motorcycle and fasten it securely.

Poor qualitied or designed accessories can lead to unsafe riding, so choose and install accessories carefully. Using parts that have not been verified by our company does not guarantee the best performance of your vehicle.

MODIFICATION

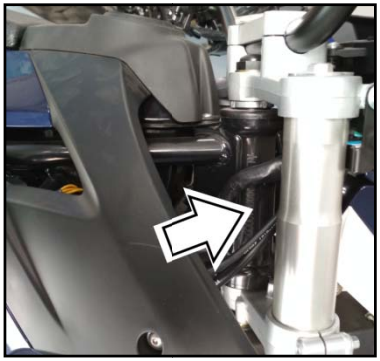
Modification of the motorcycle, or removal of original equipment may render the vehicle unsafe or illegal. Obey all applicable equipment regulations in your area.

TABLE OF CONTENTS

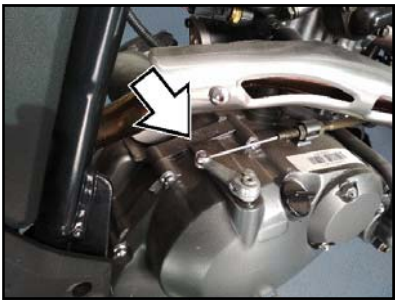
SERIAL NUMBER LOCATION

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 also known as the VIN or Vehicle Identification Number.



The frame serial number is stamped on the right side of the steering head tube.



The engine serial number is stamped on the right upside of the crankcase assembly.

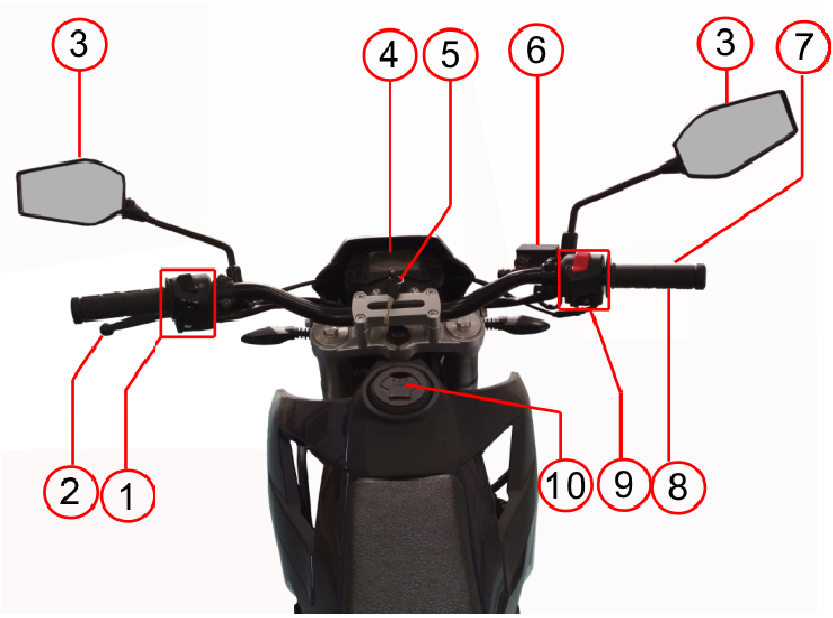
Metal nameplate is on the riser pipe of chassis, showing the main technical parameters, manufacturer and date of production of the motorcycle.

Please write down the numbers in the box provided below for your future reference.

Frame number :
Engine number :

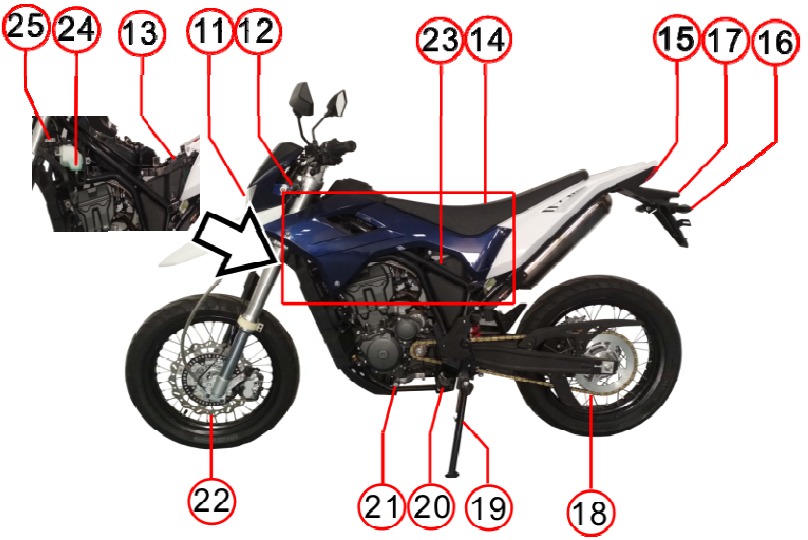
NAMES OF EACH PARTS

Handle bar instrument



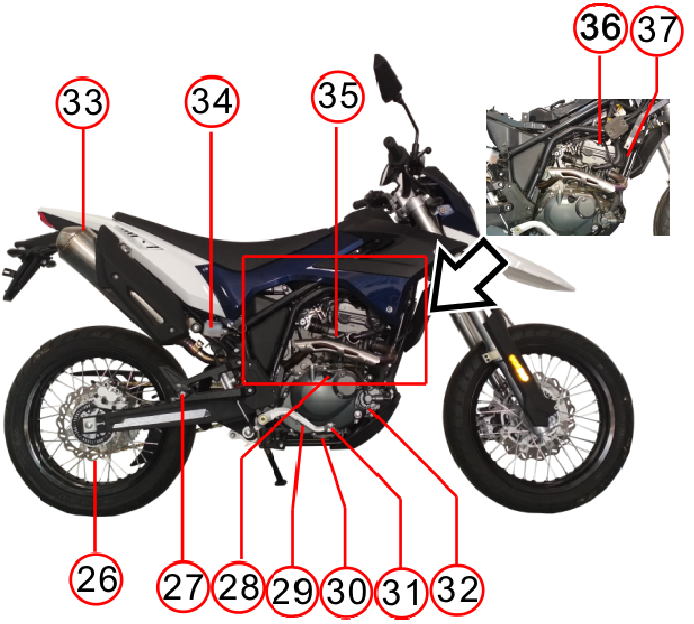
1	Left handle switches	6	Front brake fluid reservoir
2	Clutch lever	7	Front brake lever
3	Rear-view mirror	8	Throttle grip
4	Instrument panel	9	Right handle switches
5	Ignition switch	10	Fuel tank cap

Left side view



11	Head lamp & Position lamp	19	Side stand
12	Front turn signal lamp	20	Footrests
13	Battery	21	Gearshift lever
14	Seat	22	Front brake disk
15	Brake / Tail lamp	23	Air cleaner element
16	Rear turn signal lamp	24	Water tank
17	License Plate Light	25	Antifreeze filler plug
18	Drive chain		

Right side view



26	Rear brake disk	32	Antifreeze drain bolt
27	Passenger footrests	33	Muffler
28	Engine oil filler plug	34	Rear brake fluid reservoir
29	Engine oil level lens	35	Exhaust bolt
30	Engine oil drain bolt	36	Spark plug
31	Rear brake pedal	37	Ignition coil

CONTROLS

IGNITION SWITCH

The ignition switch is located on the dashboard below.

The ignition switch has three positions :

⊙"⊗"(OFF)POSITION

In this position, the ignition circuit is interrupted, a running engine stops, and a nonrunning engine will not start.
The key can be removed.

⚠ WARNING

Turning the ignition switch to the" ⊗ "position while the motorcycle is moving can be hazardous.

⊙"◯"(ON)POSITION

In this position, the ignition circuit is switched on and the engine can be started.
The key cannot be removed from the ignition switch in this position.

NOTE

Start the engine immediately after turning the key to the "◯" position, or the battery will lose power due to consumption by the lamp.

⊙"🔒"(LOCK)POSITION

When you leave the motorcycle, in order to prevent theft, please turn the steering handlebar to the left and insert and press the key on " ⊗ " position, and rotate to the "🔒" position.

Operating correctly, the handlebar cannot move, the engine and electrical system does not work at this time. In this position, the key can be set aside. Do not press down when unlock, press and hold the key to turn the key from"🔒" position to the " ◯ " position.

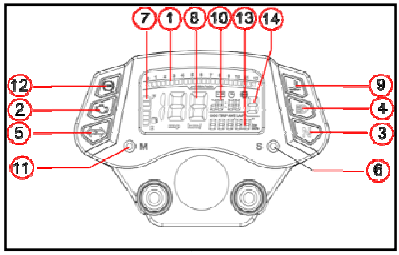
⚠ WARNING

Do not operate the steering lock during riding.
Moving the motorcycle while the steering is locked can be hazard- ous. You could lose your balance and fall, or you could drop the motorcycle.
Stop the motorcycle and place it on the side stand if equipped before locking the steering. Never attempt to move the motorcycle when the steering is locked.

IGNITION KEY

Comes equipped with the two ignition keys.
Keep the spare key in a safe place.

INSTRUMENT PANEL



⚠ WARNING

Operating the display while rid- ing can be hazardous. Removing a hand from the handlebars can reduce your ability to control the motor- cycle.
Always keep both hands on the handlebars while riding.

⚠ CAUTION

When the ignition switch is turned to the "◯" position, the meter lamp and display of the instrument panel will come on.

① TACHOMETER

It shows the engine rotational speed in number of revolutions per minute.

⚠ WARNING

Do not increase the speed to more than 9000r / min.

② ENGINE WARNING LAMP

The yellow engine warning lamp " " comes on and remains lit when the ignition switch is set to" " position with the engine stopped as a test of the engine system operation.

If the engine system fails, the engine failure warning light " " will flash the fault code cyclically in about 50 seconds.

As soon as the engine starts, the engine warning lamp " " should go out. If the engine system is faulty, the engine fault warning light is always on.

⚠ CAUTION

If the engine warning lamp does not come on when the ignition switch is set to " " position with the engine stopped or fail to not go out after the engine start, contact an authorized dealer.

⚠ CAUTION

Riding the motorcycle with the engine warning lamp lit after starting the engine can damage the engine and transmission.
Whenever the engine warning lamp is lit while riding, have your authorized dealer or a qualified mechanic inspect the engine system as soon as possible.

③ NEUTRAL INDICATOR LAMP

The green 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.

④ HIGH BEAM INDICATOR LAMP

The blue high beam indicator lamp will come on when the head lamp high beam is turned on.

⑤ TURN SIGNAL INDICATOR LAMP

When the turn signals are being operated either to the right or to the left, the green in dicator will flash at the same time.

⑥ RESET SWITCH

Short press this button to display the battery voltage 2S and return automatically. Long press this button to enter the clock, metric and inch adjustment mode.

⑦ FUEL METER

Fuel meter is LCD (Liquid Crystal Display) type, it indi-cates the remaining fuel amount in the fuel tank.

The fuel meter displays all 6 seg- ments when the fuel tank is full.

The “F” (Full) mark indicates the fuel tank is full.

The “E” (Empty) mark indicates the fuel tank is empty or nearly so.

When the remaining fuel is approximately1.5L, the indicator“E”of the last column and fuel warning lamp“ ” blink.

Fill the fuel tank before the indica tor “E” of the last column and fuel warning lamp “ ”blink.

The fuel tank capacity is 6.3 L.

⚠ CAUTION

Before the indicator “E” of the last column and fuel warning lamp “ ” blink, you should add fuel to the fuel tank at the first opportunity to avoid running out of fuel.

⚠ CAUTION

For checking the fuel meter, hold the motorcycle vertically and the ignition switch “ ”.

⑧SPEEDOMETER

The speedometer indicates the road speed in kilometers or miles per hour.

⚠ WARNING

Obey the speed limit and traffic regulation at all times.

⑨WATER TEMP GAUGE

The engine of this model uses a water cooling system.

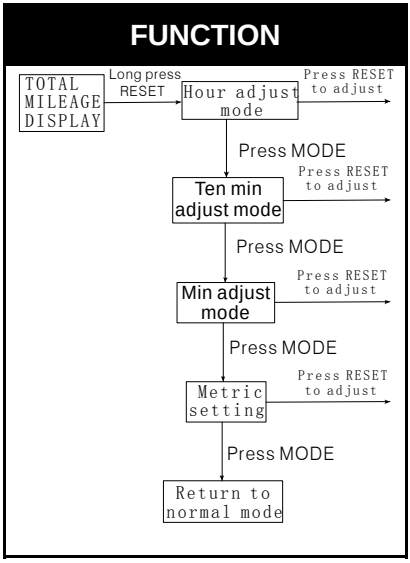
When the water temperature is too high, the “ ” water temperature symbol will stay on.

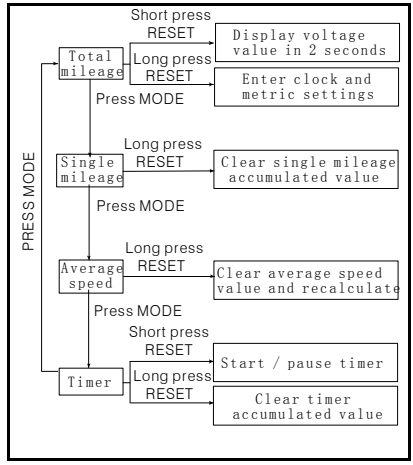
⑩ CLOCK

The clock indicates 24-hour mode.

⑪MODE SWITCH

Use this switch to adjust the following :





⑫ ABS WARNING LAMP

ABS warning lamp will light up after the ignition switch is set to “ON” position and the vehicle has traveled until a speed of 5 km/h (3 mph) for a self-diagnosis test and will go out after the vehicle has traveled over a speed of 5 km/h (3 mph).

If ABS system fails, ABS warning lamp lights up and remains lit after the vehicle has traveled over a speed of 5 km/h (3 mph).

⚠ CAUTION

If ABS warning lamp does not light up after the ignition switch is set to "ON" position and the vehicle has traveled until a speed of 5 km/h (3 mph) or fail to go out after the vehicle has traveled over a speed of 5 km/h (3 mph), contact an authorized dealer.

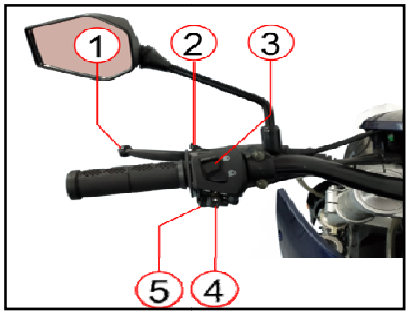
⑬ ODOMETER

The odometer indicates the total mileage, single mileage, average speed, and timer of the vehicle, and they can be switched between them.

⑭ GEAR DISPLAY

The digital display shows the gear position.

LEFT HANDLE



① CLUTCH LEVER

The clutch lever is used for disengaging the drive to the rear wheel when starting the engine or shifting the transmission gear.

Squeezing the lever disengages the clutch.

⚠ CAUTION

Use the clutch correctly. Otherwise, the clutch may be worn quickly.

② "PASS" SWITCH

Press the "PASS" switch to oper ate the head lamp high beam for using when pass.

With the ignition switch in the "ON" position, push the "PASS"

switch to operate the head lamp high beam.

⚠ CAUTION

This switch does not work when the dimmer switch is set to " ≡D " position.

③DIMMER SWITCH

Change the direction of the head lamp light.

- "≡D": The head lamp high beam comes on. The high beam indicator lamp also comes on.
- "≡D": The head lamp low beam comes on.

⚠ WARNING

Set the dimmer switch "≡D " when other vehicle is running in front or against.

④TURN SIGNAL SWITCH

Using when left, right turn or change direction.

" ⇦ " Position : Flash the left turn signal lamp.

" ⇨ " Position : Flash the right turn signal lamp.

" △ " (OFF) : Pushing the "△" position will stop the turn signal lamp to operate.

⚠ CAUTION

Always use the turn signals when you intend to change lanes or make a turn. Always be sure to turn the turn signal switch to the "⊗" position after completing the turn or lane change.

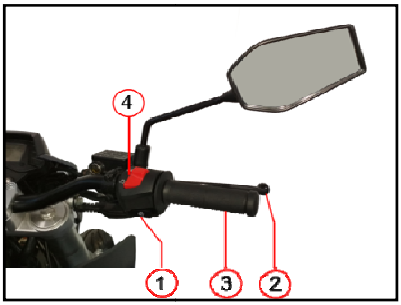
⑤HORN SWITCH " 📯 "

Press the switch to operate the horn.

⚠ CAUTION

Use the horn switch only in case of needing.

RIGHT HANDLE



① STARTER SWITCH "⚡ "

Use this switch to operate the starting motor.

With the ignition switch in the "" position, the engine stop switch in the " " position, and the transmission is in neutral, squeeze the clutch lever and the side stand up and push the starter switch to start the engine.

When the engine is stopped and the ignition switch is set to the "" position, the instrument light is on. After the instrument is displayed normally, press the start button to start the engine.

⚠ CAUTION

- **Release the starter switch immediately after the motorcycle has started.**
- **Do not engage the starting motor for more than five seconds at a time as it may over- heat the wiring harness and starting motor.**
  If the engine does not start after several attempts, check the fuel supply and ignition system.

⚠ CAUTION

Do not start the engine before the meter displays normally, otherwise it will cause difficulty in starting the engine.
If the engine does not start or runs abnormally, turn the ignition switch to the "" position. After 8 seconds, turn on the ignition switch with the meter displaying normally, and then try to restart.
This allows the ISC (Idling Speed Control) solenoid to be initialized.

⚠ CAUTION

The headlights, position lamp, meter lamp, tail lamp and license plate lamp on this motorcycle always comes on when the ignition switch is turned to the "◯" position.

⚠ WARNING

The motorcycle is equipped with the side stand ignition interlock sys- tem.
If the transmission is in neutral or the side stand up, you can only start the engine by squeezing in the clutch lever.
This side stand ignition interlock system prevents the motorcycle from being started with the side stand down.
Make sure that the side stand ignition interlock system is working properly before riding.

② FRONT BRAKE LEVER

The front brake is applied by squeezing the brake lever gently toward the throttle grip.

The front brake is a powerful disk brake system. Do not brake excessively so as to cause the front wheel to lock up or skid. The brake lamp will come on when the lever is squeezed.

⚠ WARNING

Apply the brake lightly and with great care on slippery surfaces to avoid skidding.

③ THROTTLE GRIP

Engine speed is controlled by position of the throttle grip. Turn it toward you to increase engine speed. Turn it away from you to decrease the engine speed.

⚠ WARNING

Avoid turning the throttle grip during braking.

④ ENGINE STOP SWITCH

"⊗" Position: Use in emergency or when motorcycle has fallen over to stop engine quickly.

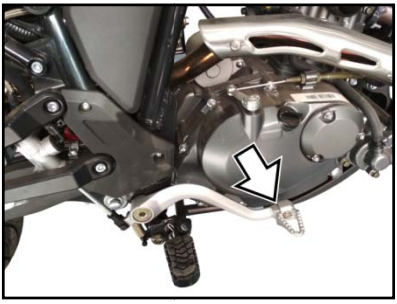
The ignition circuit is off. The engine cannot start or run.

"○" Position : The ignition circuit is on and the engine can start and run. Keep in this position for normal engine operation.

⚠ WARNING

Do not operate the engine stop switch into the "⊗" position while driving at one's pleasure.

REAR BRAKE PEDAL



Depressing the rear brake pedal will apply the rear brake.

The brake lamp will be illuminated when the rear brake is operated.

⚠ WARNING

Apply the brake lightly and with great care on slippery surfaces to avoid skidding.

ABS (for ABS models)

ABS (Anti-lock Brake System) features a dual electronic control system, which acts on the front and rear brakes independently.

Operate the brakes with ABS as you would conventional brakes.

If the ABS is activated, a pulsating sensation may be felt at the brake lever or brake pedal.

In this situation, continue to apply the brakes and let the ABS work ; do not "pump" the brakes as this will reduce braking effectiveness.

⚠ WARNING

Always keep a sufficient distance from the vehicle ahead to match the riding speed even with ABS.
ABS performs best with long braking distances.
On certain surfaces, such as rough or gravel roads, the braking distance may be longer with the ABS than without.

ABS is monitored by an ECU, which will revert the system to conventional braking if a malfunction occurs.

⚠ CAUTION

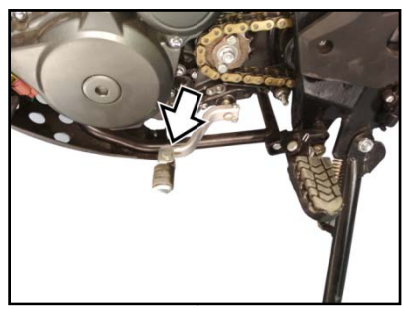
ABS performs a self-diagnosis test each time the vehicle first starts off after the key is turned to "ON" and the vehicle has traveled until a speed of 5 km/h (3 mph) or higher.

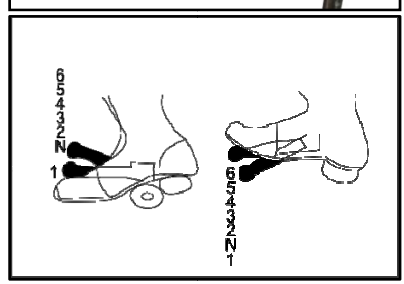
During this test, a "clicking" noise can be heard from inside the right decoration cover, and if the brake lever or brake pedal is even slightly applied, a vibration can be felt at the lever and pedal, but these do not indicate a malfunction.

N O T E

Keep any type of magnets (including magnetic pick-up tools, magnetic screwdrivers, etc.) away from the front and rear wheel's, tone wheels, otherwise the front and rear wheel's tone wheel may become magnetized, resulting in improper performance of ABS system.

GEARSHIFT LEVER





The motorcycle is provided with a 6-speed gear transmission. which operates as shown.

To shift properly, squeeze the clutch lever and close the throttle at the same time you operate the gearshift lever.

Whenever a gear is selected, the gearshift lever will return to its nor- mal position ready to select the next gear.

Lift the gearshift lever to upshift and depress the lever to downshift. Neutral is located between first and 2nd gear.

When neutral is desired, depress or lift the lever halfway between first and 2nd gear.

It is not possible to upshift or downshift more than one gear at a time.

When shifting from first to 2nd gear or 2nd gear to low, neutral will be automatically skipped.

Reduce the motorcycle speed before down-shifting.

When down-shifting, the engine speed should be increased before the clutch is engaged.

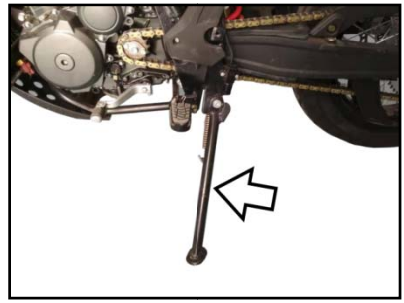
This will prevent unnecessary wear on the drive train components and the rear tire.

⚠ CAUTION

When the transmission is in neutral, the green indicator lamp on the instrument panel will be lit.

However, even though the light is lit laminated, cautiously release the clutch lever slowly to determine whether the transmission is positively in neutral.

STAND



The motorcycle is equipped with the side stand ignition interlock system.

If the transmission is in neutral or the side stand up, you can only start the engine by squeezing the clutch lever.

This side stand ignition interlock system prevents the motorcycle

from being started with the side stand down.

No.	Neutral switch	Clutch lever	Side stand	Engine start
1	●	●	△	Possible
2	△	●	●	Possible
3	●	△	△	Impossible
4	△	●	△	Impossible
5	△	△	●	Impossible

NOTE	
●	**On or Up**
△	**Off or Down**

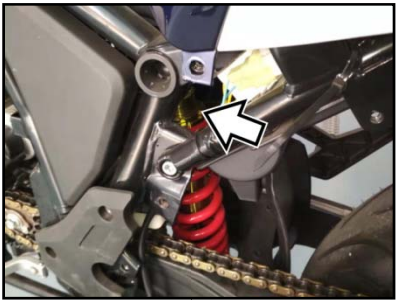
⚠ WARNING

Make sure that the side stand ignition interlock system is working properly before riding.

⚠ CAUTION

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

REAR SHOCK ABSORBER



The rear shock-absorbing buffer spring can be adjusted according to various factors such as loading conditions, driving style and road environment.

To adjust the spring pre-load, turn the adjuster clockwise or count- er-clockwise to the desired position with the pin spanner.

FUEL AND OIL AND ANTIFREEZE RECOMMENDATION

FUEL

Use unleaded gasoline with an octane rating of 92 or higher.

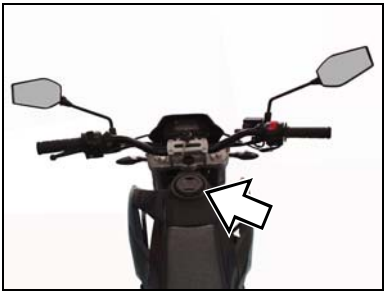
Unleaded gasoline can extend spark plug life and exhaust components life.

CAUTION

Spilling gasoline can damage the painted surfaces.
Be careful not to spill any fuel when filling the fuel tank.
Wipe spilled gasoline up immediately.

WARNING

- **When refueling, always shut the engine off and turn the ignition key to the "⊗" position.**
  Never refuel near the flames, sparks and heat sources.
- **Do not overfill the fuel tank.**
  Do not fill gasoline above the fuel tank entrance lower end.



To open the fuel tank cap, insert the ignition key into the cap lock and turn it Counterclockwise. With the key inserted, pull back the fuel tank cap.

When installing the fuel tank cap, put the fuel tank cap and the key into the fuel inlet and align with the card slot, twist it clockwise, and then pull out the key.

The key must be in the cap lock before installing the cap.

WARNING

Do not overfill the fuel tank.
Stop adding fuel when the fuel level reaches the bottom of the filler neck. If you fill the tank beyond this level, fuel may overflow when it expands due to engine heat or heating by the sun.

⚠ WARNING

Gasoline is extremely flammable and toxic.

Always observe the following precautions when refueling your motorcycle.

- **Never permit motorcycle refueling by anyone other than an adult.**
- **Refuel in a well ventilated area.**
- **Make sure the engine is " ⊗ "and avoid spilling fuel on a hot engine.**
- **Do not smoke, and make sure there are no open flames or sparks in the area.**
- **Avoid prolonged contact with skin and breathing of gasoline vapors.**
- **Keep children and pets away during refueling.**

ENGINE OIL

Oil quality is a major contributor to your engine's performance and life. Always select good quality engine oil.

⊙ ENGINE OIL SPECIFICATION

Classification system	Grade	Remarks
API	SN	
JASO	MA2	
SAE	10W-40	

Using a premium quality four stroke motor oil will increase the service life of your motorcycle.

⚠ WARNING

- **Don't mix the unrecommended oil.**
  It could damage the engine.
- **When refilling the oil, don't allow the dust to get inside.**
- **Wipe the spilled oil up immediately.**
- **Don't put the patch on the filler cap.**
- **It could disturb the oil to be provided and damage the engine.**

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 import- ant maintenances to be performed.

⊙ ENGINE OIL LEVEL CHECK

Follow the procedure below to inspect the engine oil level.

1. Start the engine and run it for a few minutes.
2. Stop the engine and wait three minutes.

⚠ WARNING

The engine and the components of the exhaust system become very hot and remain hot for some time after the engine has been stopped. Before handling these components, wear insulating gloves or wait until the engine and the exhaust system have cooled down.

3. Hold the motorcycle vertically using the stand.

NOTE

Place the motorcycle on firm and flat ground.

4. Inspect the engine oil level through the engine oil level lens on the right side on the engine.

NOTE

Engine oil expands and oil level increases when the engine oil is hot.

Check and adjust engine oil level when the engine oil is not hot.

⚠ CAUTION

Be sure to use the engine oil specified in the FUEL AND OIL RECOMMENDATION section.

⚠ CAUTION

Operating the motorcycle with an incorrect amount of engine oil can damage your motorcycle.
Too little or too much engine oil can damage your engine.
Place the motorcycle on level ground.
Check the engine oil level with the engine oil level lens before each use of the motorcycle.

⚠ CAUTION

Never operate the motorcycle if the engine oil level is below the "Lower line mark (L)" in the engine oil level lens. Never fill the engine oil above the "Upper line mark (F)". Engine oil level being most suitable about 1 mm under the "Upper line mark (F)" of the engine oil level lens. In case of the engine oil pouring excessively, the engine output being made insufficient.
Be careful not to pour the engine oil excessively.

⊙ ENGINE OIL AND FILTER CHANGE

⚠ CAUTION

More frequent servicing may be performed on motorcycles that are used under severe conditions, inspect
① Quantity of Engine oil.
② Pollution degree of Engine oil before riding the motorcycle an d then supplement and replace at any time to prevent damage of the engine.

Change the engine oil, after first running 1,000 km and every running 4,000 km.

The engine oil should always be changed when the engine is hot so that the engine oil will be drained thoroughly from the engine.

The procedure is as follows.

⚠ CAUTION

In case of the engine oil being over filled, the engine output will be reduced.
Be careful not to over fill the engine oil.

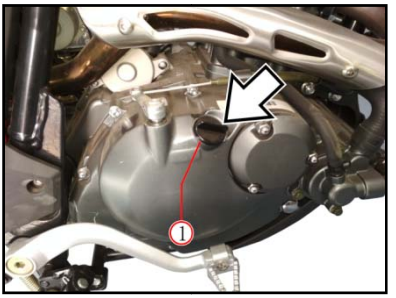
1. Hold the motorcycle vertically using the center stand.

NOTE

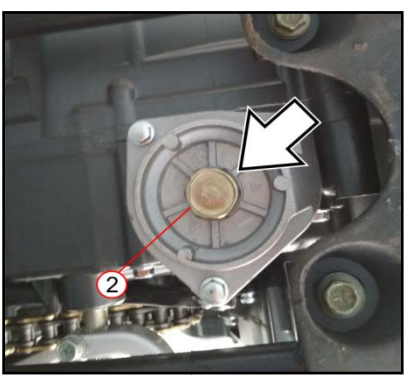
Place the motorcycle on firm and flat ground.

2.Place a drain pan under the engine.

3.Remove the engine oil filler plug①.



4.Drain the engine oil by removing the engine oil drain plug ② located on the bottom of the engine.



⚠ WARNING

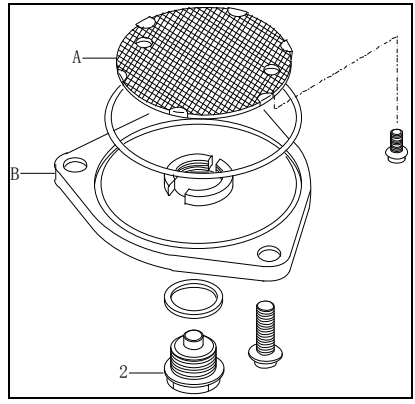
New and used oil can be hazardous.
Children and pets may be harmed by swallowing new or used oil.
Continuous contact with used engine oil has been found to cause skin cancer in laboratory animals. Brief contact with used oil may irritate skin.
Keep new and used oil and used oil filters away from children and pets. To minimize your exposure to used oil, wear a long-sleeve shirt and moistureproof gloves (such as dishwashing gloves) when changing oil. If oil contacts your skin, wash thoroughly with soap and water. Launder any clothing or rags if wet with oil. Recycle or properly dispose of used oil and filters.

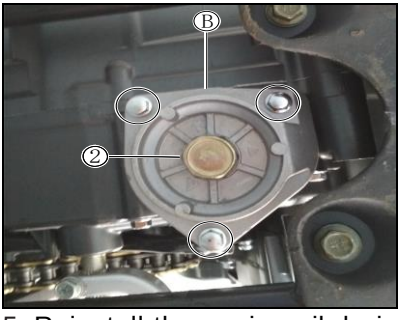
⚠ WARNING

- **The engine oil temperature may be high enough to burn you when the drain plug is loosened. Wait until the drain plug is cool enough to touch with bare hands before draining oil.**
- **Do not touch the hot muffler, or the hot muffler can burn you.**

⚠ CAUTION

Remove, inspect and clean the oil strainer A by removing the engine oil strainer cap B when replacing the Engine oil (specially, when first replacing).





5. Reinstall the engine oil drain plug ② and tighten it securely.

At this time, insert the gasket necessarily.

6. Pour a fresh engine oil through the engine oil filler hole.

Approximately 1,000 ml of the engine oil will be required.

⚠ CAUTION

In case of the engine oil being over filled, the engine output will be reduced.
Be careful not to over fill the engine oil.

ENGINE OIL CAPACITY	
Oil change	1,000ml
Oil and filter change	1,000ml
Engine overhaul	1,300ml

⚠ CAUTION

Failure to use the correct oil can damage your motorcycle.
Engine damage may occur if you use the engine oil that does not meet company specifications.
Be sure to use the engine oil specified in the FUEL AND OIL RECOMMENDATION section.

7. Install the engine oil filler plug①.

8. Start the engine and allow it idle for a few minutes. Check to see that no the engine oil is leaking from the engine oil filter and engine oil drain plug ②.

9. Check the engine oil level according to Engine Oil Level Check procedure.

⚠ CAUTION

Engine oil leaks from around drain plug indicate incorrect installation or the "O"-ring / gasket damage.

If you find any leaks or are not sure drain plug has been properly installed, have the motorcycle inspected by your dealer or qualified mechanic.

ANTIFREEZE

⚠ WARNING

This motorcycle engine is water cooling system. During motorcycle running, the antifreeze is high temperature and high pressure in the cooling system. So, it is strictly forbidden opening the radiator cap in this state, avoiding burn.
The antifreeze must be added in a timely manner and sufficient amount to prevent damaging the engine.
The antifreeze must be added after the engine is stopped and cooled.

⚠ WARNING

Antifreeze belongs to chemicals, which include toxic substances. If the antifreeze gets into your eyes or skin, wash with plenty of water immediately.

WATER TANK

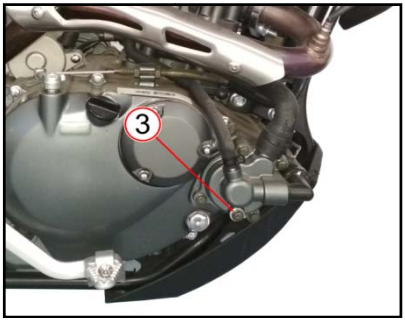
The right side of the front end of the vehicle fuel tank is provided with a white makeup water tank ① and a radiator cover ②.

The makeup water tank ① is provided with a water level scale line and the antifreeze level in the water tank shall be between the upper and lower scale lines.
When the water level is lower than the lower limit, open the radiator cover ②, add special antifreeze to the water tank and do not add tap water or other liquid at will.

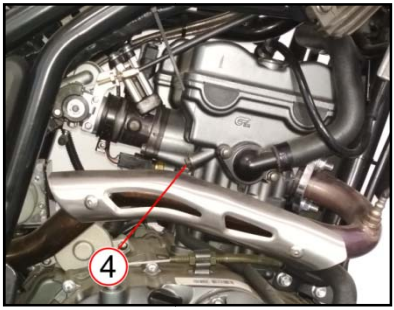
Antifreeze replacement

Carry out this work on about 10000 km running or when using the motorcycle for a year.
The operation is following:

1.Please stand the motorcycle on a level ground with stand, take a container and put under the draining bolt③, then remove the bolt③, so antifreeze is outflow.



2.Remove the exhaust bolt ④.



⚠ CAUTION

For all antifreeze fully drained off from the system, remove the exhaust bolt ④, which need to use high-pressure air to blow the exhaust bolt connection on the left side of the engine cylinder head.
There is a seal gasket on the draining bolt ③. If the seal gasket is damaged, it must be replaced.

When drain completed, assemble and tighten the drain bolt ③.
3.Open the antifreeze radiator cover ②.

Slowly add 0.7L antifreeze into radiator cover using measuring glass, at same time observe the exhaust bolt ④ connection on the engine. When antifreeze outflow from the connection on the engine, plug in the exhaust bolt ④, continue to add liquid until all of 0.7L antifreeze is into the radiator.

4.Tighten the radiator cover, start the engine, repeated acceleration and deceleration of the engine in place until the fan of cooling system turned on (or the needle of water temperature meter point to above the middle of the scale), then turn off the engine.

5.Until engine cool down and water temperature is at 80 degrees (middle scale line) or less, observe the antifreeze from the water tank. If the water level is low, add antifreeze until to the middle of upper and lower scale line. Then tighten the radiator cover.

⚠ CAUTION

Antifreeze level shall not exceed the upper scale line, nor below the lower scale line. Antifreeze liquid level should be the water tank between two scale marks, if necessary, add or remove.

Antifreeze selection:

1.Antifreeze must not be mixed using.
2.The freezing point of antifreeze is normally lower than the local minimum ambient temperature 5-10 degrees.
3.The boiling point of antifreeze is more than 107 ° C.

Common fault of cooling system:

Check the makeup water tank, radiator, fan, water pump, rubber water pipe and antifreeze. If antifreeze boiling occurs during vehicle traveling, please find the reason:

1.The boiling point of anti-freezing solution is low and unqualified. Replace anti-freezing solution;
2.The antifreeze is too little. Please add antifreeze to the specified liquid level;
3.There is accumulated gas in cooling system. Please loosen the exhaust bolts on the engine for venting.

4.The cooling system is blocked. The radiator and the rubber water pipe should be checked, and the blockage should be eliminated.
5.The engine water pump is damaged. Please repair or replace it.
6.The fan does not work. It may be that the fan is damaged or the line connection is not good. Please replace the damaged fan or troubleshoot the line connection problem.
7.The radiator is damaged. Please repair or replace it.

RIDING TIPS

STARTING THE ENGINE

Before attempting to start the engine make sure :

1. Inspect every day once before riding the motorcycle.
2. The transmission is in neutral.
3. The ignition switch is in the "◯" position.
4. The engine stop switch is in the "◯" position.
5. Moving the side stand to the fully upper position.
6. Squeeze the clutch lever.

⚠ WARNING

Running the engine indoors or in a garage can be hazardous.

Exhaust gas contains carbon monoxide, a gas that is colorless and odorless and can cause death or severe injury.

Only run the engine outdoors where there is a fresh air.

⚠ CAUTION

Running the engine too long without riding may cause the engine to overheat.

Overheating can result in dam- age to internal engine components and discoloration of exhaust pipes.

Shut the engine off if you can not begin your ride promptly.

⚠ WARNING

The motorcycle are equipped with the side stand ignition interlock sys- tem.

If the gearbox is in neutral or on its side, the engine can be started, but you cannot ride the motorcycle in gear.

This side stand ignition interlock system prevents the motorcycle from being started with the side stand down.

Make sure that the side stand ignition interlock system is working properly before riding.

⚠ CAUTION

- **Release the starter switch immediately after the motorcycle has started.**
- **Avoid pressing the starter switch when the engine is running, or the starting motor damage.**
- **Do not engage the starting motor for more than five seconds at a time as it may over- heat the wiring harness and starting motor.**

If the engine does not start after several attempts, check the fuel supply and ignition system.

⚠ CAUTION

The head lamp, position lamp, meter lamp, tail lamp and license plate lamp on this motorcycle always comes on when the ignition switch is turned to the " ◯ " position.

After the meter starts to display normally, press the start button to start the engine.

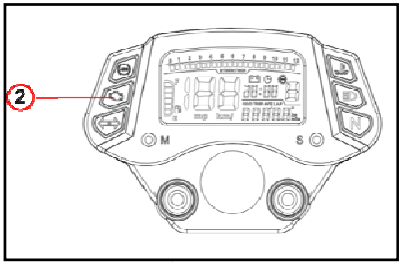
The engine warning lamp "" ① comes on when the ignition switch is set to "◯" position with the engine stopped as a test of engine system operation.

As soon as the engine starts, this lamp should go out.

If the engine system fails, the engine warning lamp "" ① comes on and remains on.

⚠ CAUTION

Do not start the engine before the meter displays normally, otherwise it will cause difficulty in starting the engine.
If the engine does not start or runs badly, turn the ignition switch to the "" position. After 8 seconds, turn the ignition switch to the "◯", then attempt to restart.
This allows the ISC (Idling Speed Control) solenoid to be initialized.



⚠ CAUTION

If the engine warning lamp ① does not come on when the ignition switch is set to "◯" position with the engine stopped or fail to go out after the engine start, contact an authorized dealer.

⚠ CAUTION

The engine warning lamp ① comes on and remains on when the ignition switch is set to "◯" position with the engine stopped as a test of engine system operation.

As soon as the engine starts, the engine warning lamp ① should go out.

If the engine system fails, the engine warning lamp ① comes on and remains on.

Riding the motorcycle with the engine warning lamp ① lit after starting the engine can damage the engine and transmission.

Whenever the engine warning lamp ① is lit while riding the motorcycle, have your authorized dealer or a qualified mechanic inspect the engine system as soon as possible.

STARTING OFF

⚠ WARNING

Sudden side winds, which can occur when being passed by large vehicles, at tunnel exits or in hilly areas, can upset your control.
Reduce your speed and be alert to side winds.

⚠ WARNING

- **Riding this motorcycles at excessive speed increases your chances of losing control of the motorcycle. This may result in an accident. Always ride within the limits of your skills, your motorcycle, and the riding conditions.**
- **Removing your hands from the handlebars or feet from the footrests during operation can be hazardous. If you remove even one hand or foot from the motorcycle, you can reduce your ability to control the motorcycle.**
- **Always keep both hands on the handlebars and both feet on the footrests of your motorcycle during operation.**

Squeeze the clutch lever and pause momentarily. Engage first gear by depressing the gearshift lever downward.

Turn the throttle grip toward you and at the same time release the clutch lever gently and smoothly. As the clutch engages, the motorcycle will start moving forward.

To shift to the next higher gear, accelerate gently, then close the throttle and squeeze the clutch lever simultaneously. Lift the gear-shift lever upward to select the next gear and release the clutch lever and open the throttle again.

Select the gears in this manner until sixth gear is reached.

⚠ WARNING

Do not turn the ignition switch to its "⊗" or the steering lock to its lock "🔒" position or the engine stop switch to its "⊗" position while riding the motorcycle.

⚠ WARNING

Opening the throttle suddenly can be hazardous.
The front wheel can lift off the ground and cause loss of control of the motorcycle.
Always open the throttle gradually when you accelerate.

⚠ WARNING

Downshifting while the motorcycle is leaned over in a corner may cause rear wheel skid and loss of control.
Reduce your speed and downshift before entering corner.

USING THE TRANSMISSION

The transmission is provided to keep the engine operating smoothly in its normal operating speed range. The gear ratios have been carefully chosen to meet the characteristics of the engine. The rider should always select the most suit- able gear for the prevailing conditions.

⚠ WARNING

Downshifting when the engine speed is too high will have the following adverse consequences;
Cause the rear wheel to skid and lose traction due to increased engine braking, resulting in an accident; or force the engine to overdrive in the lower gear, resulting in engine damage.

⚠ WARNING

Shifting incorrectly can be hazardous.
Engine and drive chain damage can occur if you do not shift correctly.
Slow down before downshifting and always release the throttle every time you shift gears.

RIDING ON HILLS

When climbing steep hills, the motorcycle may begin to slow down and show lack of power. At this point, you should shift to a lower gear so that the engine will again be operating in its normal power range. Shift gear rapidly to prevent the motorcycle from losing momentum.

When riding down a steep hill, the engine may be used for braking by shifting to a lower gear.

Be careful, however, not to allow the engine to overdrive.

WARNING

Operating this motorcycle on steep hills can be hazardous. Never operate this motorcycle on steep hills.

STOPPING AND PARKING

1. Turn the throttle grip away from you to close the throttle completely.
2. Apply the front and rear brakes evenly at the same time.

NOTE

When ABS is in effect, you can still achieve maximum braking efficiency even on poorly held surfaces such as gravel, wet or smooth surfaces. (Only for vehicles with ABS anti-lock system)

3. Downshift through the gears as road speed decreases.
4. Select neutral with the clutch lever squeezed towards the grip (disengaged position) just before the motorcycle stops. Neutral position can be confirmed by observing the neutral indicator lamp.

WARNING

Inexperienced riders tend to underutilize the front brake. This can cause excessive stopping distance and lead to a collision. Using only the front or rear brake can cause skidding and loss of control.

Apply both brakes evenly and at the same time.

WARNING

Hard braking while turning may cause wheel skid and loss of control.
Brake before you begin to turn.

WARNING

Hard braking on wet, loose, rough, or other slippery surfaces can cause wheel skid and loss of control.
Brake lightly and carefully on slippery or irregular surfaces.

WARNING

Following another vehicle too closely can lead to a collision.
As vehicle speeds increase, stopping distance increases progressively.
Be sure you have a safe stopping distance between you and the vehicle in front of you.

1. Park the motorcycle on a firm, flat surface where it will not fall over.

WARNING

A hot muffler can burn you. The muffler will be hot enough to burn you for some time after stopping the engine.
Park the motorcycle where pedestrians or children are not likely to touch the muffler.

2. Turn the handlebar all the way to the left.
3. Turn the ignition key to the "🔒" position.
4. Remove the ignition key.

BREAK-IN

This section explains how important proper break-in is to achieve maximum life and performance from your new motorcycle.

The following guidelines explain proper break-in procedures.

★MAXIMUM THROTTLE OPENING RECOMMENDATIONS

The table below shows the maximum throttle opening recommendation during the break-in period.

Initial 800 km (500 miles)	Less than 1/2 throttle
Up to 1,600 km (1,000 miles)	Less than 3/4 throttle

★AVOID CONSTANT LOW SPEED

Operating the engine at constant low speed (light load) can cause parts to glaze and not seat in. Allow the engine to accelerate freely through the gears, without exceeding the recommended maximum limits. Do not, however, use full throttle for the first 1,600 km (1,000 miles).

★VARY THE ENGINE SPEED

The engine speed should be varied and not held at a constant speed.

This allows the parts to be “loaded” with pressure and then unloaded, allowing the parts to cool.

This aids the mating process of the parts. It is essential that some stress be placed on the engine components during break-in to ensure this mating process.

Do not, though, apply excessive load on the engine.

★ALLOW THE ENGINE OIL TO CIRCULATE BEFORE RIDING

Allow sufficient idling time after warm or cold engine start up before applying load or revving the engine. This allows time for the lubricating oil to reach all critical engine components.

★BREAKING IN THE NEW TIRES

New tires need proper break-in to assure maximum performance, just as the engine does.

Wear in the tread surface by gradually increasing your cornering lean angles over the first 160 km (100 miles) before attempting maximum performance. Avoid hard acceleration, hard cornering, and hard braking for the first 160 km (100 miles).

⚠ WARNING

Failure to perform break-in of the tires could cause tire slip and loss of control.
Use extra care when riding on new tire. Perform proper break- in of the tire as described in this section and avoid hard acceleration, hard cornering, and hard braking for the first 160 km (100 miles).

★OBSERVE YOUR FIRST, AND MOST IMPORTANT 1,000 km SERVICE

The 1,000 km (600 miles) service is the most important service your motorcycle will receive.

During break-in procedures, all of the engine components will have worn in and all of the other parts will have seated in.

All adjustments will be restored, all fasteners will be tightened, and the dirty engine oil will be replaced.

Timely performance of the 1,000 km (600 miles) service will ensure optimum service life and performance from the engine.

⚠ CAUTION

Service should may be performed before 1,000 km (600 miles) on motorcycle that are used under severe conditions.

⚠ CAUTION

The 1,000 km (600 miles) service should be performed as outlined in the INSPECTION AND MAINTENANCE section of this Owner's Manual.
Pay particular attention to the 「CAUTION」 and 「WARNING」 in that section.

INSPECTION BEFORE RIDING

⚠ WARNING

Failure to inspect the motorcycle before operating it can be hazardous.

Failure to perform proper maintenance can also be hazardous.

Failure to inspect and maintain your motorcycle increases the chances of an accident or equipment damage.

Always inspect your motorcycle each time you use it to make sure it is in safe operating condition. Refer to the INSPECTION AND MAINTENANCE section in this owner's manual.

WARNING

Operating this motorcycle with improper tires, or with improper or uneven tire pressure can be hazardous.

If you use improper tires or improper or uneven tire pressure, you may lose control of the motorcycle.
This will increase your risk of an accident.
Always use the size and type tires specified in this owner's manual.
Always maintain proper tire pressure as described in the INSPECTION AND MAINTENANCE section.

WARNING

Operating this motorcycle with improper modifications can be hazardous.
Improper installation of accessories or modification of this motorcycle may cause changes in handling. In some situations, this could lead to an accident.
Never modify this motorcycle through improper installation or use of accessories.

WARNING

Overloading this motorcycle or carrying or towing cargo improperly can be hazardous.

Overloading or improper towing could cause changes in motorcycle handling which could lead to an accident.

Never exceed the stated load capacity for this motorcycle.

Check the condition of the motorcycle to help make sure that you do not have mechanical problems, or you might get stranded somewhere when you ride. Before riding the motorcycle, be sure to check the following items. Be sure your motor- cycle is in good condition for the personal safety of the rider and protection of the motorcycle.

⚠ CAUTION

- **The engine and muffler are too hot right after engine stopped, please be careful not to be burned.**
- **Don't inspect the engine indoor where there is little or no ventilation available. The exhaust gas is extremely poisonous.**

⚠ WARNING

Checking maintenance items when the engine is running can be hazardous.

You could be severely injured if your hands or clothing gets caught in moving engine parts.

Shut the engine off when performing maintenance checks, except when checking the lamp, engine stop switch and throttle.

WHAT TO CHECK	CHECK FOR :
Steering	● Smoothness ● No restriction of movement ● No play or looseness
Throttle	● Correct play in the throttle cable ● Smooth operation and positive return of the throttle grip to the closed position
Clutch	● Correct lever play ● Smooth and progressive action
Brakes	● Proper operation ● Fluid level in the reservoir to be above “LOWER” line ● Correct pedal and lever play ● No “sponginess” ● No fluid leakage ● Brake pads not to be worn down to the limit line
Suspension	● Smooth movement
Fuel	● Enough fuel for the planned distance of operation ● Fuel hoses connected securely ● No damage to fuel tank or cap ● Tank cap closed securely

WHAT TO CHECK	CHECK FOR :
Gerashift lever	● No damage lever ● Smooth operation
Drive chain	● Correct tensionor slack ● Adequatelubrication ● No excessive wear or damage
Tires	● Correct pressure ● Adequatetreaddepth ● No cracks or cuts
Engine oil	● Correct level and pollution degree of engine oil ● Noengineoilleakage
Lamp	● Operation of all lamps and indicators
Horn	● Correct function
Rear-view mirror & Reflector	● No dust or damage
Engine stop switch	● Correct function
Side stand/ Ignition interlock switch	● Proper operation
General condition	● Boltsandnutsare tight ● No rattle from any parts of motorcycle with the engine running ● No visible evidence of damage

PERIODIC MAINTENANCE

The chart indicates the intervals between periodic service in kilometers.

At the end of each interval, be sure to inspect, check, lubricate and ser- vice as instructed.

If your motorcycle is used under high stress conditions such as continuous full throttle operation, or is operated in a dusty climate, certain services should be performed more often to ensure reliability of the machine as explained in the maintenance section.

Your dealer can provide you with further guide lines.

Steering components, suspensions and require very special and careful servicing. For maximum safety we suggest that you have these items inspected and serviced by your authorized dealer or a qualified service mechanic.

⚠ WARNING

Improper maintenance or failure to perform recommended maintenance increases the chance of an accident or motorcycle damage.

Always follow the inspection and maintenance recommendations and schedules in this owner's manual.

Ask your dealer or a qualified mechanic to do the maintenance items marked with a pentagram (★).

You may perform the unmarked maintenance items by referring to the instructions in this section, if you have mechanical experience.

If you are not sure how to do any of the jobs, have your dealer or a qualified mechanic do them.

⚠ WARNING

Running the engine indoors or in a garage can be hazardous.

Exhaust gas contains carbon monoxide, a gas that is colorless and odorless and can cause death or severe injury.

Only run the engine outdoors where there is fresh air.

⚠ CAUTION

Using poor quality replacement parts can cause your motorcycle to wear more quickly and may shorten its useful life.

Use only genuine replacement parts or their equivalent.

N O T E

The MAINTENANCE CHART specifies the minimum requirements for maintenance. If you use your motorcycle under severe conditions, perform maintenance more often than shown in the chart. If you have any questions regarding maintenance intervals, consult your dealer or a qualified mechanic.

★LUBRICATION POINTS

Proper lubrication is important for smooth and long life of each working part of your motorcycle and also for safe riding.

It is a good practice to lubricate the motorcycle after a long rough ride or after it gets wet in the rain or after washing it.

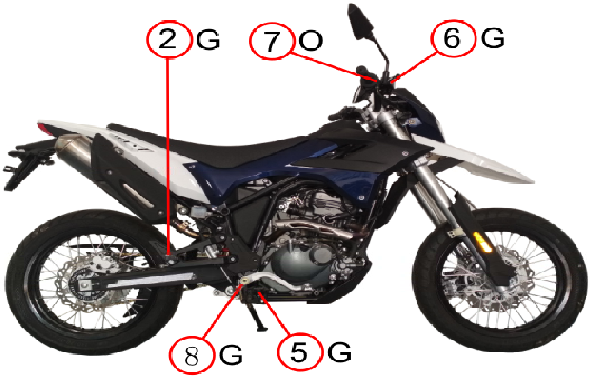
Major lubrication points are indicated as follows.

⚠ CAUTION

Lubricating switches can damage the switches. Do not apply grease and oil to the switches.

N O T E

"★": Ask your dealer or qualified mechanic to do the maintenance items marked.



①Clutch lever holder & Clutch cable	⑤Footrests pivot
②Passenger footrests pivot	⑥Front brake lever holder
③Drive chain	⑦Throttle cable
④Side stand pivot and spring hook	⑧Rear brake pedal pivot

O - Motor oil, G - Grease

★ENGINE

Item \ Interval	First 1,000 km	Every 4,000 km	Every 8,000 km
Air cleaner element	Clean every 3,000 km - Replace every 12,000 km		
Exhaust pipe nuts and muffler mounting bolts ★	Tighten	Tighten	–
Valve clearance adjust ★	Inspect	Inspect	–
Cylinder head bolt ★	Tighten	Tighten	–
Spark plug	Clean	Clean	Replace
Fuel hose	Inspect	Inspect	–
	Replace every 4 years		
Engine oil	Replace	Replace	–
Antifreeze	Replace every 10000km		
Throttle cable	Inspect		
Idle speed ★	Inspect	Inspect	–
Clutch ★	Inspect	Inspect	–

★ CHASSIS

Item \ Interval	First 1,000 km	Every 4,000 km	Every 8,000 km
Drive chain ★	Clean and lubricate every 1,000 km		
Brake ★	Inspect	Inspect	–
Brake hose ★	Inspect	Inspect	–
	Replace every 4 years		
Brake fluid ★	Inspect	Inspect	–
	Replace every 2 years		
Tire	Inspect	Inspect	–
Steering ★	Inspect	Inspect	–
Front forks ★	–	Inspect	–
Rear shock absorber ★	–	Inspect	–
Chassis nuts and bolts ★	Tighten	Tighten	–
General lubrication	Lubricate	Lubricate	–

INSPECTION AND MAINTENANCE

ENGINE OIL

Check if there is leakage from the crankcase.

FUEL HOSE

Inspect the fuel hoses for damage and fuel leakage. If any defect are found the fuel hoses must be replaced.

Replace the fuel hoses every 4 years.

FUEL

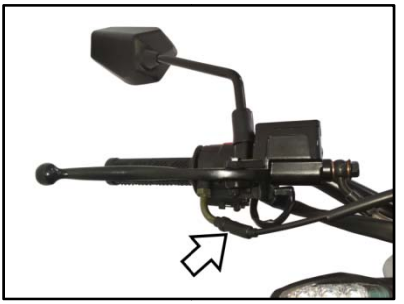
Check if there is leakage from the fuel tank, fuel pump, hoses and electric fuel injection system.

ANTIFREEZE

Check if there is leakage from the water tank, radiator cover, draining bolt, exhaust bolt and hose connection.

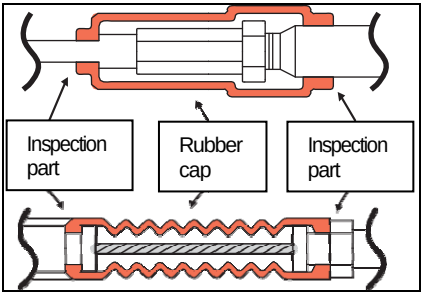
RUBBER CAP OF CABLES

Wipe them up with a cloth or towel when washing.



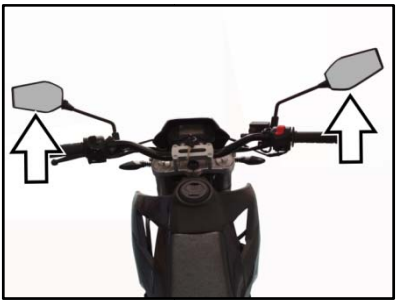
Always check the status of the cable's rubber cap assembly and must be assembled in the correct position.

Check the location of the cable's rubber cap after adjusting the throttle cable play.



REAR-VIEW MIRROR

Check if the mirror shows the rear and/or side views.



REFLECTOR

Check if the reflector is dusty or damaged.

EXHAUST PIPE AND MUFFLER

Inspect the exhaust pipe and muffler joint for loosening.

FRONT AND REAR SUSPENSIONS

Periodically check for the following:

- Keep the front brake lever pulled in and push down on the handlebars repeatedly to compress the front fork.
  The fork should compress in a smooth movement and must show no traces of oil on the legs.
- Inspect the rear shock absorber for oil leakage and spring condition.
- Ensure that all components are properly tightened and check the front and rear suspension articulated joints for correct operation.
- Inspect whether the steering stem is well assembled while moving front fork up/downwards and/or forward/backward.
-

⚠ CAUTION

In the event of malfunction or if the suspension needs expert servicing, contact an authorized dealer.

BATTERY

⊙ INSPECTION OF BATTERY SOLUTION LEVEL

The battery is located under the seat.

MF (Maintenance Free) battery of airtight type is used for this motorcycle.

It is not necessary to inspect or supplement battery fluid.

However, have your dealer check the charging condition of the battery periodically.

⚠ CAUTION

- **Never remove the airtight cover as it is a permanently sealed type battery.**
- **Keep separate from the motorcycle if not used for a long time to reduce electric discharge and electric leakage.**
- **Remove the ⊖ negative wire when storing the motorcycle.**

⚠ WARNING

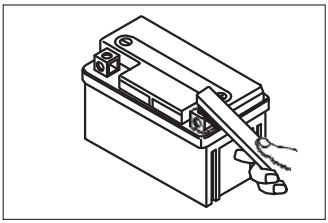
Never invert the battery cables. Ensure that the ignition switch is in position " ⊗ " before connecting or disconnecting the battery, otherwise some components might damage.

⊙ CHECK AND CLEAN OF BATTERY TERMINAL

Clean the battery terminal when it is dusty or rusted.

1. Set the ignition switch " ⊗ " position.
2. Remove the seat.
3. Check the battery lead wire and terminal.
4. If necessary : disconnect the negative ⊖ battery wire first, then disconnect the positive ⊕ battery wire. Remove the battery.
5. Clean the terminal. If there is white dust, clean it with warm water. Connect the battery wires and grease the terminal lightly.

6. When reinstalling the battery, be sure to connect the positive ⊕ battery wire first, then connect the negative ⊖ battery wire.



⊙ BATTERY INSTALLATION

The battery installation need particular attention to following points :

1. Remove the seat.
2. Install the ⊕ positive terminal of the battery to face the left side of the motorcycle into the battery case.
3. Connect the ⊕ positive battery wire at the battery terminal.
4. Put on the rubber cap at the ⊕positive terminal of the battery.
5. Connect the ⊖ negative battery wire at the battery terminal.
6. Install the battery support and seat.

⚠ CAUTION

If connect the battery wire at the battery first and then install the battery into the battery case, the battery will be installed in the opposite direction [the ⊕ positive terminal faces the right side of the motorcycle] because the length of the ⊕ positive battery wire has no to spare.
If the battery is installed in the opposite direction, the battery can't be installed into the battery case completely and the electrical problem, such as a short circuit, may occur.

⚠ CAUTION

- **Keep the battery away from fires.**
- **When disconnecting the battery wire, be sure to remove the ⊖ negative battery wire first with the ignition switch" ⊗ " position, then remove the ⊕ positive battery wire.**

  When reinstalling the battery, be sure to connect the ⊕ positive battery wire first, then connect the ⊖ negative battery wire.
- **Ensure the battery wires are fastened tightly.**
- **Incorrect installation of the battery will reverse the terminal position resulting in possible electrical system damage due to incorrect battery lead connection.**

  The red lead wire must go to the ⊕ positive terminal and the black (or black with white tracer) lead wire must go to the ⊖ negative terminal.
- **Do not connect the battery to an external power source while the battery is installed in the vehicle. This may damage the battery or the regulator rectifier.**

AIR CLEANER

The air cleaner is installed in the center of the rear of the engine.

If the air cleaner element has become clogged with dust, intake resistance will be increased, as a result decrease in output power and increase in fuel consumption.

If riding under severe conditions must be cleaned or replaced more frequently than maintenance schedule. Check and clean the air cleaner element periodically according to the following procedure.

⚠ CAUTION

Never operate the engine without the element in position.
Operating the engine without the air cleaner element will increase engine wear. Always be sure that the air cleaner element is in excellent operational condition.
The life of the engine depends largely on this single component.

⚠ CAUTION

If the air cleaner element is polluted it will result in starting difficulty, engine output reduced, combustion efficiency decline, and sooty smoke (black smoke). At this time, inspect and clean the air cleaner element and con- firm.

To remove the air cleaner element:

1. Remove the fixed bolts and remove the air cleaner cover.
2. Remove the air cleaner element.
3. Clean the air cleaner element for the following :

① When the air cleaner element clean with the air gun, necessarily blow at the outside by com pressed air.
② Carefully examine the air cleaner element for tears during cleaning.
Replace it with a new one if it is torn.
③ Assemble the element completely or damage severely the engine.
④ Be careful not to allow water to go inside the air cleaner element.

⚠ CAUTION

- **When the air cleaner element is not installed correctly, dust can go inside and severely damage the engine.**
- **Be careful not to allow water to go into the element while washing.**

⚠ CAUTION

Before and during the cleaning operation, inspect the element for tears.
A torn element must be replaced. Be sure to install the element snugly and correctly, so that no incoming air will bypass it.
Remember, rapid wear of the piston rings and cylinder bore is often caused by a defective or poorly fitted element.

⚠ WARNING

Operating the engine without the air cleaner element in place can be hazardous.

Never run the engine without the air cleaner element in place.

⚠ CAUTION

More frequent servicing may be performed on the motorcycle that are used under severe conditions, also clean the air cleaner element when replacing the oil to prevent damage of the engine.

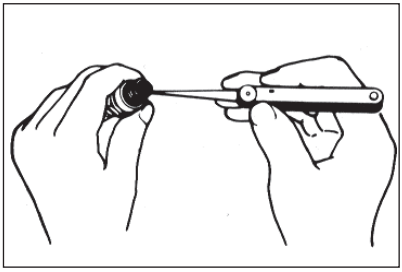
⊙ AIR CLEANER CHAMBER'S OIL DRAIN PLUG

Inspect the air cleaner chamber's oil drain plug and drain water and oil at the periodic maintenance interval.

The air cleaner chamber's oil drain plug is located beneath the air cleaner chamber case.

SPARK PLUG

Check the spark plug every time a scheduled maintenance service is performed.



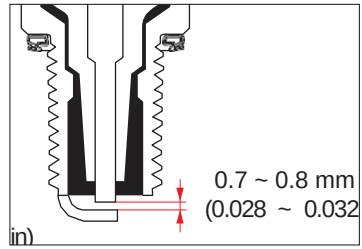
At regular intervals, remove the spark plugs and clean off any car- bon deposits or replace as required.

To remove and clean the spark plugs:

⚠ WARNING

Before carrying out the following operations, let the engine and the muffler cool down to ambient temperature, in order to avoid burns.

1. Disconnect spark plug caps.
2. Remove all the dirt from the base of the spark plugs, then unscrew it and extract it from its seat, taking care that neither dust nor other substances enter the cylinder.
3. Make sure that there are neither carbon deposits, nor corrosion marks on the electrode and on the central part: if necessary, clean them with the special cleaners for spark plugs, with an iron wire and/ or a metal brush.
4. Energetically blow some air, in order to prevent the removed residues from getting into the engine. Change the spark plugs if it shows cracks on the insulating material, corroded electrodes or excessive deposits.



5. Check the electrode gap with a thickness gauge. The gap must be 0.7 ~ 0.8 mm (0.028 ~ 0.032 in) if necessary, adjust it.
6. Make sure that the washer is in good condition. Fit the washer and screw the spark plug finger-tight to avoid damaging the thread.
7. Tighten using the spanner sup- plied with the tool kit. Screw in each spark plug by one half turn to compress the washer.

TIGHTENING TORQUE	
SPARK PLUG	15—20 N-m (1.5—2.0 kgf-m)

PLUG REPLACEMENT GUIDE	
Hotter type	CR7E
Standard type	CR8E
Colder type	CR9E

⚠ CAUTION

The spark plug must be tightened firmly, otherwise the engine may overheat and severe damage may occur.
Use recommended spark plug only.
A spark plug of the wrong rating may shorten engine life and cause loss of performance.

8. Fit the spark plug caps properly, to prevent it coming off due to engine vibration.

IDLING ADJUSTMENT

This engine features EFI (electronic fuel injection).

The idle speed is not adjustable.

⚠ CAUTION

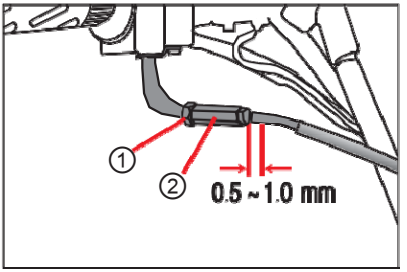
Do not attempt to make any adjustment to the idle speed as it may permanently damage the EFI system.

THROTTLE CABLE PLAY ADJUSTMENT

There should be 0.5 ~ 1.0 mm (0.02 ~ 0.04 in) free play in the throttle cable.

If this is not the case, proceed as follows:

- Position the motorcycle on the stand.
- Withdraw the protection.
- Loosen the lock nut ①.



- Rotate the adjuster ② until achieving the specified free play.
- When finished, tighten the lock nut ① and check free play again.
- Refit the protection.

⚠ WARNING

Inadequate throttle cable play can cause engine speed to rise suddenly when you turn the throttle grip. This can lead to loss of rider control.
Adjust the throttle cable play so that engine idle speed does not rise due to throttle grip movement.

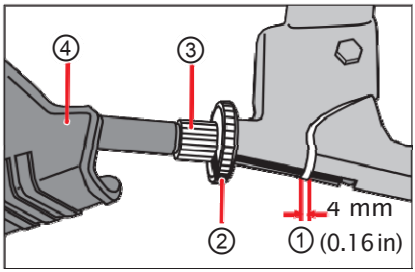
⚠ WARNING

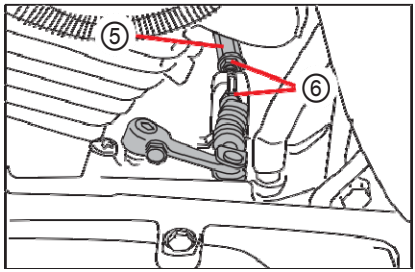
When finished, turn the handle- bars to make sure its movement does not affect the engine idle rpm and check that the throttle grip - when opened and then released - returns smoothly to the closed position.

CLUTCH CABLE ADJUSTMENT

At each maintenance interval, adjust the clutch cable play by means of clutch cable adjuster.

The cable play should be 4 mm (0.16 in) as measured at the clutch lever holder before the clutch begins to disengage.





①Clutch lever play
②Clutch lever adjuster lock nut
③Clutch lever adjuster
④Rubber boot
⑤Clutch cable adjuster
⑥Clutch cable adjuster lock nut

If you find the play of the clutch lever incorrect, adjust it in the following way:

⊙ CLUTCH CABLE PLAY ADJUSTMENT

- A basis adjustment be allowed by the clutch lever adjuster ③.
- Uncover the rubber boot ④.
- Loosen the lock nut ② counter-clockwise.
- Turn the clutch lever adjuster ③in or out to acquire the specified play.
- After end of adjustment, tighten the lock nut ② clockwise fully and cover the rubber boot ④.
- If not adjust by the clutch lever adjuster ③, adjust by the clutch cable adjuster ⑤.
- Loosen the clutch cable adjuster lock nut ⑥.
- Turn the clutch cable adjuster ⑤in or out to acquire the specified play.
- After end of adjustment, tighten the lock nut ⑥.
- The clutch cable should be lubricated with a light weight oil when- ever it is adjusted.

Clutch cable play ①	4 mm (0.16 in)

DRIVE CHAIN

The chain may require more frequent adjustment that it is with periodic maintenance depending upon your riding conditions.

Check the chain every 1,000 km.

In harsh conditions, it needs to be more frequent.

⚠ WARNING

Riding with the chain in poor condition or improperly adjusted can lead to an accident.

Inspect, adjust, and maintain the chain properly before each ride, according to this section.

⊙ INSPECTING THE DRIVE CHAIN

When inspecting the chain, look for the following :

- Loose pins
- Damaged rollers
- Dry or rusted links
- Missing O-ring seals
- Kinked or binding links
- Excessive wear
- Improper chain adjustment

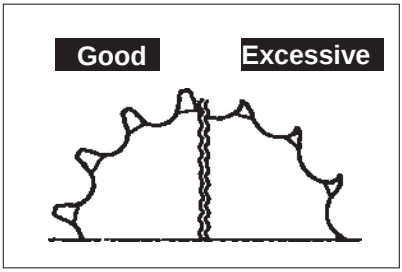
If you find something wrong with the drive chain condition or adjustment, correct the problem if you know how.

If necessary, consult your authorized dealer.

Damage to the drive chain means that the sprockets may also be dam- aged.

Inspect the sprockets for the following :

- Excessively worn teeth
- Broken or damaged teeth
- Loose sprocket mounting nuts



If you find any of these problems with your sprocket, consult your dealer.

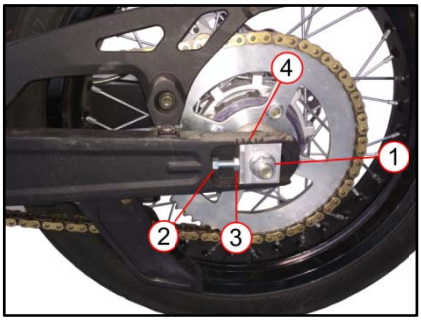
⚠ CAUTION

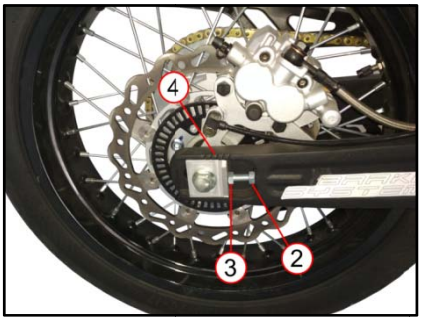
The two sprockets should be inspected for wear when a new chain is installed and replace them if necessary.

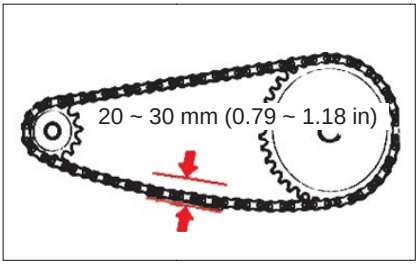
⊙ DRIVE CHAIN ADJUSTMENT

Adjust the drive chain slack to the proper specification. The chain may require more frequent adjustments than periodic maintenance schedule depending upon your riding conditions.

Chain adjust in the following way.







1. Place the motorcycle on the center stard.
2. Loosen the rear axle nut ①.
3. Loosen the drive chain adjuster lock nuts ②, right and left.
4. Adjust the chain slack by turning the nuts ③ on the left and right chain adjusters clockwise or counterclockwise
5. For alignment of the front wheel and rear wheel, there are reference mark ④ on the same position, right and left.

Aligning and adjusting the slack in the drive chain to 20 ~ 30 mm (0.79 ~ 1.18 in), re-tighten the right and left drive chain adjuster lock nut ② and the rear axle nut① securely and perform a final inspection.

⚠ CAUTION

The drive chain for this motorcycle is made of the special material.
The chain should be replaced with a 428UO for motorcycle.
Use of another chain may lead to premature chain failure.

⚠ CAUTION

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.

⚠ WARNING

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

⊙ DRIVE CHAIN CLEANING AND OILING

This drive chain has special "O"-rings.
Clean and oil the chain periodically, as follows:

1. Clean the chain with kerosene. If the chain tends to rust, the interval must be shortened. Kerosene is a petroleum product and will provide some lubrication as well as cleaning action.

⚠ WARNING

Kerosene can be hazardous. Kerosene is flammable. Children or pets may be harmed from contact with kerosene.
Keep flames and smoking materials away from kerosene. Keep children and pets away from kerosene.
If swallowed, do induce vomiting. Call a physician immediately. Dispose of used kerosene properly.

⚠ CAUTION

Cleaning the chain with gasoline or commercial cleaning solvents can damage "O"rings and ruin the chain.
Clean the drive chain with kerosene only.

2. After thoroughly washing the chain and allowing it to dry, oil the links with a chain lube or an equivalent.

⚠ CAUTION

Some drive chain lubricants contain solvents and additives which could damage the "O"-rings in your chain.
Use chain lube or an equivalent that is specifically intended for u se with the "O"-ring chains.

BRAKES

The motorcycle utilizes front and rear disk brakes.

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 your authorized dealer.

⚠ WARNING

Failure to properly inspect and maintain your motorcycle brake systems can be hazardous.
Improper maintenance of the brakes increases your chances of having an accident.
Be sure to inspect the brakes before each use of the motorcycle according to the INSPEC TION BEFORE RIDING section.
Always maintain your brakes according to the MAINTENANCE SCHEDULE.

⚠ WARNING

Operating the motorcycle in harsh condition can be hazardous if you do not inspect brake wear often.
Operating in mud, water, sand, or other extreme conditions can cause accelerated brake wear. This could lead to an accident.
If you operate your motorcycle under these conditions, the brakes must be inspected more often than recommended in the MAINTENANCE SCHEDULE.

⊙ BRAKE FLUID

Be sure to check the brake fluid level in the master cylinder. If the level was found to be lower than the lower mark holding the motorcycle upright, inspect the brake pad's wear condition.

If the brake pad's wear condition is good, replenish with the proper brake fluid that meets dealer 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.

⚠ WARNING

Brake fluid may be harmful if swallowed or if it comes in con- tact with skin or eyes. Contact your doctor immediately if brake fluid is swallowed and induce vomiting. If brake fluid gets into the eyes or in contact with the skin, flush thoroughly with plenty of water.

⚠ WARNING

Be careful that water or dust does not enter the brake fluid reservoir when refilling.
Water will significantly reduce the boiling point of the brake fluid, causing steam to lock up, and dust will block the ABS valve.

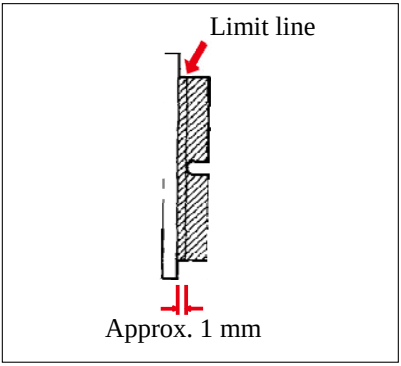
⚠ CAUTION

This motorcycle uses glycol-based brake fluid.
Do not use or mix different types of brake fluid, otherwise serious damage will result in the brake system.
Use Only DOT4 brake fluid.
Do not spill any brake fluid on painted or plastic surfaces as it will damage the surface severely.
Never use any brake fluid that has been stored in a used or unsealed container. Never reuse brake fluid left over from the last servicing and stored for long period as it absorbs moisture from the air.

⊙ BRAKE PADS

Inspect the front and rear brake pads to determine whether or not the friction pads are worn down to the grooved limit line. If a pad is worn to the grooved limit line it must be replaced with a new one by your authorized dealer or qualified service mechanic.

The rate at which brake pads will wear depends on motorcycle usage, riding style and road surface condition.



Inspect every day in the following point at the brake system.

① Brake fluid leakage of the front and rear brake system.

② Leak or damage of the brake hose.

③ Operating of the brake lever and pedal.

④ Wear of the front and rear brake pads.

⚠ CAUTION

The front and rear brake system requires the brake hose or the brake fluid to be replaced according to periodic inspection chart by your authorized dealer for safety as they operate at high pressure.

⚠ WARNING

Riding with worn brake pads will reduce braking performance and will increase your chance of having accident. Inspect brake pad wear before each use. Ask your dealer or qualified mechanic to replace brake pads if any pad is worn to the limit.

⚠ WARNING

If brake pads are allowed to wear down to the metal substrate, metal-to-metal contact with the brake disk would lead to noise and the brake caliper sparking ; this would result in loss of braking and brake disk damage, causing a dangerous riding condition.

⚠ WARNING

Replacing only one of the two brake pads can be hazardous. Replacing only one brake pads can result in uneven braking action.
Replace both pads together.

⚠ CAUTION

After replaced the front or rear brake pads, squeeze / depress and release several times the brake lever/ pedal so that it is setting at the original place.
Then, check that the brakes are operating correctly.

⊙ BRAKE DISK INSPECTION

Check the brake disk for damage or cracks.

⊙ FRONT BRAKE FLUID SUPPLY

1. Place the motorcycle on a level surface and keep the handlebars straight.
2. Clean the front brake fluid reservoir around not to allow dust to get inside of it.
3. Loosen the screws and open the cap.
4. Replenish with brake fluid to the upper line.

N O T E

The recommended brake fluid : DOT4

⚠ CAUTION

- **Don't replenish with brake fluid over the limit line. It will leak out of the brake fluid reservoir.**
- **Be careful not to allow dusts or water to go inside when it is replenished.**
- **Prohibit the use of non recommended brake fluid**
- **Brake fluid can damage severely the plastics or rubbers. When it is spilt on the parts, wipe them up immediately.**

5. Fasten the cap.

⊙ REAR BRAKE FLUID SUPPLY

1. Place the motorcycle on a level surface and keep the handlebars straight.
2. Clean the rear brake fluid reservoir around not to allow dust to get inside of it.
3. Turn the cap to the counter-clockwise.
4. Replenish with brake fluid to the upper line.

N O T E

The recommended brake fluid : DOT4

5. Fasten the cap.

⊙ REAR BRAKE LAMP SWITCH

The rear brake lamp switch is located inside the right footrest bracket.

Move the switch up or down to adjust it until the switch operates and turns on the brake lamp after the brake pedal begins to be depressed.

TIRE

Inspect the tire pressure and the tire thread depth periodically.

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

⚠ WARNING

Failure to follow these warnings may result in an accident due to tire failure. The tires on your motorcycle form the crucial link between your motorcycle and the road.

Follow these instructions ;

- **Check tire condition and pressure, and adjust pressure before each ride.**
- **Avoid overloading your motor cycle.**
- **Replace a tire when worn to the specified limit, or if you find damage such as cuts or cracks.**
- **Always use the size and type of tires specified in this owner's manual.**

⊙ TIRE PRESSURE

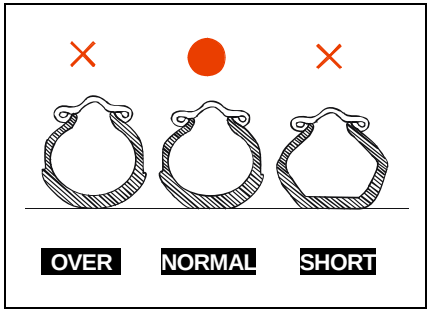
Insufficient air pressure in the tires not only hasten tire wear but also seriously affects the stability of the motorcycle.

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.

Tire pressure should only be adjusted when the tire is cold.

If you see the problem with the tire, adjust the pressure with the pressure gauge.



⚠ CAUTION

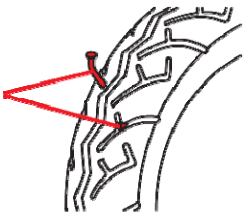
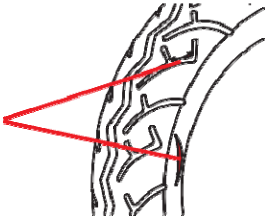
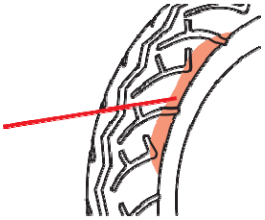
If there is a problem with the tire, such as a cut or crack, it will reduce driving stability and cause an accident.

TIRE PRESSURE (COLD INFLATION)	NORMAL RIDING	
	SOLO RIDING	DUAL RIDING
FRONT	2.00 kgf/cm² 200 kPa 29.0 psi	2.00 kgf/cm² 200 kPa 29.0 psi
REAR	2.00 kgf/cm² 200 kPa 29.0 psi	2.00 kgf/cm² 200 kPa 29.0 psi

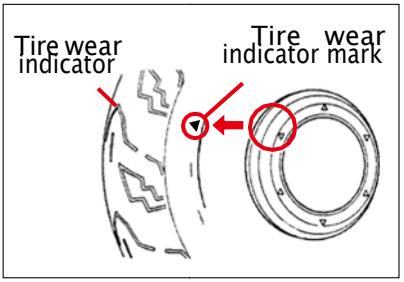
⊙ CRACKS AND CUTS

Check if

1) There are visible cracks and cuts.
2) There are abnormalwears.

SCREW, FOREIGN MATERIAL	
WORN, CRACK	
ABNORMAL WEARS	

⊙ TIRE TREAD CONDITION



Operating the motorcycle with excessively worn tire will decrease riding stability and can lead to loss of control.

Inspect storage of tire thread's depth by the 『tire wear indicator』.

Replace the front and rear tires at once when appear the 『tire wear indicator』.

⚠ CAUTION

The standard tire on motorcycle is:
110 / 70 - 17 for front, and
130 / 70 – 17 for rear.
The use of a tire other than standard may cause trouble.
It is highly recommended to use the standard tire supplied by dealer.

⊙ REAR AXLE NUT

Inspect the rear axle shaft and jointing nut for loosening.

⊙TIRE REPLACEMENT

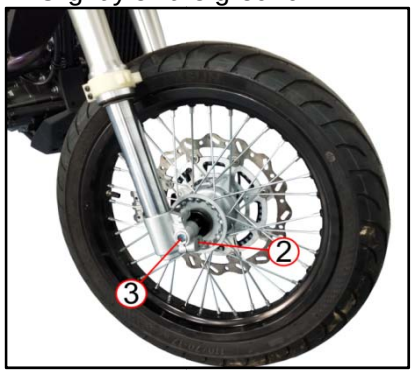
◆ FRONT TIRE REPLACEMENT

1. Place the motorcycle on the center stand.
2. Remove the brake caliper from the front fork by removing the mounting bolts ①.

⚠ CAUTION

Never squeeze the front brake lever with the caliper removed. It is very difficult to force the pads back into the caliper assembly and may result brake fluid leak- age.

3. Loosen the front axle pinch bolt ②.
4. Loosen the front axle shaft ③.
5. Place carefully a jack or block under the engine and raise until the front wheel is slightly off the ground.



⚠ CAUTION

Improper jacking may cause damage to the frame or engine. Do not apply the jack head to the engine oil strainer cap when jacking up the motorcycle.

6. Draw out the front axle shaft ③.
7. Pull out the front wheel assembly forward.
8. To reinstall the front wheel assembly, reverse the sequence as described.

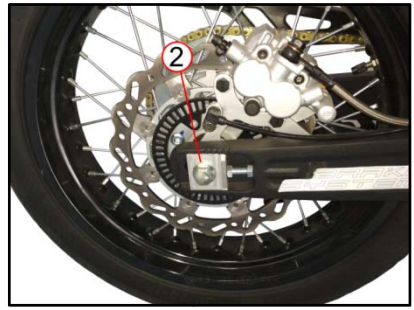
◆ REAR TIRE REPLACEMENT

1. Place the motorcycle on the center stand.
2. Place a jack or block under the swing arm to lift the rear wheel slightly off the ground.

⚠ CAUTION

Improper jacking may cause damage to the frame or engine.

3. Find the chain connection port, remove the chain connection buckle, and remove the chain from the rear wheel.
4. Loosen the rear axle nut ①.



⚠ WARNING

A hot muffler can burn you.
The muffler will be hot enough to burn you for some time after stopping the engine.
Wait until the muffler cools to avoid burns.

5. Lower the rear wheel to the end and pull out the rear wheel shaft ②.
6. Pull out the rear wheel assembly rearward.
7. To replace the rear wheel assembly, reverse the complete sequence listed.

BULBS

⚠ WARNING

Keep fuel and other flammable substances away from electric components.

⚠ CAUTION

Except the license plate lamp, the other lamps are LEDs, and there is no need to replace the bulb.

Before changing a bulb, set the ignition switch to position "⊗" and allow a few minutes for the bulb to cool down.
Wear clean gloves or use a clean, dry cloth to handle the new bulb.
Do not put your fingerprints on the bulb, as this may lead to overheating and failure.
If you have handled the bulb with bare hands, clean it with alcohol to avoid any damage.

DO NOT PULL ON THE WIRES.

N O T E

Before changing a bulb, check the fuses.

⊙ INSPECTION OF LAMPS

- Check if the head light, position lamp, meter lamp, tail lamp and license plate lamp work well when the ignition switch was turned to the "○" position.
- Check if the brake lamp work well when the front brake lever or rear brake pedal was operated after the ignition switch was turned to the "○" position.

⚠ CAUTION

The head lamp, position lamp, meter lamp, tail lamp and license plate lamp on this motorcycle always comes on when the ignition switch is turned to the " " position.

CHANGING THE HEAD / PISITION / INSTRUMENT / BRAKE / TAIL / LICENSE PLATE LAMP BULB

The lamp is LED (Light Emitting Diode) type.
If any abnormal condition are found, replace assembly.

TROUBLESHOOTING

This troubleshooting guide is provided to help you find the cause of some common complaints.

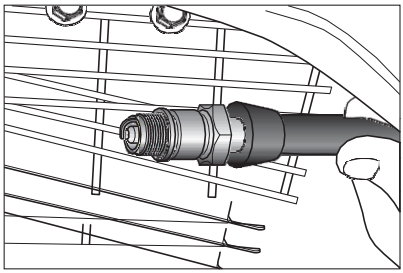
⚠ CAUTION

Failure to troubleshoot a problem correctly can damage your motorcycle.
Improper repairs or adjustments may damage the motorcycle instead of fixing it. Such damage may not be covered under warranty.
If you are not sure about the proper action, consult your dealer about the problem.

★WHEN THE ENGINE REFUSES TO START

⊙ IGNITION SYSTEM CHECK

1. Remove the spark plug and reattach it to the spark plug lead.



2. Put the engine stop switch in the "◯" position and the ignition switch in the "◯" position. Holding the spark plug base firmly against the engine, the trans- mission in neutral, the side stand up, the clutch disengaged and push the electric starter switch. If the ignition system is operating properly, a blue spark should jump across the spark plug gap.

   When the engine is stopped, when the ignition switch is set to the "◯" position, the instrument light will light up. After the instrument is normally displayed, test the electrical system operation.

When the meter is displayed normally, press the start button.

3. If there is no spark, clean the spark plug.
   Replace it if necessary. Retry the above procedure wit h t he cleaned spark plug or new one.
4. If there is still no spark, consult your dealer for repairs.

⚠ WARNING

Performing the spark test improperly can be hazardous.
You could get a high voltage electrical shock or an explosion if you are not familiar with this procedure.
Do not perform this check if you are not familiar with the procedure.
Keep the spark plug away from the spark plug hole during this test. Do not this test if you have a heart condition or wear a pace- maker.

⊙ INSPECTION OF OIL SYSTEM

1. Place the engine flameout switch in "◯"position and the ignition switch in"◯"position. There is the "click" of pull-in from the oil pump relay and there is the "buzz" of rotation from the oil pump in the oil tank. If not start the vehicle immediately, there will be "click" of disconnection in oil pump relay. If there is no above phenomenon, check the circuit system"
2. Inspection of oil pressure: If the oil pump relay and the oil pump are normal but the engine cannot start, check the oil pressure of the fuel system. Access the oil pump gauge in the oil system, place the engine flameout switch in the "◯"position and the ignition switch in"◯"position, and check the oil pressure indication of the oil pump gauge. If this value is lower, check the leakage in oil system.

★ENGINE STALLING

1. Check the fuel supply in the fuel tank.
2. Check the ignition system for intermittent spark.
3. Check the idle speed.

⚠ CAUTION

When occur any trouble, the best way is to consult your dealer for repairs.

TRANSPORT

⚠ WARNING

Before transporting the motorcycle, it is necessary to empty the fuel tank completely, making sure that it is completely dry.
During transport, the motorcycle must be firmly secured in an upright position to avoid fuel and oil leaks.

★DRAINING THE FUEL TANK

⚠ WARNING

Keep the fuel tank away from fires.
Allow some time for the engine and muffler to cool down completely.
Fuel vapors are harmful to human health.
Ensure the area is well ventilated before proceeding.
Do not inhale fuel vapors.
Do not smoke, nor use naked flames.

- Place the motorcycle on the stand on firm and level ground.
- Stop the engine and wait until it has cooled down.
- Prepare a container large enough to hold the fuel in the tank and place it on the floor on the left side of the motorcycle.
- Remove the fuel tank cap.
- Drain fuel using a manual pump or similar system.

Do not damage the fuel tank assembly (fuel level gauge accommodated inside the tank).

⚠ WARNING

Refit the fuel tank cap after draining all fuel.

CLEANING PROCEDURE

A thorough cleaning of your motor- cycle is a necessary part of maintenance and will help keep your motorcycle looking and performing its best. Proper cleaning can also extend the life of your motorcycle.

It is important to clean and inspect your motorcycle after every ride if it is used in mud, brush, grass, water, salt water, or very dusty conditions. The build-up of mud, brush, grass, etc., especially on the engine and exhaust system, can reduce engine cooling, conceal damage, or increase wear of certain parts. It is important to remove all debris during cleaning.

⚠ CAUTION

High pressure washers can dam- age your motorcycle (especially the oil cooler pin). High pressure washers such as those found at coin-operated car washes have enough pressure to damage the parts of your motorcycle. It may cause rust, corrosion and increase wear.
Do not use high pressure washers to clean your motorcycle.

★WASHING YOUR MOTORCYCLE

With some care, your motorcycle can be washed in a similar manner to washing an automobile.

NOTE

Avoid spraying or allowing water to flow over the following places:

- **Ignition switch**
- **Spark plugs**
- **Fuel tank cap**
- **Electric fuel injection system**
- **Brake master cylinders**
- **Cooling system radiator**
- **Snorkel air intake for air cleaner**
- **Electrical**

⚠ CAUTION

Do not use parts cleaner to throttle body and electric fuel injection sensors.

Use a garden hose at low pressure to remove the majority of dirt or other debris. Wash your motorcycle by hand with a mild soap or detergent and water. Try to thoroughly remove all dirt and debris without excessive water pressure. Cloth rags, washing mitts or cleaning brushes can be used, be careful with brushes as they may scratch plastic or painted surfaces.

Rinse the motorcycle thoroughly with clean water.

Dry all areas using a chamois or soft absorbent cloth.

★WAXING THE MOTORCYCLE

After washing the motorcycle, waxing and polishing are recommended to further protect and beautify the paint.

- Only use waxes and polishes of good quality.
- When using waxes and polishes, observe the precautions specified by the manufacturers.

★INSPECTION AFTER CLEANING

Remove the rags or wrapping from the exhaust pipe. For extended life of your motorcycle, lubricate according to “LUBRICATION POINTS” section.

⚠ WARNING

Operating the motorcycle with wet brakes can be hazardous. Wet brakes may not provide as much stopping power as dry brakes.
This could lead to an accident. Test your brakes after washing motorcycle, riding at slow speed.
If necessary, apply brakes sever al times to let friction dry out the pads.

Follow the procedures in the "INSPECTION BEFORE RIDING" section to check your motorcycle for any problems that may have arisen during your last ride.

STORAGE PROCEDURE

If you don't plan on using your motorcycle for a long time, it will need special servicing requiring appropriate materials, equipment and skill. For this reason, dealer recommends that you trust this maintenance work to your dealer. If you wish to service the machine for storage yourself, follow the general guidelines below :

★MOTORCYCLE

Clean the entire motorcycle.

Place the motorcycle on a firm, flat surface where it will not fall over.

Turn the handlebars all the way to the left and lock the steering, and remove the ignition key.

★FUEL

Fill the fuel tank to the top with fuel.

★BATTERY

1. Remove the battery from the motorcycle.

N O T E

Be sure to remove the ⊖ negative terminal first, then remove the ⊕ positive terminal.

2. Clean the outside of the battery with mild detergent and remove any corrosion from the terminals and wiring harness connections.
3. Store the battery in a room above freezing.

★TIRES

Inflate the tires to the normal pressure.

★EXTERNAL

- Spray all vinyl and rubber parts with rubber protectant.
- Spray the unpainted surfaces with rust preventative.
- Coat the painted surfaces with car wax.

★MAINTENANCE DURING STORAGE

Once a month, recharge the battery.

The motorcycle battery standard charging time is 1.0 A × 9hours.

★PROCEDURE FOR RETURNING TO SERVICE

1. Clean the entire motorcycle.
2. Drain the engine oil, and replace the engine oil filter & engine oil with a new one.
3. Reinstall the battery.

NOTE
Be sure connect the ⊕ positive terminal first, then connect the ⊖ negative terminal.

4. Adjust the pressure of tires as described in the TIRE section.
5. Remove the spark plugs and push several times the electric starter switch to start the engine. Reinstall the spark plugs.
6. Lubricate all places as instructed in this manual.
7. Perform the INSPECTION BEFORE RIDING as listed in this manual.

Parameter List

Model	QH125GY
Dimensional parameters	
Overall dimension (L ×W ×H) mm	2137×827×1208、2137×827×1248、2095×827×1173、2095×827×1213
Wheelbase mm	1435
Minimum ground clearance mm	300
Turning clearance circle diameter mm	5400
Castor angle（°）	29
Steering handlebar turning angle (°) (left / right)	39 / 39
Mass/volume	
Overall mass kg(front/rear)	141(65/76)
Max. loading mass kg	291(108/183)
Reference mass on shafts kg (front/rear)	216(92/124)
Fuel tank capacity L	6.5
Engine	
Model	157MI
Type	Single cylinder,4-stroke,liquid cooling.
Cylinder bore×stroke mm	57.0×58.6
Total displacement ml	124
Compression ratio	11.5:1
Max. power and corresponding speed kW/(r/min)	11.0/9500
Max. torque and corresponding speed N. m/(r/min)	11.5/8500
Min. fuel consumption g/kW·h	≤367
Min. stable idle speed r/min	1500 ± 100
Ignition mode	Electromagnetic discharge controlled by ECU
Starting mode	Electric
Lubrication mode	Pressure and splashing
Lubricant	SAE 10W-40 SN AM2
Fuel	#92 or higher unleaded gasoline
Air filter type	Oil Filter Type
Gas distribution mode	Overhead cam valve
Transmission device	
Clutch type	Wet type normal pressure multi disc
Transmission type	Foot operated 6-gear transmission
Primary reduction ratio	3.500
Final stage reduction ratio	4.000
Transmission ratio 1st gear	3.000
2nd gear	1.857
3rd gear	1.368
4th gear	1.143
5th gear	0.957
6th gear	0.840

Vehicle type	
Wheel rim type	Light alloy
Tire size Front	110/70-17
Rear	130/70-17
Tire pressure kPa (front/ rear)	280/280
Brake type Front	Disk
Rear	Disk
Brake control mode (front/ rear)	Hand brake/foot brake
Shock absorber type Front	Spring oil damping
Rear	Spring oil damping
Electric system	
Spark plug model	CR8E
Head light specification	12V 7W/14W
Turning light	12V 1.9W
Brake light /	12V 2.6W
Rear license plate lamp	12V 5W
rear-position light	12V 0.25W
Fuse size	20A 15A 10A
Battery	12V 9Ah
Horn model	Electromagnetic vibration type 12V
Model or type of speedometer	Electronic
Vehicle performance	
Braking force N front/rear	⩾559/⩾652
Acceleration noise dB(A)	
Type inspection test	⩽77
Conformity inspection test	⩽78
Exhaust contaminant	
Working condition method（g/km）	CO≤1,HC≤0.1,NMHC≤0.068,NO_x≤0.06
Idle state method	CO≤0.8% HC≤150×10^{-6}
Max. driving speed km/h	103
Min. stable driving speed km/h	≤25
Sliding distance s	≥200
Starting performance s	⩽15
Grade ability (°)	≥22
Economical fuel consumption l/100km	2.9
Starting acceleration time s	≤13.5
Surpass acceleration time s	≤14
Rollover slope angle (°)	
Angle of parking rack (°) left/right	≥9/≥5
Front slope angle (°) Parking rack	≥6
Reliability km	≥6000
Durability km	≥20000
Luminous intensity of headlight cd	≥10000